

# Saline County Community Health Assessment

## Community Engagement and Prioritization

### 2015

Saline County Health Department

Salina Regional Health Center

Central Kansas Foundation

Salina Surgical Hospital

Salina Area United Way

North Central Flint Hills Area Agency on Aging

USD 305

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## Purpose

The Community Health Assessment forms the foundation for community health improvement. The purpose of the assessment is to provide comprehensive, reliable measures that can be used to direct targeted, evidence-based health improvement activities where they are needed; provide a baseline for ongoing evaluation; and guide resource utilization.

## Community Health Assessment Core Group

Representatives of Salina Regional Health Center, the Saline County Health Department, United Way of Salina, Salina Surgical Hospital, USD 305, North Central Flint Hills Area Agency on Aging, and the Central Kansas Foundation partnered to conduct an assessment of the health status and needs of our community.

### **Salina Regional Health Center:**

Tom Bell, Vice President, Government and Public Relations

Tom Martin, Director of Salina Regional Health Foundation

Joe Tallon, Vice President Chief Financial Officer

Mike Mattek, Marketing Regional Service Representative

Kevin Hoffman, Controller SRHC Accounting Department

Linda Hinnenkamp, Tammy Walker Cancer Center/SRHC

### **Saline County Health Department:**

Jason Tiller

### **Salina Area United Way**

Amanda Michaelis, Executive Director

### **Central Kansas Foundation:**

Daniel Craig, Tobacco Use Prevention Program Coordinator

### **Salina Surgical Hospital**

Luann Puvogel, CEO

### **North Central Flint Hills Area Agency on Aging**

Kelsey Psannenstiel.

### **USD 305**

Stan Vaughn, Executive Director USD305

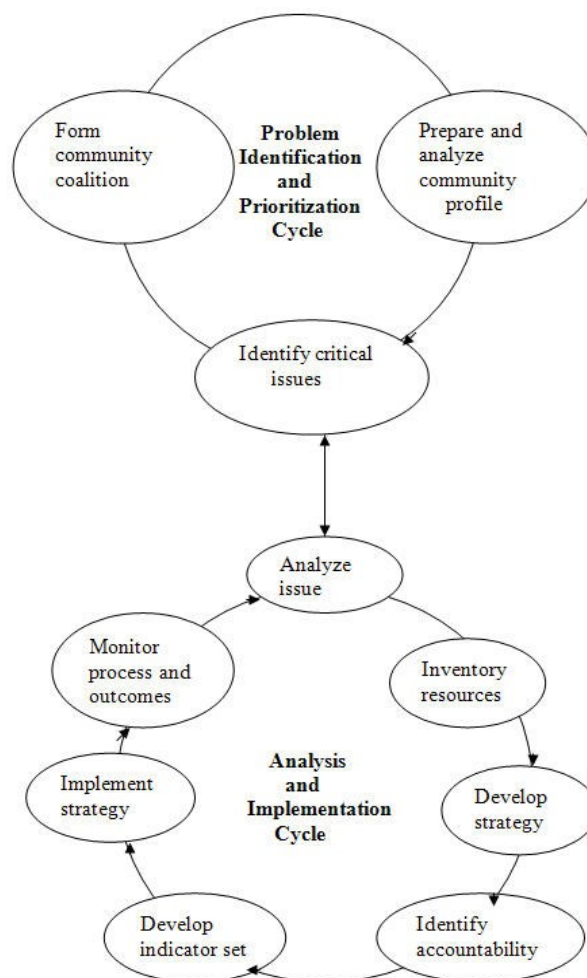
### **Community Partners**

Stephanie Cool, Vice President Human Resources, Bank of Tescott

## The Community Health Improvement Process

Several tools and frameworks have been developed to guide communities through the CHA process. The framework that was selected by the CHA Core Group is the Institute of Medicine Community Health Improvement Process [1]. An important initial step in the process is the preparation, analysis and interpretation of data describing the community, for a Community Profile. The Community Profile describes the factors that contribute to the health and the health status of the community.

Figure 1: A Community Health Improvement Process



*J.S. Durch, L.A. Bailey, and M.A. Stoto, eds. Improving Health in the Community, Washington, DC: National Academy Press, 1997.*

## Data Sources

There are numerous publicly available sources for valid, reliable data. The Kansas State Department of Health and Environment (KDHE) collects information that includes pregnancy outcomes, births, deaths, cancer incidence, reportable diseases, and more. Kansas community specific data are accessible on the KDHE web site in the form of published reports or as customizable tables [2].

In 2011 The Kansas Partnership for Improving Community Health (KanPICH) launched the Kansas Health Matters web site to assist communities with the CHA/CHIP process. The web site is a publicly accessible repository for standardized, county specific health indicator data and CHA resources . Kansas Health Matters was the primary data source used all data unless referenced is from [www.kansashealthmatters.org](http://www.kansashealthmatters.org) [3]

The Center for Disease Control and Prevention (CDC) Behavioral Risk Factor Surveillance System (BRFSS) is the largest annual health related phone survey conducted in the world. The KS BRFSS program provided county specific data for those counties with a population large enough for sufficient sample size in 2009. These data are accessible on the internet [4].

The measures compiled in this report come from multiple sources that use scientifically sound data collection and analysis methods. More information about the methods used to produce these data is available from each source.

## Data Interpretation

For the purpose of this CHA, the community is Saline County. All of the local measures in this report are based on county of residence. The measures describe the rate at which events occur among the Saline County population, allow comparison to expected values and describe trends over time.

Percentages or other rates (number of events divided by the group of people affected) have been used to standardize and allow comparison to other population groups. For example, the adolescent birth rate is expressed as the number of live births per 1,000 age group female population. Age adjustment of data, such as age adjusted death rates, standardizes the measurement to account for varying age distributions within populations. When the number of annual events or population represented are small multiple years of data may be combined to enable meaningful rate calculation.

Comparison of local values to state or national values provides means to determine an expected number of events given population size [5]. While such comparisons provide additional insight, decisions that are made on the basis of these comparisons should be made with caution, particularly when the population of interest is small or the number of events of interest is small [1].

## Saline County Demographic Overview

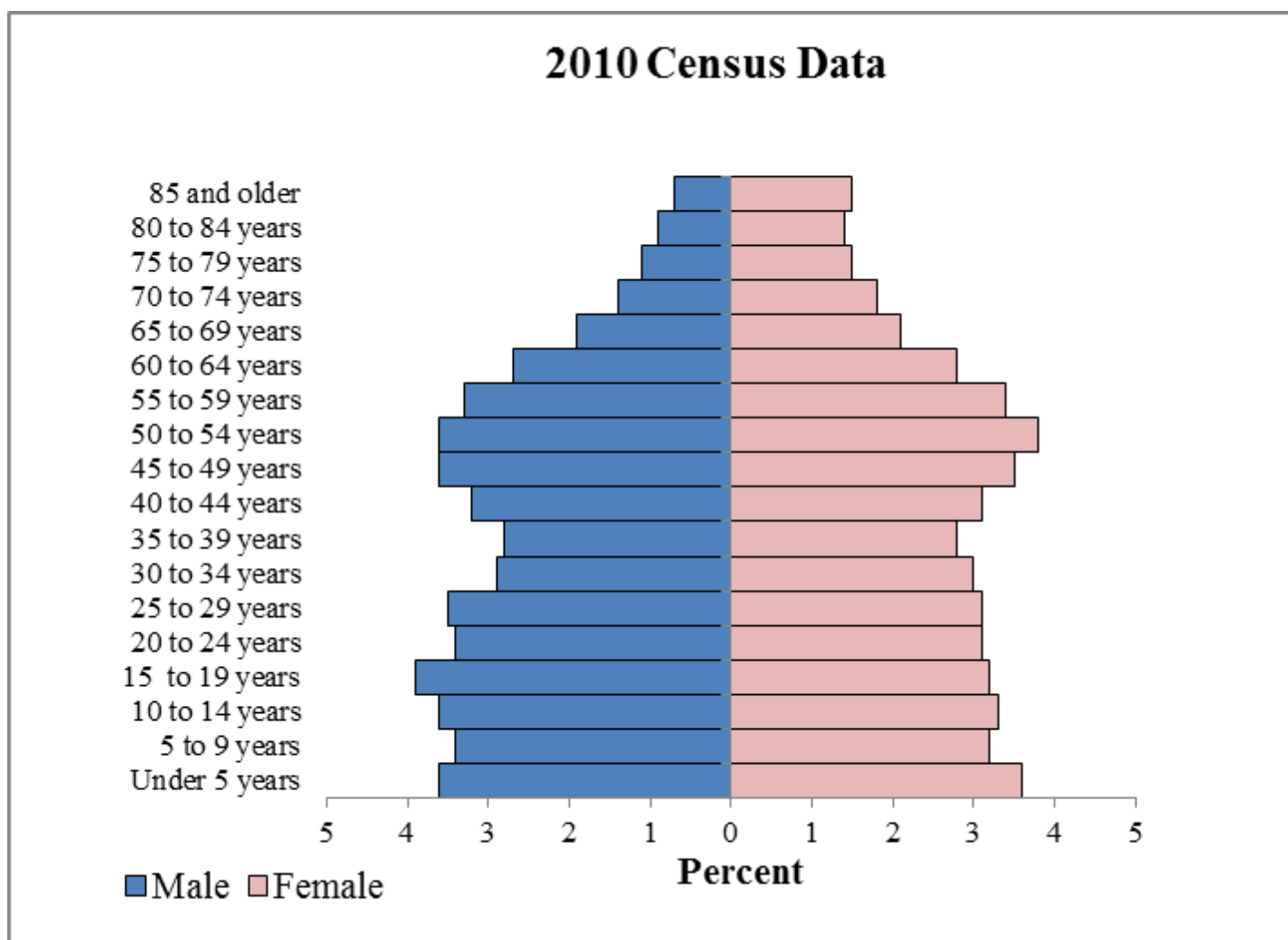
Saline County, Kansas		
People Quick Facts	Saline County	Kansas
Population, 2014 estimate	55,755	2,904,021
Population, 2013 estimate	55,830	2,895,801
Population, 2010 (April 1) estimates base	55,606	2,853,132
Population, percent change - April 1, 2010 to July 1, 2014	0.30%	1.80%
Population, percent change - April 1, 2010 to July 1, 2013	0.40%	1.50%
Population, 2010	55,606	2,853,118
Persons under 5 years, percent, 2013	6.90%	6.90%
Persons under 18 years, percent, 2013	24.40%	25.00%
Persons 65 years and over, percent, 2013	15.40%	14.00%
Female persons, percent, 2013	50.40%	50.20%
Living in same house 1 year & over, percent, 2009-2013	84.00%	83.20%
Foreign born persons, percent, 2009-13	5.10%	6.70%
Housing units, 2013	24,135	1,239,706
Homeownership rate, 2009-2013	67.10%	67.50%
Housing units in multi-unit structures, percent, 2009-2013	16.40%	17.70%
Median value of owner-occupied housing units, 2009-2013	\$119,500	\$128,400
Households, 2009-2013	22,173	1,110,440
Persons per household, 2009-2013	2.44	2.51
Per capita income in past 12 months (2013 dollars), 2009-2013	\$24,935	\$26,929
Median household income, 2009-2013	\$47,215	\$51,332
Persons below poverty level, percent, 2009-2013	17.40%	13.70%
Business QuickFacts	Saline County	Kansas
Private nonfarm establishments, 2012	1,577	739,441
Private nonfarm employment, 2012	27,083	11,342,161
Private nonfarm employment, percent change, 2011-2012	-0.20%	1.9%1
Nonemployer establishments, 2012	3,423	188,168
Manufacturers shipments, 2007 (\$1000)	D	76,751,828
Merchant wholesaler sales, 2007 (\$1000)	816,434	45,863,865
Retail sales, 2007 (\$1000)	1,064,587	34,538,332
Retail sales per capita, 2007	\$19,676	\$12,444
Accommodation and food services sales, 2007 (\$1000)	96,095	4,192,347
Building permits, 2013	77	8,285
Geography QuickFacts	Saline County	Kansas
Land area in square miles, 2010	720.23	81,758.72
Persons per square mile, 2010	77.2	34.9

## Age Distribution

Age Group	2005	2006	2007	2008	2009	Census 2010	2011	2011 Percent of total	2005-2011 Percent change
0 to 4	3604	3737	3836	3903	3928	4005	3986	7.1	10.6
5 to 9	3549	3601	3708	3607	3499	3654	3692	6.6	4.0
10 to 14	3727	3797	3679	3668	3615	3879	3809	6.8	2.2
15 to 19	3628	3554	3617	3541	3629	3919	3959	7.1	9.1
20 to 24	3860	3513	3367	3325	3699	3660	3603	6.5	-6.7
25 to 29	3603	3717	3880	3841	3884	3719	3691	6.6	2.4
30 to 34	3331	3128	3147	3289	3155	3292	3417	6.1	2.6
35 to 39	3541	3631	3658	3521	3200	3136	2978	5.3	-15.9
40 to 44	3980	3814	3625	3469	3345	3522	3586	6.4	-9.9
45 to 49	4132	4156	4104	4023	4066	3962	3735	6.7	-9.6
50 to 54	3776	3892	3877	4005	4007	4096	4227	7.6	11.9
55 to 59	3242	3384	3395	3394	3568	3712	3799	6.8	17.2
60 to 64	2307	2385	2647	2779	2885	3048	3224	5.8	39.7
65 to 69	1914	2038	2103	2201	2115	2231	2307	4.1	20.5
70 to 74	1718	1737	1764	1803	1799	1822	1832	3.3	6.6
75 to 79	1651	1605	1597	1610	1479	1463	1490	2.7	-9.8
80 to 84	1212	1273	1311	1351	1282	1265	1226	2.2	1.2
85 and up	1144	1208	1268	1327	1209	1221	1283	2.3	12.2
All	53919	54170	54583	54657	54364	55606	55844	100	3.6

Source: Kansas Department of Health and Environment. Kansas Information for Communities, Population Estimates <http://kic.kdhe.state.ks.us/kic/Populate.html>

## Demographic Overview



These data indicate that the largest increases in Saline County age group population from 2005 to 2011 occurred in the 60-64 and the 65-69 year age groups. The largest decrease in age group population occurred in the 35-39 year group. The age structure of a population is important in planning for the future of a community, particularly for schools, community centers, health care, and child care. A population with more youth will have greater education and child care needs, while an older population may have greater health care needs [3].



## Social Characteristics

<b>SALINE COUNTY RACIAL AND ETHNIC CHARACTERISTICS CENSUS DATA</b>	<b>2000</b>	<b>Number</b>	<b>2010</b>
One race	97.9%	53,901	96.9%
White	89.2%	48,695	87.6%
Black or African American	3.1%	1,814	3.3%
American Indian and Alaska Native	0.5%	295	0.5%
Asian	1.7%	1,156	2.1%
Native Hawaiian and Other Pacific Islander	0.1%	27	0.1%
Some other race	3.3%	1,914	3.4%
Two or more races	2.1%	1,705	3.1%
Hispanic or Latino (of any race)	6.0%	5,403	9.7%

<b>SALINE COUNTY LANGUAGE SPOKEN AT HOME 2009-2011, 3 YEAR ESTIMATES</b>	<b>Number</b>	<b>Percent</b>
Population 5 years and over	51,796	
English only	46,270	89.3%
Language other than English	5,526	10.7%
Speak English less than "very well"	2,149	4.1%
Spanish	3,940	7.6%
Speak English less than "very well"	1,503	2.9%
Other Indo-European languages	372	0.7%
Speak English less than "very well"	103	0.2%
Asian and Pacific Islander languages	1,214	2.3%
Speak English less than "very well"	543	1.0%

Source: American Community Survey. Selected Social Characteristics, 2009-2011. <http://factfinder2.census.gov>

Saline County continues to become more culturally diverse. The Hispanic/Latino population grew 67% from 2000 to 2010. 10.7% of the Saline County population older than five years speak a language other than English in their home. Approximately 4% of the Saline County population speak English less than very well. The most commonly spoken languages other than English are Spanish and Asian.

Culturally appropriate, community-driven programs are critical for eliminating racial and ethnic disparities in health. Prevention research is needed to identify the causes of health disparities and the best means of delivering preventive and clinical services. Establishing these programs will require new and innovative partnerships [6].

## Housing/Household Information

<b>SALINE COUNTY HOUSEHOLD TYPES AS A PERCENT OF THE TOTAL NUMBER OF HOUSEHOLDS</b>	<b>2000</b>	<b>2010</b>	<b>Kansas 2010</b>
Number of households	21,436	22,416	
Households with individuals under 18 years	34.4%	31.7%	33.2%
Households with individuals 65 years and over	23.9%	25.3%	23.7%
Average household size (not a percent)	2.43	2.42	2.49
Average family size (not a percent)	2.98	2.98	3.06
<b>FAMILY HOUSEHOLDS (families)</b>	66.3%	64.2%	66.0%
Family households with own children under 18 years	32.1%	28.6%	30.4%
Married-couple family	52.9%	48.6%	51.1%
Married couple family with own children under 18 years	23.2%	18.7%	21.3%
Male householder, no wife present #		4.8%	4.5%
Male householder, no wife present, with own children under 18 years #		2.9%	2.6%
Female householder, no husband present	9.7%	10.8%	10.4%
Female householder, no husband present, with own children under 18 years	6.5%	7.0%	6.5%
<b>NONFAMILY HOUSEHOLDS</b>	33.7%	35.8%	34.0%
Householder living alone	28.3%	29.7%	27.8%
Householder 65 years and over, living alone	10.7%	10.9%	9.9%

Source: 2000 and 2010 U.S. Census. <http://factfinder2.census.gov>  
[# New measure on 2010 Census](#)

<b>RELATIONSHIPS OF PEOPLE LIVING IN SALINE COUNTY HOUSEHOLDS</b>	<b>2000</b>	<b>2010</b>	<b>Kansas 2010</b>
Total Population	53,597	55,606	
Population in households	97.3%	97.4%	97.2%
Householder	40.0%	40.3%	39.0%
Spouse	21.2%	19.6%	19.9%
Child	28.5%	27.3%	28.8%
Own child under 18 years	24.0%	22.0%	23.1%
Other relatives	2.9%	4.4%	4.3%
Under 18 years	1.2%	2.1%	1.9%
65 years and over #		0.4%	0.5%
Nonrelatives	4.8%	5.7%	5.3%
Under 18 years #		0.6%	0.5%
65 years and over #		0.2%	0.2%
Unmarried partner	2.1%	2.9%	2.3%

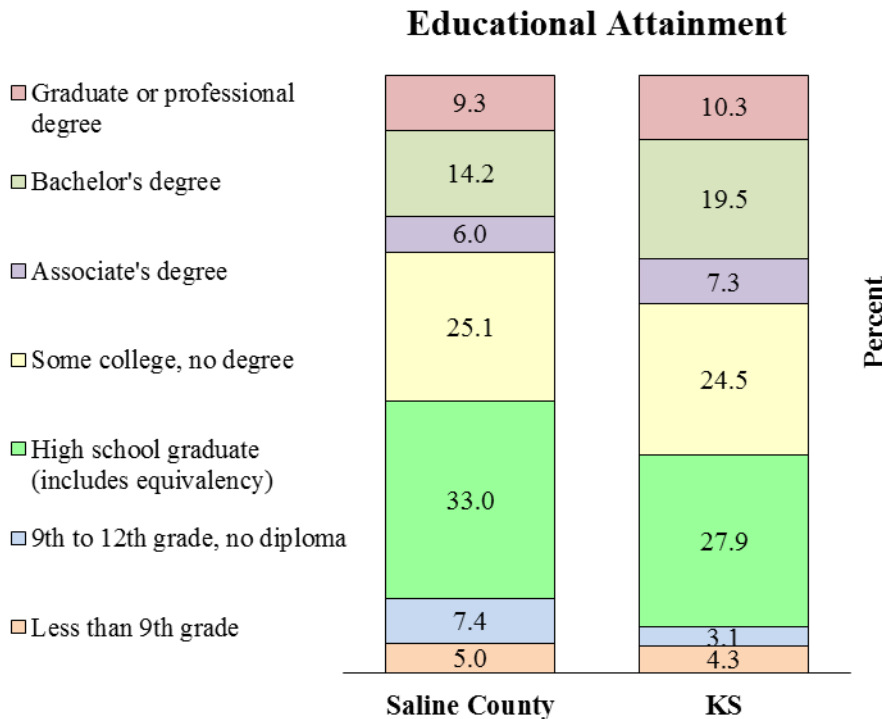
Source: 2000 and 2010 U.S. Census. <http://factfinder2.census.gov>

## Housing/Household Information

Household structure in Saline County has changed since the 2000 U.S. Census. These measures may be impacted by the increasing age of the population. The number of households with children present has decreased. Nonfamily households and family households with a female householder and no husband present have increased. Household and family structure are important social and economic indicators.

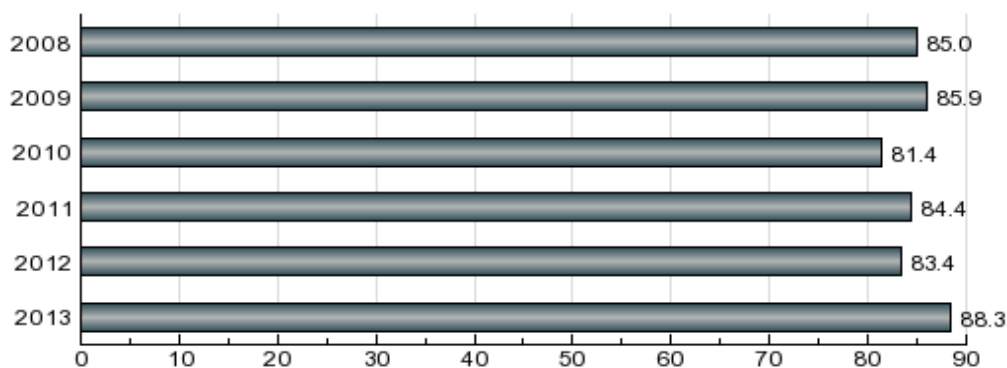
The American Community Survey 3-year Estimates of Economic Characteristics, 2009-2011 estimated that approximately 50% of Saline County female householders alone with children younger than eighteen years were living below the poverty level. In comparison, approximately 10% of married couple families with children were living below the poverty level [7].

## Education



87% of Saline County residents have at least a high school diploma or the equivalent. 24.1% have attained a bachelor's degree or higher.

### Saline County Graduation Rates



Source: Kansas Health Matters <http://www.kansashealthmatters.org/>

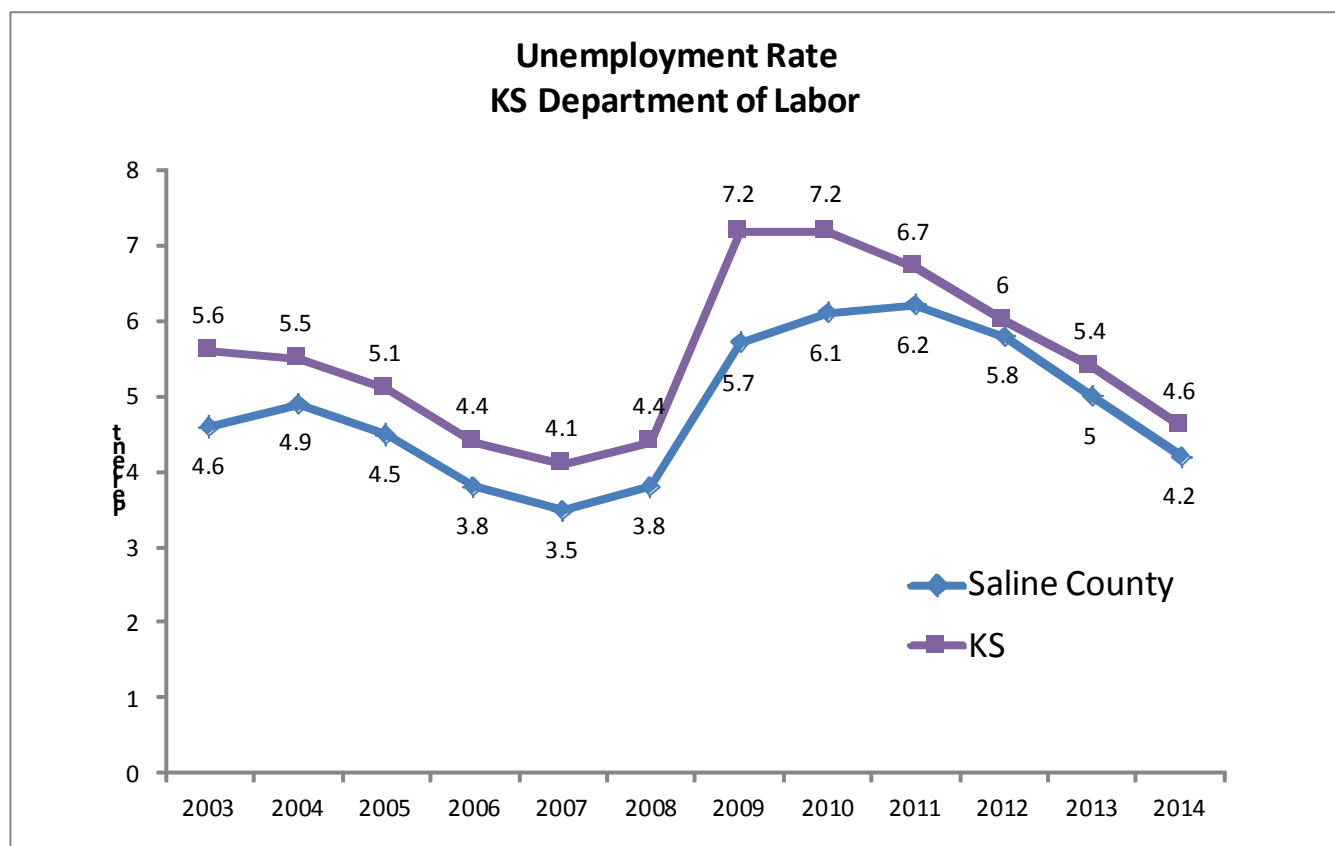
Saline County has shown an increase in graduation rates and has a 2.5% higher rate than state average of 85.8%. Individuals who do not finish high school are more likely than people who finish high school to lack the basic skills required to function in an increasingly complicated job market and society. Adults with limited education levels are more likely to be unemployed, on government assistance, or involved in crime. The Healthy People 2020 national health target is to increase the proportion of students who graduate high school within four years of their first enrollment in 9th grade to 82.4%.

## Economic Characteristics

<b>EMPLOYMENT STATUS</b>	<b>Saline County</b>	<b>Kansas</b>
Population 16 years and over	43,086	
In labor force	70.1%	68.2%
Civilian labor force	69.7%	67.4%
Employed	65.4%	62.4%
Unemployed	4.4%	5.1%
Armed Forces	0.3%	0.8%
Not in labor force	29.9%	31.8%
<b>COMMUTING TO WORK</b>		
Mean travel time to work (minutes)	14.4	18.8
<b>INDUSTRY</b>		
Civilian employed population 16 years and over	28,159	
Agriculture, forestry, fishing and hunting, and mining	1.6%	3.6%
Construction	4.9%	6.3%
Manufacturing	18.4%	12.6%
Wholesale trade	2.7%	2.8%
Retail trade	12.7%	11.3%
Transportation and warehousing, and utilities	5.1%	4.8%
Information	1.3%	2.3%
Finance and insurance, and real estate and rental and leasing	4.6%	6.0%
Professional, scientific, and management, and administrative and waste management services	8.2%	8.5%
Educational services, and health care and social assistance	22.5%	24.6%
Arts, entertainment, and recreation, and accommodation and food services	9.4%	7.9%
Other services, except public administration	4.6%	4.6%
Public administration	4.1%	4.8%

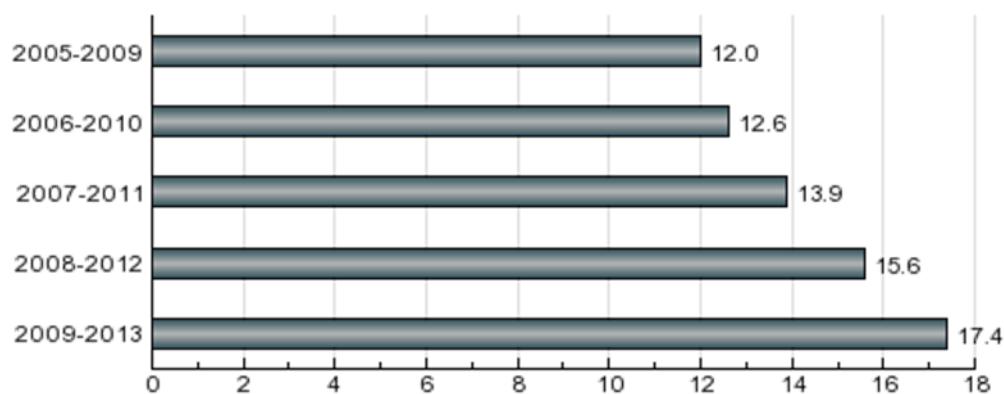
Source: American Community Survey. Selected Economic Characteristics, 2009-2011. <http://factfinder2.census.gov>

## Economic Characteristics



The unemployment rate is a key indicator of the local economy. A high rate of unemployment has personal and societal effects. During periods of unemployment, individuals are likely to feel severe economic strain and mental stress. Unemployment is also related to access to health care, as many individuals receive health insurance through their employer. A high unemployment rate places strain on financial support systems, as unemployed persons qualify for unemployment benefits and food stamp programs [3].

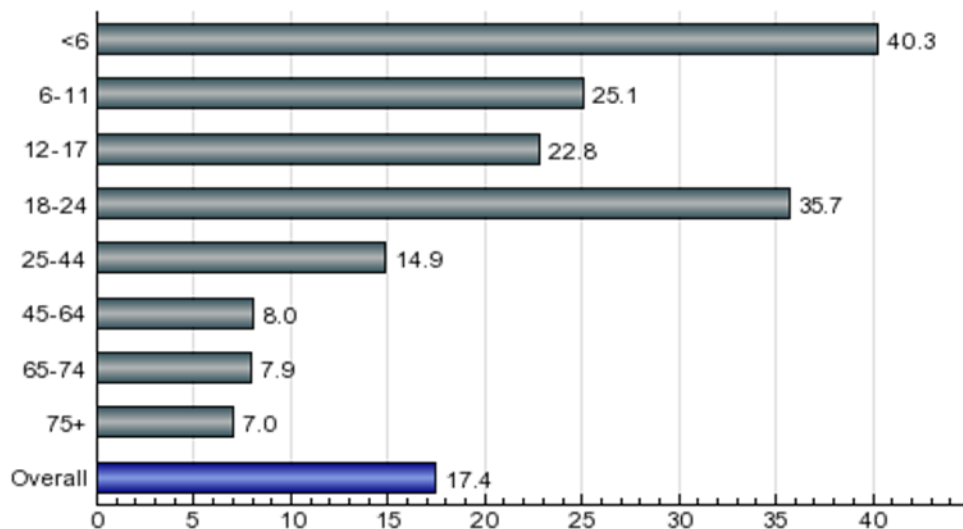
### People Living Below Poverty Level Percentage



Source: Kansas Health Matters <http://www.kansashealthmatters.org/>

## Economic Characteristics continued

### People Living Below Poverty Level By Age Percentage



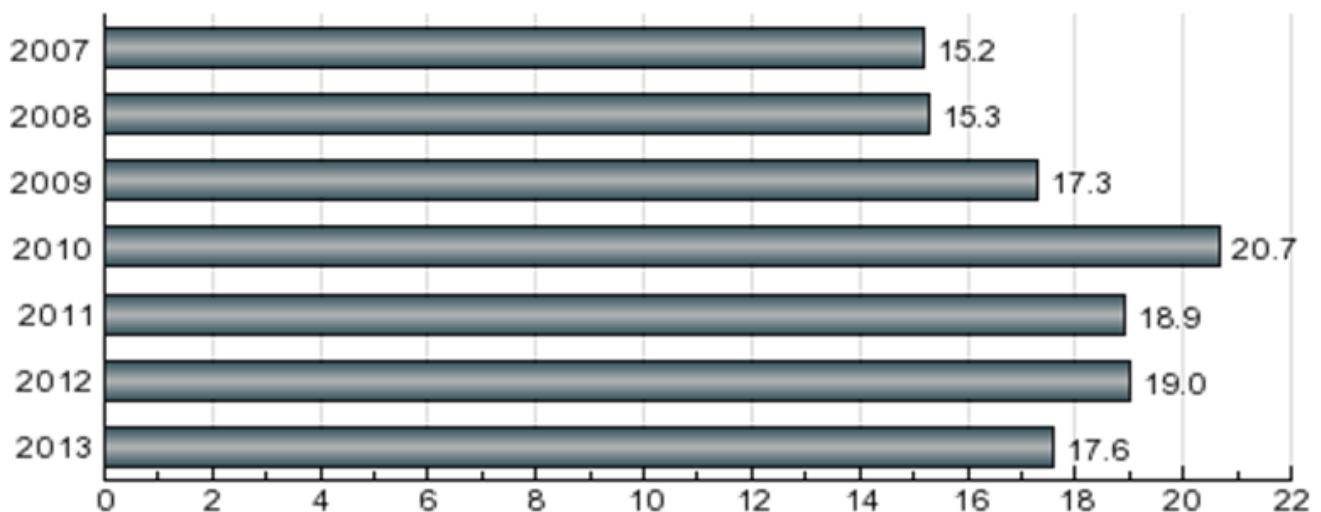
Source: Kansas Health Matters <http://www.kansashealthmatters.org/>

Family income has been shown to affect a child's well-being in numerous studies. Compared to their peers, children in poverty are more likely to have physical health problems like low birth weight or lead poisoning, and are also more likely to have behavioral and emotional problems. Children in poverty also tend to exhibit cognitive difficulties, as shown in achievement test scores, and are less likely to complete basic education [3].

## Access to Health Services

		2011	2014	Data Source
WIC Participation/1000 population	Saline County	32.4	27.7	Kansas Health Matters <a href="http://www.kansashealthmatters.org">www.kansashealthmatters.org</a>
	Kansas	26.6	22.5	
Number of staffed hospital beds/1000 population	Saline County	3.9	3.8	Kansas Health Matters
	Kansas	3	3.4	
Ratio of population to primary care physicians	Saline County	1179.8	1326	Kansas Health Matters
	Kansas	1723.8	1815	
Ratio of population to dentists	Saline County	2375	Not Available	Kansas Health Matters
	Kansas	2618	Not Available	
		<b>2011-2012</b>		
Percentage of screened K-12 grade students with obvious dental decay	Saline County	18.9%	15.6%	Kansas Health Matters
	Kansas	17.6%	15.8%	
Percentage of screened 3-12 grade students with no dental sealants	Saline County	77.4%	64.1%	Kansas Health Matters
	Kansas	61.2%	57.3%	

### Uninsured Adult Population Rates Saline County



[www.kansashealthmatters.org](http://www.kansashealthmatters.org)



## Access to Health Services

Saline County residents have access to a larger pool of primary care physicians and dentists than residents of KS overall. Primary care is the backbone of preventive health care, and a strong primary care workforce is essential to health.

Health insurance coverage helps patients get into the health care system. Uninsured people are less likely to receive medical and dental care. They are more likely to die early and more likely to have poor health status. Salina Family Health Care, a Federally Qualified Health Center, serves many of the low income and uninsured Saline County residents.

## Potential Issues

During review and discussion of these measures, the CHA Core Group identified 15 issues out of 127 issues that were reviewed that clearly stood out as concerning. These events occur at a rate that is significantly higher among Saline County residents than is expected, or are leading causes of illness, injury, disability or death. The issues are:

- 1 Aging Population**
- 2 Cancer**
- 3 Child Obesity**
- 4 Drug Overdose/Substance Abuse**
- 5 Depression / Mental Health**
- 6 Diabetes**
- 7 Domestic Violence**
- 8 Heart Disease related Indicators**
- 9 Immunizations**
- 10 Overweight/ Obesity**
- 11 Pregnancy Related Indicators**
- 12 Sexually Transmitted Disease Rate**
- 13 Smoking, Percent of Adults Who Currently Smoke Cigarettes**
- 14 Stroke**
- 15 Trauma/Falls**

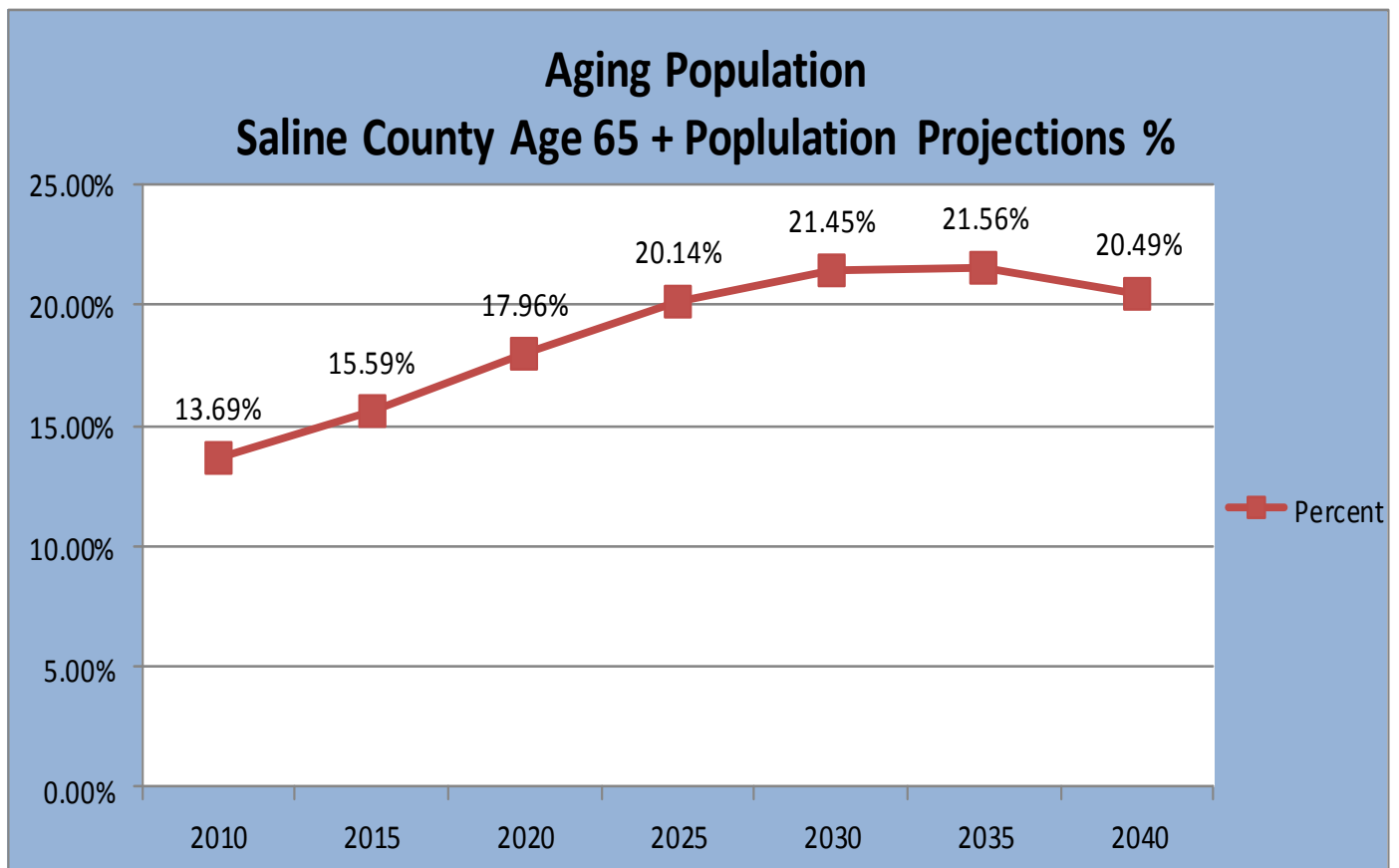
# Aging Population

## The Challenge of the Aging Population

As members of the baby boom generation get older and reach retirement age, they present an increasing challenge and opportunity for health care. The growth in the number of elderly patients from the boomer generation coupled with a loss of boomer-age providers will pressure an already-stressed health care system. A big unknown is how well Medicare will digest the 75 million baby boomers amid the federal government's attempt to transform how care is provided and paid for in the program.

Saline County is expected to see the 65+ age-group increase from **13.69%** to **21.55%** in the year 2035 before it starts to decline.

Cancer, high cholesterol, COPD, arthritis, Alzheimer's and depression for Medicare aged residents all currently have higher rates than the rest of the state. These indicators coupled with an increase in residents in this age group will be an issue for years to come.



# Cancer

## The Challenge of Cancer

Cancer is the second leading cause of death in the United States and the leading cause of death in Saline County. There are over 100 different types of cancer. According to the NCI, lung, colon and rectal, breast, pancreatic, and prostate cancer lead to the greatest number of annual deaths. With an age-adjusted mortality rate of 173.3 deaths per 100,000 population in 2009 Cancer temporarily bumped heart disease from the number one cause of death in Kansas.

Kansas is one of the lower percentage states in immunizations against HPV which has very strong links to cancer later in life.

	Kansas	USA		
All Cancer Sites	172.7	173.8	Screenings	Prevention
Lung & Bronchus	49.8	48.4	Talk to your doctor about a low dose CT scan	Stop smoking. Eat a healthy diet.
Breast	21.4	22.2	Mammogram annually after age 40. Know your own breasts and family history	Stop smoking. Eat a healthy diet. Get regular exercise.
Prostate	20.4	22.3	Talk to your doctor about prostate screening at age 50	Stop smoking. Eat a healthy diet. Get regular exercise.
Colon & Rectum	16.1	15.9	Colonoscopy at age 50 and other colorectal screening tests, annual blood testing between colonoscopies and know your family history.	Colonoscopy. Stop smoking. Eat a healthy diet. Get regular exercise.
Pancreas	10.8	10.9	Unfortunately, no standardized screening tests have been shown to improve pancreatic cancer outcomes	Stop smoking and tobacco use. Eat a healthy diet. Get regular exercise.

## Age-Adjusted Years of Potential Life Lost - Cancer

1348.6 KS Avg.



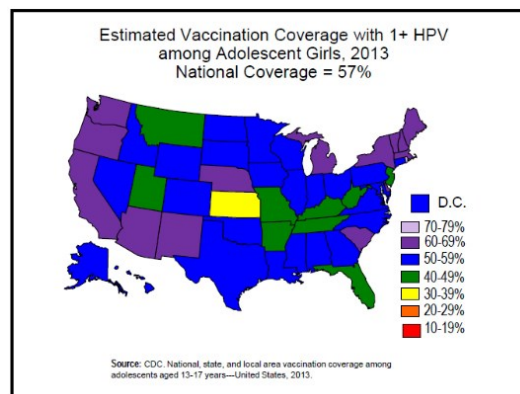
1555.4 Saline Co. Years per 100,000 Population

Why is this important?

Years of Potential Life Lost (YPLL) is an estimate of premature mortality. It represents the number of years a person would have lived if he or she had not died before a predetermined age, in this case 75 years.

## HPV Infection/Cancer

- Most females and males will be infected with at least one
- Sexually transmitted HPVs fall into two categories: low-risk HPVs, which do not cause cancer, and high-risk or oncogenic HPVs, which can cause cancer
- Every year in the United States 27,000 people are diagnosed with a **cancer caused by HPV**
- Kansas is worst in the nation in assuring that adolescent girls receive at least one dose of the vaccination (see below)



# Child Overweight and Obesity

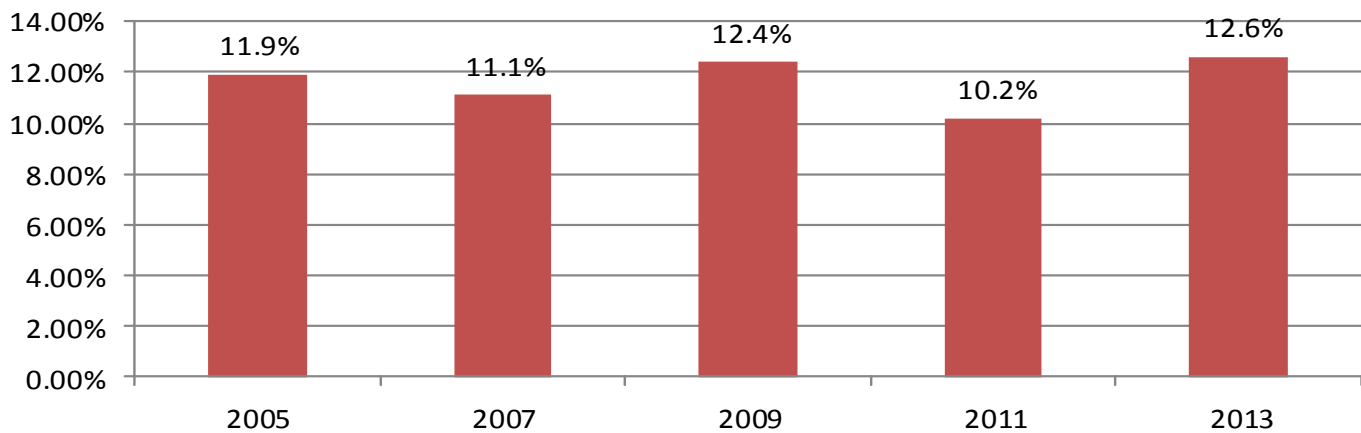
## The Challenge of Childhood Obesity

Obesity is one of the biggest drivers of preventable chronic diseases and healthcare costs in the United States. Currently, estimates for these costs range from \$147 billion to nearly \$210 billion per year. In addition, job absenteeism related to obesity costs \$4.3 billion annually. As obesity rates rise, the risk of developing obesity-related health problems — type 2 diabetes, coronary heart disease and stroke, hypertension, arthritis and obesity-related cancer — increases exponentially.

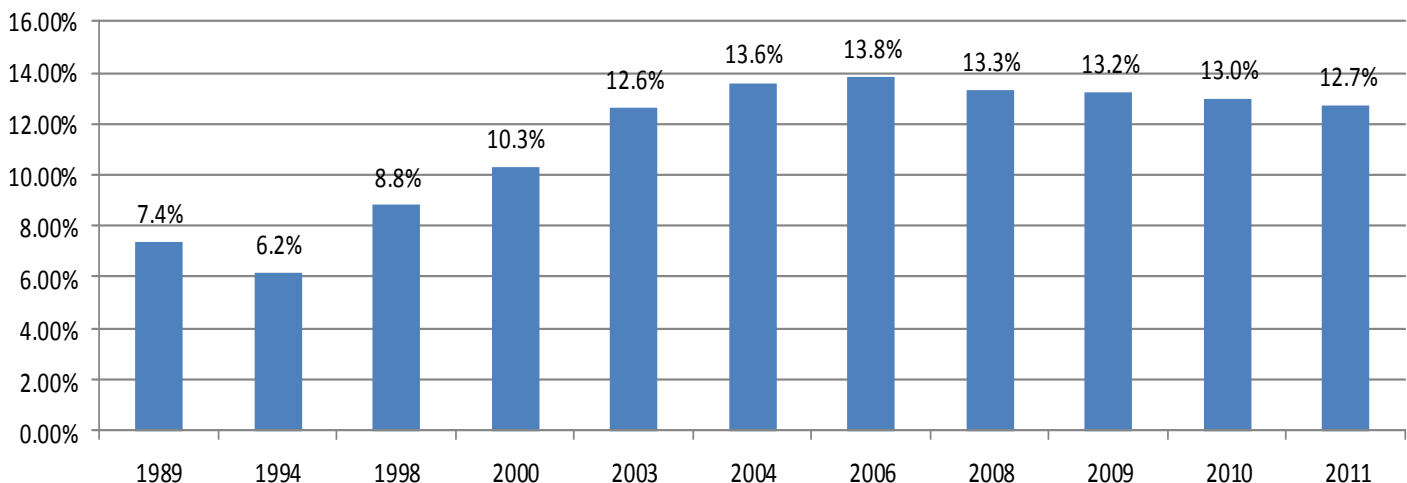
Signs of Progress on Childhood Obesity in Kansas: A report released by the Centers for Disease Control and Prevention (CDC) in August, 2013 showed that 18 states, including Kansas, and one U.S. territory experienced a decline in obesity rates among 2- to 4-year-olds from low-income families between 2008 and 2011. Over that period, Kansas's rate fell from 13.3% to 12.7%, a statistically significant decrease according to the CDC analysis. However, high school students showed an increase to 12.6% from 10.2% in 2011.

State data is used as local data is unavailable.

## 2- to 4-year-olds from low-income families Obesity % Rates



## High School Students Obesity Rates



# Drug Overdose/ Substance Abuse

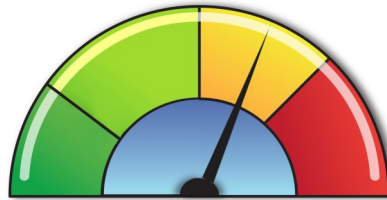
## The Challenge of Substance Abuse and Drug Overdose

Drug overdose deaths are the leading cause of injury death in the United States, with over 100 drug overdose deaths occurring every day. The death rate due to drug overdose has been increasing over the last two decades. In 2010, 60% of drug overdose deaths were related to pharmaceuticals, the majority of which were prescription painkillers. Those who died from drug overdose in 2010 were more likely to be male, American Indian/Alaska Native, or between the ages of 45 and 49. Drug overdose deaths may be accidental, intentional, or of undetermined intent.

Although Kansas has a lower than National Average for deaths by drug poisoning, Saline County is higher than the Kansas Average, 10.1 deaths per 100,000 compared to 9.7 for the state.

According to the Centers for Disease Control and Prevention's High School Youth Risk Behavior Survey, Kansas has a lower substance abuse rate among high school students than the U.S. national average, but at 33% for alcohol consumption and 32% for marijuana use, there is much room for improvement. The 9% of high school students having responded to driving while consuming alcohol is very alarming.

## Death Rate due to Drug Poisoning Deaths/100,000 Population



**10.1 Saline Co. deaths/100,000 population**

	Kansas	US
Kansas Substance Abuse Data 2013 (County data not available)		
Percent of high school students who had at least one drink of alcohol on at least one day (during the 30 days before the survey)	33%	39%
Percent of high school students who drove when drinking alcohol one or more times (in a car or other vehicle during the 30 days before the survey)	9%	8%
Percent of high school students who rode with a driver who had been drinking alcohol one or more times (in a car or other vehicle during the 30 days before the survey)	24%	24%
Percent of high school students who ever used marijuana one or more times (during their life)	32%	40%
Percent of adolescents ages 12-17 who used pain relievers for nonmedical reasons (during the 12 months before the survey)	7%	6%
Percent of adolescents ages 12-17 who needed but did not receive treatment for alcohol use (during the 12 months before the survey)	5%	4%
Percent of adolescents ages 12-17 who needed but did not receive treatment for illicit drug use (during the 12 months before the survey)	3%	4%

# Depression / Mental Health

## The Challenge of Depression and Mental Health Diseases

Many people with depression never seek treatment; however, even those with the most severe depression can improve with treatments including medications, psychotherapies, and other methods. According to the National Comorbidity Survey of mental health disorders, people over the age of 60 have lower rates of depression than the general population — 10.7% in people over the age of 60 compared to 16.9% overall. Saline Co. shows a higher than normal diagnosed depression rate: 18.5% of Medicare population versus a state average of 16.2%.

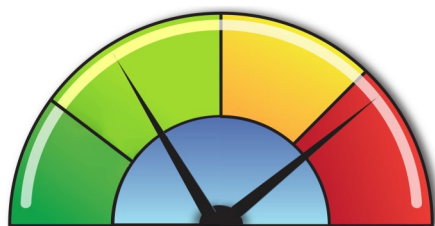
Saline County had 16.3% of adults diagnosed with some form of depressive disorder compared with 18.1% for Kansas and only 9% nationwide.

The spike in youth suicides has resulted in the large jump in the mortality rate listed in the chart below.

Healthy People 2020 has included Mental Health as one of the ten leading indicators for monitoring health of the nation and has recommended increasing the proportion of adults with recognized depression who receive treatment.

### Percent of Adults Who Were Ever Diagnosed with a Depressive Disorder (2013 KDHE)

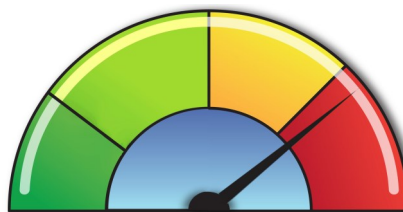
18.1 % Kansas Avg.      9% National Avg.



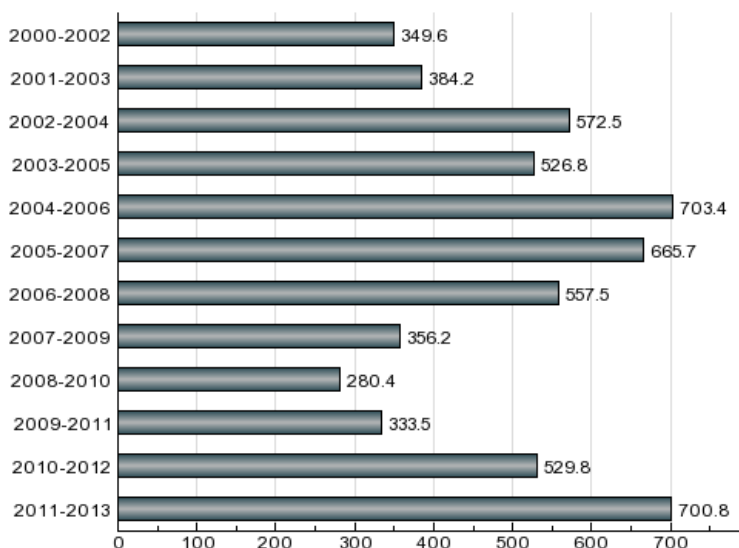
**16.3 % Saline County**

### Age-Adjusted Years of Potential Life Lost - Suicide : Saline Co.

550.7 / 100,000 KS Avg.



**700.8 / 100,000 Saline Co.**



### Why is this important?

Years of Potential Life Lost (YPLL) is an estimate of early death. It represents the number of years a person would have lived if he or she had not died before a predetermined age, in this case 75 years. On a population level, the measurement gives more weight to deaths occurring among younger people and therefore YPLL is an alternative measure to death rates.

# Diabetes

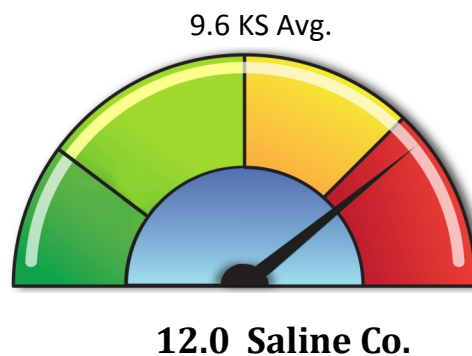
## The Challenge of Diabetes

Diabetes is the seventh leading cause of death in the United States and Saline County. In 2010, an estimated 25.8 million people or 8.3% of the population had diabetes. Diabetes disproportionately affects minority populations and the elderly .

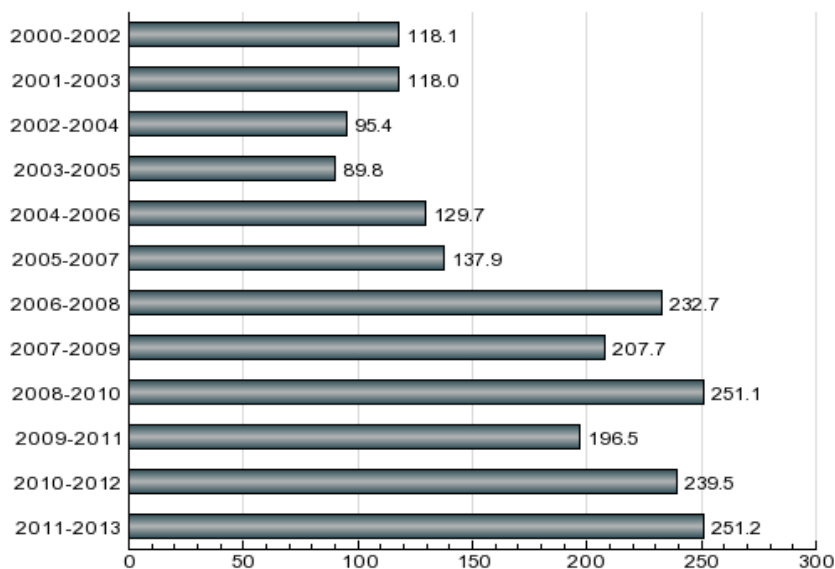
Diabetes can have a harmful effect on most of the organ systems in the human body; it is a frequent cause of end-stage renal disease, non-traumatic lower-extremity amputation, and a leading cause of blindness among working age adults. Persons with diabetes are also at increased risk for ischemic heart disease, neuropathy, and stroke. In economic terms, the direct medical expenditures attributable to diabetes in the U.S. in 2012 was estimated to be \$176 billion.

**Saline County has extremely high percentage of Adults with Diagnosed Diabetes: 12% compared to state average of 9.6%. Diabetes also leads to early death as revealed in the Age-Adjusted Years of Potential Life Lost chart below.**

### Percent of Adults with Diagnosed Diabetes



### Age-Adjusted Years of Potential Life Lost - Diabetes



Why is this important?

Years of Potential Life Lost (YPLL) is an estimate of premature mortality. It represents the number of years a person would have lived if he or she had not died before a predetermined age, in this case 75 years. On a population level, the measurement gives more weight to deaths occurring among younger people and therefore YPLL is an alternative measure to death rates.



# Domestic Violence

## The Challenge of Domestic Violence

Domestic violence is an epidemic that affects all persons regardless of ethnicity, education level, economic status, sexual orientation, immigration status, geographic location, spiritual beliefs, physical or mental ability, or criminal status.

According to the NCADV, the cost of intimate partner violence exceeds \$5.8 billion each year, \$4.1 billion of which is for direct medical and mental health services. Kansas and DVACK's service area are no exception to these statistics proportionately.

The good news is that domestic violence encounters in Saline County has gone down, However, at 631 domestic violence encounters for 2013 domestic violence continues to be an issue needing attention.

## Victims Served By The Local Domestic Violence Agency In 2014

- 600 victims served (404 adults + 196 children) in 10 county service area
- 392 domestic violence and sexual assault victims served in Saline county
- 185 shelter residents
- 3,455 nights of stay
- DVACK advocates assisted with 13 protection from stalking orders and 96 protection from abuse orders

Domestic Violence for Saline County KBI data			
	2011	2012	2013
Protection from stalking order (court filings)	224	189	173
Violation of Protective order #	42	199	122
Protection from abuse filings	246	286	219
Reported DV incidents	691	768	631

# Heart Disease Related Indicators

## The Challenge of Heart Disease Related Indicators

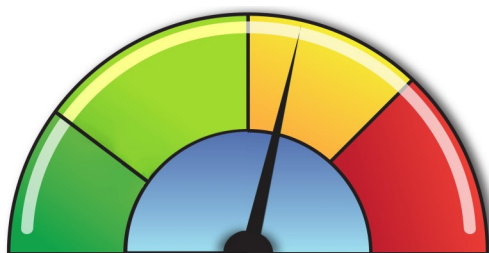
Heart disease is the leading cause of death among men and women in the United States and 2nd leading cause of death in Saline County. About 600,000 people die of heart disease in the United States every year—that's one in every four deaths. Lowering cholesterol levels lessens the risk for developing heart disease and reduces the chance of having a heart attack. High blood cholesterol is one of the major risk factors for heart disease.

High blood pressure is the number one modifiable risk factor for stroke. In addition to stroke, high blood pressure increases the risk for heart attack, heart failure, kidney failure, and atherosclerosis. In the United States, one in three adults has high blood pressure, and nearly one-third of these people are not aware that they have it. Because there are no symptoms associated with high blood pressure, it is often called the "silent killer." The only way to tell if you have high blood pressure is to have your blood pressure checked. High blood pressure can occur in people of any age or sex; however, it is more common among those over age 35. It is particularly prevalent in African Americans, older adults, individuals who are obese, diabetics, or heavy drinkers. Blood pressure can be controlled through lifestyle changes including eating a heart-healthy diet, limiting alcohol, avoiding tobacco, maintaining a healthy weight, and staying physically active.

The Healthy People 2020 national health target is to reduce the proportion of adults aged 20 years and older with high total blood cholesterol levels to 13.5%. Saline County is at 42% and to reduce the proportion of adults aged 20 years and older with high blood pressure to 26.9% Saline County is at 32.4%

### Percent of Adults with High Blood Pressure

31.3 % KS Avg.



32.4 % Saline County

### Percent of Adults Tested and Diagnosed with High Cholesterol

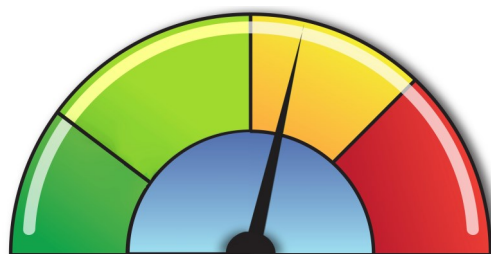
38.1 % KS Avg.



42.0 % Saline County

### Age-adjusted Heart Disease Mortality Rate per 100,000 population

156.2 KS Average



159.2 Saline County

### Percent of Adults who are Obese (body mass index $\geq 30$ kg/m<sup>2</sup>).

30.0 % KS Avg.



32.9 % Saline County

# Immunizations

## The Challenge of Immunizations

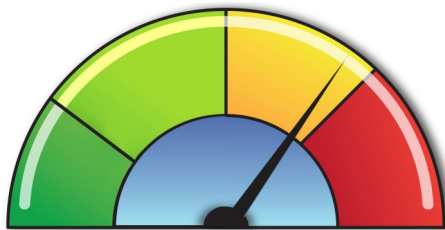
It is estimated that 226,000 people in the U.S. are hospitalized each year due to influenza and 36,000 die – mostly the elderly. The seasonal influenza vaccine can prevent serious illness and death. The Centers for Disease Control and Prevention (CDC) recommends annual vaccinations to prevent the spread of influenza.

Kansas is one of the lower percentage states in immunizations against HPV which has very strong links to cancer later in life.

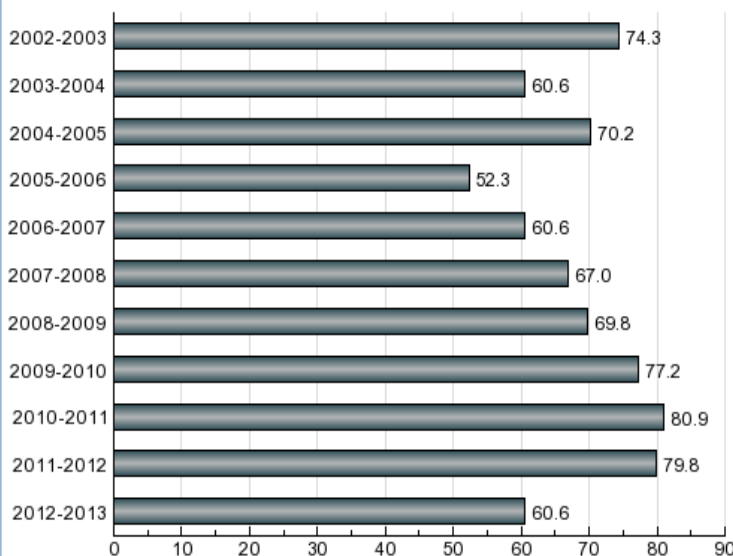
Infants Fully Immunized at 24 Months in Saline County dropped significantly from **79.8% to 60.6%** between 2012 –2013, which is the latest data available.

### Percent of Infants Fully Immunized at 24 Months

61.5 % KS Avg.

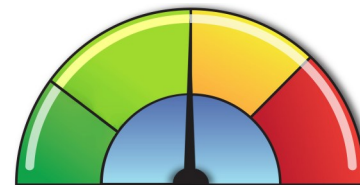


60.6 % Saline Co.



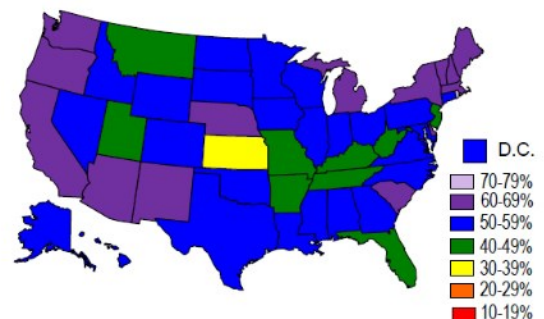
### Percent of Adults Ages 65 Years and Older Who Were Immunized Against Influenza During the Past 12 Mo.

64.8 % KS Avg.



67.2 % Saline Co.

### Estimated Vaccination Coverage with 1+ HPV among Adolescent Girls, 2013 National Coverage = 57%



Source: CDC. National, state, and local area vaccination coverage among adolescents aged 13-17 years—United States, 2013.

# Overweight and Obesity

## The Challenge of Adult Obesity

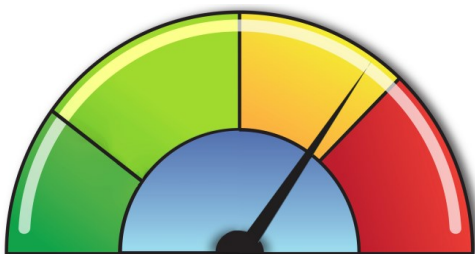
Obesity is one of the biggest drivers of preventable chronic diseases and healthcare costs in the United States. Currently, estimates for these costs range from \$147 billion to nearly \$210 billion per year. In addition, job absenteeism related to obesity costs \$4.3 billion annually.

As obesity rates rise, the risk of developing obesity-related health problems — type 2 diabetes, coronary heart disease and stroke, hypertension, arthritis and obesity-related cancer — increases exponentially. Twenty years ago, only 7.8 million Americans had been diagnosed with diabetes but, today, approximately 25.8 million Americans have the disease. More than 75 percent of hypertension cases can be attributed to obesity. And, approximately one-third of cancer deaths are linked to obesity or lack of physical activity.

The Healthy People 2020 national health target is to reduce the proportion of adults (ages 20 and older) who are obese to 30.6%. Saline County is currently at 32.9 % and has been growing.

### Percent of Adults who are Obese (body mass index)

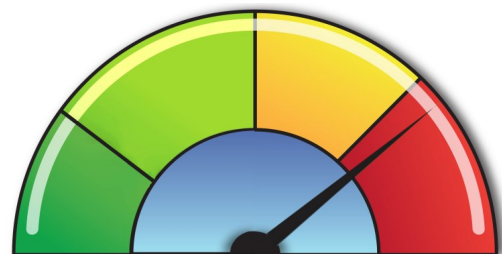
30.0 % KS Avg.



32.9 % Saline County

### Percent of Adults Doing Enough Physical Activity To Meet Both The Aerobic And Strengthening Exercise

17.9 % KS Avg.



14.5 % Saline County

# Pregnancy Related Indicators

## The Challenge of Pregnancy Related Indicators (Teen Births, Low Birthweight and Smoking during Pregnancy)

The good news is Saline Co. is doing much better at several of the pregnancy related indicators.

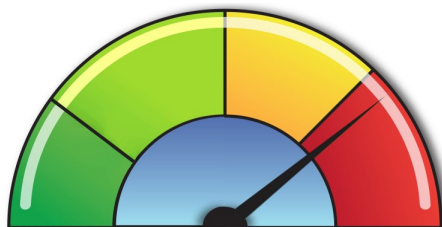
Teen Pregnancy has shown steady declines. However Saline County is still significantly higher than the State avg. During the last decade several programs have been initiated by various agencies in Saline county to address this problem and it looks like their efforts are showing in the decline in teen pregnancy.

The percent of births where mothers smoked during pregnancy has also shown a decline but is almost **8% higher** than the state average of 13.5%. This statistic may have something to do with the high percentage (8%) of low weight deliveries.

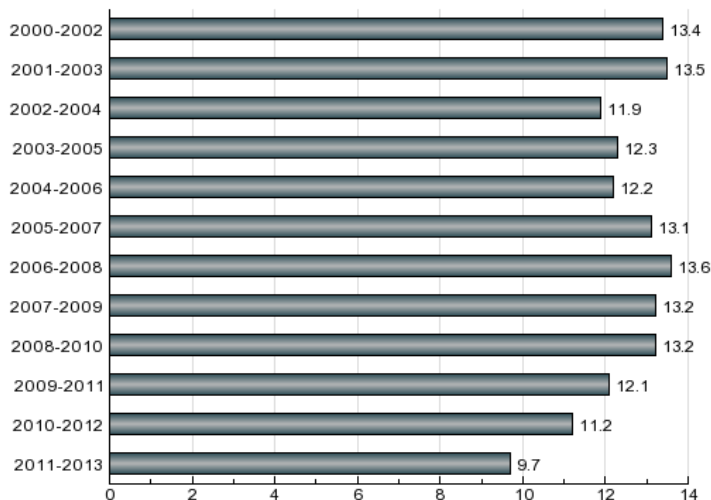
On a positive note that displays the commitment many agencies in Saline County have for expectant mothers, the percent of mothers who receive pre-natal care is 80% which is higher than the state average and already higher than the goal set for **Healthy People 2020**.

### Percent of all Births Occurring to Teens (15-19)

8.1 % KS Avg.

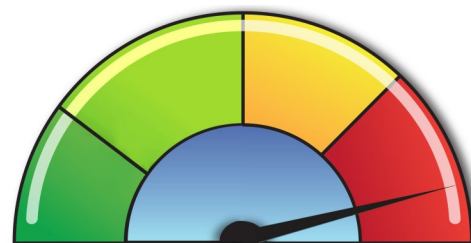


9.7 % Saline County

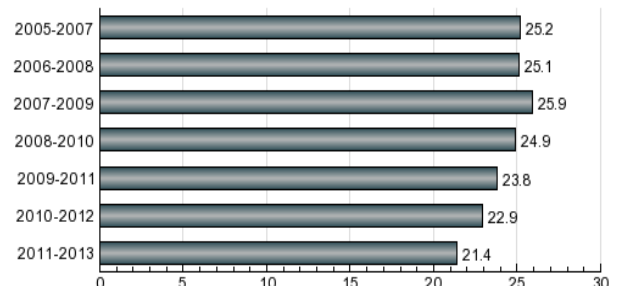


### Percent of Births Where Mother Smoked During Pregnancy

13.5 % KS Avg.



21.4 % Saline County



# Sexually Transmitted Disease

## The Challenge of Sexually Transmitted Disease

The Centers for Disease Control and Prevention (CDC) estimates that there are approximately 19 million new STD infections each year—almost half of them among young people ages 15 to 24. The cost of STDs to the U.S. health care system is estimated to be as much as \$15.9 billion annually. Because many cases of STDs go undiagnosed—and some common viral infections, such as human papillomavirus (HPV) and genital herpes, are not reported to CDC at all—the reported cases of chlamydia, gonorrhea, and syphilis represent only a fraction of the true burden of STDs in the United States.

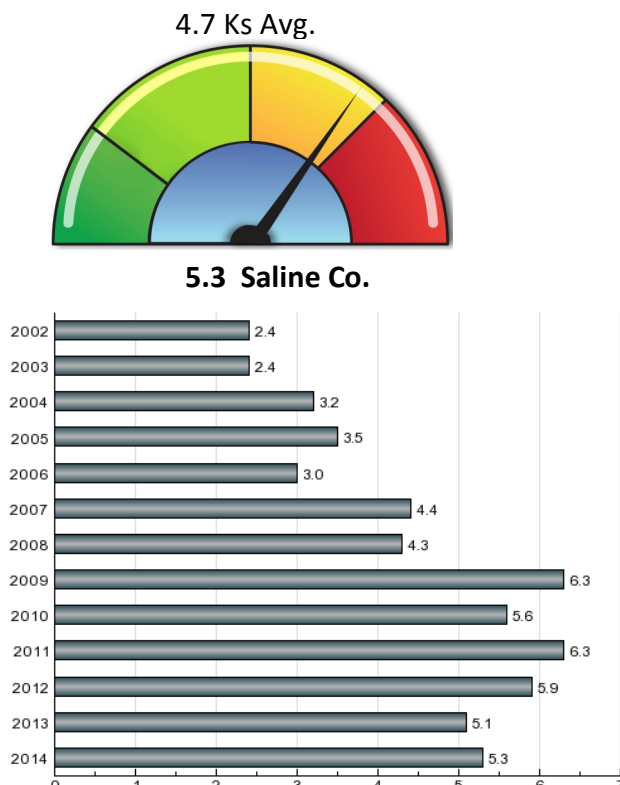
Untreated STDs can lead to serious long-term health consequences, especially for adolescent girls and young women. CDC estimates that undiagnosed and untreated STDs cause at least 24,000 women in the United States each year to become infertile.

Chlamydia, the most frequently reported bacterial sexually transmitted disease in the United States, is caused by the bacterium, *Chlamydia trachomatis*. Under-reporting of chlamydia is substantial because most people with chlamydia are not aware of their infections and do not seek testing.

Kansas is one of the lower percentage states in immunizations against HPV which has very strong links to cancer later in life.

The Saline County sexually transmitted disease rate is slightly higher than the state average and although down from the high of

### Sexually Transmitted Disease Rate Incidence rate per 100,000 population

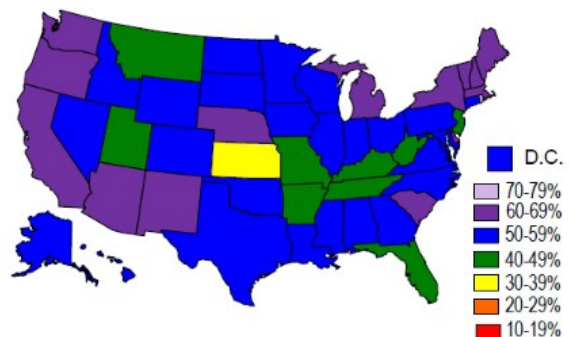


Every year in the United States 27,000 people are diagnosed with a cancer caused by HPV



That's 1 case every 20 minutes

### Estimated Vaccination Coverage with 1+ HPV among Adolescent Girls, 2013 National Coverage = 57%

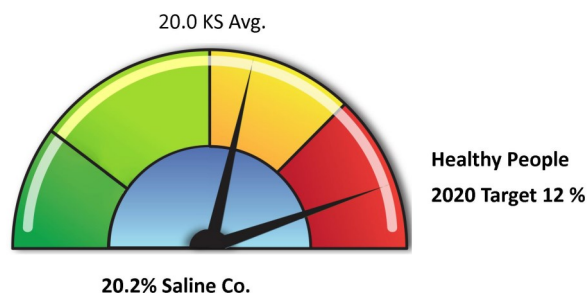


Source: CDC. National, state, and local area vaccination coverage among adolescents aged 13-17 years—United States, 2013.



# Percent of Adults Who Currently Smoke Cigarettes

Percentage of Kansas adults currently smoke cigarettes



## CURRENT KANSAS TOBACCO USE FACTS

### Adult

20% of Kansas adults 18 years and older currently smoke cigarettes.<sup>1</sup>

22.3% of Kansas men currently smoke cigarettes.<sup>1</sup>

17.8% of Kansas women currently smoke cigarettes.<sup>1</sup>

56.5% of current adult smokers stopped smoking for one or more days in the past 12 months because they were trying to quit smoking.<sup>1</sup>

### Youth

13% of Kansas high school students are current cigarette smokers. More than one third of those students want to quit.<sup>2</sup>

11.1% of high school males currently use smokeless tobacco.<sup>2</sup> compared to 12.8% of male high school students nationally.<sup>3</sup>

34% of middle school students and 35% of high school students live with someone who smokes cigarettes.<sup>2</sup>

24.1% of high school students used at least one form of tobacco. This includes cigarettes, smokeless tobacco, cigars, pipes and other forms of smoked tobacco.<sup>2</sup>

### SOURCES:

1 2013 Kansas Behavioral Risk Factor Surveillance System

2 2011/2012 Kansas Youth Tobacco Survey

3 National High School Youth Risk Behavior Survey

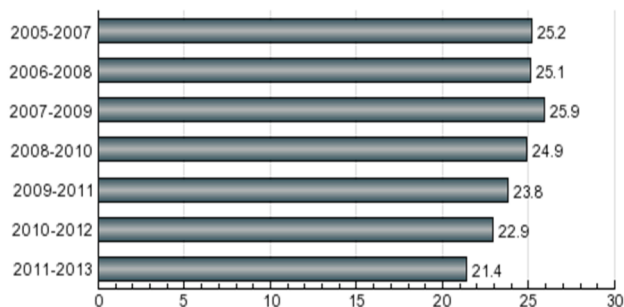
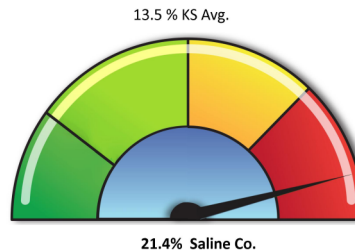
## The Challenge of Tobacco use

Tobacco use is one of the most preventable causes of illness and death in America today. Tobacco use causes premature death for almost half a million Americans each year, and it contributes to profound disability and pain for many others. Approximately one-third of all tobacco users in this country will die prematurely because of their dependence on tobacco. Areas with a high smoking prevalence will also have greater exposure to secondhand smoke for non-smokers, which can cause or exacerbate a wide range of adverse health effects, including cancer, heart disease, respiratory infections, and asthma.

At 21.4% of expectant mothers smoking while pregnant, Saline County is almost 8% higher than the Kansas percentage.

**The Healthy People 2020 national health target is to reduce the proportion of adults aged 18 years and older who smoke cigarettes to 12%.**

Percent of births Where Mother Smoked During Pregnancy



# Stroke

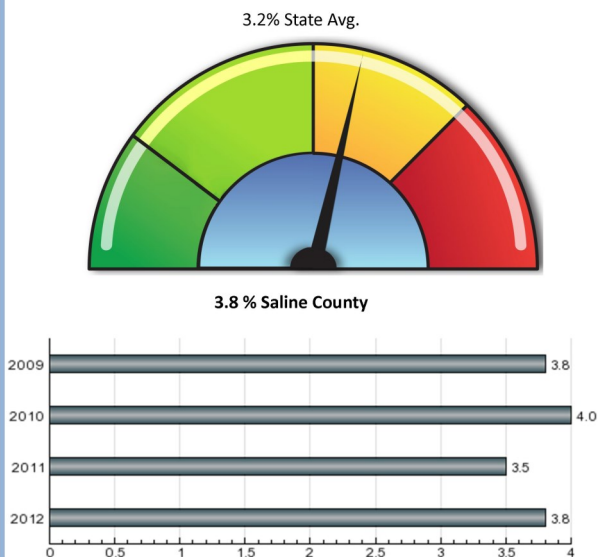
## The Challenge of Strokes

Stroke, also known as cerebrovascular disease, is one of two major components of cardiovascular disease, a leading cause of death and major contributor to health care costs in Kansas. Stroke is responsible for about 1 in 16 deaths to Kansas residents.

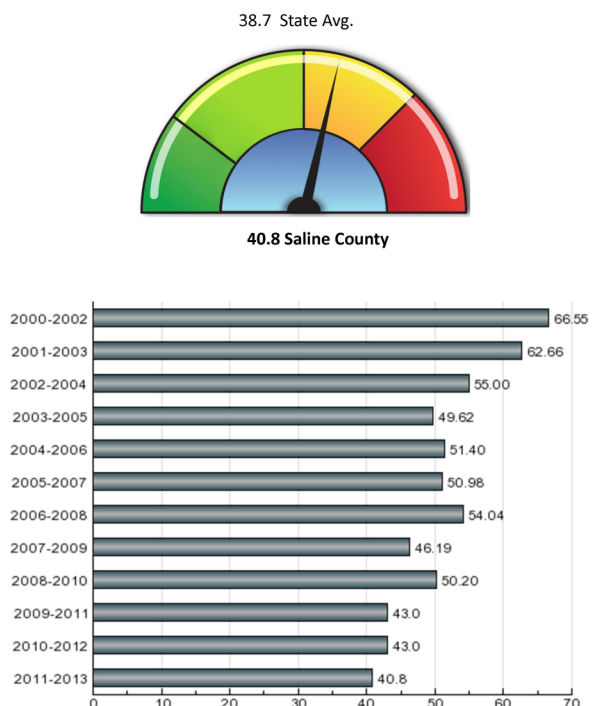
The Centers for Disease Control and Prevention (CDC) states that stroke is the fourth leading cause of death in the United States, is a leading cause of long-term disability, and is the cause of almost 133,000 deaths annually. According to the CDC, strokes cost the United States an estimated \$38.6 billion each year.

The percent of the Medicare population treated for stroke in Saline County is 3.8%. The state of Kansas average is 3.2% and national average is 3.4%. Saline County has a 40.8 age-adjusted cerebrovascular disease/stroke mortality rate (deaths per 100,000 population). The Kansas age adjusted mortality rate is 38.7.

**Percent of Medicare Population Treated for Stroke**



**Age-adjusted Cerebrovascular Disease/Stroke Mortality Rate Deaths per 100,000 population**





# Trauma / Falls

## Community Challenge of Trauma and Falls

Injuries are the leading cause of death for Americans ages 1 to 44, and a leading cause of disability for all ages, regardless of sex, race/ethnicity, or socioeconomic status. More than 180,000 people die from injuries each year, and approximately 1 in 10 sustains a nonfatal injury serious enough to be treated in a hospital emergency department. Beyond their immediate health consequences, injuries and violence have a significant impact on the well-being of Americans by contributing to: premature death, disability, poor mental health, high medical costs and lost productivity. The effects of injuries and violence extend beyond the injured person or victim of violence to family members, friends, coworkers, employers, and communities. Injuries are not tracked systematically unless they result in hospitalization or death. Hospital admission data only represent the most serious injuries.

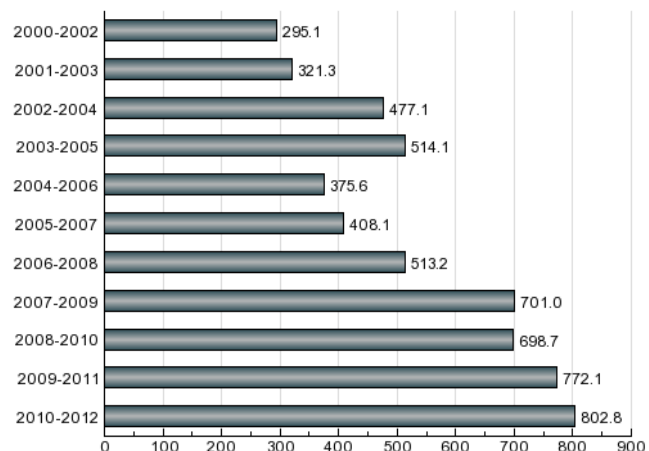
Saline County has shown a significant and steady increase in Injury Related Hospital Admissions. In the 10 year measured period (2002-2012) rates have gone from **295.1 /100,000 to 802/ 100,000**.

Most significant among the trauma/injury data is that **62%** of Salina Regional Health Center's injury admissions are fall related compared to 52% for the Kansas average.

SRHC in partnership with the North Central-Flint Hills Area on Aging implemented the **Be Well! Stay Well!** program following the 2013 Saline County Health Needs Assessment. This program helps identify individual patients leaving the hospital or as identified by physicians at ComCare and Salina Family Healthcare that may be at risk for falls or medication misuse.

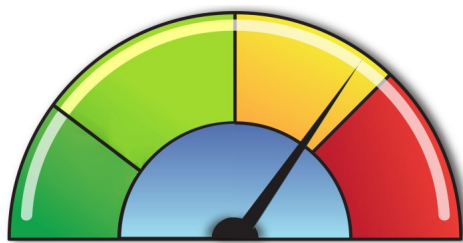
## Injury Hospital Admission Rate

This indicator shows the number of Saline County residents hospital admissions for unintentional and intentional injury per 100,000 population.



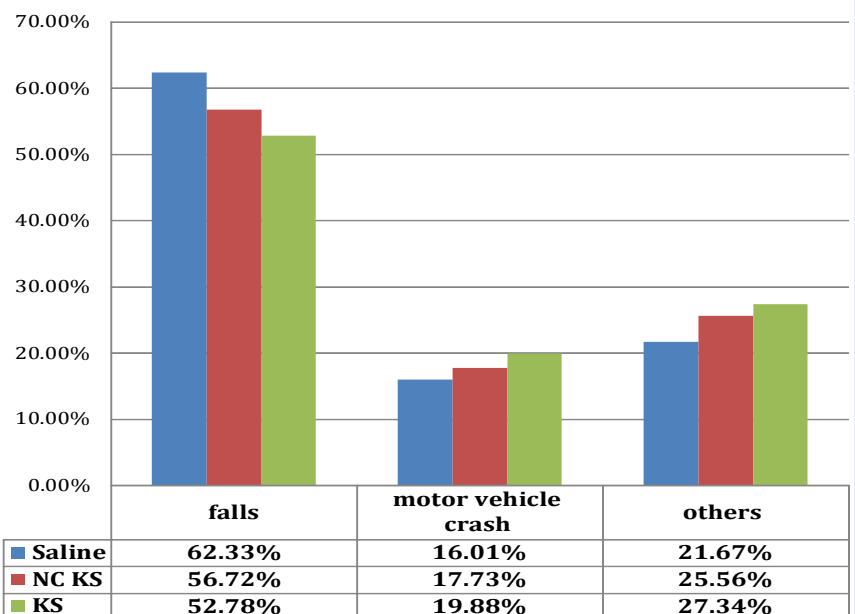
## Age-adjusted Unintentional Injuries Mortality Rate per 100,000 population 2011-2013

40.0 KS Avg.



**44.4 Saline County**

## 2014 SRHC Trauma Admissions



# Community Viewpoint

Obtaining input from individuals in the community at large increases the likelihood that the health issues targeted for improvement truly reflect the concerns of the community. Public perception of an issue as important to the community as a whole, the need for community based action and willingness to personally support health improvement initiatives are important to successful health improvement programs. In June 2015 several community organizations were invited to review the community measures, discuss the issues and provide input as to the relative importance of each. Each of the 15 indicators had a station with an expert on the issue to discuss the data that was posted at the station. The Saline County community entities attending included 48 people from the following organizations:

American Red Cross	Salina Area United Way
Big Brothers Big Sisters	Salina Community Foundation
Catholic Charities	Salina Family Healthcare
Central KS Foundation	Salina Family YMCA
Central KS Mental health	Salina Regional Health Center
Chamber of Commerce	Salina Saline County Health Department
Child Advocacy & Parenting Services	Saline County Human Relations
City of Salina	Saline County Sherriff’s Office
Commission on Aging	Salina Technical College
Coronado Area Council– Boy Scouts	USD 305
Domestic Violence Assoc.. of Central KS	USD 307
Kansas Wesleyan	Veridian
KSU Salina	Volunteer Connection
Salina Police Department	Phillips Lighting
National Association for the Advancement of Colored People	Sunflower Bank
Parish nurse group	First Bank KS
Parks & Recreation	YMCA

Online and paper surveys were also given to the general public. In all 178 surveys were completed. The online survey was driven off of area agency websites, social media and email invitations. Written survey boxes were set up at various locations around Saline County at the public library, health department and several health organizations. These surveys along with the results of the Key Informed meeting were crucial in the prioritization process.

## Prioritization of Issues

All health issues are profoundly important to the people impacted by them. Healthcare providers, agencies and community organizations each have their inherent priorities, goals and missions. However, few communities or community organizations have the resources to effectively address every health issue in their jurisdiction. From a population perspective, each issue must be further assessed with regard to seriousness, impact on the community as a whole, economic burden and the potential for prevention or improvement. The CHA Core group felt we had a very well balanced cross section of the community that attended the Key Informed presentation and priority voting process meeting. Because this meeting had each of the 15 indicators with an expert on the issue to discuss the data that was also posted, we doubled the weighting of this voting and combined with the electronic and written surveys. The results were as follows:

	Key informed	weighting x 2	Survey Monkey	Written Surveys	Total
1 Depression/Mental Health	34	68	42	69	<b>179</b>
2 Cancer	24	48	47	65	<b>160</b>
3 Aging Population	25	50	45	46	<b>141</b>
4 Overweight/Obesity – Adults	24	48	36	51	<b>135</b>
5 Child Obesity	28	56	38	36	<b>130</b>
6 Drug Overdose and Substance Abuse	11	22	38	56	<b>116</b>
7 Domestic Violence	17	34	22	46	<b>102</b>
8 Diabetes	18	36	23	30	<b>89</b>
9 Heart Disease Relater Indicators	18	36	22	20	<b>78</b>
10 Tobacco Use	17	34	15	20	<b>69</b>
11 Pregnancy Related Indicators	18	36	15	15	<b>66</b>
12 Immunizations	13	26	16	16	<b>58</b>
13 STD Rate	5	10	17	12	<b>39</b>
14 Trauma/Falls	9	18	6	11	<b>35</b>
15 Stroke	8	16	9	9	<b>34</b>

## Final Prioritization Rankings

The CHA core group met to discuss the results of the Key informed meeting and the electronic and written survey results. Evaluation of several prioritization methods were discussed. The group felt that the best indicator of Salina County community needs were displayed and voted on by the key informed meeting and general public surveys. The CHA core group voted and decided to use the prioritizations that came out of those two processes.

Because all of the 15 indicators had a certain level of support we are not limiting our needs assessment to a top three or top five but ranking all of the top 15. This ranking also takes into the consideration that many of the indicators have issues that cross-over to at least one if not many other indicators.

1	<b>Depression/Mental Health</b>
2	<b>Cancer</b>
3	<b>Aging Population</b>
4	<b>Overweight/Obesity – Adults</b>
5	<b>Child Obesity</b>
6	<b>Drug Overdose and Substance Abuse</b>
7	<b>Domestic Violence</b>
8	<b>Diabetes</b>
9	<b>Heart Disease Relater Indicators</b>
10	<b>Tobacco Use</b>
11	<b>Pregnancy Related Indicators</b>
12	<b>Immunizations</b>
13	<b>STD Rate</b>
14	<b>Trauma/Falls</b>
15	<b>Stroke</b>

## Next Step implementation and evaluations

The information provided in this report will hopefully inspire and empower community organizations and individuals to engage in collaborative processes on the way to improving health. There is evidence that communities that form partnerships linking corporations, public health, healthcare, faith based and educational entities increase their capacity for health improvement [1].

Further assessment of the individual issues for influencing factors is needed to identify the interventions that are most likely to be effective. There is a growing body of evidence-based practices available to guide the development and implementation of health improvement activities. Community context also plays an important role in attaining improved health. An assessment of issue specific community strengths and gaps will enable targeted resource allocation. Multidisciplinary, multi-level systems changes as well as changes in individual behavior will likely be necessary for measurable, sustained health improvement.

One of the unique challenges faced when evaluating population health interventions is the potentially long period of time between intervention implementation and evident changes in the ultimate outcome. Measurable changes in outcomes such as obesity prevalence or cancer incidence may not be apparent for decades. Shorter term goals and measures will be needed to assess progress. Thus, the health improvement process will be ongoing and long term, through what may prove to be numerous cycles of assessment, planning, action and evaluation.

As organizations use this CHNA for determining programs and initiatives we ask they contact Mike Mattek Chairman of the CHNA Core group so these programs can be listed and measured in our evaluation of the implementation process.

## 2013 Needs Assessment evaluation of progress of recognized health indicators

The 2013 Community Health Needs Assessment recognized the following items for prioritization.

Childhood obesity

Teenage pregnancy

Adult obesity

Domestic violence

Falls among elderly

Medication misuse

Sexually transmitted infections

## Saline County 2013 Needs Assessment evaluation of progress of recognized health indicators

Salina Regional Health Center chose two items from the 2013 CHNA (falls among elderly and medication misuse) to receive additional attention as they fit within the framework of our mission and had less attention from other Saline County agencies.

### **Falls among elderly and medication misuse**

In 2014 the North Central-Flint Hills Area Agency on Aging received a \$100,000 grant from Salina Regional to start a fall prevention program in the Salina area the program was rolled out in July 2014. In January 2015 COMCARE a large family practice clinic began participating in the program and is able to enroll any of their patients with high fall risks. The program began to be offered for Salina Family Healthcare in April 2015.

The program is called “Be Well! Stay Well! Right at Home” and is aimed at helping prevent falls. It includes going into a person’s home and identifying often small changes that can make the home safer.

The first steps included placing articles about fall prevention in “Keynotes,” the agency’s newspaper, and providing information about fall prevention at venues such as the annual Sunflower Fair in Salina.

There’s also an eight-session class called “A Matter of Balance,” that follows a curriculum written at Boston University and addresses fear of falling, recognizing that falls are preventable and increasing physical activity.

The program also includes an assessment to identify situations that can cause falls and finding ways to fix them.

During an in-home assessment they look at issues such as the person’s vision, what medications they’re taking and items around the home that represent fall dangers..

The agency has contact with several other agencies that can help with specific issues that can help a person stay out of the hospital again.

SRHC is looking at different ways of reaching these high fall risk patients as over the last 12 mo. (8/1/14 to 7/31/15) there were 126 patients 65 and older with falls from same height seen in the SRHC emergency dept.

Area Agency on Aging has only recently gotten their database system up and running, but anecdotal reports indicate that the program is successful. Of those who completed the pre and post intervention questionnaire, only one person returned to the hospital, and that was because of a heart attack. One person after intervention did go to a rehab facility for a two week stay for strengthening. None of the participants have had a fall within the 30 days of the intervention.

## Saline County 2013 Needs Assessment evaluation of progress of recognized health indicators.

### **Medication Misuse**

As part of a project to limit readmissions to hospital and disease complications due to medication misuse the SRHC pharmacy department implemented a new process for follow up on heart failure patients to assure proper medication compliance.

Background:

October, 2012. 90 day Pilot project: Heart Failure patients identified and educated by a pharmacist prior to discharge with follow-up phone call in 48-72 hours.

Outcome evaluation of pilot project: HCAP scores increased for medication-related measures and no CMS failures for discharge instructions occurred on patients with pharmacist intervention.

May, 2013: Communication to pharmacists of all patients identified by quality auditors with high risk criteria of heart failure diagnosis.

Current Process: Quality auditors identify patients with possible primary diagnosis of Heart Failure and notify pharmacists.

1. Pharmacists add Discharge Instructions for Heart Failure to the patient's chart.
2. Pharmacists visit patients prior to discharge and schedule follow-up phone call appointment with patient. During visit, pharmacists give patient ZONE CHART and answer medication questions.
3. Nurses also complete discharge assessment and document if patient has heart failure and has received discharge instructions and identify patients for follow-up phone call.

Follow-up phone call intervention completed by pharmacist in 48-72 hours post-discharge for patients returning to home setting to reinforce education and medication adherence.

### **Project Evaluation:**

**The 30-day all cause readmission rate for patients who received a phone call from a pharmacist was 14%. The readmission rate for patients who did not receive a phone call was 41%. Interventions by pharmacist ranged from reinforcement of discharge instructions to taking action like calling physician office or retail pharmacy to correct medication discrepancies.**



## Saline County 2013 Needs Assessment evaluation of progress of recognized health indicators.

### **Child Obesity**

The Salina Regional Health Foundation's Community Health Investment Program (CHIP) Committee awarded a grant of \$16,000 to fund one half of the school marathon program in 2014. The CHIP Committee awarded a \$38,853 grant to the School Marathon Foundation to fund the entire program in 2015 .

A School Marathon is a 26.2 mile group running program for children that takes place each school day over a 6-week period. The 26.2 mile "marathon experience" follows a structured process, pre-determined schedule, and includes Milestone Incentives to keep students motivated along the way. The School Marathon is a wonderful School/Community event with parents, siblings, teachers, and local neighbors often joining the students each morning to give them support...or just to get a little exercise themselves!

School Marathon program offers kids the ability to achieve an adult-sized goal. It is really a duplication of a marathon over a longer period of time, at school, kid style.

Participating students experience improved physical condition, increased focus, and better concentration throughout the school day. Runners also experience a great deal of pride and self-esteem from their accomplishments. The energetic, inclusive, non-competitive, and highly social group dynamic associated with School Marathon leaves children with a positive exercise experience that gives them an Early Start to a Healthy Lifestyle!

The School Marathon Foundation is a 501(c)(3) Non-Profit Organization. The Foundation was established to promote lifelong habits for healthy living by educating children on the benefits of staying active. The Foundation recognizes that childhood obesity is a real and growing threat to the well-being of our youngest generation and offers the School Marathon exercise and education program to schools and students around the nation. The Foundation believes that improving the health of our youth is a critically important initiative and provides a variety of subsequent benefits to the individual, family, and community.

The goal of The School Marathon Foundation is to host 500 School Marathons yearly at elementary schools across the nation and to partner with a corporation to provide the full "marathon experience" including Milestone Incentives with minimal cost to qualified schools.

# Saline County 2013 Needs Assessment evaluation of progress of recognized health indicators.

## **Domestic Violence**

DVACK is the only accredited domestic violence and sexual assault agency within its 10 county catchment area.

### Services Available

24-Hour Hotline

Emotional Support and Understanding

Crisis Counseling

Safety Planning

Emergency Transportation

Safe Shelter

Information and Referrals

Civil and Criminal Court Advocacy

Assistance with Protection from Abuse Orders

Assistance with Protection from Stalking Orders

Economic Advocacy

Housing Advocacy

HopeLine and 911 Phones

Emergency Aide: Food, Clothing, and Household Goods

Domestic Violence Support Groups

Sexual Assault Support Group

Economic Support Group

Survivors with Disabilities Support Group

Adolescent Services

Teen Dating Violence Prevention

## Saline County 2013 Needs Assessment evaluation of progress of recognized health indicators.

### **Domestic Violence**

#### **DVACK Utilization**

Comparing SFY 2013-2014 (July 1, 2013 – June 30, 2014) to SFY 2014-2015 (July 1, 2014 – June 30, 2015), DVACK has experienced a 13% increase in number of victims served. Moreover, the number of victims residing in DVACK's safe shelter increased 53% during the indicated timeframe. Additionally, in regards to services provided, DVACK's units of service increased by 66%, crisis hotline calls have doubled and the total number of nights of stay increased by 94%. The following chart depicts the statistical information indicative of the aforementioned increases:

	FY July 1, 2013 – June 30, 2014	FY July 1, 2014 – June 30, 2015
Total Clients Served	550	622
Total Shelters Served	128	196
Total Units Provided	9,140	15,174
Crisis Hotline Calls	557	1720
Bed Nights	2,494	4,833

## Saline County 2013 Needs Assessment evaluation of progress of recognized health indicators.

Teen Pregnancy/ Medication Misuse/ Drug and Alcohol Abuse

Salina Regional Health Center donated housing duplexes valued at \$266,000.00 to the Ashby House in September of 2014.

### **About Ashby House**

Every year at Ashby House strives to help families connect with our community. At Ashby House, they firmly believe that connected families are strong families. They encourage each resident to attend worship regularly, with have numerous faith based connections who help facilitate getting the families to church.

Many people in the community are aware that Ashby House is the only full time shelter for families and single women. Bridge House is Ashby House's substance abuse treatment program. Bridge House is a State licensed residential and outpatient treatment facility serving women, as well as women with children. Children can reside in our treatment facility with their mothers. Their building consists of 11 apartments, designed to build the skills of independent, sober, family life. Their third residence is Legacy House, which specializes in services for pregnant and early postpartum women that are homeless and/or substance abusing. Light House is their transitional housing for women who have graduated from treatment but still need a bit of support. Residents pay a program fee and follow all campus rules and regulations. Osage House is residential property off campus that their treatment graduates can transition to if they continue to struggle securing housing.

Hope House is Ashby's newest residential program serving young women, ages 18 -22, who are exiting from the foster care system or who are homeless. HOPE house provides structured living and the opportunity to learn healthy lifestyle skills. All of Ashby House residences provide services, such as life skills, case management, mentoring, spiritual growth encouragement, educational opportunities, employment skills, and possibly most important, love and guidance from 24 hour staff. Next on campus is Cornerstone House, which is a collaboration between Heartland and Ashby House. Children of Ashby House clients are fast-tracked into both Heartland's Early Head Start and Head Start programs at Cornerstone. Ashby House's newest addition is the Safe Exchange and Safe Visitation Center, which is housed at 113 E. Mulberry (previously USD 305 maintenance building).

As one of the larger counties in Kansas, Saline County was without direct access to a supervised visitation and safe exchange center. The Ashby House identified this area of need in our community, and provides the services of safe exchanges between caregivers, as well as a visitation center for those children who need a safe place to visit their parent with supervision. In addition to this program, also housed in this property is Ashby House Resource Exchange and Ashby House Free Store, which serves over 150 residents of Saline County each day, providing clothing, food, and household items

## References:

[1]

Institute of Medicine, *Improving Health in the Community: A Role for Performance Monitoring*, J. S. Durch, L. A. Bailey and M. A. Stoto, Eds., Washington, D.C.: National Academies Press, 1997.

[2]

Bureau of Public Health Informatics, "Kansas Information for Communities," 15 August 2012. [Online]. Available: <http://kic.kdhe.state.ks.us/kic/index>. [Accessed 23 August 2012].

[3]

Kansas Partnership for Improving Community Health (KanPICH), "Community Dashboard," [Online]. Available: <http://www.kansashealthmatters.org/index.php>.

[4]

"BRFSS Local Data 2009," [Online]. Available: <http://www.kdheks.gov/brfss/Expansion/index.html>.

[5]

N. Kanarek, R. Bialek and J. Stanley, "Use of Peer Groupings to Assess County Public Health Status," *Preventing Chronic Disease*, vol. 5, no. 3, pp. 1-8, 7 July 2008.

[6]

Office of Minority Health & Health Disparities (OMHD), "Disease Burden & Risk Factors," 5 June 2007. [Online]. Available: <http://www.cdc.gov/omhd/amh/dbrf.htm>.

[7]

U.S. Census Bureau, "Selected Economic Characteristics 3-Year Estimates, 2009-2011," n.d.. [Online]. Available: <http://factfinder2.census.gov>.