KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT

Suicide in Kansas, 2014

Final U.S. data for 2013 (the most recent year available) showed suicide was the 10th leading cause of death, responsible for 41,149 deaths [1]. In Kansas, suicide was responsible for 454 deaths and the 10th leading cause of death in Kansas in 2014 [2]. The

Kansas age-adjusted suicide death rate was 15.7 per 100,000 population, which was higher than the goal set by the Healthy People 2020 project of 10.2 suicide deaths per 100,000 population [3].

Kansas Highlights

- There were 454 Kansas resident suicides in 2014, up 6.6 percent from 426 in 2013.
- The age-adjusted suicide death rate for Kansas residents in 2014 was 15.7 deaths per 100,000 population, up 6.8 percent from 14.7 deaths per 10

Figure 1. Age-Adjusted Suicide Rates, Kansas and US, 2002-2014



percent from 14.7 deaths per 100,000 population in 2013.

- Men are much more likely to die by suicide than women. In 2014 there were 357 Kansas resident male suicide deaths, compared to 97 female suicide deaths. The ageadjusted suicide death rates were 25.2 deaths per 100,000 for Kansas resident males and 6.5 deaths per 100,000 Kansas resident females.
- Age-group 45-54 had more suicides than any other age-group (92) in 2014, but the 75-84 age-group had the highest age-group specific suicide rate (26.2 deaths per 100,000 age-group population).
- Firearms accounted for a majority (52.2%) of Kansas resident suicide deaths in 2014. Suffocation, the second most common method of suicide, accounted for 27.1 percent of all suicide deaths in 2014.

Inside

Inside	
Suicide in Kansas, 2014	1
Chronic Disease Risk Factors Kansas Living with Disabilities	2
Infant Mortality and Stillbirths, 2014	5
APNCU Report Issued	6
KIC Query System Provides Maps	9
Teen Pregnancy Report Issued	. 10
Infectious Disease Report Issued	11
Kansas Health Matters Updated	. 12
Notes from the Field	. 14
FastStats – Population Projections	. 15



Division of Public Health Bureau of Epidemiology and Public Health Informatics

State and National Trends

The Kansas suicide rate has been higher than the national rate since 2002 (Figure 1). In 2014, the Kansas suicide rate (15.7 suicides per 100,000 population) was 24.6% higher than the national rate (12.6 suicides per 100,000 population). (National data from 2013, the most recent available year.)

The data brief can be accessed at http://www.kdheks.gov/phi/data_briefs /Suicide2014No20.pdf

> David Oakley, MA Greg Crawford Bureau of Epidemiology and Public Health Informatics

References:

- [1] Deaths: Final data for 2013. National vital statistics reports; vol 64 no 2 (forthcoming). Hyattsville, MD: National Center for Health Statistics. 2015. Available at http://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_02.pdf. Accessed January 14, 2015.
- [2] Oakley D, Crawford G, Savage C. 2014 Kansas Annual Summary of Vital Statistics. Topeka, KS: Kansas Department of Health and Environment, 2015.
- [3] Healthy People 2020 suicide targets available at http://www.healthypeople.gov/2020/topicsobjectives/topic/mental-health-and-mental-disorders/objectives. Accessed January 9, 2015.

Chronic Diseases and Associated Risk Factors among Kansans Living with Disability–2014 Kansas Behavioral Risk Factor Surveillance System

Background:

Adverse health outcomes among those living with disabilities impact the lives of many Americans. Data on health status of people living with disabilities is critical for public health officials to better tailor and allocate resources to improve the quality of lives of persons living with disabilities [1]. To better assess the type of functional limitation or condition associated with the disability among Kansans, KS BRFSS added five additional questions to the survey for the first time in 2013 and subsequently in 2014. This study will examine the status of disability and types of functional disability by selected sociodemographics characteristics and assess health outcomes by disability status among Kansans.

Objective:

The objective of this analysis is to examine the status of disability and types of functional disability by selected socio-demographics characteristics and assess health outcomes by disability status among Kansans.

Methods:

The 2014 Kansas BRFSS data were used for this report. Kansas BRFSS is an ongoing, annual, population-based, random, digit-dial survey of non-institutionalized adults aged 18

Table 1. Prevalence of disability (at least one functional disability) by sociodemographic characteristics among adults aged 18 years and older in Kansas, 2014 BRFSS

Sociodemographic Characteristics and selected indicators	Percentage of Adults 18 Years and Older with disability (at least one functional disability)					
	Unweighted Frequency	Weighted Percentage	Lower 95% Confidence Interval	Upper 95% Confidence Interval		
Total	3345	22.3%	21.5%	23.2%		
Gender	1160	40.70/	47.50	10.0%		
	1169	18.7%	17.5%	19.9%		
Female	21/6	25.8%	24.6%	27.0%		
Age groups	100	12 50/	10.00/	16.20/		
18-24 years	109	13.5%	10.8%	16.2%		
25-34 years	180	13.8%	11.7%	15.8%		
35-44 years	219	14.4%	12.4%	16.3%		
	408	22.5%	20.5%	24.0%		
55-64 years	809	27.7%	25.8%	29.5%		
b5 years and older	1560	37.9%	30.3%	39.6%		
RdLe	2760	10.6%	10 70/	20.5%		
Mille, Non-Hispanic	2769	19.0%	18.7%	20.5%		
African American, Non-Hispanic	189	31.3%	20.8%	35.8%		
Uienonia	184	29.7%	25.0%	33.8%		
	128	20.5%	22.5%	30.5%		
Annual Household Income	F73	40.6%	45 70/	E2 60/		
¢15,000	572	49.0%	45.7%	33.0%		
\$15,000 - \$24,999	276	30.7%	33.9%	39.4%		
\$25,000 - \$34,999 \$25,000 - \$40,000	370	24.7%	22.1%	27.4%		
\$35,000 - \$49,999	379	17.1%	15.2%	19.0%		
\$50,000 of higher	037	10.0%	9.7%	11.0%		
	241	26 79/	22.00/	40.7%		
High school graduate or C.E.D.	1106	30.7%	52.0% DE 29/	40.7%		
	1060	20.8%	20.2%	20.4/0		
	7/8	12.3%	11.2%	13.0%		
Employment Status	740	12.270	11.270	13.270		
Employed for wages or Solf employed	QEE	11 5%	10.6%	12.4%		
Out of work	170	27.2%	27.5%	27.4%		
Homemaker or Student	225	18 10/	15 5%	20.7%		
Retired	1272	27 7%	25.0%	20.7%		
Linable to work	7//	\$7.7% \$8.3%	\$5.5% \$5.6%	90.0%		
	744	00.370	65.0%	50.3%		

* Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population Source: 2014 Kansas Behavioral Risk Factor Surveillance System, Bureau of Health Promotion, KDHE.

years and older living in a private residence or college housing with landline and/or cell phone service in Kansas. The question for specific functional disability types are: "Are you blind, or do you have serious difficulty seeing, even when wearing glasses?" (vision); "Because of a physical, mental, or emotional condition, do you have serious difficulty concentrating, remembering, or making decisions?" (cognition); "Do you have serious difficulty walking or climbing stairs?" (mobility); "Do you have difficulty dressing or bathing?" (self-care); and "Because of a physical, mental, or emotional condition, do you have difficulty doing errands alone such as visiting a doctor's office or shopping?" (independent living). Respondents who responded "yes" to at least one of the five functional disability questions were identified as having any disability. Responses of "don't know" or "refused" were excluded from analyses. Further, adjusted logistic regression analyses (multiple models) to examine the odds of selected health indicators among people with at least one functional disability compared to people without functional disability adjusting for age, gender, race, ethnicity, and education were conducted. Prevalence estimates and 95% confidence intervals (CI) were calculated. Weighted analysis procedures were applied using SAS 9.3 software.

Results:

An estimated 486,345 (22.3%) adults have at least one functional disability. Higher prevalence of at least one functional disability was seen among females, adults aged 45 years and older, non-Hispanic African Americans, those with lower income, lower education and those who were unable to work. (Table 1) About 4.0% adults had serious difficulty seeing (vision); 10.0% adults had serious difficulty concentrating, remembering

or making decisions (cognitive); 14.0% had serious difficulty walking or climbing stairs (mobility); 3.0% had difficulty dressing or bathing (self-care); and 6.5% adults had difficulty doing errands alone (independent living). (Table 2) Adjusted odds ratios indicated that frequent mental distress, self-

Table 2. Prevalence of functional disability type among adults aged 18								
years and older in Kansas, 2014 BRFSS								
Functional	Unweighted	Weighted	Lower 95%	Upper 95%				
Disability Type	Frequency	Percentage	Confidence Interval	Confidence Interval				
Vision								
Yes	592	4.0%	3.6%	4.4%				
No	12707	96.0%	95.6%	96.4%				
Cognition								
Yes	1262	9.9%	9.3%	10.6%				
No	11973	90.1%	89.4%	90.7%				
Mobility								
Yes	2320	13.7%	13.1%	14.4%				
No	10917	86.3%	85.6%	86.9%				
Self-care								
Yes	470	3.1%	2.7%	3.4%				
No	12809	96.9%	96.6%	97.3%				
Independent living								
Yes	951	6.5%	6.0%	7.0%				
No	12302	93.5%	93.0%	94.0%				

Source: 2014 Kansas Behavioral Risk Factor Surveillance System Bureau of Health Promotion, KDHE.

perceived poor or fair general health, heart attack, stroke, asthma, arthritis, obesity, current cigarette smoking, cost as a barrier to care, poor oral health care are associated with functional disability.

Conclusion:

Adverse health outcomes among those living with disabilities are prevalent in Kansas. Disparities among those living with disability are also seen with respect to various sociodemographic sub groups. Frequent mental distress, obesity, current smoking, other chronic diseases and risk factors are higher among those living with functional disability. These population based information indicated the need of public health strategies to address issues related to disability and types of functional disability among Kansas adults.

References:

[1] Centers for Disease Control and Prevention. Disability and Health. Available at: http://www.cdc.gov/ncbddd/disabilityandhealth/index.html Accessed on January 10, 2016.

> Pratik Pandya, MPH Ghazala Perveen, MBBS, PhD, MPH Bureau of Health Promotion

Infant Mortality Report Released

The Kansas Department of Health and Environment's Bureau of Epidemiology and Public Health Informatics has released *Selected Special Statistics, Stillbirths and Infant Deaths, 2014,* which summarizes vital records data on stillbirths and infant deaths. Infant mortality is an important indicator of community health. It is associated with a variety of factors such as economic development, general living conditions, social well-being where basic needs are met, rates of illness such as diabetes and hypertension, and quality of the environment [1].

The purpose of this report is to move beyond single-year statistics reported in the *Annual Summary of Vital Statistics* and provide a more long-term view of stillbirth and infant mortality data and statistics. In an attempt to increase data reliability, years are combined. Trends are evaluated using 20 years.

Selected Findings

- In the last century, the Kansas single year infant mortality rate (IMR) has decreased dramatically from 73.5 deaths per 1,000 live births in 1912 (2,795 infant deaths) to 6.3 in 2014 (246 infant deaths).
- In the last 20 years (1995-2014), the IMR fluctuated with a high of 8.2 in 1996 to a low of 6.2 in 2011. However, the overall trend decreased significantly in this time period.
- The Kansas five year average (2010-2014) shows that the Kansas rate (6.3) exceeds the Healthy People 2020 (HP2020) objective of 6.0 deaths per 1,000 live births. The White non-Hispanic population IMR met the HP2020 target, while the Hispanic and Black non-Hispanic rates did not (Figure 1).



Figure 1. Five Year Average Infant Mortality Rates by Selected Population Group of Mother, Kansas 1995-2014

Cause of Death

The leading underlying cause of infant mortality (2010-2014) was congenital anomalies (23.3%), followed by prematurity or low birth weight (19.8%), SUID or sudden unexplained infant death (17.0%), and maternal factors and complications (10.3%).

County Rates

The counties with the highest number of infant deaths in the 2010-2014 cohort included Sedgwick (278), Johnson (166), Wyandotte (110), and Shawnee (70). These four counties accounted for 50.0 percent of all infant deaths.

The counties with the highest reliable (RSE \leq 30%) infant mortality rates, included Jefferson (11.7 infant deaths per 1,000 live births), Reno (9.9), Labette (9.6), Dickinson (9.4), and Lyon (9.1); while the counties with the lowest (reliable) non-zero rates were Douglas (3.7), Leavenworth (3.9), Crawford (4.4), Johnson (4.5), and Riley (5.3).

Risk Factors - Linked birth and Death Files (Death cohort)

Analysis of the linked file revealed that low birthweight or prematurity were primary risk factors for infant death even when the underlying or primary cause of death was not prematurity or low birthweight.

Gestational age-specific analysis (linked file) showed an infant mortality rate of 44.1 per 1,000 live births for infants born prematurely, over 17 times the rate for infants born at term (2.5 deaths per 1,000 live births). Similarly, the infant mortality rate for very premature infants (less than 32 weeks, 198.7 per 1,000 live births) was 79 times higher than the rate for infants born at term.

Additional notable risk factors for infant deaths (linked file) included no prenatal care (6.5% of linked deaths), multiple births (14.0%), mothers who smoked during pregnancy

(22.6% of infant deaths), and out-of-wedlock births (49.2%). Analysis of mother's age showed the highest percent of infant deaths among mothers age 20-24 (30.4%), but the highest rate was among 10-19 year old adolescents (8.0 infant deaths per 1,000 live births).

This report can be found at http://www.kdheks.gov/phi/index.htm. Persons inquiring about additional data needs can call (785) 296-8627.

Reference

[1] Reidpath D, Allotey P. Infant mortality rate as an indicator of population health. J. Epidemiol Community Health. 2003; 57:344-346.

Bureau of Epidemiology and Public Health Informatics

Adequacy of Prenatal Care Reported for 2014

Introduction

The Bureau of Epidemiology and Public Health Informatics (BEPHI) at the Kansas Department of Health and Environment (KDHE) provides this report to monitor the progress of adequate prenatal care. The purpose of this report is to inform policy makers, local health departments, program managers and the public of the extent to which adequate prenatal care is provided to pregnant women in Kansas, and to indicate disparities in the provision of that care. Tracking the quantity of prenatal care pregnant women receive through the Adequacy of Prenatal Care Utilization (APNCU) Index enables public health agencies to identify inequities in the provision of care [1]. Prenatal care is a flexible package of services for pregnant women up to the delivery of an infant. Inadequate prenatal care has been associated with pre-term delivery, low birth weight, and small-forgestation infants [2,3]. It has also been linked with a higher overall net cost per pregnancy for mother and newborn care combined [4].

Methods

BEPHI receives reports of births that occur in Kansas through the Office of Vital Statistics. The APNCU Index is calculated using methods developed by Dr. Milton Kotelchuck [5]. The index uses information readily available on the Kansas birth certificate (number of prenatal care visits, date of first prenatal visit, date of last menses, and gestational length of pregnancy). Prenatal care (PNC) utilization is characterized by adequacy of initiation of PNC and adequacy of utilization of received services once PNC has begun. The APNCU Index categorizes care as inadequate, intermediate, adequate, or adequate plus.

Results

In 2014, the APNCU Index was calculated for 38,678 Kansas resident live births, representing 98.7 percent of the 39,193 births reported. About 83.0 percent of mothers received adequate or better prenatal care*, including 30.9 percent with adequate-plus care. This level of adequate or better prenatal care meets the target established by Healthy People 2020 (77.6%). Approximately 17.0 percent received less than adequate prenatal care†: 11.1 % inadequate care and 5.9 percent intermediate care.

Among mothers whose prenatal care utilization was classified as inadequate (4,304), the vast majority (4,101 or 95.3%) were due to late initiation of care. Only a minority of women (203 or 4.7%) who initiated their care within the first four months of pregnancy received inadequate care due to an insufficient number of prenatal care visits to their provider (Figure 1).



Figure 1. Number of Live Births by Adequacy of Prenatal Care Utilization (APNCU) among Kansas Residents*, 2014

* Includes 98.7 percent (38,678) of 39,193 total Kansas resident births for which the number of prenatal visits, date of first prenatal visit, and the date of last menses were reported on the birth certificate.

Source: Bureau of Epidemiology and Public Health Informatics, Kansas Department of Health and Environment

Additional findings:

- Among mothers of infants with low birth weight (<2,500 grams), 83.0 percent received adequate or better care, while 12.2 percent received inadequate care.
- The proportion of mothers who received adequate or better prenatal care was highest among White non-Hispanic mothers (87.0%) followed by Asian/Pacific Islander non-Hispanic mothers (81.8%). Population groups below the target established by Healthy People 2020 (77.6%) included American Indian non-Hispanic mothers (75.4%) and Black non-Hispanic mothers (72.4%). The population group with the lowest percentage receiving adequate or better prenatal care was Hispanic mothers (70.8%).

- The proportion of mothers reporting inadequate care was highest among Hispanics (19%), Black non-Hispanics (18.6%), and American Indian non-Hispanics (16.8%). These proportions are more than twice that of White non-Hispanic women, who experienced inadequate care at a rate of 8.3 percent.
- Among the 4,304 mothers who received inadequate prenatal care, most care was paid by Medicaid (51.0%), followed by Private Insurance (23.8%) and Self Pay (15.4%).
- Fewer (9.2%) mothers received inadequate care when delivering their first-born infant than mothers delivering their second- or higher-born infant (12.1%).
- A trend analysis showed a significant decreasing trend in less than adequate care from 2007 to 2014.
- Analysis by county revealed 10 Kansas counties with a significantly higher percentage of mothers receiving less than adequate care when compared to the state percentage.

Discussion

Adequate prenatal care promotes healthy pregnancies and positive birth outcomes. The APNCU Index does not assess the quality of prenatal care that is delivered, only its utilization. The full report shows Kansas is above target for adequate or better prenatal care utilization; however, inequities continue to exist by population group, pay source, and county. Findings highlight areas where prenatal care is improving as well as areas which may be improved. The full report will be available at: http://www.kdheks.gov/phi/index.htm.

Julia Soap, MPH

Bureau of Epidemiology and Public Health Informatics *Adequate or better prenatal care combines Adequate + Adequate Plus categories. †Less than adequate prenatal care combines intermediate and inadequate categories.

References

- [1] Soap J, Oakley D, Crawford G (2014). Adequacy of Prenatal Care Utilization Index Kansas, 2014. Kansas Department of Health and Environment, Bureau of Epidemiology and Public Health Informatics.
- [2] Krueger PM, Scholl TO. Adequacy of prenatal care and pregnancy outcome. JAOA 2010 Aug; 100(8): 485-492.
- [3] Heaman MI, Newborn-Cook CV, Green CG, Elliott LJ, Helewa ME. Inadequate prenatal care and its association with adverse pregnancy outcomes: A comparison of indices. BMC Pregnancy and Childbirth 2008, 8:15.
- [4] Schramm WF. Weighing costs and benefits of adequate prenatal care for 12,023 births in Missouri's Medicaid program, 1988. Public Health Rep. 1992 Nov-Dec; 107(6): 647-52.
- [5] Kotelchuck M. An Evaluation of the Kessner of Adequacy of Prenatal Care Index and a proposed Adequacy of Prenatal Care Utilization Index. American Journal of Public Health, 1994; 84:1414-1420.

Announcements

Kansas Information for Communities Features Maps

Kansas Information for Communities (KIC) Map features were implemented in December 2015 for births and deaths. Maps will work for all data years for these two events. Each map created will include a table of the data used to create the map and maps

will be implemented for Cancer and Hospital Discharge data next.

The KIC map modules can display statistical data by "Frequencies Only", such as counts, and "Frequencies & Percent / Rate", such as population based mortality rates or percent of birth for a specific measure.

All map results are displayed by county. KIC Maps cannot



filter out counties nor can it map data for various regional groupings like peer group, geographic region, or health preparedness region. State data will display with the map as well.

KIC Maps will display counts or rates/percents in three different ways: "Higher / Lower than State", "Quartiles", and "Quintiles". The quartiles feature groups the states counties into four categories and assigns colors based on the range of values. There are multiple color choices that can be selected. The quintiles feature groups the state's counties into five groups. The groups in quartiles and quintiles are assigned an equal number of counties.

The third approach to displaying results, "Higher / Lower than State," is a map that compares county rates or percents to the state's rate and determines if the county values are statistically higher, statistically lower, or not statistically different from the state rate. Each county's rate is categorized as "High", "N/S" (Not Significant), or "Low" and category determination is based on a 95% Confidence Interval. KIC Maps calculates upper and lower confidence intervals for each county's rate. If those intervals overlap the state rate's confidence intervals, the category is set to N/S indicating there is no significant difference between the county rate and the state rate. This feature is valuable when comparing rates and percents. The feature is not recommended when you are mapping counts.

KIC Maps has a suppression feature to address instances when individual county rates do not support an equal distribution of counties into quartiles or quintiles. When this suppression rule is implemented, the map graphic does not appear but the data table is visible. Absence of the map is due to the data distribution not being suitable for a map. This is determined by the difference between the data set's first element and the element 'one-fourth' of the way through is less than 0.1 or the difference between the data set's element three-fourths of the way through and the last element is less than 0.1. When either or both of these conditions are true, the map is suppressed. Often you can add more years to the map query to change the distribution of counties so that quintiles or quartiles will display.

Features such as download and rotate, commonly available in KIC tabular outputs, are turned off in KIC Maps. However, users can perform a screen grab to capture the image. You can also copy the contents of the statistical table in the KIC Maps output and paste that into a spreadsheet program. Alternately, you can also print out the page to a printer or PDF file if you have the appropriate software.

KIC Maps uses the same source data as the corresponding tabular data modules. These modules will be updated as new data is added to the tabular modules.

Roger Zornes Bureau of Epidemiology and Public Health Informatics

2014 Teen Pregnancy Report Issued

KDHE has a number of programs directed at reducing teen pregnancy. The Bureau of Epidemiology and Public Health Informatics at KDHE prepares the Teen Pregnancy report annually to provide data to support assessment and evaluation of teen pregnancies in Kansas. The report contains a series of summary tables detailing pregnancy outcomes (live

births, abortions, and stillbirths) for females 10-19 years of age. Pregnancies among adolescents and teens accounted for 7.2 percent (3,118) of the 43,110 pregnancies in 2014. About 86.5 percent resulted in a live birth (n=2,696), 12.9 percent in abortion (n=402), and the remainder in stillbirths (n=20).

Other findings include:

- The pregnancy rate for females aged 10-19 was 16.0 per 1,000 age group specific female population in 2014, down 6.4 percent from 2013 (17.1) (Table 1).
- Pregnancy rates among females 15-17 years of age, (13.6 per 1,000 female age group population) and females aged 18-19 (58.6 per 1,000 age group population) compared

rubic 1. reen regnancy nates per 1,000 remaie								
population by age-group by year, 2000-2014								
Kansas								
Year	Age Groups							
	(10-19)	10-14	15-17	18-19	10-17	15-19		
2000	30.3	0.9	30.1	105.0	12.0	58.7		
2001	28.8	0.8	30.2	101.4	11.9	56.0		
2002	28.3	0.9	28.3	96.0	11.3	54.7		
2003	26.4	0.8	26.6	92.9	10.5	51.3		
2004	26.1	0.8	25.8	86.8	10.3	50.3		
2005	26.7	0.8	25.7	85.1	10.4	50.8		
2006	27.1	0.9	25.5	87.1	10.4	52.2		
2007	27.8	0.8	26.8	93.1	10.9	53.2		
2008	28.6	0.7	27.1	95.7	10.9	55.0		
2009	26.8	0.6	25.2	88.5	10.0	51.6		
2010	23.1	0.6	22.4	77.6	8.8	45.1		
2011	20.9	0.7	18.4	72.2	7.3	40.8		
2012	19.7	0.4	17.0	70.8	6.6	39.0		
2013	17.1	0.4	14.6	62.4	5.7	34.0		
2014	16.0	0.4	13.6	58.6	5.3	33.2		
Residence Data								

Table 1 Teen Pregnancy Rates per 1 000 female

favorably with the Healthy People 2020 national targets of 36.2 and 72.2, respectively.

• In 2014, Black non-Hispanic and Hispanic pregnancy rates among teens 10-17 years of age decreased by 5.6 percent and 13.9 percent, respectively, while white non-Hispanic pregnancy rates declined by 2.6 percent.

The 2014 Teen Pregnancy report can be found at http://www.kdheks.gov/phi/index.htm.

Bureau of Epidemiology and Public Health Informatics

Infectious Disease in Kansas: 2013 Annual Summary

Background

Every year, the state of Kansas publishes a report detailing the reportable diseases in the state of Kansas. The Kansas Department of Health and Environment (KDHE) recently published the report for 2013. The purpose of the report is to provide useful information for health care providers, public health colleagues, and policy makers about infectious diseases in Kansas. The focus of the report is the assessment of disease trends, including incidence, severity, populations affected, and risk factors for infection.

Methods

Health care providers, laboratories, and hospitals are required by Kansas law (K.S.A. 65-118, 65-128; 65-6001 through 65-6007; K.A.R. 28-1-2, 28-1-4, and 28-1-18) to report selected diseases and conditions. Data for this report were obtained from EpiTrax, Kansas's electronic disease surveillance system, which is utilized by the KDHE Infectious Disease Epidemiology and Response (IDER) team to track and investigate reportable infectious diseases in the state of Kansas. Demographic and clinical data from the 2013 Morbidity and Mortality Weekly Report (MMWR) year were extracted from EpiTrax along with data on risk factors which are specific to each disease. Incidence rates were calculated from the vintage 2013 population estimates provided by the U.S. Census Bureau. Whenever possible, information regarding disease trends for the United States was included for comparison with Kansas's trends.

Results and Discussion

A summary of each reportable infectious disease is included in the document, along with summary tables on 2013 disease incidence by Kansas county, 2013 disease incidence by demographic characteristic, and disease incidence over the previous ten years. The full report is available at: http://www.kdheks.gov/epi/annual_summary.htm.

Charles Cohlmia, MPH Bureau of Epidemiology and Public Health Informatics

Updates to Kansas Health Matters

Kansas Health Matters (KHM) has updated a number of indicators. The measures have been posted to the KHM website, http://www.kansashealthmatters.org/. During January 2016, the Healthy Communities Institute also updated a number of measures based on the American Community Survey. These indicators address poverty and economic issues. Indicators updated by the KHM Partners include:

Natality:

- Infant Mortality Rate,
- Number of Births per 1,000 Population,
- Percent of Births Occurring to Teens (15-19),
- Percent of Births Occurring to Unmarried Women,
- Percent of births Where Mother Smoked During Pregnancy,
- Percent of Births Where Prenatal Care began in First Trimester,
- Percent of Births with Inadequate Birth Spacing,
- Percent of Births with Low Birth Weight, and
- Percent of Premature Births.

Hospital Discharge:

- Bacterial Pneumonia Hospital Admission Rate,
- Chronic Obstructive Pulmonary Disease (COPD) Hospital Admission Rate,
- Congestive Heart Failure Hospital Admission Rate,
- Heart Disease Hospital Admission Rate, and
- Injury Hospital Admission Rate.

American Community Survey

- People Living Below Poverty Level,
- Children Living Below Poverty Level,
- Young Children Living Below Poverty Level,
- Families Living Below Poverty Level,
- People 65+ Living Below Poverty Level,
- People Living 200% Above Poverty Level,
- Median Household Income,
- Per Capita Income,
- Income Inequality,
- Poverty Status by School Enrollment,
- Renters Spending 30% or More of Household Income on Rent,
- Homeowner Vacancy Rate,
- Homeownership,
- Households with Cash Public Assistance,
- Households with Supplemental Security Income,
- Households without a Vehicle,
- Houses Built Prior to 1950,
- People 25+ with a Bachelor's Degree or Higher,
- People 25+ with a High School Degree or Higher,
- People 65+ Living Alone,
- Linguistic Isolation,
- Single-Parent Households,
- Single-Parent Female Households,

- Mean Travel Time to Work,
- Workers Commuting by Public Transportation,
- Workers who Drive Alone to Work,
- Workers who Walk to Work,
- Workers who Bike to Work, and
- Youth not in School or Working.

The Kansas Health Matters partners have also created a page for persons to submit reports to be posted on KHM. This will facilitate sharing reports with the Kansas audience. That link is: http://www.kansashealthmatters.org/index.php?

controller = index & module = Resource Library & action = contribute resource.

If you have KHM questions, please email Kansas.health.statisics@kdheks.gov.

Kansas Health Matters Partners

Notes from the Field

Norovirus Outbreaks

The Kansas Department of Health and Environment (KDHE) has investigated an increased number of norovirus outbreaks in Kansas this winter. Since November, five laboratory-confirmed norovirus outbreaks have been identified around the state. The outbreaks were associated with restaurants and long-term care facilities.

Norovirus symptoms are like those of food poisoning, and it is often called the "stomach flu." Symptoms of norovirus generally include nausea, vomiting, diarrhea, and some stomach cramping. Some people will suffer from a low-grade fever, chills, headache, muscle aches, and a general sense of tiredness.

Symptoms develop 12 to 48 hours after exposure to the virus. The illness often begins suddenly, and the infected person may feel very sick. The illness is usually brief, with symptoms lasting only one to two days and rarely causing long term problems after recovery. The virus is easily spread. People infected with norovirus are contagious from the onset of symptoms until at least three days after recovery.

For disease reporting information for health professionals, visit http://www.kdheks.gov/epi/disease_reporting.html.

Daniel Neisis, MPH Bureau of Epidemiology and Public Health Informatics

Zika Virus Information Available

Zika virus is spread to people through mosquito bites. The most common symptoms of Zika virus disease are fever, rash, joint pain, and conjunctivitis (red eyes). The illness is usually mild with symptoms lasting from several days to a week. Severe disease requiring hospitalization is uncommon. CDC has issued <u>travel notices</u> for people traveling to regions and certain countries where Zika virus transmission is ongoing. More information at: http://www.cdc.gov/zika/index.html/.

Bureau of Epidemiology and Public Health Informatics



Kansas County Cumulative Population Change, 2014-2064

nendi		Wy and otte	nosuhola	in Miami		Linn	5	Bourbon	Crawford	eCherokee
rown	Atcuiso	Jetters or	Dougla	ge Frankli		ey	n Anderso	Allen	onNeosh	ery Labett
Nemaha	mieJackso	Shawi	Jaunsee	Osa	Lyon	Cott	Woodso	poonu	Wils	Montgome
Marshal	Pottawato	I	Morrie		Chase			utler Gree		wley chau
c /ashingto	Clay		Ickinson		Marion		vey	ä	vick	ner Co
Republi	Cloud	Ottawa	Saline		IcP hers	-	Har		n Sedg	ar Sum
Jewell	Mitchell	Lincoln	-lie worth		Rice N	ł	Reno		Kingma	Harpe
Smith	Osborne		Russell		Barton		Stafford		Pratt	e Barber
Phillips	Rooks		Ellis	Duch	lienu	Pawnee		Edwards	Kiowa	comanch
Norton	Graham		Trego	and the second se	Ness		oageman		Ford	Clark
Decatur	Sheridan		Gove		Lane		A	100	Glay	d Meade
wlins	omas		gan		Scott	C	y n		t Haskel	1s Sewar
nne Ra	an T		2		y Wichit		nKearn		n Gran	Stever
Cheyer	Sherm		Wallad		Greele		Hamilto		Stanto	Mortor

Population Forecast

Total Percent Change 2014-2064

-94.2% to -59.3%

-59.4% to -24.4%

-24.5% to 0.0%

0.1% to 45.2%

45.3% to 80.1%

80.2% to 115.0%

Source: Center for Economic Development and Business Research Wichita State University

F

The Public Health Informatics Unit (PHI) of the Kansas Department of Health and Environment's Bureau of Epidemiology and Public Health Informatics produces *Kansas Health Statistics Report* to inform the public about availability and uses of health data. Material in this publication may be reproduced without permission; citation as to source, however, is appreciated. Send comments, questions, address changes, and articles on health data intended for publication to: PHI, 1000 SW Jackson, Suite 130 Topeka, KS, 66612-1354, Kansas.Health.Statistics@kdheks.gov, or 785-296-1531. Susan Mosier, MD, Secretary KDHE; D. Charles Hunt, MPH, State Epidemiologist and Director, BEPHI; Elizabeth W. Saadi, PhD, State Registrar, Deputy Director, BEPHI; Greg Crawford, BEPHI, Editor.

PRST STD US Postage Paid Topeka. KS Permit No. 157 264-39 Bureau of Epidemiology and Public Health Informatics 1000 SW Jackson, Suite 130 Topeka, KS 66612-1354