

**Kansas County Health Rankings 2009 —
Indicators**

May 2009

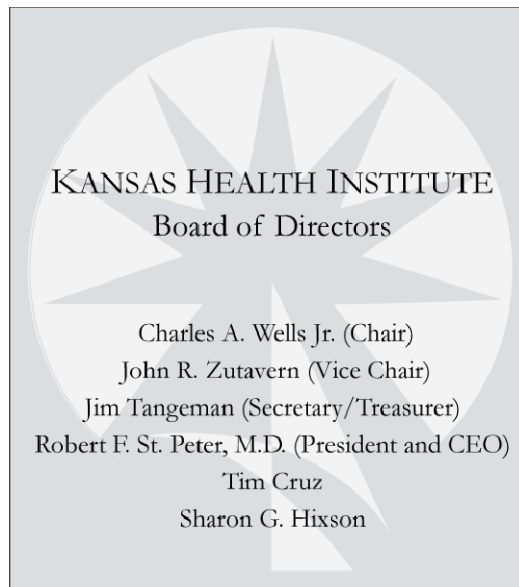
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The Kansas Health Institute is an independent, nonprofit health policy and research organization based in Topeka, Kansas.

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DESCRIPTION OF INDICATORS

YEARS OF POTENTIAL LIFE LOST PRIOR TO AGE 75

What It Is

Years of Potential Life Lost Prior to Age 75 (YPLL-75) is a measure of premature mortality in a county. Every death occurring before the age of 75 contributes to the total number of years of potential life lost. For example, a person dying at age 50 would contribute 25 years of life to the YPLL-75 index. The YPLL is age-adjusted to the 2000 U.S. population to allow comparison between counties, and reported as a rate per 1,000 people. Three-year averages are used to create more robust estimates of mortality, particularly for counties with smaller populations.

Where It Comes From

- Death counts are obtained from the Annual Summary of Vital Statistics, published by the Kansas Department of Health and Environment, Office of Health Assessment.
- Population Estimates of Kansas counties are from U.S. Census Bureau, Annual Estimates of the Resident Population by Selected Age Groups and Sex for Counties April 1, 2000, to July 1, 2006.
- County-level population for age under 1 is from National Center for Health Statistics (NCHS) bridged-race Vintage 2006 postcensal population estimates.
- 2000 U.S. population is the projected 2000 standard population that NCHS employs for age-adjusting data.

Reasons for Ranking

YPLL is a widely used measure of the rate and distribution of premature mortality that allows one to target resources to high-risk areas and investigate further into the causes of death.

Category

Health Outcomes

Weight

33.3 percent of Health Outcomes, or 8.3 percent of Summary Health Index

Years of Data Used

2004–2006

Reportable Criteria

Numbers are censored if less than 20 deaths in the 2004–2006 three-year combined data. All 105 counties are reportable.

Calculations

YPLL-75 is calculated using the following eight age groups: under 1 year, 1–14 years, 15–24 years, 25–34 years, 35–44 years, 45–54 years, 55–64 years and 65–74 years. The age-adjusted deaths in each age group in each county are obtained by the age-group specific death rates weighted by the 2000 U.S. population age composition. An age-adjusted death in under 1 year, 1–14 years, 15–24 years, 25–34 years, 35–44 years, 45–54 years, 55–64 years, or 65–74 years age group contributes 74.5, 67.5, 55.5, 45.5, 35.5, 25.5, 15.5, or 5.5 years, respectively, to the years of life loss at the county level. The final values represent the YPLL-75 per 1,000 population.

GENERAL HEALTH STATUS: FAIR OR POOR

What It Is

General Health Status: Fair or Poor is a measure of self-reported health-related quality of life in a population. This measure is based on answers to the question, “In general, would you say that your health is excellent, very good, good, fair, or poor?” The percentage reported is the percentage of adults reporting fair or poor health. This measure is age-adjusted to the 2000 U.S. population.

Where It Comes From

- Data are obtained from the Behavioral Risk Factor Surveillance System (BRFSS), a national survey data representative of the total non-institutionalized Kansas population over 18 years of age living in households with a landline telephone. We combined six years of BRFSS data to increase sample size.

- The data are re-weighted to be age and sex adjusted to 2000 U.S. standard population at the county level.
- 2000 U.S. population is the projected 2000 standard population that NCHS employs for age-adjusting data.

Reasons for Ranking

People reporting fair or poor health provide an estimate of the health-related quality of life, or morbidity, of a population.

Category

Health Outcomes

Weight

33.3 percent of Health Outcomes, or 8.3 percent of the Summary Health Index

Years of Data Used

2001–2006

Reportable Criteria

Numbers are censored if less than 50 in sample size in the 2001–2006 six-year combined data. A total of 96 counties is reportable.

Calculations

The Kansas BRFSS sample is drawn from twelve strata based on two sex groups (male and female) and six age groups (18–24, 25–34, 35–44, 45–54, 55–64 and 65 and over). To achieve the age and sex adjustment at the county level, we keep the design weights but reweight the post-stratification weights so that the total weighted sum in a county will be equal to the 2000 U.S. adult age 18 and over population.

LOW BIRTH WEIGHT

What It Is

Low Birth Weight is a measure of the percentage of live births weighing under 2,500 grams (5.5 pounds). Three-year averages are used to create more robust estimates of low weight births, particularly for counties with smaller populations.

Where It Comes From

Counts of live births by their birth weight are obtained from the Annual Summary of Vital Statistics, published by the Kansas Department of Health and Environment, Office of Health Assessment.

Reasons for Ranking

Low Birth Weight is a major contributor to infant mortality and is associated with birth defects and lasting disabilities. It affects both mortality and quality of life.

Category

Health Outcomes

Weight

33.3 percent of Health Outcomes, or 8.3 percent of Summary Health Index

Years of Data Used

2004–2006

Reportable Criteria

Numbers are censored if less than six low weight births in 2004–2006 three-year combined data. A total of 87 counties is reportable.

Calculations

Low Birth Weight is the percentage of live births weighing under 2,500 grams (5.5 pounds).

NO HEALTH INSURANCE

What It Is

No Health Insurance is the percentage of the population under 65 years of age (including children) reporting that they do not have health insurance coverage of any kind, including prepaid plans, HMOs, or government plans such as Medicare or Medicaid.

Where It Comes From

The statistics are from the Census Bureau, Small Area Health Insurance Estimates (SAHIE) program which was created to develop model-based estimates of health insurance coverage for counties and states by combining survey data with population estimates and administrative records. SAHIE released 2005 county-level data in Oct. 2008 and the SAHIE 2006 data release is planned for 2009.

Reasons for Ranking

Lack of health insurance is a strong barrier to health care access.

Category

Health Determinants — Health Care — Access to Care

Weight

1.67 percent of Health Determinants, or 1.25 percent of the Summary Health Index

Years of Data Used

2005

Reportable Criteria

All 105 counties are reportable. Sample size for each county is unknown.

Calculations

No further calculation is needed.

DID NOT RECEIVE NEEDED HEALTH CARE

What It Is

Did Not Receive Needed Health Care is the percentage of the adults reporting that they did not get needed health care (medical care or surgery) that they felt they should have had in the twelve months prior to being interviewed.

Where It Comes From

These data are obtained from the Behavioral Risk Factor Surveillance System (BRFSS), a national survey data representative of the total non-institutionalized Kansas population over 18 years of age living in households with a landline telephone. We combined six years of BRFSS data to increase sample size. However, this question was not asked in 2001 survey.

Reasons for Ranking

Not receiving needed medical care may contribute to chronic conditions and cause more serious health problems in the future.

Category

Health Determinants — Health Care — Access to Care

Weight

1.67 percent of Health Determinants, or 1.25 percent of the Summary Health Index

Years of Data Used

2002–2006

Reportable Criteria

Numbers are censored if less than 50 in sample size in the 2001–2006 six-year combined data. A total of 94 counties is reportable.

Calculations

It is based on the percent of adults who answered “No” to this question “Was there a time in the past 12 months when you needed to see a doctor but could not because of cost?”

Questions were asked differently in two parts in 2002, resulting in fewer respondents reporting ‘not receiving needed care due to cost’ in 2002 than in the four later years.

NO DENTIST VISIT IN PAST YEAR

What It Is

No Dentist Visit in Past Year is the percentage of the adults that reports that they did not see a dentist in the year prior to being interviewed.

Where It Comes From

These data are obtained from the Behavioral Risk Factor Surveillance System (BRFSS), a national survey data representative of the total non-institutionalized Kansas population over 18 years of age living in households with a landline telephone. We combined six years of BRFSS data to increase sample size but this question was asked three times (2002, 2004 and 2006) out of the six years.

Reasons for Ranking

Dental hygiene is not only important to maintain oral health, but it is also related to various other health problems, including cardiovascular health.

Category

Health Determinants — Health Care — Access to Care

Weight

1.67 percent of Health Determinants, or 1.25 percent of the Summary Health Index

Years of Data Used

2002, 2004 and 2006

Reportable Criteria

Numbers are censored if less than 50 in sample size in the 2001–2006 six-year combined data. A total of 71 counties is reportable.

Calculations

It is based on the percent of adults who answered “Within the past year” to the question “How long has it been since you last visited a dentist or a dental clinic for any reason? Include visits to dental specialists, such as orthodontists.”

NO INFLUENZA VACCINE SHOTS IN PAST YEAR

What It Is

No Influenza Vaccine Shots In Past Year is the percentage of adults that reports they did not receive an influenza shot in the year prior to being interviewed. It is recommended by CDC that certain people such as people 50 years of age and older should get vaccinated each year.

However, anyone who wants to reduce their chances of getting the flu can get vaccinated. So we included all adults.

Where It Comes From

These data are obtained from the Behavioral Risk Factor Surveillance System (BRFSS), a national survey data representative of the total non-institutionalized Kansas population over 18 years of age living in households with a landline telephone. We combined six years of BRFSS data to increase sample size.

Reasons for Ranking

Influenza is a very contagious disease, and can lead to pneumonia in severe cases. Vaccination is a good way to prevent influenza.

Category

Health Determinants — Health Care — Quality of Preventive and Outpatient Care

Weight

1.67 percent of Health Determinants, or 1.25 percent of the Summary Health Index

Years of Data Used

2001–2006

Reportable Criteria

Numbers are censored if less than 50 in sample size in the 2001–2006 six-year combined data. A total of 96 counties is reportable.

Calculations

It is based on the percent of adults who answered “Yes” to the question “A flu shot is an influenza vaccine injected into your arm. During the past 12 months, have you had a flu shot?” We include adults of all ages who answered.

NO ADEQUATE PRENATAL CARE

What It Is

No Adequate Prenatal Care is the percentage of the live births whose birth certificate indicates that their mothers did not receive prenatal care that was adequate or adequate plus according to the Adequacy of Prenatal Care Utilization (APNCU) Index. Three-year averages are used to create more robust estimates, particularly for counties with smaller populations.

Where It Comes From

Counts of live births by the APNCU index are obtained from the Annual Summary of Vital Statistics, published by the Kansas Department of Health and Environment, Office of Health Assessment.

Reasons for Ranking

Prenatal care in the early stage of pregnancy is important to both maternal health and baby health. Although not all birth defects or mishaps can be prevented, adequate prenatal care can

help reduce the risk and provide the mothers a chance for education, resources and supports besides the medical care.

Category

Health Determinants — Health Care — Quality of Preventive and Outpatient Care

Weight

1.67 percent of Health Determinants, or 1.25 percent of the Summary Health Index

Years of Data Used

2004—2006

Reportable Criteria

Censored if less than six live births or less than adequate prenatal care in 2004–2006 three-year combined data. All 105 counties are reportable.

Calculations

Kansas Department of Health and Environment has tallied the live births by APNCU index. The index, often referred to as the Kotelchuck Index, is a composite measure based on gestational age of the newborn, the trimester prenatal care began, and the number of prenatal visits made.

BREAST CANCER DEATH RATE

What It Is

Breast Cancer Death Rate is a measure of breast cancer mortality and the inadequacy of breast cancer screenings in a county. The fatality of this cancer is so much associated with the delay in its detection and diagnosis that many deaths occurring can mean the inadequacy of screening at the early stage. The rate is age-adjusted to the 2000 U.S. population to allow comparison between counties, and reported as a rate per 100,000 people (both female and male). Because breast cancer death is rare events, we use six-year averages to create more robust estimates of mortality, particularly for counties with smaller populations.

Where It Comes From

- Breast cancer deaths counts data are requested from the Kansas Department of Health and Environment, Office of Health Assessment.
- Population estimates of Kansas counties are from U.S. Census Bureau, Annual Estimates of the Resident Population by Selected Age Groups and Sex for Counties April 1, 2000, to July 1, 2006.
- 2000 U.S. population is the projected 2000 standard population that NCHS employs for age-adjusting data.

Reasons for Ranking

There are effective screening techniques such as biennial mammography and clinical breast exam that help diagnose breast cancer at an early stage and therefore improve the survival rate of the disease. Higher age-adjusted death rates may indicate inadequacy or untimely of the screenings in the population.

Category

Health Determinants — Health Care — Quality of Preventive and Outpatient Care

Weight

1.67 percent of Health Determinants, or 1.25 percent of the Summary Health Index

Years of Data Used

2001–2006

Reportable Criteria

Numbers are censored if less than 20 breast cancer deaths in 2001–2006 six-year combined data. Only 27 counties are reportable.

Calculations

The age-adjusted breast cancer death rate in this report is the deaths per 100,000 population of both sexes. It will be almost double for female breast cancer death rate (age-adjusted) if limited to female deaths per 100,000 female population.

CIGARETTE SMOKING

What It Is

Cigarette Smoking is a measure of the percentage of adults that report having smoked at least 100 cigarettes in their lifetime and that they currently smoke.

Where It Comes From

These data are obtained from the Behavioral Risk Factor Surveillance System (BRFSS), a national survey data representative of the total non-institutionalized Kansas population over 18 years of age living in households with a landline telephone. We combined six years of BRFSS data to increase sample size.

Reasons for Ranking

Cigarette smoking has been shown to cause a variety of health problems including cancer, cardiovascular disease and respiratory diseases.

Category

Health Determinants — Health Behaviors — Tobacco

Weight

5 percent of Health Determinants, or 3.75 percent of the Summary Health Index

Years of Data Used

2001–2006

Reportable Criteria

Numbers are censored if less than 50 in sample size in the 2001–2006 six-year combined data. A total of 96 counties is reportable.

Calculations

It is based on the percent of adults who answered “Yes” to the question “Have you smoked at least 100 cigarettes in your entire life?” and they also answered “Every Day” or “Some Days” to the next question “Do you now smoke cigarettes every day, some days, or not at all?”

SMOKING DURING PREGNANCY

What It Is

Smoking During Pregnancy measures the percentage of the women in the population who smoked during their pregnancy. Women giving birth in a hospital are asked about their smoking status after delivering the baby. This information is recorded in the birth certificate. Three-year averages are used to create more robust estimates, particularly for counties with smaller populations.

Where It Comes From

The data are obtained from the Kansas Department of Health and Environment, Office of Health Assessment.

Reasons for Ranking

Smoking during pregnancy has been shown to be associated with low birth weight, a higher risk of miscarriages, and Sudden Infant Death Syndrome.

Category

Health Determinants — Health Behaviors — Tobacco

Weight

5 percent of Health Determinants, or 3.75 percent of the Summary Health Index

Years of Data Used

2004–2006

Reportable Criteria

Numbers are censored if less than six live births whose mother smoked during pregnancy in 2004–2006 three-year combined data. A total of 104 counties is reportable.

Calculations

Kansas Department of Health and Environment did the tally for us at our request. No further calculation is needed.

PHYSICAL INACTIVITY

What It Is

Physical Inactivity is a combination of two measures.

1. The percentage of the adults reporting that they had no leisure time exercise in past month, and/or
2. The percentage of the adults that reports levels of activity that do not meet the recommended levels of moderate physical activity (30 minutes per day of moderate physical activity for five or more days a week) or vigorous physical activity (20 minutes per day of vigorous physical activity for three or more days of the week).

Where It Comes From

These data are obtained from the Behavioral Risk Factor Surveillance System (BRFSS), a national survey data representative of the total non-institutionalized Kansas population over 18 years of age living in households with a landline telephone. We combined six years of BRFSS data to increase sample.

Reasons for Ranking

Regular physical activity has been shown to prevent or reduce the severity of coronary heart disease (CHD), heart attack, diabetes, obesity, cancer and a variety of other health problems.

Category

Health Determinants — Health Behaviors— Diet and Exercise

Weight

3.3 percent of Health Determinants, or 2.5 percent of the Summary Health Index

Years of Data Used

2001–2006

Reportable Criteria

Numbers are censored if less than 50 in sample size in the 2001–2006 six-year combined data. A total of 96 counties is reportable for no leisure time exercise, but only 69 counties are reportable for no recommended level of moderate or vigorous physical activity.

Calculations

1. No leisure time exercise is percent who answered “No” to “During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?” This question was asked every year for the 2001–2006 period.
2. No recommended level of moderate or vigorous physical activity defined by the Centers for Disease Control and Prevention (CDC). BRFSS public use data set available at CDC website contains the derived variable PACAT_ =4 or 5. This set of questions was asked in 2003, 2004 and 2005 in Kansas BRFSS.

Each of the two measures contributes half the assigned weights to the composite z-scores.

OVERWEIGHT AND OBESITY

What It Is

- Overweight is a measure of the percentage of the adults that has a body mass index (weight in kilograms divided by height in meters squared) greater than or equal to 25 kg/m².

- Obesity is a measure of the percentage of the adults that has a body mass index greater than or equal to 30 kg/m².

Where It Comes From

These data are obtained from the Behavioral Risk Factor Surveillance System (BRFSS), a national survey data representative of the total non-institutionalized Kansas population over 18 years of age living in households with a landline telephone. We combined six years of BRFSS data to increase sample.

Reasons for Ranking

Obesity is a strong determinant of various health problems including hypertension, diabetes, coronary heart disease (CHD), stroke, sleep apnea and a variety of others. Adults who are overweight but not obese also are at a higher risk of the aforementioned diseases.

Category

Health Determinants — Health Behaviors — Diet and Exercise

Weight

3.3 percent of Health Determinants, or 2.5 percent of the Summary Health Index

Years of Data Used

2001–2006

Reportable Criteria

Numbers are censored if less than 50 in sample size in the 2001–2006 six-year combined data. A total of 92 counties is reportable for overweight and for obesity.

Calculations

Both measures are based on answers to the same questions, “About how much do you weigh without shoes?” and “About how tall are you without shoes?” and each is given half the assigned weights to the composite z-scores.

LOW FRUIT AND VEGETABLE CONSUMPTION

What It Is

Low Fruit and Vegetable Consumption is a measure of the percentage of adults that consume less than five servings of fruits and/or vegetables per day. This measure is obtained from the answers to questions asking about what types of food are eaten daily.

Where It Comes From

These data are obtained from the Behavioral Risk Factor Surveillance System (BRFSS), a national survey data representative of the total non-institutionalized Kansas population over 18 years of age living in households with a landline telephone. We combined six years of BRFSS data to increase sample size. However, this set of fruits and vegetables questions was only asked in 2002, 2003, 2004 and 2005 in Kansas BRFSS.

Reasons for Ranking

There is strong evidence that a diet with a sufficient level of fruits and vegetables can lower the risk of heart disease and stroke. In addition, many health problems such as birth defects, immune deficiencies and blindness can be caused by insufficient fruit and vegetable consumption.

Category

Health Determinants — Health Behaviors — Diet and Exercise

Weight

3.3 percent of Health Determinants, or 2.5 percent of the Summary Health Index

Years of Data Used

2002, 2003, 2004 and 2005

Reportable Criteria

Numbers are censored if less than 50 in sample size in the 2001–2006 six-year combined data. A total of 69 counties is reportable.

Calculations

We follow the calculation of `_FRTSERV` rules adopted by the Centers for Disease Control and Prevention (CDC). The calculated variable for fruit and vegetable servings per day, `_FRTSERV`, is derived from the servings per day variables (`FTJUDAY_`, `FRUTDAY_`, `GNSLDAY_`, `POTADAY_`, `CRTSDAY_` and `VEGEDAY_`) and the measure is the percentage of adults whose `_FRTSERV` value is less than five.

BINGE DRINKING

What It Is

Binge Drinking is a measure of the percentage of adults that drinks five or more alcoholic beverages in one day, at least once per month.

Where It Comes From

These data are obtained from the Behavioral Risk Factor Surveillance System (BRFSS), a national survey data representative of the total non-institutionalized Kansas population over 18 years of age living in households with a landline telephone. We combined six years of BRFSS data to increase sample size.

Reasons for Ranking

Alcohol abuse can have lasting effects on organs such as the liver, heart, brain and stomach, and also can cause short-term psychosocial problems, including violence and drunk driving.

Category

Health Determinants — Health Behaviors — Alcohol Use

Weight

10 percent of Health Determinants, or 7.5 percent of the Summary Health Index

Years of Data Used

2001–2006

Reportable Criteria

Numbers are censored if less than 50 in sample size in the 2001–2006 six-year combined data. A total of 94 counties is reportable.

Calculations

From 2001–2005, this measure is based on answers to the question, “Considering all types of alcoholic beverages, how many times during the past 30 days did you have 5 or more drinks on an occasion?” In 2006, Binge Drinking is defined as 5 or more drinks on an occasion for men, and 4 or more drinks for women.

NOT ALWAYS WEARING SEATBELT

What It Is

Not Always Wearing Seatbelt is a measure of the percentage of adults that do not answer “Always” wear seatbelt when driving or riding in a car.

Where It Comes From

These data are obtained from the Behavioral Risk Factor Surveillance System (BRFSS), a national survey data representative of the total non-institutionalized Kansas population over 18 years of age living in households with a landline telephone. We combined six years of BRFSS data to increase sample size but this question was asked three times (2002, 2005 and 2006) out of the six years.

Reasons for Ranking

Wearing the seatbelt at all time when driving or riding in the front passenger seat of a car is the law in most states. Wearing a seatbelt is proven to be effective in reducing the risk of death and severe injury in a collision.

Category

Health Determinants — Health Behaviors — High Risk Behaviors

Weight

2.5 percent of Health Determinants, or 1.88 percent of the Summary Health Index

Years of Data Used

2002, 2005 and 2006

Reportable Criteria

Numbers are censored if less than 50 in sample size in the 2001–2006 six-year combined data. A total of 59 counties is reportable.

Calculations

It is based on the percent of adults who answered “Almost always”, “Sometimes”, “Seldom” or “Never” to the question “How often do you use seat belts when you drive or ride in a car?”

TEEN BIRTH**What It Is**

Teen Birth is a measure of the percentage of live births born to teenage females aged 15–19. Three-year averages are used to create more robust estimates, particularly for counties with smaller populations.

Where It Comes From

Counts of live births by the age group of mothers are obtained from the Annual Summary of Vital Statistics, published by the Kansas Department of Health and Environment, Office of Health Assessment.

Reasons for Ranking

Pregnant teens and teen mothers are at a higher risk of acquiring STDs, repeat pregnancy, and have a lower likelihood of completing school. Children born to teen mothers are more likely to be born with low birth weight and are at a higher risk of infanticide or child abuse.

Category

Health Determinants — Health Behaviors — High Risk Behaviors

Weight

2.5 percent of Health Determinants, or 1.88 percent of the Summary Health Index

Years of Data Used

2004–2006

Reportable Criteria

Numbers are censored if less than six teen births in 2004–2006 three-year combined data. 96 counties are reportable.

Calculations

Percentage of live births born to teenage females age 15–19. Note: Less than 0.1 percent of babies are born to mother age 14 or younger each year, but they are not counted as teen births.

SEXUALLY TRANSMITTED DISEASE

What It Is

Sexually Transmitted Disease is a measure of the average annual number of reported cases of chlamydia, gonorrhea and syphilis as the crude rate per 100,000 in the population, averaged from the past six years. The reported rate is not age-adjusted. Six-year averages are used to create more robust estimates, particularly for counties with smaller populations.

Where It Comes From

Counts of chlamydia, gonorrhea and syphilis are obtained from the Kansas STD Report, published by the Kansas Department of Health and Environment, Bureau of Disease Control and Prevention.

Reasons for Ranking

If left untreated, many STDs can develop into more serious health problems. In addition, the prevalence of STDs is a proxy for high-risk sexual behavior.

Category

Health Determinants — Health Behaviors — High Risk Behaviors

Weight

2.5 percent of Health Determinants, or 1.88 percent of the Summary Health Index

Years of Data Used

2002–2007

Reportable Criteria

Numbers are censored if less than six reported cases of the three STDs in 2002–2007 six-year combined data. A total of 100 counties is reportable.

Calculations

Six-year averages of reported cases of chlamydia, gonorrhea and syphilis per 100,000 population.

VIOLENT CRIME

What It Is

Violent Crime is a measure of the average annual number of reported violent crimes per 100,000 adults in the population, averaged from the past six years. Crimes that are defined as violent are offenses that involved face-to-face confrontation between victim and perpetrator, including murder, rape, robbery and aggravated assault/battery. Six-year averages are used to create more robust estimates, particularly for counties with smaller populations.

Where It Comes From

Counts of violent crime offenses are obtained from the Kansas Bureau of Investigation (KBI) based on statistics reported by state and local law enforcement agencies.

Reasons for Ranking

Violent crime rates are closely associated with mortality and have a potential number of other effects on psychological and physical health.

Category

Health Determinants — Health Behaviors — High Risk Behaviors

Weight

2.5 percent of Health Determinants, or 1.88 percent of the Summary Health Index

Years of Data Used

2001–2006

Reportable Criteria

Numbers are censored if less than six offenses in 2001–2006 six-year combined data. A total of 101 counties is reportable.

Calculations

Six-year averages of reported violent crime offenses of murders, rapes, robberies and aggravated assaults/batteries per 100,000 population.

HIGH SCHOOL NON-GRADUATION

What It Is

High School Non-Graduation is a measure of the proportion of a cohort of students who did not graduate high school with a regular diploma. It is calculated as the number of students who do not receive a regular diploma divided by the total number of students expected to complete high school. The students who get a GED are not considered as graduates under the No Child Left

Behind Act of 2001. Two-year averages of percentage are used to create more robust estimates, particularly for counties with smaller populations

Where It Comes From

These data are obtained from the Kansas State Department of Education.

Reasons for Ranking

There is evidence that people who graduate from high school have longer and healthier lives than those who do not attain a high school degree. High school graduates typically have significantly higher incomes, which strongly correlates with better health over time.

Category

Health Determinants – Socioeconomic Factors – Education

Weight

6.7 percent of Health Determinants, or 5 percent of the Summary Health Index

Years of Data Used

2006 and 2007

Reportable Criteria

Sufficient students in graduation classes of 2006 and 2007 by county. All 105 counties are reportable

Calculations

Percentage of a cohort of students enrolling in the high school freshman class in a county who did not graduate from this high school with a diploma four years later. Students who drop out, get a GED and repeat school year(s) are counted as non-graduates in the cohort.

NO HIGH SCHOOL DIPLOMA

What It Is

No High School Diploma is a measure of the percentage of the population over age 25 in year 2000 that do not have a high school diploma. Age 25 and over population who lived in the county at the time of 2000 census did not necessarily attend high schools in the same county.

Where It Comes From

U.S. 2000 Decennial Census. Specifically, these data are obtained from Summary File 3 (SF-3), Table P37: Sex by educational attainment for the population 25 years and over.

Reasons for Ranking

There is evidence that people who graduate from high school have longer and healthier lives than those who do not attain a high school degree. High school graduates typically have significantly higher incomes, which strongly correlates with better health over time.

Category

Health Determinants – Socioeconomic Factors – Education

Weight

6.7 percent of Health Determinants, or 5 percent of the Summary Health Index

Years of Data Used

2000

Reportable Criteria

Data are from Census 2000. All 105 counties are reportable.

Calculations

Percentage of the adults age 25 and over whose highest education attainment is less than high school diploma, at the time of 2000 census.

UNEMPLOYMENT RATE

What It Is

Unemployment Rate is a measure of the percentage of civilian population age 15 years or older that is seeking work. Precisely, the rate represents the average annual percent of the labor force that is unemployed.

Where It Comes From

These data are obtained from the Local Area Unemployment Statistics Program, Bureau of Labor Statistics (BLS).

Reasons for Ranking

Employment has been shown to correlate positively with health, and is associated with slower declines in health status over time.

Category

Health Determinants – Socioeconomic Factors – Income

Weight

6.7 percent of Health Determinants, or 5 percent of the Summary Health Index

Years of Data Used

2006

Reportable Criteria

Data are from BLS statistics. All 105 counties are reportable

Calculations

The rate represents the average annual percent of the labor force that is unemployed.

CHILDREN IN POVERTY

What It Is

Children in Poverty is a measure of the percentage of children under 18 living in families that are below 100 percent of the poverty level.

Where It Comes From

These data are obtained from the Small Area Income and Poverty Estimates (SAIPE) program, U.S. Census Bureau. The SAIPE provides more current estimates of selected income and poverty statistics than those from the most recent decennial census.

Reasons for Ranking

Evidence shows that children from disadvantaged backgrounds have slower cognitive development and increased behavioral problems, which may remain with them for the rest of their lives.

Category

Health Determinants – Socioeconomic Factors – Income

Weight

6.7 percent of Health Determinants, or 5 percent of the Summary Health Index

Years of Data Used

2005

Reportable Criteria

Data are from Census Bureau statistics. All 105 counties are reportable

Calculations

SAIPE tables provide the percentage of children under age 18 in poverty by county. No further calculation is needed.

DIVORCE RATE

What It Is

Divorce Rate is a measure of the average annual number of marriage dissolutions per 1,000 population, by the county of action. Three-year averages are used to create more robust estimates, particularly for counties with smaller populations. There is no age limit or number of times limit that a person can divorce.

Where It Comes From

Counts of marriage dissolutions are obtained from the Annual Summary of Vital Statistics, published by the Kansas Department of Health and Environment, Office of Health Assessment.

Reasons for Ranking

Divorce has been shown to have adverse health effects on mental and social health, including anxiety, depression and increased risk of alcohol abuse.

Category

Health Determinants – Socioeconomic Factors – Social Support

Weight

6.7 percent of Health Determinants, or 5 percent of the Summary Health Index

Years of Data Used

2004–2006

Reportable Criteria

Numbers are censored if less than six marriage dissolutions in 2004–2006 three-year combined data. All 105 counties are reportable.

Calculations

Three-year average number of marriage dissolutions per 1,000 population during 2004–2006.

SINGLE PARENT HOUSEHOLDS

What It Is

Single Parent Households is a measure of the number of households run by a single parent (male householder with no wife present or female householder with no husband present) with one or more of their own children under 18 years as a percentage of the total number of households.

Where It Comes From

U.S. 2000 Decennial Census. Specifically, these data are obtained from Summary File 1 (SF-1), Table P18: Household size, household type and presence of own children.

Reasons for Ranking

This measure is included as a proxy for social disruption in the community. Studies have shown that being raised in a single-headed household can have negative effects on health in the future, such as increased anxiety symptoms.

Category

Health Determinants – Socioeconomic Factors – Social Support

Weight

6.7 percent of Health Determinants, or 5 percent of the Summary Health Index

Years of Data Used

2000

Reportable Criteria

Data are from Census 2000. All 105 counties are reportable.

Calculations

Percentage of family households with own child among which only a male or a female householder but without the spouse present, at the time of 2000 census.

RESPIRATORY HAZARD INDEX

What It Is

Respiratory Hazard Index is a measure of the cumulative hazard of respiratory non-cancer adverse health effects due to inhalation of multiple pollutants based on EPA modeled estimates of emissions. This measure is reported as a ratio of the estimated potential level of exposure for a county to the level below which no adverse health effects are expected. If the Hazard Index is greater than 1, then it is possible that adverse effects may occur. If the Hazard Index is less than 1, then no adverse health effects are expected.

Where It Comes From

These data are obtained from the 1999 National Air Toxics Assessment, U.S. Environmental Protection Agency (EPA).

Reasons for Ranking

The non-cancer pollutants measured by the EPA were chosen because they are known to cause irritation to the lining of the respiratory system, which may lead to more serious problems in people with compromised respiratory systems such as cystic fibrosis patients or asthmatics.

Category

Health Determinants – Physical Environment – Air quality

Weight

1.7 percent of Health Determinants, or 1.25 percent of the Summary Health Index

Years of Data Used

1999

Reportable Criteria

Data are from EPA National Assessment. All 105 counties are reportable.

Calculations

EPA tables contain this Respiratory Hazard Index, which is a ratio of the estimated hazards exposure of the county to the level that is considered safe. No further calculation is needed.

SECONDHAND SMOKING

What It Is

Secondhand Smoking is a measure of the percentage of adults that live in homes where smoking is allowed or where there is no rule about smoking at home.

Where It Comes From

These data are obtained from the Behavioral Risk Factor Surveillance System (BRFSS), a national survey data representative of the total non-institutionalized Kansas population over 18 years of age living in households with a landline telephone. We combined six years of BRFSS data to increase sample size but this question was asked three times (2001, 2002 and 2005) out of the six years.

Reasons for Ranking

Health effects of exposure to secondhand smoke, or passive smoking, include lung cancer, nasal sinus cancer, respiratory tract infections and heart disease. Secondhand smoke contains more than 50 substances that can cause cancer. There is no safe amount of secondhand smoke.

Children, pregnant women, older people and people with heart or breathing problems should be especially careful. (National Cancer Institute)

Category

Health Determinants – Physical Environment – Air Quality

Weight

1.7 percent of Health Determinants, or 1.25 percent of the Summary Health Index

Years of Data Used

2001, 2002 and 2005

Reportable Criteria

Numbers are censored if less than 50 in sample size in the 2001–2006 six-year combined data. Only 34 counties are reportable.

Calculations

It is based on the percent of adults who answered “Smoking is allowed in some places or at some times”, “Smoking is allowed anywhere inside your home”, or “There are no rules about smoking inside your home” to the question “Which statement best describes the rules about smoking inside your home?”

NITRATE AND COLIFORM LEVELS IN WATER

What It Is

Nitrate and Coliform Levels in Water measures the presence of nitrates and coliform in public drinking water system exceeding the maximum contamination level (MCL) and the population affected by such public water system contamination. We exclude violations that are administrative or procedural, and the violations related to MCL violation of other chemicals. Three-year averages are used to create more robust estimates, but we found that certain public water systems have been frequent violators of over the maximum nitrate/coliform levels during the three-year period, while most systems in Kansas have not had a single violation for the past five years.

Where It Comes From

Violations are listed in the Public Water Supply Annual Compliance Report, published by the Kansas Department of Health and Environment, Bureau of Water.

Reasons for Ranking

Among other negative health effects, nitrates in drinking water are responsible for blue baby syndrome and can cause birth defects. Excessive fecal coliform such as E. coli levels in drinking water or swimming pools may cause acute gastro-intestinal infections, bloody diarrhea and abdominal cramps. Children and the elderly are particularly susceptible.

Category

Health Determinants – Physical Environment – Water Quality

Weight

3.3 percent of Health Determinants, or 2.5 percent of the Summary Health Index

Years of Data Used

2004–2006

Reportable Criteria

There were no violations in 41 counties during all three years. No county number was censored.

Calculations

Percentage of the county population affected by the nitrate or coliform MCL violations, three-year annual averages. Certain public water systems have multiple and repeat violations in a year. The measure is presented as a percent, but it is in fact a ratio. For example, three violations to one water system that affected the same community three times which consisted of 10 percent of the county population would count as 30 percent of the county population being affected, even though it was always the same 10 percent.

HOUSING WITH INCREASED LEAD RISK**What It Is**

Housing with Increased Lead Risk is the percentage of housing units that were built before 1950. Residents of these units are more likely to be exposed to lead paint.

Where It Comes From

U.S. 2000 Decennial Census. Specifically, these data are obtained from Summary File 3 (SF-3).

Reasons for Ranking

Housing that was built before 1950 has a higher risk of lead poisoning for its inhabitants. In children, lead poisoning can cause learning disabilities, Attention-Deficit / Hyperactivity

Disorder and stunted growth, among other problems. In adults, lead poisoning can cause fertility, neurological and memory problems, among many others.

Category

Health Determinants — Physical Environment — Built environment

Weight

1.1 percent of Health Determinants, or 0.83 percent of the Summary Health Index

Years of Data Used

2000

Reportable Criteria

Data are from Census 2000. All 105 counties are reportable.

Calculations

Percentage of the housing units that were built before 1950, at the time of 2000 census.

LEAD POISONED CHILDREN

What It Is

Lead Poisoned Children is a measure of the annual percentage of children under age six with blood lead tests that tested positive for lead poisoning with second confirmatory test. Reporting all blood lead test results of children under age six has been mandatory in Kansas since late 2002, although it is still likely that children who are tested are considered at high risk of exposure to lead poisoning. Four-year averages are used to create more robust estimates, particularly for counties with smaller populations.

Where It Comes From

These data are requested from the Kansas Childhood Lead Poisoning Prevention Program, a unit of the Kansas Department of Health and Environment, Bureau of Consumer Health.

Reasons for Ranking

Lead poisoning has been shown to cause many health problems. In children, lead poisoning can cause learning disabilities, Attention-Deficit / Hyperactivity Disorder and stunted growth, among other problems. In adults, lead poisoning can cause fertility, neurological and memory problems, among many others.

Category

Health Determinants – Physical Environment – Built Environment

Weight

1.1 percent of Health Determinants, or 0.83 percent of the Summary Health Index

Years of Data Used

2003–2006

Reportable Criteria

Numbers are censored if less than 50 in blood test sample size in the 2003–2006 four-year combined data. A total of 92 counties is reportable.

Calculations

Percentage of the children under age six with blood lead tests that are confirmed cases of lead poisoning.

COMMUTING TO WORK BY DRIVING ALONE

What It Is

Commuting to Work by Driving Alone is a measure of the percentage of the workforce (ages 16 and above) that drives alone to work.

Where It Comes From

U.S. 2000 Decennial Census. Specifically, these data are obtained from Summary File 3 (SF-3).

Reasons for Ranking

Method of commuting captures whether community design or policy initiatives (such as free or subsidized bus passes) facilitate alternative transportation, such as walking, bicycling, mass transit, or carpooling. Research has demonstrated that community design that is not automobile-dependent can have beneficial health effects, including reduced rates of obesity, cardiovascular disease and diabetes, as well as less air and water pollution that can adversely affect health.

Category

Health Determinants – Physical Environment – Built Environment

Weight

1.1 percent of Health Determinants, or 0.83 percent of the Summary Health Index

Years of Data Used

2000

Reportable Criteria

Data are from Census 2000. All 105 counties are reportable.

Calculations

Percentage of the workforce (ages 16 and above) that usually drives alone to work, at the time of 2000 census.