

## Quick Guide: Finding, Understanding, and Using Data

**D**on't be intimidated by data! A few basic skills are all anyone needs to find, understand, and use statistical information regarding children and families. With county, state, or national demographic and basic program data, child advocates can wield a powerful tool for improving the well-being of children in Kansas.

**Finding Reliable and Useful Data.** Finding national, state, and county data on child well-being is easier than ever with the help of agencies and their websites. Although data sources are numerous, the following list can get you started on your search for useful information.

AVAILABLE DATA SOURCES			
TYPES OF INFORMATION	LEVEL	SOURCE	ADDRESS
Child abuse/neglect	National, State	Natl. Clearinghouse on Child Abuse & Neglect	<a href="http://www.calib.com/nccanch">www.calib.com/nccanch</a>
Child care	State, County	KS Assoc. of Childcare Resource & Referral Agencies	785-823-3343
	State, County	Bureau of Child Care Licensing & Regulation, KS Dept of Health & Environment	<a href="http://www.kdhe.state.ks.us/bccclr">www.kdhe.state.ks.us/bccclr</a>
Child Welfare	National, State	Natl. Child Care Information Center	<a href="http://www.nccic.org">www.nccic.org</a>
	State	KS Dept of Social & Rehabilitation Services	<a href="http://www.srskansas.org">www.srskansas.org</a>
Communities That Care Survey (student info)	State, County	Greenbush Institute	<a href="http://www.ctcdata.org">www.ctcdata.org</a> <a href="http://www.greenbush.org">www.greenbush.org</a>
Court (Juvenile)	State, County	Office of Judicial Administration	<a href="http://judicial.kscourts.org">judicial.kscourts.org</a>
Crime	State, County	KS Bureau of Investigation	<a href="http://www.kbi.org">www.kbi.org</a>
	National, State	US Federal Bureau of Investigation	<a href="http://www.fbi.gov">www.fbi.gov</a>
Early Prenatal Care	State, County	Office of Health Care Information, KS Dept of Health & Environment	785-296-5644
Education	National, State	Natl. Center for Health Statistics, CDC	<a href="http://www.cdc.gov/nchs/data">www.cdc.gov/nchs/data</a>
	State, County	KS Dept of Education	<a href="http://www.ksbe.state.ks.us">www.ksbe.state.ks.us</a>
Free/Reduced School Meals	National, State	Natl. Center for Education Statistics	<a href="http://nces.ed.gov">nces.ed.gov</a>
	State, County	US Dept of Education	<a href="http://www.ed.gov">www.ed.gov</a>
Head Start	State, County	KS State Dept of Education	<a href="http://www.ksde.org">www.ksde.org</a>
	State, County	US Dept of Agriculture, Office of Analysis, Nutrition, and Evaluation	703-605-0482
Health	State, County	KS Head Start Association	913-422-1700
	State, County	Office of Health Care Information, KS Dept of Health & Environment	785-296-5644
Health – Med. Providers	National, State	Centers for Disease Control & Prevention	<a href="http://www.cdc.gov">www.cdc.gov</a>
	State, County	Kaiser Family Foundation	<a href="http://www.statehealthfacts.kff.org">www.statehealthfacts.kff.org</a>
Hunger	National, State	KS Health Care Data Governing Board	<a href="http://www.accesskansas.org/hcdgb">www.accesskansas.org/hcdgb</a>
Immunization	State, County	US Dept of Agriculture	<a href="http://www.reeusda.gov">www.reeusda.gov</a>
	State, County	Epidemiologic Services & Bureau of Epidemiology & Disease Prevention, KS Dept of Health & Environment	785-296-8156
Income (e.g., Family)	National	Natl. Center for Health Statistics, CDC	<a href="http://www.cdc.gov/nchs/data">www.cdc.gov/nchs/data</a>
	State, County	Fannie Mae	<a href="http://www.efanniema.com">www.efanniema.com</a>
Infant Mortality	State, County	Office of Health Care Information, KS Dept of Health & Environment	785-296-5644
	National, State	Natl. Center for Health Statistics, CDC	<a href="http://www.cdc.gov">www.cdc.gov</a>

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Labor, Workforce	National, State State	US Dept of Labor, Bureau of Labor Statistics KS Department of Human Resources	data.bls.gov laborstats.hr.state.ks.us
Low-Birth-Weight	State, County	Office of Health Care Information, KS Dept of Health & Environment	785-296-5644
	National, State	Natl. Center for Health Statistics, CDC	www.cdc.gov/nchs
Multiple Types of Info Census Data	National, State County	US Census Bureau	www.census.gov quickfacts.census.gov/qfd
Federal Statistics	National, State	FedStats	www.fedstats.gov/qf/states
Child Statistics	National, State	Child Trends Data Bank	www.childtrendsdatbank.org
Poverty	State	Natl. Center for Children in Poverty	www.nccp.org
Taxes	State, County	KS Dept of Revenue	www.ksrevenue.org/stats
Teen Births	State, County	Office of Health Care Information, KS Dept of Health & Environment	785-296-5644
	National, State	Natl. Center for Health Statistics, CDC	www.cdc.gov/nchs
Teen Death	State, County	Office of Health Care Information, KS Dept of Health & Environment	785-296-5644
	National, State	Natl. Center for Health Statistics, CDC	www.cdc.gov/nchs
Well-being – KIDS COUNT	State, County	Kansas Action for Children	www.kac.org

## Understanding Data: What Do the Numbers Mean?

Although research often presents numerous types of statistics, the following statistics commonly reported by agencies can provide meaningful information that is easily understandable.

**Percentage.** The percentage tells you what portion of the total group a particular subgroup represents. It is calculated by taking the number of people in a subgroup and dividing it by the number of people in the total group.

$$\text{Percentage} = (\text{Number in subgroup} \div \text{Number in total group}) \times 100$$

Example: What percentage of the babies born in Kansas were low-birth-weight babies?

$$\begin{aligned} \text{Percentage} &= (2,758 \text{ low-birth-weight babies} \div 39,335 \text{ total babies born}) \times 100 \\ &= 7.01\% \text{ of the babies born were low-birth-weight babies} \end{aligned}$$

**Mean.** Also called the average, the mean gives you an idea of what the average person looks like. It is calculated by adding up all the data values (e.g., scores) each person in the group has and dividing the sum by the total number of people in the group.

$$\text{Mean} = (1^{\text{st}} \text{ person's value} + 2^{\text{nd}} \text{ person's value} + \dots \text{ last person's value}) \div \text{Number of people}$$

Example: What is the mean salary for child care workers in the county?

$$\begin{aligned} \text{Mean} &= (\$13,700 + \$14,100 + \dots \$42,540) \div 67 \text{ child care workers} \\ &= \$24,760 \text{ is the mean salary of child care workers in the county} \end{aligned}$$

\* Numbers used in this example are fictitious.

**Median.** The median tells you the value or number that 50 percent of the people fall at or below.

If people in a group were lined up from lowest to highest according to their value on something, the median would be the value in the middle of the group. Example: a median family income of \$47,800 in a county means that 50 percent of the families have an income of \$47,800 or less.

**Rate.** The rate tells you the number of things being measured per a set group size. Common set group sizes include 1,000, 10,000, and 100,000. The rate is calculated by taking the number of people in a subgroup, dividing it by the number of people in the total group, then multiplying by the set group size.

$$\text{Rate} = (\text{Number in subgroup} \div \text{Number in total group}) \times \text{Set group size}$$

Example: What is the rate of teen violent deaths in Kansas?

$$\begin{aligned} \text{Rate} &= (111 \text{ teen violent deaths} \div 206,787 \text{ teens in Kansas}) \times 100,000 \\ &= 53.67 \text{ teen violent deaths per } 100,000 \text{ teens in Kansas} \end{aligned}$$

**Percent Change.** When data are available for at least two points in time, you can determine if the newest number increased, decreased, or stayed the same compared to the previous number. You can also determine just how much the number changed. Percent change is calculated by subtracting the newest number from the previous number, then dividing by the previous number. If the percent change is a positive number, it means that the newest number has increased compared to the previous number. If the percent change is a negative number, it means that the newest number has decreased compared to the previous number.

$$\text{Percent Change} = [(\text{Newest number} - \text{Previous number}) \div \text{Previous number}] \times 100$$

Example: In the 2003/04 school year, the percent of children in Kansas approved for free school meals was 28 percent. In the base years, 1998/99 to 2002/03, the average percentage was 24.6 percent. Therefore, the change from the base years to the current year is:

$$\begin{aligned} \text{Percent Change} &= [(28.0 - 24.6) \div 24.6] \times 100 \\ &= 13.9\% \text{ increase from the base years to the 2003/04 school year in the percent} \\ &\quad \text{of children approved for free school meals} \end{aligned}$$

**Ranks and Decile Scores.** Rank scores tell you where a given performance stands compared to the rest of the group. For example, according to the National 2003 KIDS COUNT Data Book, Kansas ranked 37th on the rate of teen violent deaths, indicating that Kansas' rate was higher than over half of the U.S. states. The Kansas KIDS COUNT Data Book groups the counties into ten equal groups (decile ranks) to represent the top 10 percent, top 20 percent, and so forth. A decile rank of "one" indicates that the county is in the top 10 percent while a decile rank of "10" indicates that the county is in the bottom 10 percent.