A Picture of Health:

A Report of Kentucky School Districts' Health Services



Compiled by Kentucky Youth Advocates and University of Louisville Funded by the Foundation for a Healthy Kentucky March 2011

This project was supported by the Foundation for a Healthy Kentucky and was completed by Kentucky Youth Advocates in collaboration with the University of Louisville: The Urban Studies Institute. The views expressed in this report are those of the authors and may not reflect the views of the Foundation, its governing board, or staff.



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ACKNOWLEDGMENTS: Kentucky Youth Advocates would like to thank people from across the state that assisted with this project in some way. Special thanks to the advisory committee, the superintendents who assisted with the initial design phase, Kentucky Association of School Superintendents, school leaders for filling the survey out, the community partners who contributed to the survey, and to the local district staff in encouraging and assisting in the completion of the survey.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
BACKGROUND	3
SCHOOL HEALTH SURVEY PROJECT OVERVIEW	5
FINDINGS	6
Most school districts spend less than one percent of their budgets on school health services	7
Local boards of education and local health departments are the most common funders of school health services	12
Mental health/substance abuse and dental health services trail physical health services provided in schools	16
The majority of health services offered are basic	20
School nurses are the most common health provider in Kentucky schools	22
Kentucky does not meet the nationally recommended school nurse-to-student ratio	24
Sustainability is a concern for many districts	26
PROMISING PRACTICES FOR KENTUCKY SCHOOL DISTRICTS	27
Fully utilize Family Resource and Youth Services Centers	28
Create strong health department partnerships	29
Expand comprehensive services	30
Seize local opportunities and resources	31
METHODOLOGY	32
APPENDIX A – LIST OF RELEVANT STATE SCHOOL HEALTH LAWS	33
APPENDIX B – LIST OF EDUCATIONAL COOPERATIVES AND THEIR MEMBERS	34
ENDNOTES	35

EXECUTIVE SUMMARY

Picture of Health: A Report of Kentucky School Districts' Health Services presents the findings of a study of school health services offered in Kentucky school districts during the 2008-2009 school year and offers highlights of promising practices across the state. The study addressed physical health, dental health, and mental health/substance abuse services provided in Kentucky school districts. Study topics included school health services funding, school health services offered, and types of school health providers.

Findings

Most school districts spend less than one percent of their budgets on school health services.

Reporting districts spent an average of 0.6 percent of their operational budgets on school health services during the 2008-2009 school year. This was approximately \$53.11 per pupil. While this study did not allow for an analysis of quality of services, the small amount spent on school health services raises questions about whether health barriers to learning are being addressed during the school day.

Local boards of education and local health departments are the most common funders of school health services.

Some 82 percent of reporting districts allocated school district dollars and 41 percent of districts reported health departments as a health services funding source. Based on survey responses, it appears that districts committed to providing health services to their students find ways to budget school district funding for school health services and employ health providers such as nurses. However, many districts identified a lack of resources as a barrier to providing health services.

Mental health/substance abuse and dental health services trail physical health services provided in schools.

Physical health was the most common category of service provided with 96 percent of districts providing some level of physical health services to their students. Mental health/substance abuse services were offered in 85 percent of districts and dental health in 72 percent of the districts. Schools offer a convenient venue to address children's dental and mental health needs, especially in areas of the state where access to care is an issue. Increasing dental and mental health/substance abuse services at schools could meet health needs and in turn, help students become better ready to learn.

The majority of school health services offered are basic.

Every type of physical, dental, and mental health/substance abuse service addressed in the survey was represented in at least one district. The most common service offered was administration of over-the-counter and prescription medication. The least common services provided were generally those that required more than a school nurse to administer, which included many of the dental and mental health/substance abuse services covered in the survey. The wide variation in school health services offered is most likely due to differing levels of student need and the availability of funding and providers.

The school nurse is the most common health provider in Kentucky schools.

The most common health providers in schools were nurses, with a total of 558.8 full time equivalent (FTE) nurses reported. However, increased needs of students have caused other types of providers to enter schools in recent years. A few districts reported bringing in more specialized providers such as doctors and dentists to meet students' health needs, yet this is rare.

Executive Summary

Kentucky does not meet the nationally recommended school nurse-to-student ratio.

The statewide average of reporting districts was one FTE nurse to 1,254 students. The National Association of School Nurses recommends one nurse for every 750 students. School nurses play a crucial role for students by promoting health and safety, intervening to address students' health issues, and providing case management services. Several districts reported that either being able to meet the national recommendation or having one nurse in every school would be helpful in improving school health service delivery.

Sustainability of services is a concern for many districts.

Although districts indicated optimism about the probability of continued funding from current sources and strategies for developing new sources of funding, they expressed fear about state budget cuts to local health departments and to local boards of education. Several districts reported that having children with multiple health care needs in the schools has caused increased demand for school health services. Many districts mentioned grants as a strategy for sustainability, although very few districts received grant funding at the time of the survey.

Promising Practices for Kentucky School Districts

Many promising practices emerged from the school health services study. Districts reported a variety of strategies to serve children and remove physical, dental, and mental health/substance abuse barriers to learning. The strategies highlighted below represent key methods districts are using to meet the increasing health needs of their students.

- ▶ Fully utilize Family Resource and Youth Services Centers Family Resource and Youth Services Centers (FRYSC) are integral in making and coordinating community health referrals and assisting families to enroll in the Kentucky Children's Health Insurance Program (KCHIP) and Medicaid.
- ▶ **Create strong health department partnerships** A strong partnership between a school district and local health department is key to employing providers, ensuring strength and sustainability of funding, and expanding the array of services for students.
- ▶ Expand comprehensive services Some districts reported going beyond minimal health service provision to ensure their students received the care they needed. Although many districts with extensive programs such as school-based health centers find sustainability difficult, some are figuring out how to keep comprehensive care available to students with various funding models.
- ▶ Seize local opportunities and resources Many districts are making their students' health needs a priority by seizing local opportunities to provide care for their students. Several districts reported collaborating with community partners to bring needed health services to their students, both on-campus and off-campus through mobile units and referrals.

BACKGROUND

All children need to be healthy and have access to health care so they can succeed in school and realize their full potential. However, disparities often hinder children from receiving needed health care. Barriers to health care result from multiple factors, including the lack of health insurance, and problems with access to care such as transportation issues, limited available providers and time constraints for parents who work full time. The results of poor child health, such as obesity, often follow children into adulthood, making childhood interventions critical. ²

Historically, the primary focus of schools has been academic achievement. In recent years, an increasing importance on high-stakes accountability has magnified that emphasis. However, as schools wrestle with issues of test scores and other accountability measures, a growing awareness has emerged about the impact that non-cognitive factors, such as children's health, have on school performance.³ While all children need a health care home, with a primary care provider they regularly see, schools can fill gaps in health care access and services since children spend a large part of their day at school. Despite differences in what schools offer, studies continually support the positive impact school-based health care has on students.⁴

School-based health care is particularly important for children living in poverty. These children typically experience worse health outcomes than children living in families with higher income levels because of financial constraints, limited access to health care services, maternal health, and home environment. ^{5,6} Additionally, preventive services, including immunizations, dental cleanings, and well-child checkups are less common among children living in poverty. ⁷ School-based health care offers a chance for children in poverty to receive preventive health services and needed care to improve their health status overall and remove barriers to achievement.

Research shows that schools can be optimal places to reach students with special health care needs. For example, studies show that school-based management interventions for asthma result in significant positive academic outcomes, reduced symptoms and increased attendance.^{8,9}

The practice of school health care began in the late 1890's as a way to screen children for contagious diseases. In the early 1900's, nurses started entering schools to help reduce absenteeism by addressing students' health care needs. 10 School health care steadily progressed to include screenings, immunization documentation, minor injury treatment, and health education throughout the 20th century. Innovation and increased needs of students resulted in the development of new models of care throughout the latter part of the 1900's, including school-based health centers, nurse practitioners in schools, and a new emphasis on care for students living in poverty.¹¹ Federal mandates also impacted school health care as requirements were placed on schools to care for students with disabilities and to remove barriers to learning.12

Currently, there are several school health models in place across the United States. One model is the school nurse model. According to the National Association of School Nurses: "School nurses facilitate positive student responses to normal development; promote health and safety, including a healthy environment; intervene with actual and potential health problems; provide case management services; and actively collaborate with others to build student and family capacity for adaptation, self-management, self advocacy, and learning." Studies link school nurse interventions with reduced absenteeism and other positive student outcomes. 14

The National Association of School Nurses recommends a ratio of one registered nurse or nurse practitioner for every 750 students, noting that this ratio refers to "healthy" students and should be adjusted to fit the needs of a school's student population. The National Association of School Nurses also states that ideally, a school nurse is a full-time employee available to students during school hours. Studies indicate that schools that exceed the recommended nurse-to-student ratio often offer more preventive health services to students and provide more services for students with diabetes and asthma. They also provide increased follow-up for children with vision problems and for children who are injured at school.

Background 3

Another model for school health is the school-based health center model. School-based health centers differ widely, but generally bring a multidisciplinary team of professionals to the school to provide primary care to students, including mental health care. This model offers students assistance with chronic conditions, specialty care, and health screenings for early detection of health conditions. 18 In addition, the centers provide services, such as immunizations, to children who have limited access to health care elsewhere. 19 A study by the Health Foundation of Greater Cincinnati found that school-based health centers in Kentucky and Ohio have possibly saved Medicaid an estimated \$35.20 per student per year in medical costs.²⁰ A 2009 study showed that students with a school-based health center at their elementary school had a greater probability of seeing a dentist, medical doctor, counselor, or social worker. These students were less likely than their counterparts, without access to a school-based health center, to visit the emergency department for care.²¹ Studies on school-based health centers also indicate a positive impact on student achievement and attendance.22

School Health Care in Kentucky

The health needs of Kentuckians are vast. Kentucky ranks in the bottom 10 states in the nation for multiple health indicators, including overall health status, poor physical health days, poor mental health days, smoking, preventable hospitalizations, diabetes, childhood obesity, and children with oral health problems.²³ In addition, Kentucky has the highest rate in the nation of children with special health care needs (24 percent), defined by the Maternal and Child Health Bureau as children under age 18 who are at increased risk of a chronic physical, developmental, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally.24 Kentucky also has the highest percentage of children with asthma in the United States (12 percent).²⁵

Kentucky school leaders currently balance federal and state school health mandates with the specific health needs of their students. There are numerous federal, state, and local laws and regulations regarding health services in Kentucky schools. Section 504 of the Rehabilitation Act of 1973 and the Individuals with Disabilities Education Act of 1975 are two key federal

laws that protect students with disabilities and promote their ability to learn in schools. The Rehabilitation Act of 1973 prohibits schools from receiving federal funding if they discriminate against any individual with a disability. Discrimination includes inadequate provision of health services which could keep a student from being able to attend school. The Individuals with Disabilities Education Act of 1975 created requirements for schools to make provisions for students with disabilities so they can learn in the least restrictive environment.

Multiple Kentucky state laws and regulations provide school districts with guidelines and requirements for school health service provision. Kentucky's main school health statute states that "schools shall reduce physical and mental health barriers to learning."26 Kentucky statute defines school health services as "the provision of direct health care, including the administration of medication; the operation, maintenance, of healthcare through the use of medical equipment; or the administration of clinical procedures. Health services do not include first aid or emergency procedures."27 Health care professionals allowed by law to provide school health services to students include physicians, advanced registered nurse practitioners, registered nurses, licensed practical nurses, and unlicensed assistive personnel (UAPs), who are designated school employees who have been properly trained.²⁸

Kentucky Revised Statute 156.501, adopted in 2002, outlines the roles of the Kentucky Department of Education and the Kentucky Department for Public Health in assisting local districts with school health service provision.²⁹ The Kentucky Department of Education published the "Health Services Reference Guide" in 2004 as a tool for districts in response to this statute.³⁰ The Kentucky Department of Education also hired an education school nurse consultant to further support districts in organizing their school health services programs. (See Appendix A for additional information on relevant statutes.)

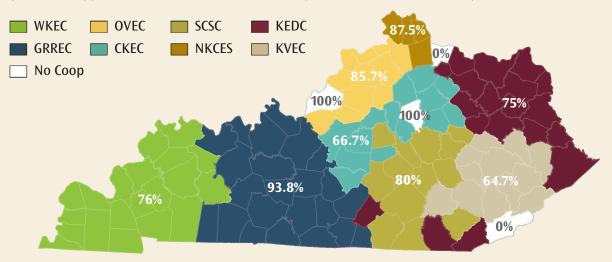
SCHOOL HEALTH SURVEY PROJECT OVERVIEW

This report provides a comprehensive view of the range of school health services offered in Kentucky school districts. The purpose of this project was to provide a snapshot of school health services in the 2008-2009 school year and to offer highlights of promising practices across the state. The Foundation for a Healthy Kentucky contracted with Kentucky Youth Advocates in collaboration with the University of Louisville: The Urban Studies Institute to complete this study through the distribution of a voluntary survey to Kentucky's 174 school districts as well as a survey of community health providers across the state. The school district survey

addressed physical, dental, and mental health/substance abuse services provided in schools. Questions covered districts' health funding sources and expenditures, types of services offered in schools, and the providers of those services. Questions were also asked about differences in what is offered at elementary, middle, and high schools. The sample size represents more than three-fourths of all Kentucky districts and almost 85 percent of students enrolled in public schools in Kentucky. Full survey data and the survey tool are available upon request from Kentucky Youth Advocates. For district-level data, see www.kentuckyhealthfacts.org.

Survey Response Rate by Educational Cooperative Region

(Please see Appendix B for a list of Educational Cooperatives and their members)



Survey Sample Information					
	Districts Responding	Districts Not Responding*			
Number of Districts	137	37*			
Percent of Districts	78.7%	21.3%			
Number of Students	574,590	107,662			
Percent of Students	84.2%	15.8%			

*Non-responding districts include:						
Barbourville Ind.	Bardstown Ind.	Beechwood Ind.	Berea Ind.	Bracken Co.	Breathitt Co.	
Breckinridge Co.	Carter Co.	Christian Co.	Crittenden Co.	Dawson Springs Ind.	East Bernstadt Ind.	
Eminence Ind.	Fairview Ind.	Floyd Co.	Frankfort Ind.	Fulton Co.	Harlan Co.	
Harrison Co.	Knott Co.	Knox Co.	Lewis Co.	Magoffin Co.	Martin Co.	
McCracken Co.	Middlesboro Ind.	Newport Ind.	Nicholas Co.	Oldham Co.	Paintsville Ind.	
Pikeville Ind.	Russellville Ind.	Scott Co.	Webster Co.	Williamsburg Ind.	Wolfe Co.	
Woodford Co.						



- ► Most school districts spend less than one percent of their budgets on school health services.
- ► Local boards of education and local health departments are the most common funders of school health services.
- ▶ Mental health/substance abuse and dental health services trail physical health services provided in schools.
- ▶ The majority of school health services offered are basic.
- ▶ The school nurse is the most common health provider in Kentucky schools.
- ▶ Kentucky does not meet the nationally recommended school nurse-to-student ratio.
- ▶ Sustainability of services is a concern for many districts.

Most school districts spend less than one percent of their budgets on school health services.

"I think we are above and beyond what the state requires for school health providers, we just need more funding for the district."

"Our local board is very supportive of school health services; however, due to the decrease in funding they are not able to provide funds for additional school nurse[s] or health aides."

The survey asked districts to report their spending levels on student health services. The survey did not define what health services included, thus respondents answered the questions using their own definition of what comprised health services.

Findings Regarding Spending on School Health Services:

- ▶ The surveyed districts spent approximately \$28 million on student health services during the 2008-2009 school year, which averaged \$227,429 per district or less than 1 percent of districts' operational budgets. When taking the largest district in size and health spending (Jefferson County) out of the calculation, the state average drops to \$129,450. The range of respondents' student health budgets was \$200 in Anchorage Independent to \$12.3 million in Jefferson County.
- ▶ Districts spent an average of \$53.11 per pupil on student health services during the 2008-09 school year. The spending ranged from \$0.54 per pupil in Anchorage Independent to \$416.67 per pupil in Southgate Independent.
- ▶ Outside health agencies, such as for-profit clinics, non-profit clinics and hospitals spent almost \$13 million on school health services in the 2008-2009 school year, according to survey responses. However, due to variation of responses, this information is most useful on the individual district level.
- ▶ When disaggregated, higher poverty districts spent more of their operational budgets on school health services than lower poverty districts; though still not reaching one percent. Higher poverty districts spent an average of \$72.14 per pupil compared with lower poverty districts at \$32.36 per pupil.
- ▶ The 25 largest districts spent approximately \$12 more per pupil on school health services than the 25 smallest districts.

Percent of Budgets Spent on Health Services (N=124)				
Kentucky Average	0.60%			
Higher Poverty Districts	0.78%			
Lower Poverty Districts	0.39%			
Largest 25 Districts	0.68%			
Smallest 25 Districts	0.56%			

Note: Higher and lower poverty districts were grouped based on whether they fell above or below the state average in participation in the free and reduced lunch program (56%).

Per Pupil Spending on Health Services (N=124)				
Kentucky Average	\$53.11			
Higher Poverty Districts	\$72.14			
Lower Poverty Districts	\$32.36			
Largest 25 Districts	\$61.38			
Smallest 25 Districts	\$49.18			

Note: Higher and lower poverty districts were grouped based on whether they fell above or below the state average in participation in the free and reduced lunch program (56%).

Discussion:

There are different needs, resources, and district and community capacity to offer health services. While no concrete conclusions can be drawn from the variation in district funding levels, there are a few observations to be noted. Higher poverty districts spent more per pupil on school health services than lower poverty districts, which may be due to the fact that their students have higher levels of need. When looking at other data sources, the link between poor health and poverty is well documented. For example, the 10 Kentucky counties with the highest rates of inpatient hospitalizations for an asthma attack among children are all higher poverty counties with the exception of

one.³¹ This is one example that demonstrates a potential need for increased spending to help with asthma management at school.

The scope of this study was to assess the quantity, not the quality, of services offered, making it difficult to draw conclusions as to whether increased spending results in higher quality health services. However, the fact that all districts spent very little of their budgets on school health services does raise additional questions for further study: Are students' needs being met with the small funding levels of districts? What additional funding streams are realistic in increasing the level of services provided? What funding level do school districts need to meet health needs and improve school outcomes?

Percent of Districts' Budgets Spent on Health Services by Educational Cooperative				
Central Kentucky Educational Cooperative	0.77%			
Green River Regional Educational Cooperative	0.45%			
Kentucky Educational Development Corporation	0.51%			
Kentucky Valley Educational Cooperative	0.46%			
Northern Kentucky Cooperative for Educational Services	0.54%			
Ohio Valley Educational Cooperative	0.33%			
Southeast/South Central Educational Cooperative	0.37%			
West Kentucky Educational Cooperative	0.37%			
Fayette County	0.14%			
Jefferson County	1.21%			

Note: Data represents districts' reported health services budget divided by total operational budget data obtained from the Kentucky Department of Education from school year 2008-2009. (N=124). Please see Appendix B for a list of Educational Cooperatives and their members.



District Level Data Portrait: School District Spending on Health Services

Average \$227,429 0.60% Danville Ind. \$80,000 0.41% Adair Co. \$17,500 0.08% Davess Co. \$591,700 0.39% Allen Co. \$125,000 0.52% Dayton Ind. \$40,437 0.49% Anchorage Ind. \$200 0.00% Edmoson Co. \$85,000 0.47% Androan Ind. \$25,000 0.10% Elizabethitown Ind. \$45,000 0.25% Adaptat Ind. \$20,000 0.73% Eflanger Elsmere Ind. \$180,000 0.92% Ballard Co. \$50,000 0.41% Estill Co. ————————————————————————————————————	District	Health Spending	Percent of District Budget	District	Health Spending	Percent of District Budget
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Augusta Ind. \$20,000 0.73% Erlanger-Elsmere Ind. \$180,000 0.92% Ballard Co. \$50,000 0.41% Estill Co. — — Barren Co. — — Fayette Co. \$500,000 0.14% Bath Co. \$69,000 0.42% Fleming Co. \$80,000 0.41% Bell Co. — — Fort Thomas Ind. \$68,225 0.32% Bellevue Ind. \$40,000 0.59% Franklin Co. \$30,000 0.06% Boone Co. \$401,505 0.27% Fullon Ind. \$10,000 0.21% Bourban Co. \$171,865 0.73% Galtatin Co. \$72,700 0.51% Bowling Green Ind. \$50,000 0.13% Garrard Co. \$90,000 0.39% Boyle Co. \$80,503 0.36% Grant Co. \$225,000 0.78% Bullit Co. \$225,000 0.31% Graves Co. \$135,000 0.38% Burler Co. \$32,000 0.06% Grayson Co. \$238,312 0	Anderson Co.	\$100,000	0.33%	Elizabethtown Ind.	\$45,000	0.25%
Ballard Co. \$50,000 0.41% Estill Co. — — Barren Co. — — Fayette Co. \$500,000 0.14% Bath Co. \$69,000 0.42% Fleming Co. \$80,000 0.41% Bell Co. — — Fort Thomas Ind. \$68,225 0.32% Bellevue Ind. \$40,000 0.59% Franklin Co. \$30,000 0.06% Boone Co. \$401,505 0.27% Fullon Ind. \$10,000 0.21% Bourbon Co. \$171,865 0.73% Gallatin Co. \$72,700 0.51% Bowling Green Ind. \$50,000 0.13% Garrard Co. \$90,000 0.39% Boyle Co. \$204,499 0.69% Glasgow Ind. \$50,000 0.29% Bullit Co. \$2295,000 0.31% Grave Co. \$235,000 0.78% Buller Co. \$32,000 0.06% Grayson Co. \$238,312 0.68% Buller Co. \$32,000 0.16% Green Co. \$60,000 0.44%	Ashland Ind.	\$25,000	0.10%	Elliott Co.	\$80,000	0.80%
Barren Co. — — Fayette Co. \$500,000 0.14% Bath Co. \$69,000 0.42% Fleming Co. \$80,000 0.41% Bell Co. — — Fort Thomas Ind. \$68,225 0.32% Bellevue Ind. \$40,000 0.59% Franklin Co. \$30,000 0.06% Boone Co. \$401,505 0.27% Fulton Ind. \$10,000 0.21% Bourbon Co. \$171,865 0.73% Gallatin Co. \$72,700 0.51% Bowling Green Ind. \$50,000 0.13% Garrard Co. \$90,000 0.39% Boyle Co. \$80,503 0.36% Glasgow Ind. \$50,000 0.29% Bullitt Co. \$295,000 0.31% Graves Co. \$135,000 0.78% Bullitt Co. \$220,000 0.06% Grayson Co. \$238,312 0.68% Butler Co. \$32,000 0.16% Green Co. \$60,000 0.44% Caldwell Co. \$30,000 0.19% Greenup Co. \$155,053 <t< td=""><td>Augusta Ind.</td><td>\$20,000</td><td>0.73%</td><td>Erlanger-Elsmere Ind.</td><td>\$180,000</td><td>0.92%</td></t<>	Augusta Ind.	\$20,000	0.73%	Erlanger-Elsmere Ind.	\$180,000	0.92%
Bath Co. \$69,000 0.42% Fleming Co. \$80,000 0.41% Bell Co. — — Fort Thomas Ind. \$66,225 0.32% Bellevue Ind. \$40,000 0.59% Franklin Co. \$30,000 0.06% Boone Co. \$401,505 0.27% Fultron Ind. \$10,000 0.21% Bourbon Co. \$171,865 0.73% Gallatin Co. \$72,700 0.51% Bowling Green Ind. \$50,000 0.13% Garrard Co. \$90,000 0.39% Boyle Co. \$80,503 0.36% Grant Co. \$20,000 0.29% Bullit Co. \$295,000 0.31% Graves Co. \$135,000 0.78% Buller Co. \$32,000 0.06% Grayson Co. \$238,312 0.68% Buller Co. \$32,000 0.16% Green Co. \$60,000 0.44% Caldwell Co. \$30,000 0.19% Greenup Co. \$155,053 0.63% Calloway Co. \$240,000 0.91% Hancok Co. \$114,443	Ballard Co.	\$50,000	0.41%	Estill Co.	_	_
Bell Co. — Fort Thomas Ind. \$68,225 0.32% Bellevue Ind. \$40,000 0.59% Franklin Co. \$30,000 0.06% Boone Co. \$401,505 0.27% Fulton Ind. \$10,000 0.21% Bourbon Co. \$171,865 0.73% Gallatin Co. \$72,700 0.51% Bowling Green Ind. \$50,000 0.13% Garrard Co. \$90,000 0.39% Boyle Co. \$80,503 0.69% Glasgow Ind. \$50,000 0.29% Bullitt Co. \$295,000 0.31% Graves Co. \$135,000 0.78% Bullitt Co. \$295,000 0.31% Graves Co. \$135,000 0.38% Butler Co. \$32,000 0.06% Grayson Co. \$238,312 0.68% Butler Co. \$30,000 0.16% Green Co. \$60,000 0.44% Caldwell Co. \$30,000 0.19% Green Co. \$114,443 0.76% Calloway Co. \$240,000 0.91% Hancock Co. \$114,443 0.76	Barren Co.	_	_	Fayette Co.	\$500,000	0.14%
Bellevue Ind. \$40,000 0.59% Franklin Co. \$30,000 0.06% Boone Co. \$401,505 0.27% Fulton Ind. \$10,000 0.21% Bourbon Co. \$171,865 0.73% Gallatin Co. \$72,700 0.51% Bowling Green Ind. \$50,000 0.13% Garrard Co. \$90,000 0.39% Boyd Co. \$204,499 0.69% Glasgow Ind. \$50,000 0.29% Boyle Co. \$80,503 0.36% Grant Co. \$235,000 0.78% Bullitt Co. \$295,000 0.31% Graves Co. \$135,000 0.38% Burgin Ind. \$2,000 0.06% Grayson Co. \$238,312 0.68% Butler Co. \$32,000 0.16% Green Co. \$60,000 0.44% Caldwell Co. \$30,000 0.19% Greenup Co. \$114,443 0.76% Calloway Co. \$240,000 0.91% Harcock Co. \$114,443 0.76% Campbell Soille Ind. \$182,000 1.63% Harl Ind.	Bath Co.	\$69,000	0.42%	Fleming Co.	\$80,000	0.41%
Boone Co. \$401,505 0.27% Fulton Ind. \$10,000 0.21% Bourbon Co. \$171,865 0.73% Gallatin Co. \$72,700 0.51% Bowling Green Ind. \$50,000 0.13% Garrard Co. \$90,000 0.39% Boyd Co. \$204,499 0.69% Glasgow Ind. \$50,000 0.29% Boyle Co. \$80,503 0.36% Grant Co. \$235,000 0.78% Bullitt Co. \$295,000 0.31% Graves Co. \$135,000 0.38% Burgin Ind. \$2,000 0.06% Grayson Co. \$238,312 0.68% Butler Co. \$32,000 0.16% Green Co. \$60,000 0.44% Calloway Co. \$240,000 0.91% Hancock Co. \$114,443 0.76% Campbell Co. \$273,000 0.66% Hardin Co. \$300,000 0.27% Campbellsville Ind. \$182,000 1.63% Harlan Ind. — — Carroll Co. \$80,000 0.44% Hazard Ind. \$90,000<	Bell Co.	_	_	Fort Thomas Ind.	\$68,225	0.32%
Bourbon Co. \$171,865 0.73% Gallatin Co. \$72,700 0.51% Bowling Green Ind. \$50,000 0.13% Garrard Co. \$90,000 0.39% Boyd Co. \$204,499 0.69% Glasgow Ind. \$50,000 0.29% Boyle Co. \$80,503 0.36% Grant Co. \$235,000 0.78% Bullitt Co. \$295,000 0.31% Graves Co. \$135,000 0.38% Burgin Ind. \$2,000 0.06% Grayson Co. \$238,312 0.68% Butler Co. \$32,000 0.16% Green Co. \$60,000 0.44% Caldwell Co. \$30,000 0.19% Greenup Co. \$155,053 0.63% Calloway Co. \$240,000 0.91% Hancock Co. \$114,443 0.76% Campbell Co. \$273,000 0.66% Harlan Ind. — — Carrisle Co. — — Harl Co. \$100,000 0.47% Carroll Co. \$80,000 0.44% Hazard Ind. \$90,000	Bellevue Ind.	\$40,000	0.59%	Franklin Co.	\$30,000	0.06%
Bowling Green Ind. \$50,000 0.13% Garrard Co. \$90,000 0.39% Boyd Co. \$204,499 0.69% Glasgow Ind. \$50,000 0.29% Boyle Co. \$80,503 0.36% Grant Co. \$235,000 0.78% Bullitt Co. \$295,000 0.31% Graves Co. \$135,000 0.38% Burgin Ind. \$2,000 0.06% Grayson Co. \$238,312 0.68% Butler Co. \$32,000 0.16% Green Co. \$60,000 0.44% Caldwell Co. \$30,000 0.19% Greenup Co. \$155,053 0.63% Calloway Co. \$240,000 0.91% Hancock Co. \$114,443 0.76% Campbell Co. \$273,000 0.66% Hardin Co. \$300,000 0.27% Campbellsville Ind. \$182,000 1.63% Harlan Ind. — — Carrioll Co. \$80,000 0.44% Hazard Ind. \$90,000 1.03% Casey Co. \$20,000 0.10% Henderson Co. \$310,0	Boone Co.	\$401,505	0.27%	Fulton Ind.	\$10,000	0.21%
Boyd Co. \$204,499 0.69% Glasgow Ind. \$50,000 0.29% Boyle Co. \$80,503 0.36% Grant Co. \$235,000 0.78% Bullitt Co. \$295,000 0.31% Graves Co. \$135,000 0.38% Burgin Ind. \$2,000 0.06% Grayson Co. \$238,312 0.68% Butler Co. \$32,000 0.16% Green Co. \$60,000 0.44% Caldwell Co. \$30,000 0.19% Greenup Co. \$155,053 0.63% Calloway Co. \$240,000 0.91% Hancock Co. \$114,443 0.76% Campbell Co. \$273,000 0.66% Hardin Co. \$300,000 0.27% Campbellswille Ind. \$182,000 1.63% Harlan Ind. — — Carlisle Co. — — Hart Co. \$100,000 0.47% Carroll Co. \$80,000 0.44% Hazard Ind. \$90,000 1.05% Casey Co. \$20,000 0.10% Henderson Co. \$310,000 <td< td=""><td>Bourbon Co.</td><td>\$171,865</td><td>0.73%</td><td>Gallatin Co.</td><td>\$72,700</td><td>0.51%</td></td<>	Bourbon Co.	\$171,865	0.73%	Gallatin Co.	\$72,700	0.51%
Boyle Co. \$80,503 0.36% Grant Co. \$235,000 0.78% Bullitt Co. \$295,000 0.31% Graves Co. \$135,000 0.38% Burgin Ind. \$2,000 0.06% Grayson Co. \$238,312 0.66% Butler Co. \$32,000 0.16% Green Co. \$60,000 0.44% Caldwell Co. \$30,000 0.19% Greenup Co. \$155,053 0.63% Calloway Co. \$240,000 0.91% Harcock Co. \$114,443 0.76% Campbell Co. \$273,000 0.66% Hardin Co. \$300,000 0.27% Campbellsville Ind. \$182,000 1.63% Harlan Ind. — — Carlisle Co. — — Hart Co. \$100,000 0.47% Carroll Co. \$80,000 0.44% Hazard Ind. \$90,000 1.05% Casey Co. \$20,000 0.10% Henderson Co. \$310,000 0.53% Clark Co. \$150,000 0.36% Hickman Co. \$6,261	Bowling Green Ind.	\$50,000	0.13%	Garrard Co.	\$90,000	0.39%
Bullitt Co. \$295,000 0.31% Graves Co. \$135,000 0.38% Burgin Ind. \$2,000 0.06% Grayson Co. \$238,312 0.68% Butler Co. \$32,000 0.16% Green Co. \$60,000 0.44% Caldwell Co. \$30,000 0.19% Greenup Co. \$155,053 0.63% Calloway Co. \$240,000 0.91% Hancock Co. \$114,443 0.76% Campbell Co. \$273,000 0.66% Hardin Co. \$300,000 0.27% Campbellsville Ind. \$182,000 1.63% Harlan Ind. — — Carlisle Co. — — Hart Co. \$100,000 0.47% Carroll Co. \$80,000 0.44% Hazard Ind. \$90,000 1.05% Casey Co. \$20,000 0.10% Henderson Co. \$310,000 0.53% Caverna Ind. \$11,000 0.16% Henry Co. \$118,000 0.68% Clay Co. \$127,000 0.38% Hopkins Co. \$170,000	Boyd Co.	\$204,499	0.69%	Glasgow Ind.	\$50,000	0.29%
Burgin Ind. \$2,000 0.06% Grayson Co. \$238,312 0.68% Butler Co. \$32,000 0.16% Green Co. \$60,000 0.44% Caldwell Co. \$30,000 0.19% Greenup Co. \$155,053 0.63% Calloway Co. \$240,000 0.91% Hancock Co. \$114,443 0.76% Campbell Co. \$273,000 0.66% Hardin Co. \$300,000 0.27% Campbellsville Ind. \$182,000 1.63% Harlan Ind. — — Carlisle Co. — — Hart Co. \$100,000 0.47% Carroll Co. \$80,000 0.44% Hazard Ind. \$90,000 1.05% Casey Co. \$20,000 0.10% Henderson Co. \$310,000 0.53% Caverna Ind. \$11,000 0.16% Henry Co. \$118,000 0.68% Clay Co. \$127,000 0.36% Hickman Co. \$6,261 0.08% Clay Co. \$16,043 0.09% Jackson Ind. \$10,000 0	Boyle Co.	\$80,503	0.36%	Grant Co.	\$235,000	0.78%
Butler Co. \$32,000 0.16% Green Co. \$60,000 0.44% Caldwell Co. \$30,000 0.19% Greenup Co. \$155,053 0.63% Calloway Co. \$240,000 0.91% Hancock Co. \$114,443 0.76% Campbell Co. \$273,000 0.66% Hardin Co. \$300,000 0.27% Campbellsville Ind. \$182,000 1.63% Harlan Ind. — — Carlisle Co. — — Hart Co. \$100,000 0.47% Carroll Co. \$80,000 0.44% Hazard Ind. \$90,000 1.05% Casey Co. \$20,000 0.10% Henderson Co. \$310,000 0.53% Caverna Ind. \$11,000 0.16% Henry Co. \$118,000 0.68% Clark Co. \$127,000 0.36% Hickman Co. \$6,261 0.08% Clay Co. \$127,000 0.38% Hopkins Co. \$170,000 0.27% Clioverport Ind. \$14,000 0.43% Jackson Ind. \$10,000	Bullitt Co.	\$295,000	0.31%	Graves Co.	\$135,000	0.38%
Caldwell Co. \$30,000 0.19% Greenup Co. \$155,053 0.63% Calloway Co. \$240,000 0.91% Hancock Co. \$114,443 0.76% Campbell Co. \$273,000 0.66% Hardin Co. \$300,000 0.27% Campbellsville Ind. \$182,000 1.63% Harlan Ind. — — Carlisle Co. — Hart Co. \$100,000 0.47% Carroll Co. \$80,000 0.44% Hazard Ind. \$90,000 1.05% Casey Co. \$20,000 0.10% Henderson Co. \$310,000 0.53% Caverna Ind. \$11,000 0.16% Henry Co. \$118,000 0.68% Clark Co. \$150,000 0.36% Hickman Co. \$6,261 0.08% Clay Co. \$127,000 0.38% Hopkins Co. \$170,000 0.27% Clinton Co. \$16,043 0.09% Jackson Co. \$46,416 0.22% Cloverport Ind. \$14,000 0.43% Jackson Ind. \$10,000 0.27%	Burgin Ind.	\$2,000	0.06%	Grayson Co.	\$238,312	0.68%
Calloway Co. \$240,000 0.91% Hancock Co. \$114,443 0.76% Campbell Co. \$273,000 0.66% Hardin Co. \$300,000 0.27% Campbellsville Ind. \$182,000 1.63% Harlan Ind. — — Carlisle Co. — — Hart Co. \$100,000 0.47% Carroll Co. \$80,000 0.44% Hazard Ind. \$90,000 1.05% Casey Co. \$20,000 0.10% Henderson Co. \$310,000 0.53% Caverna Ind. \$11,000 0.16% Henry Co. \$118,000 0.68% Clark Co. \$150,000 0.36% Hickman Co. \$6,261 0.08% Clay Co. \$127,000 0.38% Hopkins Co. \$170,000 0.27% Clinton Co. \$16,043 0.09% Jackson Co. \$46,416 0.22% Cloverport Ind. \$14,000 0.43% Jackson Ind. \$10,000 0.27%	Butler Co.	\$32,000	0.16%	Green Co.	\$60,000	0.44%
Campbell Co. \$273,000 0.66% Hardin Co. \$300,000 0.27% Campbellsville Ind. \$182,000 1.63% Harlan Ind. — — Carlisle Co. — — Hart Co. \$100,000 0.47% Carroll Co. \$80,000 0.44% Hazard Ind. \$90,000 1.05% Casey Co. \$20,000 0.10% Henderson Co. \$310,000 0.53% Caverna Ind. \$11,000 0.16% Henry Co. \$118,000 0.68% Clark Co. \$150,000 0.36% Hickman Co. \$6,261 0.08% Clay Co. \$127,000 0.38% Hopkins Co. \$170,000 0.27% Clinton Co. \$16,043 0.09% Jackson Co. \$46,416 0.22% Cloverport Ind. \$14,000 0.43% Jackson Ind. \$10,000 0.27%	Caldwell Co.	\$30,000	0.19%	Greenup Co.	\$155,053	0.63%
Campbellsville Ind. \$182,000 1.63% Harlan Ind. — — Carlisle Co. — — Hart Co. \$100,000 0.47% Carroll Co. \$80,000 0.44% Hazard Ind. \$90,000 1.05% Casey Co. \$20,000 0.10% Henderson Co. \$310,000 0.53% Caverna Ind. \$11,000 0.16% Henry Co. \$118,000 0.68% Clark Co. \$150,000 0.36% Hickman Co. \$6,261 0.08% Clay Co. \$127,000 0.38% Hopkins Co. \$170,000 0.27% Clinton Co. \$16,043 0.09% Jackson Co. \$46,416 0.22% Cloverport Ind. \$14,000 0.43% Jackson Ind. \$10,000 0.27%	Calloway Co.	\$240,000	0.91%	Hancock Co.	\$114,443	0.76%
Carlisle Co. — — Hart Co. \$100,000 0.47% Carroll Co. \$80,000 0.44% Hazard Ind. \$90,000 1.05% Casey Co. \$20,000 0.10% Henderson Co. \$310,000 0.53% Caverna Ind. \$11,000 0.16% Henry Co. \$118,000 0.68% Clark Co. \$150,000 0.36% Hickman Co. \$6,261 0.08% Clay Co. \$127,000 0.38% Hopkins Co. \$170,000 0.27% Clinton Co. \$16,043 0.09% Jackson Co. \$46,416 0.22% Cloverport Ind. \$14,000 0.43% Jackson Ind. \$10,000 0.27%	Campbell Co.	\$273,000	0.66%	Hardin Co.	\$300,000	0.27%
Carroll Co. \$80,000 0.44% Hazard Ind. \$90,000 1.05% Casey Co. \$20,000 0.10% Henderson Co. \$310,000 0.53% Caverna Ind. \$11,000 0.16% Henry Co. \$118,000 0.68% Clark Co. \$150,000 0.36% Hickman Co. \$6,261 0.08% Clay Co. \$127,000 0.38% Hopkins Co. \$170,000 0.27% Clinton Co. \$16,043 0.09% Jackson Co. \$46,416 0.22% Cloverport Ind. \$14,000 0.43% Jackson Ind. \$10,000 0.27%	Campbellsville Ind.	\$182,000	1.63%	Harlan Ind.	_	_
Casey Co. \$20,000 0.10% Henderson Co. \$310,000 0.53% Caverna Ind. \$11,000 0.16% Henry Co. \$118,000 0.68% Clark Co. \$150,000 0.36% Hickman Co. \$6,261 0.08% Clay Co. \$127,000 0.38% Hopkins Co. \$170,000 0.27% Clinton Co. \$16,043 0.09% Jackson Co. \$46,416 0.22% Cloverport Ind. \$14,000 0.43% Jackson Ind. \$10,000 0.27%	Carlisle Co.	_	_	Hart Co.	\$100,000	0.47%
Caverna Ind. \$11,000 0.16% Henry Co. \$118,000 0.68% Clark Co. \$150,000 0.36% Hickman Co. \$6,261 0.08% Clay Co. \$127,000 0.38% Hopkins Co. \$170,000 0.27% Clinton Co. \$16,043 0.09% Jackson Co. \$46,416 0.22% Cloverport Ind. \$14,000 0.43% Jackson Ind. \$10,000 0.27%	Carroll Co.	\$80,000	0.44%	Hazard Ind.	\$90,000	1.05%
Clark Co. \$150,000 0.36% Hickman Co. \$6,261 0.08% Clay Co. \$127,000 0.38% Hopkins Co. \$170,000 0.27% Clinton Co. \$16,043 0.09% Jackson Co. \$46,416 0.22% Cloverport Ind. \$14,000 0.43% Jackson Ind. \$10,000 0.27%	Casey Co.	\$20,000	0.10%	Henderson Co.	\$310,000	0.53%
Clay Co. \$127,000 0.38% Hopkins Co. \$170,000 0.27% Clinton Co. \$16,043 0.09% Jackson Co. \$46,416 0.22% Cloverport Ind. \$14,000 0.43% Jackson Ind. \$10,000 0.27%	Caverna Ind.	\$11,000	0.16%	Henry Co.	\$118,000	0.68%
Clinton Co. \$16,043 0.09% Jackson Co. \$46,416 0.22% Cloverport Ind. \$14,000 0.43% Jackson Ind. \$10,000 0.27%	Clark Co.	\$150,000	0.36%	Hickman Co.	\$6,261	0.08%
Cloverport Ind. \$14,000 0.43% Jackson Ind. \$10,000 0.27%	Clay Co.	\$127,000	0.38%	Hopkins Co.	\$170,000	0.27%
	Clinton Co.	\$16,043	0.09%	Jackson Co.	\$46,416	0.22%
Corbin Ind \$35,000 0.17% Jefferson Co \$12,278,830 1.21%	Cloverport Ind.	\$14,000	0.43%	Jackson Ind.	\$10,000	0.27%
0.17/0 Jeneratin Co. \$12,270,000 1.21%	Corbin Ind.	\$35,000	0.17%	Jefferson Co.	\$12,278,830	1.21%
Covington Ind. \$420,000 0.92% Jenkins Ind. \$20,000 0.38%	Covington Ind.	\$420,000	0.92%	Jenkins Ind.	\$20,000	0.38%
Cumberland Co. \$30,400 0.31% Jessamine Co. \$1,306,000 2.02%	Cumberland Co.	\$30,400	0.31%	Jessamine Co.	\$1,306,000	2.02%

[—] Denotes districts that did not respond to this question. **Note:** Only districts that completed the survey are listed.

District Level Data Portrait: School District Spending on Health Services (continued)

District	Health Spending	Percent of District Budget	District	Health Spending	Percent of District Budget
Johnson Co.	\$150,000	0.49%	Paducah Ind.	\$101,000	0.29%
Kenton Co.	_	_	Paris Ind.	\$30,000	0.47%
LaRue Co.	\$119,558	0.61%	Pendleton Co.	_	_
Laurel Co.	\$181,495	0.23%	Perry Co.	\$150,000	0.41%
Lawrence Co.	\$3,520	0.02%	Pike Co.	\$309,945	0.37%
Lee Co.	\$30,000	0.30%	Pineville Ind.	\$25,000	0.51%
Leslie Co.	\$96,000	0.57%	Powell Co.	\$36,000	0.18%
Letcher Co.	\$140,000	0.47%	Pulaski Co.	\$203,000	0.29%
Lincoln Co.	\$380,000	1.03%	Raceland Ind.	\$20,000	0.25%
Livingston Co.	\$20,000	0.18%	Robertson Co.	\$10,000	0.28%
Logan Co.	\$145,500	0.50%	Rockcastle Co.	\$162,000	0.67%
Ludlow Ind.	\$60,000	0.84%	Rowan Co.	_	_
Lyon Co.	\$30,000	0.40%	Russell Co.	\$99,241	0.38%
Madison Co.	\$270,000	0.29%	Russell Ind.	_	_
Marion Co.	\$120,000	0.47%	Science Hill Ind.	_	_
Marshall Co.	\$143,202	0.39%	Shelby Co.	\$10,000	0.02%
Mason Co.	\$147,652	0.68%	Silver Grove Ind.	\$20,000	0.76%
Mayfield Ind.	\$62,947	0.45%	Simpson Co.	_	_
McCreary Co.	\$50,000	0.17%	Somerset Ind.	\$50,000	0.42%
McLean Co.	\$30,000	0.20%	Southgate Ind.	\$100,000	6.45%
Meade Co.	\$860,000	2.22%	Spencer Co.	\$60,000	0.28%
Menifee Co.	\$40,000	0.39%	Taylor Co.	_	_
Mercer Co.	\$120,000	0.39%	Todd Co.	\$90,000	0.49%
Metcalfe Co.	\$10,000	0.07%	Trigg Co.	\$143,124	0.73%
Monroe Co.	\$19,000	0.11%	Trimble Co.	\$126,584	1.00%
Montgomery Co.	\$165,446	0.44%	Union Co.	\$130,000	0.55%
Monticello Ind.	\$40,000	0.52%	Walton Verona Ind.	\$40,000	0.30%
Morgan Co.	\$100,000	0.56%	Warren Co.	\$272,546	0.24%
Muhlenberg Co.	\$50,000	0.10%	Washington Co.	\$150,000	0.97%
Murray Ind.	\$10,000	0.07%	Wayne Co.	_	_
Nelson Co.	\$170,000	0.44%	West Point Ind.	\$3,000	0.22%
Ohio Co.	\$150,000	0.43%	Whitley Co.	\$517,953	1.13%
Owen Co.	\$92,000	0.54%	Williamstown Ind.	\$140,676	1.48%
Owensboro Ind.	\$175,917	0.40%			
Owsley Co.	\$10,000	0.11%			

[—] Denotes districts that did not respond to this question.

Note: Only districts that completed the survey are listed.

District Level Data Portrait: Per Pupil Spending on Health Services

District	Per Pupil	District	Per Pupil	District	Per Pupil	District	Per Pupil
Average	\$53.11	Danville Ind.	\$45.35	Johnson Co.	\$38.52	Paducah Ind.	\$32.09
Adair Co.	\$6.82	Daviess Co.	\$51.62	Kenton Co.	_	Paris Ind.	\$38.07
Allen Co.	\$40.66	Dayton Ind.	\$38.29	LaRue Co.	\$51.36	Pendleton Co.	_
Anchorage Ind.	\$0.54	Edmonson Co.	\$41.63	Laurel Co.	\$19.20	Perry Co.	\$35.68
Anderson Co.	\$23.81	Elizabethtown Ind.	\$19.63	Lawrence Co.	\$1.36	Pike Co.	\$30.29
Ashland Ind.	\$7.67	Elliott Co.	\$68.32	Lee Co.	\$27.03	Pineville Ind.	\$43.25
Augusta Ind.	\$64.72	Erlanger-Elsmere Ind.	\$75.69	Leslie Co.	\$53.27	Powell Co.	\$14.06
Ballard Co.	\$33.36	Estill Co.	_	Letcher Co.	\$42.09	Pulaski Co.	\$24.08
Barren Co.	_	Fayette Co.	\$13.70	Lincoln Co.	\$88.54	Raceland Ind.	\$19.96
Bath Co.	\$33.14	Fleming Co.	\$33.71	Livingston Co.	\$13.90	Robertson Co.	\$13.70
Bell Co.	_	Fort Thomas Ind.	\$28.88	Logan Co.	\$38.93	Rockcastle Co.	\$52.14
Bellevue Ind.	\$47.56	Franklin Co.	\$4.85	Ludlow Ind.	\$65.29	Rowan Co.	_
Boone Co.	\$20.46	Fulton Ind.	\$21.37	Lyon Co.	\$31.81	Russell Co.	\$35.35
Bourbon Co.	\$59.78	Gallatin Co.	\$43.38	Madison Co.	\$26.37	Russell Ind.	_
Bowling Green Ind.	\$13.18	Garrard Co.	\$31.73	Marion Co.	\$37.04	Science Hill Ind.	_
Boyd Co.	\$69.75	Glasgow Ind.	\$25.58	Marshall Co.	\$24.87	Shelby Co.	\$1.47
Boyle Co.	\$28.60	Grant Co.	\$62.02	Mason Co.	\$50.84	Silver Grove Ind.	\$82.30
Bullitt Co.	\$23.24	Graves Co.	\$27.24	Mayfield Ind.	\$38.69	Simpson Co.	_
Burgin Ind.	\$4.23	Grayson Co.	\$54.01	McCreary Co.	\$15.72	Somerset Ind.	\$32.62
Butler Co.	\$14.65	Green Co.	\$34.68	McLean Co.	\$17.69	Southgate Ind.	\$416.67
Caldwell Co.	\$14.79	Greenup Co.	\$51.94	Meade Co.	\$166.67	Spencer Co.	\$20.74
Calloway Co.	\$72.42	Hancock Co.	\$66.04	Menifee Co.	\$36.97	Taylor Co.	_
Campbell Co.	\$75.35	Hardin Co.	\$20.90	Mercer Co.	\$37.50	Todd Co.	\$40.71
Campbellsville Ind.	\$168.05	Harlan Ind.	_	Metcalfe Co.	\$5.48	Trigg Co.	\$69.65
Carlisle Co.	_	Hart Co.	\$41.60	Monroe Co.	\$8.92	Trimble Co.	\$78.48
Carroll Co.	\$40.22	Hazard Ind.	\$90.63	Montgomery Co.	\$34.92	Union Co.	\$54.78
Casey Co.	\$8.24	Henderson Co.	\$42.32	Monticello Ind.	\$45.98	Walton Verona Ind.	\$25.82
Caverna Ind.	\$13.25	Henry Co.	\$51.26	Morgan Co.	\$47.80	Warren Co.	\$20.12
Clark Co.	\$26.02	Hickman Co.	\$7.46	Muhlenberg Co.	\$9.48	Washington Co.	\$85.62
Clay Co.	\$35.50	Hopkins Co.	\$21.84	Murray Ind.	\$6.51	Wayne Co.	_
Clinton Co.	\$8.61	Jackson Co.	\$19.73	Nelson Co.	\$34.81	West Point Ind.	\$28.57
Cloverport Ind.	\$13.30	Jackson Ind.	\$23.15	Ohio Co.	\$37.45	Whitley Co.	\$102.14
Corbin Ind.	\$12.44	Jefferson Co.	\$125.54	Owen Co.	\$46.96	Williamstown Ind.	\$148.86
Covington Ind.	\$102.74	Jenkins Ind.	\$34.01	Owensboro Ind.	\$40.52		
Cumberland Co.	\$30.61	Jessamine Co.	\$169.72	Owsley Co.	\$11.00		

[—] Denotes districts that did not respond to this question.

Note: Only districts that completed the survey are listed.

Local boards of education and local health departments are the most common funders of school health services.

"Our general fund expenditure covers the cost of two nurses. We feel they are a true benefit to our schools and will try to keep them available for our students."

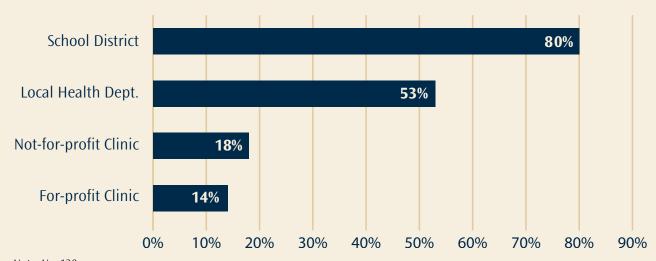
"Budgets are tight and health needs seem to become greater each year. It is felt that the needs can be handled as long as the resources and funding are available to meet them. This is getting harder and harder for districts as a commitment to health services requires the majority [of] funding to be allocated from the general fund."

Several questions on the survey asked about the funding sources of districts' health budgets and the employers of health providers in the schools.

Findings Regarding Funding Sources of School Health Services:

- Local boards of education were the most common funders reported with 113 districts (82 percent) allocating local dollars. Seventeen districts reported this source as 100 percent of their student health services funding. The second most cited funding source included local health departments (56 districts or 41 percent).
- School district employees and local health departments were the main providers of school health services: 79 percent utilized school district employees and 63 percent utilized local health departments.
- Forty-two districts (31 percent) utilized Medicaid and KCHIP reimbursements for services.
- Only 13 districts reported grants from private foundations or charities to fund health services, and in all cases grants were a small part of their health budgets.

Employers of Health Providers in Schools



Note: N= 130

Discussion:

The two main funders and employers of school health services, health departments and school districts, differ in what they can offer schools. For example, nurses employed by a health department can perform services, such as immunizations, that school district nurses cannot.³² Health department nurses can offer similar services to school district nurses, yet some health department nurses offer limited services because school health is not a required part of their job description.³³ At the time of this survey, health department nurses had a financial advantage over school district nurses because of the way they could bill Medicaid for services.³⁴ However, at the start of the 2010-2011 school year, changes were made to the way health departments bill Medicaid for certain school health services, which limited their reimbursement. This has resulted in some health departments reducing the services they offer schools.³⁵

The open-ended responses revealed that districts committed to providing health services to their students find ways to budget school district funding for health services and employ health providers such as nurses. The financial resources and student populations of school districts widely vary, so it may be easier for some districts to allocate local dollars for health services than others. Some districts may have healthier students overall, making it unnecessary to spend a lot of money on health services. Districts have to make decisions as to how best to spend their money. If positive results are seen from providing school health services, districts may continue to invest as much as possible.



District Level Data Portrait: Source of School Health Services Funding

District	Local Board of Education	Local Health Department	District	Local Board of Education	Local Health Department
Totals	113 Districts	56 Districts	Danville Ind.	•	
Adair Co.	•		Daviess Co.	•	
Allen Co.	•	•	Dayton Ind.	•	
Anchorage Ind.	•		Edmonson Co.	•	
Anderson Co.	•	•	Elizabethtown Ind.		
Ashland Ind.	•	•	Elliott Co.	•	•
Augusta Ind.	•		Erlanger-Elsmere Ind.	•	
Ballard Co.	•		Estill Co.	•	
Barren Co.			Fayette Co.	•	•
Bath Co.	•		Fleming Co.		
Bell Co.			Fort Thomas Ind.	•	
Bellevue Ind.	•		Franklin Co.	•	
Boone Co.	•	•	Fulton Ind.	•	
Bourbon Co.	•		Gallatin Co.	•	
Bowling Green Ind.	•	•	Garrard Co.	•	•
Boyd Co.	•	•	Glasgow Ind.	•	
Boyle Co.	•		Grant Co.		
Bullitt Co.	•		Graves Co.	•	
Burgin Ind.	•	•	Grayson Co.	•	
Butler Co.			Green Co.	•	•
Caldwell Co.	•	•	Greenup Co.	•	
Calloway Co.	•	•	Hancock Co.	•	•
Campbell Co.	•		Hardin Co.	•	
Campbellsville Ind.	•		Harlan Ind.		
Carlisle Co.	•		Hart Co.	•	
Carroll Co.	•		Hazard Ind.	•	
Casey Co.	•	•	Henderson Co.	•	•
Caverna Ind.	•		Henry Co.	•	
Clark Co.	•	•	Hickman Co.	•	•
Clay Co.	•	•	Hopkins Co.	•	•
Clinton Co.			Jackson Co.	•	•
Cloverport Ind.			Jackson Ind.	•	•
Corbin Ind.	•		Jefferson Co.		•
Covington Ind.	•		Jenkins Ind.	•	•
Cumberland Co.	•	•	Jessamine Co.	•	

Note: Only districts that completed the survey are listed.

District Level Data Portrait: Source of School Health Services Funding (continued)

District	Local Board of Education	Local Health Department	District	Local Board of Education	Local Health Department
Johnson Co.		•	Paducah Ind.		
Kenton Co.			Paris Ind.	•	
LaRue Co.	•		Pendleton Co.		
Laurel Co.	•		Perry Co.	•	
Lawrence Co.	•	•	Pike Co.	•	•
Lee Co.			Pineville Ind.	•	
Leslie Co.			Powell Co.	•	•
Letcher Co.	•	•	Pulaski Co.	•	•
Lincoln Co.	•	•	Raceland Ind.	•	
Livingston Co.	•	•	Robertson Co.	•	
Logan Co.	•		Rockcastle Co.	•	•
Ludlow Ind.	•	•	Rowan Co.		
Lyon Co.	•		Russell Co.	•	•
Madison Co.	•	•	Russell Ind.		
Marion Co.	•	•	Science Hill Ind.		
Marshall Co.	•	•	Shelby Co.	•	
Mason Co.	•	•	Silver Grove Ind.	•	•
Mayfield Ind.	•		Simpson Co.		
McCreary Co.	•		Somerset Ind.	•	•
McLean Co.	•	•	Southgate Ind.	•	
Meade Co.	•	•	Spencer Co.	•	•
Menifee Co.	•	•	Taylor Co.		•
Mercer Co.	•	•	Todd Co.	•	
Metcalfe Co.	•		Trigg Co.	•	
Monroe Co.	•	•	Trimble Co.	•	
Montgomery Co.	•		Union Co.	•	
Monticello Ind.	•		Walton Verona Ind.	•	•
Morgan Co.	•		Warren Co.	•	
Muhlenberg Co.	•	•	Washington Co.	•	
Murray Ind.	•		Wayne Co.		
Nelson Co.	•	•	West Point Ind.		
Ohio Co.	•	•	Whitley Co.	•	•
Owen Co.	•	•	Williamstown Ind.	•	
Owensboro Ind.	•	•			
Owsley Co.					

Note: Only districts that completed the survey are listed.

Mental health/substance abuse and dental health services trail physical health services provided in schools.

"[_____] County is a small rural county with 60% free and reduced lunch rate. We have very limited health services available in the community. Most families have to travel 30 miles for the nearest medical facility. We also only have one dentist who sees patients on a cash only basis."

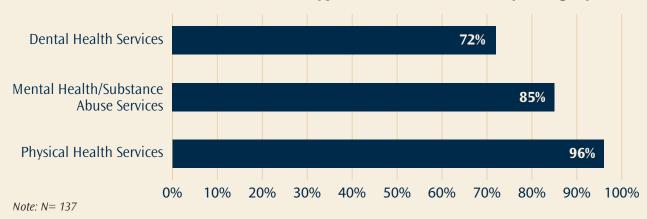
"Consistent, cost effective and high quality counseling is difficult to access and maintain. Case workers seem to be working with as many people as possible but the need is often too great for addressing needs in a timely fashion."

Survey questions asked about the categories of services offered to students including physical, dental, and mental health/substance abuse services. The survey provided respondents a comprehensive list to select from, with very basic to advanced services included. These options are detailed later in the report.

Findings Regarding Categories of School Health Services Offered:

- ▶ Overall, 96 percent or 132 of the reporting districts offered at least one physical health service in one or more of their schools.
- Some 85 percent or 116 of the districts offered at least one mental health/substance abuse service to students.
- ▶ Only 72 percent or 99 districts provided at least one dental health service.
- Only 63 percent or 86 districts provided some level of care in all three categories of services (physical, dental, and mental health/substance abuse) in at least one school in the district.
- ▶ Only 22 percent (30 districts) provided all three categories (physical, dental, and mental health/substance abuse services) in all levels for which they had schools, including elementary, middle, and high schools.
- ▶ 12 districts provided only physical health services.

Percent of Districts that Offered ANY Type of Health Services, by Category

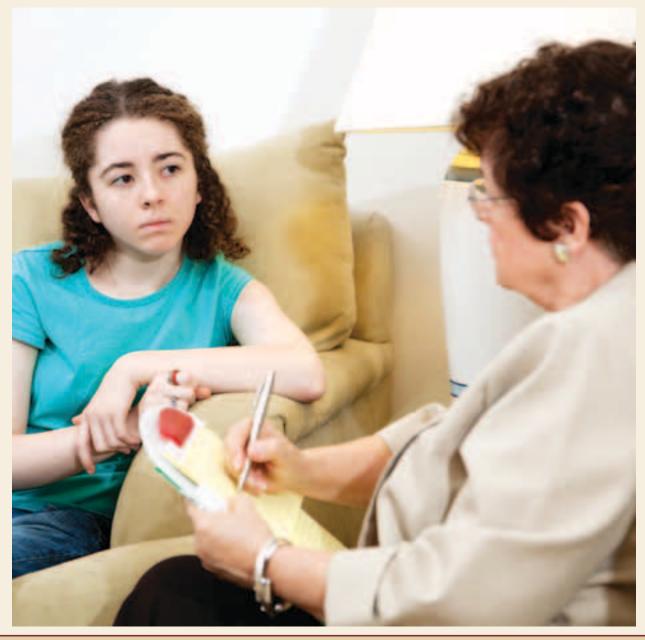


Discussion:

Physical health services may be offered by more districts than dental health and mental health/substance abuse services for a variety of reasons. Schools are required by law to offer needed physical health services, such as the administration of medication, so it is not surprising that a high percentage of reporting districts offered at least one physical health service. In addition, if districts successfully partner with their local health departments, many physical health services such as immunizations and school physicals can be offered to students at school.

Dental and mental health/substance abuse services were lacking in many districts. While this may be an indication of the difficulty in offering dental and mental health/substance abuse services to students, it is clear that children in Kentucky have unmet dental and mental health/substance abuse needs. In 2007, one in five children in Kentucky had at least one oral health problem such as tooth decay, toothaches, broken teeth, or bleeding gums.³⁷ In addition, only 65 percent of children ages 2-17 with a mental health need received mental health care in Kentucky in 2007.³⁸

Schools offer a convenient venue to address children's dental and mental health/substance abuse needs, especially in areas of the state where access to care is an issue. Increasing dental and mental health/substance abuse services at schools could meet health needs and in turn, help students be more ready to learn. According to the Kentucky Department of Education: "Health has obvious impact on a student's readiness to learn and meet academic standards." ³⁹



District Level Data Portrait: Categories of School Health Services Offered

District	Physical Health	Dental Health	Mental Health/ Substance Abuse	District	Physical Health	Dental Health	Mental Health/ Substance Abuse
Totals	132 Districts	99 Districts	116 Districts	Daviess Co.	•	•	•
Adair Co.	•	•	•	Dayton Ind.	•	•	
Allen Co.	•	•		Edmonson Co.	•		•
Anchorage Ind.	•			Elizabethtown Ind.	•	•	•
Anderson Co.	•			Elliott Co.	•		
Ashland Ind.	•	•	•	Erlanger-Elsmere Ind.	•	•	•
Augusta Ind.	•	•	•	Estill Co.	•		•
Ballard Co.	•	•	•	Fayette Co.	•	•	•
Barren Co.	•		•	Fleming Co.	•	•	•
Bath Co.	•	•	•	Fort Thomas Ind.	•		•
Bell Co.	•	•	•	Franklin Co.	•	•	•
Bellevue Ind.	•	•	•	Fulton Ind.	•	•	•
Boone Co.	•	•	•	Gallatin Co.	•	•	•
Bourbon Co.	•	•	•	Garrard Co.	•	•	•
Bowling Green Ind.	•		•	Glasgow Ind.	•		
Boyd Co.	•	•	•	Grant Co.	•	•	•
Boyle Co.	•	•	•	Graves Co.	•	•	•
Bullitt Co.	•	•	•	Grayson Co.	•		•
Burgin Ind.	•	•	•	Green Co.	•	•	•
Butler Co.	•	•	•	Greenup Co.	•	•	•
Caldwell Co.	•	•	•	Hancock Co.	•	•	•
Calloway Co.	•	•	•	Hardin Co.	•		•
Campbell Co.	•	•	•	Harlan Ind.	•	•	
Campbellsville Ind.	•	•	•	Hart Co.	•	•	•
Carlisle Co.	•	•	•	Hazard Ind.	•	•	•
Carroll Co.	•		•	Henderson Co.	•		•
Casey Co.	•	•	•	Henry Co.	•	•	•
Caverna Ind.	•		•	Hickman Co.	•	•	•
Clark Co.	•	•	•	Hopkins Co.	•	•	•
Clay Co.	•	•	•	Jackson Co.	•	•	•
Clinton Co.	•	•	•	Jackson Ind.	•		•
Cloverport Ind.	•	•	•	Jefferson Co.	•	•	•
Corbin Ind.	•		•	Jenkins Ind.	•		
Covington Ind.	•	•	•	Jessamine Co.	•	•	•
Cumberland Co.	•	•	•	Kenton Co.	•	•	

Note: Only districts that completed the survey are listed.

District Level Data Portrait: Categories of School Health Services Offered (continued)

District	Physical Health	Dental Health	Mental Health/ Substance Abuse
LaRue Co.	•		•
Laurel Co.	•		•
Lawrence Co.	•		•
Lee Co.	•	•	•
Leslie Co.	•	•	•
Letcher Co.	•		•
Lincoln Co.	•	•	•
Livingston Co.	•	•	
Logan Co.	•		
Ludlow Ind.	•		•
Lyon Co.	•	•	•
Madison Co.	•	•	•
Marion Co.	•	•	•
Marshall Co.	•	•	•
Mason Co.	•		•
Mayfield Ind.	•	•	•
McCreary Co.	•	•	•
McLean Co.	•	•	
Meade Co.	•	•	•
Menifee Co.	•	•	•
Mercer Co.	•	•	•
Metcalfe Co.	•	•	•
Monroe Co.	•	•	•
Montgomery Co.	•	•	•
Monticello Ind.	•	•	•
Morgan Co.	•		
Muhlenberg Co.	•	•	
Murray Ind.	•	•	•
Nelson Co.	•	•	•
Ohio Co.	•		•
Owen Co.	•	•	•
Owensboro Ind.	•	•	•
Owsley Co.	•	•	•
Paris Ind.	•	•	•
Pendleton Co.	•	•	•

District	Physical Health	Dental Health	Mental Health/ Substance Abuse
Perry Co.	•	•	•
Pike Co.	•	•	•
Pineville Ind.	•		•
Powell Co.	•	•	•
Pulaski Co.	•	•	•
Raceland Ind.	•		
Robertson Co.	•		
Rockcastle Co.	•		•
Rowan Co.	•	•	•
Russell Co.	•	•	•
Russell Ind.			
Science Hill Ind.	•	•	•
Shelby Co.	•	•	•
Silver Grove Ind.	•	•	•
Simpson Co.			
Somerset Ind.	•		•
Southgate Ind.		•	•
Spencer Co.	•		•
Taylor Co.	•	•	•
Todd Co.	•	•	•
Trigg Co.	•	•	•
Trimble Co.	•	•	•
Union Co.	•		
Walton Verona Ind.	•	•	•
Warren Co.	•		•
Washington Co.	•	•	•
Wayne Co.			
West Point Ind.			
Whitley Co.	•	•	•
Williamstown Ind.	•	•	•

Note: Only districts that completed the survey are listed.

The majority of health services offered are basic.

"We had one FTE registered nurse who serviced all of our schools on an as needed basis in addition to planned health needs/ activities. The services were more on an on call basis except for those students requiring daily needs."

Districts reported the types of physical, dental, and mental health/substance abuse services offered to students. Districts also reported types of services offered categorized by school level, including elementary, middle, and high schools.

Findings Regarding Types of School Health Services Offered:

▶ There was wide variation in the types of services offered by districts. Every type of physical, dental, and mental health/substance abuse service addressed in the survey was represented in at least one district. The least common services provided were generally those that required highly trained providers, such as mental health diagnosis, primary care, and dental fillings.

Physical Health Services

- The most common physical health service was administration of over-the-counter and prescription medication. Also common was individual health education with three-fourths of districts providing this service.
- Twenty-one districts provided primary care, which could indicate the presence of a school-based health center. Higher poverty districts offered primary care at a higher rate than lower poverty districts (20 percent vs. 8 percent).

Dental Health Services

- ▶ The two most common dental health services offered were oral health screenings and prevention counseling. Dental services which require administration by dental professionals, including cleaning, X-rays, fillings, and extractions, were rare with fewer than 25 percent of districts offering any of these services.
- More districts offered dental health services to elementary schools than to middle and high schools. While almost 50 percent of districts provided oral health screenings in elementary schools, only 15 percent provided this service to middle schools and 8 percent provided screenings to high schools. In addition, 46 percent of reporting districts provided referrals for dental health services to elementary school students, while only 27 percent of districts provided referrals to middle school students and only 24 percent provided them to high school students.

Mental Health/Substance Abuse Services

- ▶ The mental health service provided by the most districts was individual mental health counseling at 67 percent. However, all other mental health services addressed in the survey were offered by fewer than half of the districts.
- Districts offered more substance abuse services, including drug/alcohol assessment, substance abuse individual counseling, and substance abuse group counseling, to middle and high schools than to elementary schools, yet many districts offered few or none of these services.
- ▶ Almost half of the districts offered mental health/substance abuse referrals. Districts repeatedly noted referring students to organizations such as Adanta, Pathways, Four Rivers Behavioral Health, Kentucky River Community Care, and Life Skills, all of which are comprehensive care centers.

Discussion:

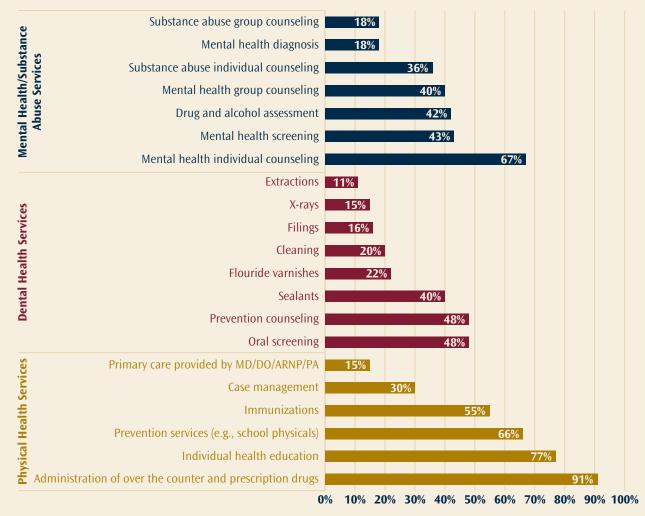
The wide range of school health services offered by districts is due to multiple factors. Kentucky statute requires that schools offer administration of overthe-counter and prescription medication as a school health service if children need this service.⁴⁰ However, the availability of funding and providers affects the level of other services that districts offer. In addition, differing levels of need among student populations may dictate which services are offered. The 2004 Kentucky Department of Education's School Health Services Reference Guide states that schools should know how many students with special health care needs are in their student population.⁴¹ While many parents inform the school of their children's needs, the Reference Guide states that districts may choose to conduct a needs assessment of their students so they can better meet students' needs.

While most districts offered at least one physical,

dental, or mental health/substance abuse service, health services that a nurse could administer were most commonly offered by districts. As will be discussed later in the report, nurses were the most common school health provider in schools. Nurses are able to perform many of the physical health services identified in the survey, but they are not qualified for most of the dental and mental health/substance abuse services mentioned on the survey. This most likely contributes to the fact that most of the dental and mental health/substance abuse services were offered in less than half of the districts.

There may be untapped opportunities for school districts to provide students with services that are offered by community based health providers. For example, fluoride varnishes were only offered in 22 percent of districts. However many health departments reported providing this service to schools, so there may be an opportunity for districts to collaborate with local health departments to offer this service.

Percent of Districts Offering Services, by Type



Note: This chart refers to the percent of districts that provided the service in at least one level (elementary, middle, and high).

School nurses are the most common health provider in Kentucky schools.

"Our board of education has always recognized the need for health care services for our students and staff. School nurses have been employed in our school district since the 1950's."

Districts reported on student health service providers, including qualifications and availability of providers. Districts reported the number of full time equivalent providers (FTEs) available to all students and those available to special education students only. Since FTEs were reported, 1 FTE provider could consist of two part-time providers that share responsibility at a school.

Findings Regarding the Types of School Health Providers:

- ▶ The most common health providers in schools were nurses, with a total of 558.8 full time equivalent nurses (FTEs) reported in the state. This total includes nurses with varying qualification levels and credentials, including Advanced Registered Nurse Practitioners (ARNP), Registered Nurses (BSN, MSN, AND), and Licensed Practical Nurses (LPN). Of the total, only 16.6 FTEs were nurse practitioners.
- Licensed mental health providers were the second most common provider type with 80.3 FTEs reported.
- ▶ The least common providers were medical doctors (3.1 FTEs), dentists (7.3 FTEs), and dental hygienists (10.0 FTEs).
- ▶ Higher poverty districts reported more FTE providers per 1,000 students than lower poverty districts for almost all of the types of providers listed.
- ▶ The smallest districts reported more FTE providers per 1,000 students than the largest districts for most of the providers listed.

School Health Providers					
	Total FTEs available to all students	Total FTEs available to special education students only			
Total Registered Nurses (ARNP, BSN, MSN, ADN)	458.1	20.2			
Nurse Practitioner (ARNP)	16.6	0.0			
Registered Nurse (BSN, MSN)	227.4	15.2			
Registered Nurse (AND - Associates Degree)	214.1	5.0			
Licensed Practical Nurse (LPN)	100.7	6.2			
Licensed Mental Health Provider	80.3	6.6			
Dental Hygienist	10.0	2.0			
Dentist	7.3	0.0			
Emergency Medical Technician (EMT)	4.0	0.0			
Medical Doctor (MD, DO)	3.1	0.0			

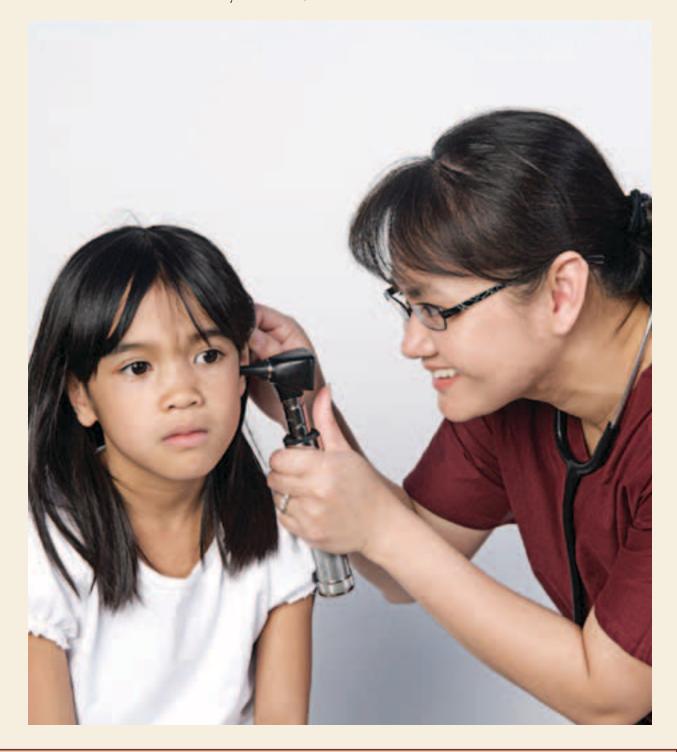
Note: (N=125)

Discussion:

Nurses were the first providers to enter schools in the early 20th century and have continued to be the main type of health provider in schools. Some districts bring in more specialized providers, such as doctors and dentists, in order to meet students' needs. Other districts may not be able to do this for a variety of reasons such as lack of available providers or lack of sustainable funding for providers.

The data shows the diversity of providers who offer services to schools is limited with very few dentists,

dental hygienists, nurse practitioners, medical doctors, and licensed mental health providers reported. This greatly contributes to the lack of dental and mental health/substance abuse services provided to schools and also to the lack of specialized medical care reported. In the provider survey, many doctors and other types of providers stated they did not provide services to schools simply because no one had asked them. Therefore, districts may be able to get more specialized providers in their districts by reaching out and creating collaborations with providers in their communities.



Kentucky does not meet the nationally recommended school nurse-to-student ratio.

"We have students with medical needs such as diabetes, seizures, and severe food allergies. Currently we have only two RNs spread across seven schools serving approximately 3,000 students. Our district is rural with several miles between schools."

Districts reported the number of specific types of nurses including advanced registered nurse practitioners (ARNP); registered nurses with associate's, bachelor's and master's degrees (BSN, MSN, ADN); and licensed practical nurses (LPN).

Findings Regarding School Nurses in Kentucky:

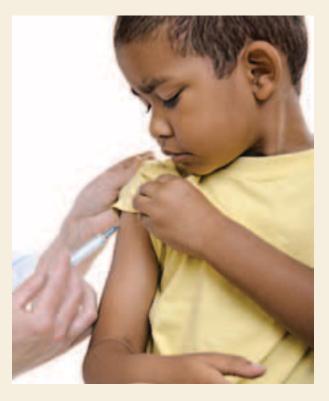
- ▶ In Kentucky, the statewide average of reporting districts was one FTE nurse to 1,254 students, which does not meet the national recommendation of one nurse for every 750 students. Only registered nurses were used in the calculation and include ARNP, BSN, MSN, and ADN. LPNs were not included because the National Association of School Nurses only includes registered nurses in the nationally recommended ratio. ⁴²
- Some 47 districts (38 percent) met or exceeded the nationally recommended nurse to student ratio.
- ▶ Higher and lower poverty districts had similar nurse-to-student ratio averages.
- ▶ The smallest districts had better nurse-to-student ratios than the largest districts.

Discussion:

School nurses offer a crucial service to students by promoting health and safety, intervening in students' health issues, and providing case management services. 43 Several districts reported that being able to meet the national recommendation or having a nurse in every school would be helpful in improving school health service delivery.

According to the state's School Health Services Reference Guide, during the 2002-2003 school year, Kentucky's average nurse-to-student ratio was one to 1,362.44 This findings of this study showed a slight improvement with the ratio being one nurse for every 1,254 students. The fact that Kentucky does not meet the recommended ratio raises questions about whether health barriers to learning are being addressed during the school day. It is important to consider that the recommended ratio applies to healthy students. Kentucky has the highest rate in the nation of children with special health care needs, indicating that even if Kentucky met the national recommendation of one nurse for every 750 students, this still might not be enough nurses to meet students' health needs. Most districts acknowledged that nurses play a significant

role in schools; however, solutions for expanding the number of nurses in schools across the state mostly rely on increased funding, which is difficult to procure during times of economic hardship.



District Level Data Portrait: Ratio of Students to one FTE Nurse

District	Ratio	District	Ratio	District	Ratio	District	Ratio
Average	1,254	Danville Ind.	1,764	Johnson Co.	1,947	Paducah Ind.	787
Adair Co.	2,566	Daviess Co.	1,146	Kenton Co.	3,388	Paris Ind.	788
Allen Co.	1,537	Dayton Ind.	1,056	LaRue Co.	_	Pendleton Co.	689
Anchorage Ind.	_	Edmonson Co.	2,042	Laurel Co.	1,050	Perry Co.	420
Anderson Co.	840	Elizabethtown Ind.	2,292	Lawrence Co.	432	Pike Co.	1,462
Ashland Ind.	3,260	Elliott Co.	586	Lee Co.	1,110	Pineville Ind.	578
Augusta Ind.	_	Erlanger-Elsmere Ind.	793	Leslie Co.	601	Powell Co.	854
Ballard Co.	750	Estill Co.	2,573	Letcher Co.	3,326	Pulaski Co.	527
Barren Co.	4,925	Fayette Co.	1,460	Lincoln Co.	505	Raceland Ind.	_
Bath Co.	694	Fleming Co.	2,373	Livingston Co.	480	Robertson Co.	_
Bell Co.	451	Fort Thomas Ind.	2,147	Logan Co.	623	Rockcastle Co.	621
Bellevue Ind.	81	Franklin Co.	6,184	Ludlow Ind.	656	Rowan Co.	430
Boone Co.	1,825	Fulton Ind.	936	Lyon Co.	943	Russell Co.	702
Bourbon Co.	719	Gallatin Co.	1,676	Madison Co.	640	Russell Ind.	_
Bowling Green Ind.	948	Garrard Co.	1,418	Marion Co.	1,620	Science Hill Ind.	_
Boyd Co.	977	Glasgow Ind.	_	Marshall Co.	1,440	Shelby Co.	6,795
Boyle Co.	2,815	Grant Co.	1,263	Mason Co.	726	Silver Grove Ind.	243
Bullitt Co.	12,694	Graves Co.	1,239	Mayfield Ind.	814	Simpson Co.	_
Burgin Ind.	473	Grayson Co.	2,206	McCreary Co.	530	Somerset Ind.	511
Butler Co.	2,184	Green Co.	577	McLean Co.	_	Southgate Ind.	343
Caldwell Co.	676	Greenup Co.	1,493	Meade Co.	2,580	Spencer Co.	_
Calloway Co.	1,105	Hancock Co.	433	Menifee Co.	361	Taylor Co.	914
Campbell Co.	1,208	Hardin Co.	2,050	Mercer Co.	1,067	Todd Co.	2,211
Campbellsville Ind.	542	Harlan Ind.	_	Metcalfe Co.	456	Trigg Co.	685
Carlisle Co.	443	Hart Co.	2,404	Monroe Co.	473	Trimble Co.	1,613
Carroll Co.	_	Hazard Ind.	993	Montgomery Co.	1,579	Union Co.	_
Casey Co.	485	Henderson Co.	1,127	Monticello Ind.	870	Walton Verona Ind.	775
Caverna Ind.	830	Henry Co.	2,302	Morgan Co.	349	Warren Co.	2,021
Clark Co.	_	Hickman Co.	839	Muhlenberg Co.	528	Washington Co.	876
Clay Co.	397	Hopkins Co.	599	Murray Ind.	1,536	Wayne Co.	_
Clinton Co.	1,864	Jackson Co.	471	Nelson Co.	1,221	West Point Ind.	_
Cloverport Ind.	1,053	Jackson Ind.	_	Ohio Co.	1,001	Whitley Co.	563
Corbin Ind.	563	Jefferson Co.	7,524	Owen Co.	653	Williamstown Ind.	945
Covington Ind.	1,022	Jenkins Ind.	588	Owensboro Ind.	1,085		
Cumberland Co.	331	Jessamine Co.	1,283	Owsley Co.	303		

[—] Denotes No FTE Reported.

Note: Only districts that completed the survey are listed.

Sustainability is a concern for many districts.

"Too much responsibility is put on the district to find the resources to provide what is needed."

"The BOE [Board of Education] applied for and received a grant from The Foundation for a Healthy Kentucky. This grant allowed the BOE to partner with our local health department and provide start up funds to place a school nurse in every school and an ARNP that would rotate through each school. The ARNP could diagnose and treat students at the school sites without the need for the student to leave and go elsewhere for medical treatment."

"[We plan on] exploring new grant opportunities if we can find the human resources to help initiate, complete, and sustain the grant."

The survey asked how districts felt about the future sustainability of their health services programs and possibilities for new funding sources.

Findings Regarding the Sustainability of School Health Services:

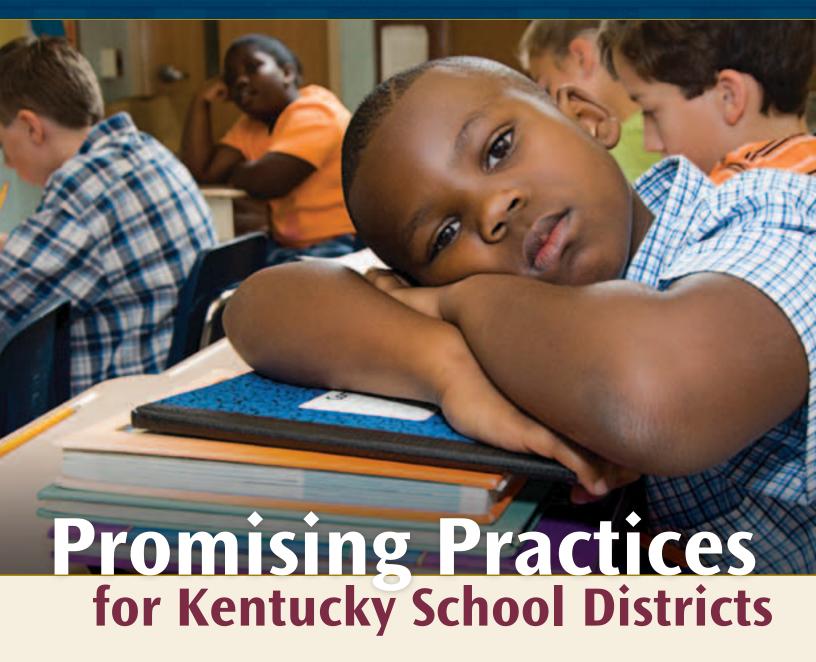
- Districts indicated optimism about the probability for continued funding from current sources and strategies for developing new sources of funding. However, districts expressed fear about state budget cuts to local health departments and to local boards of education.
- ▶ Some 83 districts mentioned that meeting the extensive health needs of students with districts' limited resources was a challenge. Several districts also reported that having students with multiple health care needs has increased the demand for school health services. Although difficult, the majority of respondents thought that provision of health services was positive for their students.
- ▶ Forty districts mentioned grants as a strategy for sustainability. The responses in this section also reflected a desire for schools to become more adept at learning about and pursuing grant opportunities, gaining proficiency in preparing grant applications, and finding the internal capacity to pursue this funding option for sustainable service provision.

Discussion:

While districts seemed to recognize the importance of school health services, some plans appeared unsustainable. For example, many districts mentioned grants as a strategy for sustainability, although very few districts received grant funding at the time of the survey and most grants accounted for only small portions of districts' health services budgets. If there are few grants available for school health services, it will be difficult for districts to rely on this type of funding.

Another key challenge to sustainability mentioned by districts in and around Jefferson County was the inability of health departments to bill for Medicaid and KCHIP in the Passport region. Passport is a

Medicaid managed care plan covering the following 16 counties: Breckinridge, Bullitt, Carroll, Grayson, Hardin, Henry, Jefferson, LaRue, Marion, Meade, Nelson, Oldham, Shelby, Spencer, Trimble, and Washington. Passport operates under a "medical home model" where each patient is assigned a primary care provider and must utilize that provider for health services. Primary care providers receive funding for each Medicaid patient assigned to them. Because they are not considered medical homes, health departments in the Passport region are not allowed to bill Medicaid and KCHIP for school health services, as they can outside of the region. This creates a challenge for sustainability in the region for districts, as many students in this region still need health services while at school.



Many promising practices emerged from the school health services study. Districts reported a variety of strategies to serve children and remove physical, dental, and mental health barriers to learning. The following represent key methods districts use to meet the increasing needs of their students.

Fully utilize Family Resource and Youth Services Centers

"Our FRYSCs are very efficient and are able to secure many services for our students and families. They offer programs for families in nutrition, smoking cessation, child care, and healthy life styles. We have after-school day care programs and tutoring classes. Our staff is willing to give their time and efforts to help [______] County students achieve their optimal potential."

"Our youth service centers assist families to enroll in K-chip and Medicaid. They help parents fill out the forms and help get the forms to the proper offices."

"FRYSC staff have been trained in the application process.

They help distribute information to parents, assist parents in completing the application and assist parents in obtaining the necessary paperwork for approval. We have provided the manpower for walk-in clinic at various agencies and community centers."

Family Resource and Youth Services Centers (FRYSCs) were designed by statute to "meet the needs of children and their families by providing services to enhance a student's ability to succeed in school." Furthermore, the law requires that "family resource centers shall promote identification and coordination of existing resources and shall include [...] health services or referrals to health services, or both." As with any law there are minimum standards to meet but several districts seemed to be following the spirit of the law by integrating health services.

FRYSCs are critical in making and following up on community health referrals and assisting families to enroll in the Kentucky Children's Health Insurance Program (KCHIP) and Medicaid, according to survey results. Several districts highlighted that FRYSCs did more than create awareness and pass out applications for Medicaid and KCHIP. They actually assisted families with filling out the application, followed up on submitted applications, and proactively identified families who were eligible.

Recent legislative efforts were successful in allowing school districts to employ a physician or a nurse to

provide health services through a FRYSC, although funding for this has yet to be allocated.⁴⁷ FRYSC coordinators can also be key connectors in identifying and fostering community partners. FRYSCs are poised to be leaders in the provision of health care but need the appropriate authority, resources, and level of commitment from school leaders to fully realize the potential of this program.



Create strong health department partnerships

"We have a model program that has blended two agencies,

[______] County School District and the [______] County

Health Department, to allow the provision of health services to all
the students in the [______] County public school system."

"Until we were able to have school nurses at each of our schools, the issue was funding. The collaboration between the local health department and our district has made it more feasible to conduct physicals at school and complete immunizations for students."

"Our current collaboration with the local health department will result in a much higher quality school health program. We have never had school nurses in all our schools in the past. With health department nurses in place in every school in the near future, we look forward to a greatly improved health services program."

A strong partnership between a school district and a local health department is key in employing providers, ensuring strength and sustainability of funding, and expanding the array of services for the students. Health departments bring advantages that can benefit school health services.

A key reason for districts to partner with local health departments is financial sustainability. Health departments have a financial advantage because, except in the Passport service area, they are able to bill Medicaid and KCHIP for services provided in schools, while school districts are limited in their ability to be reimbursed. However, as previously mentioned, changes in the 2010-2011 school year limit health departments' Medicaid reimbursements, thus causing some health departments to reduce services offered to schools.

There are challenges to an effective partnership. For example, leadership and roles must be clearly defined in order to ensure that students' needs are being met. Written agreements between health departments and school districts can strengthen collaboration. Liability is also a concern for health departments since many school health services are not covered in the Public Health Practice Reference, which guides health department practices.⁴⁹ Despite obstacles, however, health departments offer opportunities for districts to increase the range of services and providers available to students. Many districts stated that effective partnerships with health departments benefit children and improve the quality of services provided.

Expand comprehensive services

"Our partnership with New Horizons Health Systems and our School-Based Health Center has changed. We are now billing and NHHS is using SBHC as a satellite office."

"School-based clinic in elementary schools provided by Mary Breckinridge Healthcare."

"Three primary care clinics in partnership with the health dept. and UK."

"Safe Schools Healthy Children grant allowed district to employ 3 school social workers and allowed us to contract for 2 FTE mental health counselors, 2 substance abuse counselors, and one prevention specialist. We have also contracted with the health dept. for 6 school nurses."

Some districts reported going beyond minimal health service provision to ensure their students received the care they needed. School-based health centers are an innovative approach to bring primary care to students at school. Many respondents to the provider and the school district surveys indicated that issues with access to care, such as transportation, keep children from receiving needed care in a health care home. School-based health centers offer the chance for students to receive care at the time of need to keep them in the classroom. As previously mentioned, research continually supports the positive impact school-based health centers have on health outcomes, reduced emergency room visits, improved attendance, and academic achievement.

The 2009 National Assembly on School-Based Health Care (NASBHC) Census identified 20 school-based health centers in Kentucky.⁵⁰ Results from this study found 21 districts offering primary care, which could indicate the presence of a school-based health center. While many school-based health centers receive grant funding initially, sustainability proves difficult. Some districts have been successful in sustaining and expanding their school-based health centers by seizing opportunities such as becoming a satellite office of a community clinic as well as utilizing KCHIP and Medicaid reimbursement to pay for services.

A few districts expanded mental health services by employing licensed mental health therapists. One district received a grant to hire social workers and to contract with licensed mental health therapists. Employing mental health providers allows districts to offer comprehensive mental health care to students at school, which takes out the referral process. While districts must find the resources to employ these types of providers, this can fill a large gap in the lack of mental health services available to students.



Seize local opportunities and resources

"We were able to collaborate with the Big Sandy Dental School at one of our pre-schools that does not have a full time nurse. Their dental hygiene students came to do visual dental screenings and referred students to dentists."

"Our dental program is unparalleled in the state. We screen and treat about 80% in every elementary school and have brought the number of students with severe dental disease from 76% in 2004 to under 25% in 2009. We bus children to the dentist weekly and daily until treatment is completed."

"Our school nurse has developed several programs that we use in our district. She partners with the Rural Dental Health Program, the local health department, and other agencies to bring programs in like "Take 10" that is implemented every day in our elementary school. We have an active Wellness Committee and have made several changes in our school following the board approved Wellness Plan. We also incorporate wellness, nutrition, and physical fitness in our curriculum through practical living."

Many districts are taking ownership of their students' health needs by seizing local opportunities to provide care for their students. Several districts reported collaborating with community partners to bring a vast array of health services to their students.

The Council of Chief State School Officers also promotes the concept of partnerships between schools and health and social service providers in order to be more effective in school health delivery. 51 Strong partnerships allow agencies to develop joint plans for achieving positive health outcomes and to establish administrative systems for sharing funding and other resources.

Most districts that collaborated with local providers, other than local health departments, reported doing so in the area of dental health. One district established a relationship with a local dentist to provide oral health screenings at school. If further care is needed,

the district works with the child's family to provide transportation for the student to receive dental care. Another district screens and treats over 80 percent of their students and buses those that need treatment to a dentist every week. While it may be difficult for districts to actually employ dentists, reaching out to dentists in their communities can help expand dental care offered through schools and have positive results for students.

Community partnerships require effort from school districts. Some providers and programs may approach schools and inquire about providing services. However, as previously mentioned, multiple providers from the provider survey reported that they did not provide school health services simply because no one had asked them to. The opportunity exists for expanded community collaboration by reaching out to local providers on school health.

Methodology

The Foundation for a Healthy Kentucky appointed a School Health Services Advisory Board of school health experts to provide guidance and insight to Kentucky Youth Advocates and the University of Louisville throughout the study. The Advisory Board actively assisted in reviewing proposals and choosing the contracted organization to conduct the study and continued to offer oversight throughout the project. The study involved two surveys, one sent to every school district and one sent to Kentucky health providers. Kentucky Youth Advocates conducted the study using cross sectional surveys, meaning the information was collected at a single point in time.

Prior to the survey of school districts, Kentucky Youth Advocates conducted a literature review and examined surveys used by other states on similar topics. With assistance from the School Health Services Advisory Board, Kentucky Youth Advocates and the University of Louisville identified the specific background research needed for the study and designed the survey questions to gain detailed information from each district. The survey went through a vigorous revision process until it was found by the Advisory Board to be ready for distribution.

The University of Louisville developed a web-based survey collection tool, which was used for the first part of the collection process. The survey was initially sent out by the Kentucky Association of School Superintendents and a reminder e-mail was sent one week later. During the remainder of 2009, a former superintendent assisted with follow-up to encourage superintendents to return the surveys. Kentucky Youth Advocates also followed up and re-sent the survey to non-responding districts. In late 2009, a third followup was sent to all non-responding districts, with the option to fill out the survey on a printable PDF. An independent contractor entered the received PDF surveys and assisted with data analysis. The initial goal for this study was a 100 percent response rate. At the end of the survey collection period, the response rate was 79 percent, which includes a representative sample of various geographical areas, district sizes, and income levels across Kentucky.

In order to enhance the results of the school health survey, Kentucky Youth Advocates also surveyed health providers. Kentucky Youth Advocates worked with specific medical associations to distribute the survey to association members. The survey reached community health clinics, hospitals, public health departments, private practice providers, and family resource and youth services center coordinators. The results of this survey informed the process and were included in the identification of promising practices. After both phases of the study were complete, Kentucky Youth Advocates engaged in qualitative data collection. Informal follow-up interviews were conducted with schools, government administrators, providers, and other relevant organizations.

Finally, Kentucky Youth Advocates analyzed the findings and produced this comprehensive report on school health services in Kentucky.



Appendix A - List of Relevant State School Heath Laws

- ▶ **KRS 156.029** Establishes membership and functions of Kentucky Board of Education
- KRS 156.160 Demonstrates areas in which the Kentucky Board of Education may promulgate regulations
- ▶ **KRS 156.496** Discusses design, components, and grant program for family resource and youth services centers
- ▶ **KRS 156.4977** Explains grants for family resource and youth services centers including a supplemental grant program to provide health services
- KRS 156.501 Establishes roles for the Kentucky Department of Education and the Department for Public Health in the area of student health services
- ▶ **KRS 156.502** Defines health services, states who may provide them, and allows for liability protection
- KRS 158.6451 Establishes goals for Kentucky's schools
- ▶ **KRS 158.830-836** Allows for self-administration of asthma and anaphylaxis medications
- ▶ **KRS 158.838** Allows emergency administration of glucagon and diazepam rectal gel
- ▶ **KRS 159.070** States that parents are permitted to enroll student in the school nearest their home
- ▶ **KRS 160.330** Establishes a waiver of fees for pupils who qualify for free and reduced price lunches
- ▶ **KRS 160.345** Requires adoption of schoolbased decision making councils and defines responsibilities
- ▶ **KRS 211.287** Requires funding from Department for Public Health for student health services
- ▶ KRS 211.736 Creates the Kentucky Diabetes Research Board
- ▶ **KRS 211.737** Creates the Kentucky Diabetes Research Trust Fund

- ▶ **KRS 314.011** Discusses delegation and scope of practice for nurses
- ► **KRS 314.470** Establishes the Nurse Licensure Compact
- KRS 438.050 Prohibits smoking on school premises except by adult employees in designated areas
- ▶ **KRS 605.115** Permits access to Medicaid funding by local school districts to serve eligible students with disabilities
- ▶ 16 KAR 2:060 Notes requirements for school nurse certification by the Education Professional Standards Board
- ▶ 16 KAR 4:010 Sets qualifications for professional school positions including school health coordinator
- ▶ **201 KAR 20:400** Defines delegation process for nursing tasks
- ▶ **702 KAR 3:285** Establishes requirements for school districts to be Medicaid providers
- ▶ **704 KAR 4:020** Addresses some aspects of school health services
- ▶ **704 KAR 7:120** Presents information related to home/hospital instruction
- ▶ **707 KAR 1:002-380** Establishes regulations for special education
- ▶ **902 KAR 8:170** Details financial management requirements for local health departments
- ▶ 907 KAR 1:715 Discusses Medicaid payments for school-based health services

Appendices 33

Appendix B – List of Educational Cooperatives and their Members

Central Kentucky Edu	cational Cooperative ((CKEC)			
Anderson Co.	Bardstown Ind.	Bourbon Co.	Boyle Co.	Burgin Ind.	Clark Co.
Danville Ind.	Frankfort Ind.	Harrison Co.	Jessamine Co.	Marion Co.	Montgomery Co
Nelson Co.	Nicholas Co.	Paris Ind.	Scott Co.	Washington Co.	Woodford Co
Green River Regional	Educational Cooperat	ive (GRREC)			
Adair Co.	Allen Co.	Barren Co.	Bowling Green Ind.	Breckinridge Co.	Butler Co.
Campbellsville Ind.	Caverna Ind.	Clinton Co.	Cloverport Ind.	Cumberland Co.	Daviess Co.
Edmonson Co.	Elizabethtown Ind.	Glasgow Ind.	Grayson Co.	Green Co.	Hancock Co.
Hardin Co.	Hart Co.	LaRue Co.	Logan Co.	Meade Co.	Metcalfe Co.
Monroe Co.	Ohio Co.	Owensboro Ind.	Russellville Ind.	Simpson Co.	Taylor Co.
Todd Co.	Warren Co				
Kentucky Educational	Development Corpora	ation (KEDC)			
Ashland Ind.	Augusta Ind.	Bath Co.	Bell Co.	Boyd Co.	Carter Co.
Elliott Co.	Fairview Ind.	Fleming Co.	Greenup Co.	Johnson Co.	Lawrence Co.
Lewis Co.	Martin Co.	Mason Co.	Menifee Co.	Middlesboro Ind.	Morgan Co.
Paintsville Ind.	Pike Co.	Pineville Ind.	Raceland-Worthingto	n Ind.	Robertson Co.
Rowan Co.	Russell Co.	Russell Ind.	Whitley Co.	Williamsburg Ind.	
Kentucky Valley Educ	ational Cooperative (K	(VEC)			
Breathitt Co.	Clay Co.	Floyd Co.	Harlan Ind.	Hazard Ind.	Jackson Ind.
enkins Ind.	Knott Co.	Laurel Co.	Lee Co.	Leslie Co.	Letcher Co.
Magoffin Co.	Owsley Co.	Perry Co.	Pikeville Ind.	Wolfe Co.	
Northern Kentucky Co	operative for Educati	onal Services (NVEC	:)		
Beechwood Ind.	Bellevue Ind.	Boone Co.	Campbell Co.	Covington Ind.	Dayton Ind.
Erlanger-Elsmere Ind.	Fort Thomas Ind.	Kenton Co.	Ludlow Ind.	Newport Ind.	
Pendleton Co.	Silver Grove Ind.	Southgate Ind.	Williamstown Ind.	Walton-Verona Ind.	
Ohio Valley Education	al Cooperative (OVEC)				
Anchorage Ind.	Bullitt Co.	Carroll Co.	Eminence Ind.	Franklin Co.	Gallatin Co.
Grant Co.	Henry Co.	Oldham Co.	Owen Co.	Shelby Co.	Spencer Co.
Trimble Co.	West Point Ind.				
Southeast/South Cent	ral Educational Coope	rative (SCSC)			
Barbourville Ind.	Berea Ind.	Casey Co.	Corbin Ind.	East Bernstadt Ind.	Estill Co.
Garrard Co.	Jackson Co.	Knox Co.	Lincoln Co.	Madison Co.	McCreary Co.
Mercer Co.	Monticello Ind.	Powell Co.	Pulaski Co.	Rockcastle Co.	Science Hill Ind
Somerset Ind.	Wayne Co.				
	ional Cooperative (W	KEC)			
Ballard Co.	Caldwell Co.	Calloway Co.	Carlisle Co.	Christian Co.	Crittenden Co.
Dawson Springs Ind.	Fulton Co.	Fulton Ind.	Graves Co.	Henderson Co.	Hickman Co.
Hopkins Co.	Livingston Co.	Lyon Co.	Marshall Co.	Mayfield Ind.	McCracken Co.
McLean Co.	Muhlenberg Co.	Murray Ind.	Paducah Ind.	Trigg Co.	Union Co.
Webster Co.					
Non-affiliated District	<u> </u>				
Bracken Co.					

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