

HUNGER IN KANSAS

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Kansas Health Institute
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Healthier Kansans Through Informed Decisions

About the Kansas Health Institute

The Kansas Health Institute is an independent, non-profit health policy and research organization based in Topeka, Kansas. KHI was established in 1995 with a multi-year grant from the Kansas Health Foundation. The Kansas Health Institute's vision is based on the belief that if key information is made available and effectively communicated to decision-makers in the state, better-informed decisions will be made that improve the health of Kansans.

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Hunger in Kansas

A Study Conducted by the Kansas Health Institute

EXECUTIVE SUMMARY

Purpose of Study: To determine the prevalence of hunger in Kansas, and to identify particular subgroups at increased risk of experiencing hunger.

Study Methods: Data were analyzed from the 1,418 persons in 571 households in Kansas randomly selected for the April 1995 Current Population Survey Food Security Supplement. Persons were assigned a food security score based on the food security status for the entire household during the previous 12 months. Kansas is the only state at this time to have analyzed these data to determine the prevalence of hunger at the state level.

Main Findings:

Hunger is Present in Kansas

- ☞ More than 300,000 persons in Kansas (13%) reported the lack of a secure supply of food in their household at some point during the previous year.
- ☞ Of those persons, 91,000 (4%) reported that hunger occurred in their household.

Poor and Minorities Are at Increased Risk

- ☞ One-Fourth (26%) of persons in households with incomes below 185 % of the federal poverty level (FPL) reported the lack of a secure supply of food in their household during the previous year, compared to only 3% of those above this income level. (In 1995, the cutoff for 185% FPL was \$28,803 for a family of four)
- ☞ African Americans were three times more likely than whites to experience lack of a secure supply of food in their household during the previous year (33% vs. 10%).

Some Children Are at Particular Risk

- ☞ More than one-third (35,000) of those who reported hunger in their households were children, representing nearly one child out of every 20 (5%) in Kansas.
- ☞ Children living in households with a single parent were much more likely to lack a secure supply of food than those living with two parents.
- ☞ One Kansas child out of every four (27%) living in a single female-headed household reported hunger in their household during the past year. This is nearly twice the national average (14%) of hunger reported by similar children.

Summary: Despite good economic conditions and numerous food distribution programs, many Kansans lack access to a secure supply of food. In Kansas, those most at risk for experiencing hunger are children living in households with a single parent, low -income persons, and African Americans. Particularly concerning is the finding that Kansas children living in households headed by single females were nearly twice as likely as similar children in other parts of the country to report hunger in their households. This winter, additional data from 1996 through 1998 will be available to analyze trends on hunger in Kansas.

Hunger in Kansas

Why a Study of Hunger in Kansas?

Economic conditions in Kansas, as well as the entire U.S., have been good for the last several years. We have enjoyed record low unemployment, a thriving economy, and rising household incomes. Why is a study on hunger in Kansas important to undertake right now? Information from a national survey undertaken to examine the issue of hunger in the U.S. showed that despite the robust national economy, a surprising 12 percent of American households lacked a secure food supply, and 4 percent experienced hunger. Could the same situation exist in Kansas as across the nation? Or are we spared from this seemingly contradictory situation?

In the fall of 1998, staff from the Campaign to End Childhood Hunger in Kansas (CTECH) approached the Kansas Health Institute about the possibility of undertaking a study to determine the number of persons, in particular children, who were hungry or at risk of hunger in Kansas. After investigating the options, a decision was made to tap into an ongoing national study of hunger and to specifically analyze the situation in Kansas.

This national study provided a number of advantages. It was already underway and funded by the federal government so it would be relatively inexpensive to perform. The study had been designed so that the data could be used to describe hunger within specific states; however, no state had actually used the data for this purpose and Kansas would become the first state to do so. An even more important reason for conducting the study now is that the national study will continue to provide data each year on hunger in Kansas and across the nation so that trends can be analyzed over time.

Source of the Data Used in Report

In April 1995, the U.S. Bureau of the Census conducted the first Food Security Supplement survey in conjunction with its regular Current Population Survey (CPS) for the U.S. Department of Agriculture (USDA).² The survey was undertaken because the Presidents' Task Force on Food Assistance realized there was no reliable measure of the prevalence of hunger in the United States.¹ Investigators began developing tools to assess the prevalence of hunger and from these efforts the Food Security Supplement survey was developed. From this, hunger scales called comprehensive food security measurement tools, and hunger status indicators were developed. The CPS Food Security Supplement is intended to estimate the food security of the U.S. population. However, only food insecurity resulting from the lack of resources or poverty is assessed. The Food Security Supplement does not attempt to assess the nutritional quality or safety of the food consumed.

Data from this 1995 CPS Food Security Supplement were used for this analysis. These data were released by the federal government in 1998; however, no state has yet analyzed the data at

the state level and Kansas is the first state to conduct such an analysis. Additional data from 1996 through 1998 have been collected and will be analyzed over the next several months to determine the trends in hunger in Kansas.

Study Methods

Current Population Survey Food Security Supplement data were downloaded from the CPS home page, <http://www.bls.census.gov/cps>. Variables extracted also included demographic, geographic, household, labor force, and weighting variables from the main CPS file. Analytic variables were identified, including variables for comparison to published unweighted tallies used to verify proper access of the data.

Data were analyzed from the 1,418 persons in 571 households in Kansas randomly selected for the April 1995 Current Population Survey Food Security Supplement. Most of the subgroups analyzed are the same as those used in the USDA Food Security Report.² County population density was added for this study using county population density category definitions commonly used to describe Kansas county populations.³ Because this analysis used data from only Kansas, some categories had to be collapsed due to small sample sizes. In particular, the categories of “food insecure with moderate hunger” and “food insecure with severe hunger” were combined into a single group called “food insecure with hunger.” Consistent with the USDA methodology, individuals were assigned a food security score based on the food security status for the entire household during the previous 12 months.

All estimates presented in this report were weighted to be representative of the entire Kansas population, except those who are institutionalized or homeless. Estimation of the standard errors accounts for the complex sample design of the survey and uses parameters provided by the USDA for use with the survey data. Point estimates with relative standard errors of 30 percent or more are not reported because they are considered unreliable. All comparisons made in the report have statistical significance with a *p* value of less than or equal to 0.05.

Definitions of Terms:

The Food Security Status indicator describes the 12 month food security status in four categories: 1) Food Secure, 2) Food Insecure with no apparent hunger, 3) Food Insecure with moderate hunger, and 4) Food Insecure with severe hunger.

- ?? Food Secure: Defined by the USDA as “Access by all people at all times to enough food for an active, healthy life. Food security includes at a minimum: (1) the ready availability of nutritionally adequate and safe foods, and (2) an assured ability to acquire foods in socially acceptable ways.”²
- ?? Food Insecure: This includes the category of food insecure with no apparent hunger. This is defined by the USDA as “Limited or uncertain availability of nutritionally

adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways.”²

?? Hunger Present: This includes the categories of food insecure with moderate hunger as well as food insecure with severe hunger. It is defined as “The uneasy or painful sensation caused by a lack of food. The recurrent and involuntary lack of access to food. Hunger may produce malnutrition over time. Hunger is a potential although not necessary, consequence of food insecurity.”²

Other definitions relevant to the information presented include:

- ?? Householder: the person owning or renting the housing unit. In the case of a married couple it may be either the husband or wife.
- ?? Elderly: persons 60 years of age or older.²
- ?? Children: persons less than 18 years of age.²
- ?? Race/Ethnicity: obtained through the combination of the individuals race and Hispanic origin.²
- ?? Household Income: the total income of all individuals 15 years of age or older in the household.²
- ?? Federal Poverty Level (FPL): The 185% FPL poverty threshold was selected for analysis because this is the threshold for food stamp eligibility.² In 1995, 185% FPL was an income of \$28,803 for a family of four.
- ?? Household Composition: three main categories 1) with at least one child regardless of the relationship to the head of household, 2) with no children but with at least one person 60 years or older, 3) with no children or elderly. Households with children are divided according to the marital status of the householder (a married couple, an unmarried female, or an unmarried male). A person less than 18 years of age and either married or an unmarried householder is included as both a householder and as a child.²
- ?? County Population Density: the number of persons per square mile in Kansas counties. Counties may be in one of three categories: 1) rural counties having fewer than 20 persons per square mile, 2) semi-urban counties with 20 to 149 persons per square mile, 3) and urban counties with 150 or more persons per square mile.³

Main Findings

(Detailed information is provided in Table 1)

Hunger is Present in Kansas

- ☞ More than 300,000 persons in Kansas (13%) reported the lack of a secure supply of food in their household at some point during the previous year.
- ☞ Of those persons, 91,000 (4%) reported that hunger occurred in their household.

Poor and Minorities Are at Increased Risk

- ☞ One-Fourth (26%) of persons in households with incomes below 185 % of the federal poverty level (FPL) reported the lack of a secure supply of food in their household during the previous year, compared to only 3% of those above this income level. (In 1995, the cutoff for 185% FPL was \$28,803 for a family of four).
- ☞ African Americans were three times more likely than whites to experience lack of a secure supply of food in their households during the previous year (33% vs. 10%).

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Summary

Despite good economic conditions and numerous food distribution programs, many Kansans lack access to a secure supply of food. In Kansas, those most at risk for experiencing hunger are children living in households with a single parent, low -income persons, and African Americans. Particularly concerning is the finding that Kansas children living in households headed by single females were nearly twice as likely as similar children in other parts of the country to report hunger in their households.

About the Authors

Robert F. St. Peter, M.D., became *President* of the Kansas Health Institute in April 1998. He received a BS from the University of Kansas, a medical degree from Duke University, and completed his residency and chief residency in pediatrics at the University of Colorado Health Sciences Center in Denver. Dr. St. Peter was an international health fellow in Nigeria, West Africa, and trained in health services research as a Robert Wood Johnson Foundation Clinical Scholar at the University of California, San Francisco/Stanford University.

Dr. St. Peter is a board certified pediatrician with experience in health services research and health policy development. Prior to joining KHI, Dr. St. Peter served as Senior Medical Researcher at Mathematica Policy Research and the Center for Studying Health System Change in Washington, D.C. He also served as a health policy adviser on the U.S. Senate Committee on Labor and Human Resources during the consideration of comprehensive health care reform legislation in 1994-95, and as Coordinator of Child and School Health Programs in the U.S. Department of Health and Human Services.

David Bourdon, M.H.S., *Research Analyst*, received a BS in Microbiology from South Dakota State University and a Master of Health Science from Wichita State University. He has worked as a Health Data Analyst for the Kansas Foundation for Medical Care, the Kansas Peer Review Organization, and has served as coordinator of clinical outcomes projects for the Via Christi Health System, Wichita, Kansas.

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Table 1

Food Security Status of Persons in Kansas and the U.S.

Persons	Food Security Status for the Previous 12 Months					
	Food Secure		Food Insecure			
			Hunger not Evident		Hunger Present	
	U.S.	Kansas	U.S.	Kansas	U.S.	Kansas
All persons	87%	88%	9%	9%	4%	4%
Age:						
Children (< 18 yrs)	81%	82%	13%	13%	6%	5%
Adults (18 to 59 yrs)	88%	89%	8%	8%	4%	3%
Elderly (60 yrs. or more)	94%	94%	4%	4%	2%	NR
Race/Ethnicity:						
White Non-Hispanic	88%	90%	8%	8%	3%	3%
Black Non-Hispanic	75%	77%	16%	20%	9%	13%
Other	70%	88%	NR	NR	NR	NR
Household Income:						
Below \$10,000	63%	74%	NR	NR	NR	NR
\$10,000 - \$19,999	74%	73%	NR	NR	NR	NR
\$20,000 - \$29,999	85%	80%	NR	NR	NR	NR
\$30,000 - \$39,999	92%	97%	NR	NR	NR	NR
\$40,000 - \$49,999	95%	96%	NR	NR	NR	NR
\$50,000 and above	98%	99%	NR	NR	NR	NR
Household Income / Poverty Ratio:						
Less than 1.85	71%	74%	19%	19%	10%	13%
1.85 and over	96%	97%	3%	2%	1%	1%
Household Composition:						
With children < 18 yrs. (all persons)	82%	84%	12%	12%	5%	3%
Married couple families (all persons)	88%	91%	9%	9%	3%	0%
Children < 18 yrs. (children only)	87%	90%	10%	10%	4%	0%
Female head, no spouse (All persons)	64%	63%	23%	25%	13%	11%
Children < 18 yrs. (children only)	61%	69%	25%	24%	14%	17%
Male head, no spouse (All persons)	80%	75%	13%	15%	7%	9%
Children < 18 yrs. (children only)	79%	82%	NR	NR	NR	NR
With no children or elderly	91%	91%	5%	3%	4%	NR
With elderly but no children	95%	94%	4%	4%	2%	NR
County Population Density:						
Rural	NA	92%	NA	7%	NA	2%
Semi-Urban	NA	86%	NA	9%	NA	5%
Urban	NA	88%	NA	9%	NA	3%

NR – Not Reportable due to small sample size

NA – Data are Not Available

Persons were assigned a food security score based on the food security status for the entire household during the previous 12 months.

Indicates that the difference between that group and the reference group (indicated in bold) is statistically significant at $p < 0.05$.

?? Household Composition comparisons:

?? Individuals in households with children are compared to individuals in households with no children or elderly, and to individuals in households with elderly but no children.

?? Individuals in households with children and a married couple householder(s) are compared to individuals in households with children headed by an unmarried female and headed by an unmarried male.

?? Children in households with a married couple householder are compared to children in households headed by an unmarried female and to children in households headed by an unmarried male.

Indicates that the difference between the Kansas and national estimates is statistically significant at $p < 0.01$.

REFERENCES

1. Olson C.M., Symposium: Advances in Measuring Food Insecurity and Hunger in the U.S. Introduction, *J. Nutr.* 129: 504S-505S, 1999.
2. Hamilton W.L., Cook J.T., Thompson W.W., Buron L.F., Frongillo E.A., Olson C.M., Wehler C.A. Household Food Security in the United States in 1995. Summary report of the Food Security Measurement Project. FCS/USDA, Washington, DC 1997.
3. Perry M., Miller H., Pickard S., Tasseff J., Positc S.R. Health Risk Behaviors of Kansans 1996, Bureau of Disease Prevention and Health Promotion, Kansas Department of Health and Environment, 1998.

BIBLIOGRAPHY

Carlson S.J., Andrews M.S., Bickel G.W. Measuring Food Insecurity and Hunger in the United States: Development of a National Benchmark Measure and Prevalence Estimates. *J. Nutr.* 129: 510S-516S, 1999.

Frongillo E.A., Validation of Measures of Food Insecurity and Hunger. *J. Nutr.* 129: 506S-509S, 1999.

Hamelin A., Habicht J., Beaudry M. Economic Determinants and Dietary Consequences of food Insecurity in the U.S. *J. Nutr.* 129: 517S-520S, 1999.

Hamelin A., Habicht J., Beaudry M. Food Insecurity: Consequences for the Household and Broader Implications. *J. Nutr.* 129: 525S-528S, 1999.

Olson C.M., Nutrition and Health Outcomes Associated with Food Insecurity and Hunger. *J. Nutr.* 129: 521S-524S, 1999.