CHILDREN'S HEALTH ISSUES

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FOREWORD

In 1997, The Health Foundation of Greater Cincinnati – then called The ChoiceCare Foundation – launched a multifaceted project to identify the health issues and to assess the health care needs of the Cincinnati area, encompassing portions of Ohio, Kentucky and Indiana. The purpose of the project was to guide the Foundation in its strategic planning and priority-setting processes.

This report is one of several topical reports the foundation prepared to assess regional health care needs. The information in this report helped shape the foundation's decision to focus its grantmaking in four areas of concern:

- Strengthening Primary Care Providers to the Poor
- School-Based Child Health Interventions
- Substance Abuse
- Severe Mental Illness

This report was updated in February 1999 with the latest available data for the Foundation's 20-county service area.

If you need assistance or have a question with regard to health data, the foundation may be able to help you. Contact:

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This report and others, as well as links to web sites containing health data, can be found on The Health Foundation of Greater Cincinnati's web site: *www.healthfoundation.org.*

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INTRODUCTION

Over the past 40 years unintentional injuries have replaced infectious diseases as the cause of greatest concern for children's health. Violence toward children is an ever-growing concern, as are psychological, emotional and learning disorders. Tobacco, alcohol and marijuana use, as well as sexual activities, often start in childhood.

The foundation for good health and good health habits begin with childhood. Prenatal and early childhood care are key in health promotion for children. Schools also present an excellent opportunity to influence health. Appropriate educational strategies can change attitudes and behavior. The school setting can also be used to facilitate access to child health services.

The purpose of this report is to use available data to provide an overview of children's health issues for the 20 counties that constitute the Foundation's service area. Even in a relatively small geographic area like Greater Cincinnati, the factors affecting children's health can vary significantly. What is a strength in one area may be a problem in another area. For example, lack of health insurance, lack of access to medical care, lack of immunizations, and/or violence may result in poor health outcomes for children. Poverty, early school dropout and teen pregnancy also play a part in the picture of children's health issues.

It is important to note that there are data shortcomings in this report. As we attempted to move from a national and state focus to a local focus, gathering local data proved quite difficult. Gathering *comparable* local data for interstate comparison proved very nearly impossible. Where data exist, they are often incomplete and inconsistent. Greater Cincinnati encompasses three separate states -- Ohio, Kentucky and Indiana -- and each state gathers, reports and disseminates data differently. Every effort was made to collect the most recent, reliable and comparable data regarding The Health Foundation of Greater Cincinnati's service area; however, readers should be aware that data contained in this report may be from different years and different sources, so may not be directly comparable. The data shortcomings in this report point to a need for quality data regarding children's health care in the Greater Cincinnati.

Note: For purposes of this report, "Greater Cincinnati" refers to The Health Foundation's 20-county service area, not the 14-county Cincinnati Metropolitan Statistical Area (CMSA).

I. A PROFILE OF CHILDREN'S HEALTH ISSUES

In many ways, the United States is the wealthiest of nations. We rank No. 1 in the world in gross national product, health technology, military technology and defense spending. We also have more millionaires and billionaires than any country in the world.

Nonetheless, there is justifiable concern for the health and future of significant numbers of our country's children. According to the Children's Defense Fund[1]:

- 1 child in 4 is born poor.
- 1 child in 11 lives at less than half the federal poverty level.
- 1 child in 3 is born to unmarried parents.
- 1 child in 8 is born to a teenage mother.
- 1 child in 4 is born to a mother who did not graduate from high school.
- 1 child in 5 is born to a mother who received no prenatal care in the first trimester of pregnancy.
- 1 child in 24 is born to a mother who received late or no prenatal care.
- 1 child in 13 is born at low birth-weight.
- 1 child in 12 has a disability.
- 1 child in 7 lives with a working relative but is poor nonetheless.
- 1 child in 7 has no health insurance.
- 1 child in 132 dies before age 1.
- 1 child in 680 is killed by gunfire before age 20.

Good childhood health is a mosaic of many physical and socioeconomic factors. Many child health problems are symptomatic of poverty. Health and poverty are so inter-related that many indicators of poverty have become predictors of child health problems. Poverty, for example, is very often the predictor of lack of health insurance, which in turn leads to lack of access to health care. Interestingly, the majority of uninsured children have working parents, but the parents work at jobs that do not provide insurance or a wage high enough for the family to afford it. Poverty is associated with issues as diverse as lack of immunizations, violence, school

dropouts and teen pregnancies. Teen pregnancies are associated with low birth-weight infants and higher infant mortality. It is easy to see the cyclical nature of many of the health issues of children.

It is erroneous to assume that only poor children experience health problems. They do, however, experience a disproportionate number of them. For this reason, this report examines poverty, uninsured children, and lack of access to care nationally, state and locally (when the data were available). Immunizations, teen pregnancies, prenatal care, infant mortality, and child and teen deaths will be discussed as representative issues that are important to the children of Greater Cincinnati. Finally, school dropouts will be discussed. Education and income are highly correlated; staying in school is an important way to stop the poverty cycle. In addition schools provide an excellent site for health education and sometimes as sites for basic health care delivery.

Poverty

Although poor neighborhoods include individuals and families with extraordinary resilience and strength, children who live in poverty are at greater risk of being sick and having inadequate health care, of being users of easily available drugs, of being exposed to violence, of being parents before they complete school, and of being incarcerated before they are old enough to vote.[2]

The federal government each year establishes official poverty guidelines in order to determine eligibility for federal programs. For children, these guidelines determine eligibility for Medicaid, the school lunch program, and enrollment in Head Start programs. The federal poverty measure is based on annual family income and family size; the annual family income used to calculate poverty statistics is pre-tax income, and it excludes non-cash public assistance and the Earned Income Tax Credit. The federal poverty level in 1998 is $10,850 for a family of two; $13,650 for a family of three; and $16,450 for a family of four.

In 1996, according to U.S. Census Bureau data, 13.7% of the total U.S. population lived at or below federal poverty level, while 12.7% of Ohio residents, 17% of Kentucky residents, and 7.5% of Indiana residents lived in poverty.[3]

Children, however, represent a disproportionately large numbers of those living in poverty.

POVERTY STATUS OF CHILDREN:
Percentage of Children Who Live At or Below Federal Poverty Level, By State and County

	AGES 0-4	AGES 5-17	TOTAL AGES 0-17
OHIO - 1990			17.8%
Adams	0.6%	34.4%	35%
Brown	1.7%	17.0%	18.7%
Butler	1.2%	12.0%	13.2%
Clermont	1.0%	10.9%	11.9%
Clinton	1.4%	13.3%	14.7%
Hamilton	2.0%	17.6%	19.6%
Highland	0.9%	18.5%	19.4%
Warren	0.4%	8.3%	8.7%
KENTUCKY - 1993	2.4%	25.7%	28.1%
Boone	1.7%	9.4%	11.1%
Bracken	1.7%	9.4%	11.1%
Campbell	2.0%	17.0%	19.0%
Gallatin	0.4%	21.2%	21.6%
Grant	2.0%	19.6%	21.6%
Kenton	2.3%	16.8%	19.1%
Pendleton	1.5%	21.8%	23.3%
INDIANA - 1990			
Dearborn	Not Available	Not Available	16.6%
Franklin			23.1%
Ohio			43.5%
Ripley			18.3%
Switzerland			10.4%

Sources:
Ohio data: Ohio County Profiles 1990
Kentucky data: Kentucky Population Research, University of Louisville, 1993
Indiana data: Indiana County Profiles 1990

Uninsured Children

In 1995, 9.8 million children – 14% of all U.S. children – under the age of 18 lacked health insurance. By ages, 13.3% of all children under age 6, 13.5% of all children ages 6-11, and 14.5% of all children ages 12-17 had no health insurance. Currently, in 1998, the Census Bureau estimates that more than 10 million American children – one in seven – are uninsured. [4]

Nationwide, more than 90% of uninsured children have one or more working parents, three in five uninsured children live in two-parent homes,[5] and almost 53% of Medicaid-covered children have at least one parent who works.[6]

In 1980, the majority of employees at medium to large companies had employers who paid 100% of family health insurance; in 1998, less than one-quarter do. Today, one in four workers has no access to employer-based family health insurance at any price.[7]

It seems that many working families either cannot afford to purchase insurance through their employers, or -- when employers do not offer insurance plans – families cannot afford to purchase private coverage on their own.

Percentage of Children Ages 0-17 Without Health Insurance, By State and County

OHIO	8.3%
Adams	10.0%
Brown	10.3%
Butler	12.0%
Clermont	11.7%
Clinton	10.2%
Hamilton	12.8%
Highland	10.6%
Warren	12.7%

KENTUCKY	
Boone	11.7%
Bracken	13.5%
Campbell	10.4%
Gallatin	15.5%
Grant	14.4%
Kenton	10.1%
Pendleton	14.6%

INDIANA	
Dearborn	Data Not Available
Franklin	
Ohio	
Ripley	
Switzerland	

Sources:
Ohio data: 1995 Estimates of Uninsured Children, The Ohio State University, Dept. of Statistics
Kentucky data: Good Samaritan Foundation Inc., Kentucky County Health Profiles, 1995

Lack of Access to Health Care

Children with health insurance – private or public – are more likely to have a family physician, and therefore have a regular and accessible source of health care. Children without health insurance generally do not have ready access to a physician. Furthermore, even if they have a family physician, parents without family health insurance often cannot afford to take their children to the doctor.

Children who lack regular health care and a family physician often arrive at school with undiagnosed illnesses. They are also more likely to have untreated vision problems, and may not even be able to see the blackboard. Likewise, children without health insurance are frequently absent from school for days and weeks for common illnesses because their families lack access to a physician and/or cannot afford to pay for prescriptions.

Uninsured children are 25% more likely to miss school. The majority of uninsured children with asthma never see a doctor, and many are hospitalized with acute asthma attacks that could have been prevented. Similarly, only one in three uninsured children with recurrent ear infections see a doctor, and many suffer permanent hearing loss from untreated ear infections.[8]

II. SELECTED CHILD HEALTH INDICATORS

Prenatal Care, Low Birth-Weight and Infant Mortality

Prenatal care should begin in the first trimester of pregnancy. Women who do not receive adequate early prenatal care are more likely to give birth to a low birth-weight infant (less than 2,500 grams or 5 pounds 8 ounces). Low birth-weight babies have a high probability of experiencing development problems. Women who lack health insurance are less likely to seek and obtain prenatal care, and those who live in poverty, high school dropouts and young adults (ages 18-24) are among the groups least likely to have health insurance.[9] Nationally, 7.3% percent of all children born in 1995 were low birth-weight. Low birth-weight babies represented 7.6% of all Ohio births, 7.6% of all Kentucky births, and 7.5% of all Indiana births in 1995. [10]

The infant mortality rate measures the rate that babies die before their first birthday. Two-thirds of all infant deaths occur in the neonatal period – the first 27 days after birth. The leading causes of infant deaths are congenital anomalies, short gestational time, unspecified low birth-weight, sudden infant death syndrome (SIDS), and respiratory distress syndrome.[11]

The infant mortality rate is closely related to socio-economic disadvantage and is considered a key indicator of the community's health. The infant death rate for children born into families living in poverty (13.5 deaths per 1,000 births) is more than 50% higher than that for children born into families with income above the poverty level (8.3 deaths per 1,000 births). In 1995, the national infant mortality rate of African-Americans (15 per 1,000) was more than twice that of whites (6 per 1,000). Communities that have a combination of high poverty, unemployment and illiteracy rates tend to have higher infant mortality rates, largely because the residents are less likely to receive neonatal intensive care.[12]

Prenatal Care, Low Birth-Weight & Infant Mortality Rates For Ohio, Kentucky and Indiana, By State and County, Various Years

COUNTY	Low Birth-Weight Percentage of all live births	Infant Mortality Rate Rate per 1,000 live births
OHIO	**(1996)[1] 7.5%**	**(1996) [1] 8.7 Rate**
Adams	7.1%	10.8
Brown	7.3%	9.9
Butler	6.9%	8.3
Clermont	5.9%	7.9
Clinton	5.5%	9.7
Hamilton	8.4%	9.8
Highland	5.1%	11.6
Warren	6.2%	7.7
KENTUCKY	**(1995)[2] 7.1%**	**(1995)[2] 7.3 Rate**
Boone	6%	7.5
Bracken	13.8%	27.5
Campbell	7.1%	6.5
Gallatin	6.8%	0
Grant	8.0%	6.4
Kenton	7.7%	6.8
Pendleton	7.4%	15.9
INDIANA	**(1996)[3] 7.5%**	**(1996) [3] 8.4 Rate**
Dearborn	4.5%	5.4
Franklin	7.6%	14.4
Ohio	6.9%	0
Ripley	7.4%	5.3
Union	8.4%	24

Sources:

1. Ohio Department of Health, 1996 Vital Statistics Summary
2. Good Samaritan Foundation Inc., Kentucky County Health Profiles, 1995
3. Indiana State Department of Health, Epidemiology Resource Center

Immunizations

Immunizations are among the most cost-effective medical interventions available to prevent diseases among children. It is estimated that every dollar spent on immunizations saves $20 on potential future medical costs.

In 1994, when it was estimated that only two-thirds of our nation's children had received all appropriate immunizations, the U.S. Public Health Service launched the Childhood Immunization Initiative. The initiative's goal was to immunize by 1996 at least 90% of children before their second birthday with critical doses of the routinely recommended vaccines for nine infectious diseases: diphtheria, tetanus, pertussis, poliomyelitis, measles, mumps, rubella, haemophilus influenza type b, and hepatitis B. The initiative exceeded its goal.

The Ohio Department of Health began collecting immunization data at a county level in 1998; these data will be available in late 1999. On a statewide basis, however, the Ohio Department of Health reports that more than 95% of children have received required immunizations by the time they enter school.

Likewise, the states of Kentucky and Indiana do not track immunizations by county; that data is available only if an organization has done a special survey. The Northern Kentucky Community Health Committee conducted such a survey to produce its *Community Health Plan 1996*. The survey indicated that by age 2, 71% of Boone County children, 72% of Campbell County children, 60% of Grant County children and 79% of Kenton County children received appropriate immunizations.

Teen Births

Teen pregnancy takes an enormous toll on mothers, their children and our society.

- Teen mothers face greater health risks than older mothers, including anemia, pregnancy-induced hypertension, toxemia, premature delivery, mortality and cervical trauma. Most of these risks are the result of inadequate prenatal care, rather than physical immaturity.
- Infants born to teen mothers are at higher risk of prematurity, low birth-weight, fragile health, need for intensive care, cerebral palsy, epilepsy and mental retardation.
- Children of teen parents can often become part of a cycle of poor health, school failure and poverty.

The teenage birth rate describes the number of births in a given year to a group of 1,000 teenage females. The following tables show teen birth rates for 1996.

1996 U.S. Teen Birth	10-14 Years	15-17 Years	18-19 Years
Rate per 1,000 teens	1.2	34	86.5

Source: U.S. Centers for Disease Control, Monthly Vital Statistic Report, 1996

1995 Ohio Teen Birth Rates by County

	Birth Rate per 1,000 Teens Ages 10-19
OHIO	**27.5**
Adams	37.3
Brown	35.8
Butler	25.9
Clermont	27.4
Clinton	30.3
Hamilton	31.1
Highland	43.6
Warren	20.7

Source: Ohio Vital Statistics Data 1995

1996 Indiana Teen Birth Rates by County

	Birth Rate per 1,000 teens by age group		
	Ages 10 -14	**Ages 15 - 17**	**Ages 18 - 19**
Dearborn	1	18	66
Franklin	0	27	108
Ohio	0	36	16
Ripley	0	12	110
Switzerland	0	17	63

Source: Indiana State Department of Health, Epidemiology Resource Center

1996 Kentucky Teen Birth Rates by County

	Birth Rates per 1,000 teens by age group		
	Ages 10-14	**Ages 15 - 17**	**Ages 18 - 19**
Boone	-	21	68
Bracken	4	52	79
Campbell	2.4	33	73
Gallatin	-	30	121
Grant	1.5	32	108
Kenton	1.5	35	90
Pendleton	-	19	99

Source: State of Kentucky Department of Public Health, Kentucky County Health Profiles 1995

Child and Teen Deaths

Unintentional injuries – accidents – are the leading cause of death among children and teenagers. The Child Death Rate – the number of deaths per 100,000 children ages 1-14 – has fallen for the past several years, due mostly to advances in medical care. There has been a general decrease in deaths from motor vehicle accidents, which is a major cause of death among children. Nationally, between 1985 and 1995, the child death rate fell steadily from 34 to 28 deaths per 100,000 children. In that same period, the rate fell from 30 to 27 in Ohio, but remained at 33 in Indiana and 29 in Kentucky. (Between 1985-1995, the child death rate decreased in 44 states, increased in three, and remained the same in three states; it ranged from a low of 18 in Massachusetts to a high of 47 in the District of Columbia.)[13]

Accidents, homicide and suicide accounted for 78% of all deaths among teenagers ages 15-19 in 1995. Accidents continue to account for twice as many teen deaths as any other cause. Nationally, the Rate of Teen Deaths by Accident, Homicide and Suicide was 65 (per 100,000 teens ages 15-19) in 1995, compared to 63 in 1985. During that 10-year period, deaths due to accidents (mostly automobile) declined by about 20%, while deaths by homicide doubled. Teen suicides increased slightly.

The Teen Death Rate by Accident, Homicide and Suicide Rate for 1995 was 50 for Ohio (total of 392 deaths); 74 for Kentucky (total 215 deaths); and 63 for Indiana (268 deaths).[14]

In Ohio, where 2,106 children under the age of 19 died in 1996, the leading causes of death were (in order): perinatal conditions, accidents, congenital anomalies, sudden infant death syndrome, homicide, malignant neoplasms, heart diseases, suicide, pneumonia and influenza, and

benign neoplasms.[15] Among children, accidents were the leading cause of death in Adams, Brown and Clermont Counties; perinatal conditions the leading cause in Butler and Hamilton Counties; and congential anomalies the leading cause in Clinton, Highland and Warren Counties.

In Kentucky, unintentional injuries accounted for nearly half of all death of children ages 1-14 in 1995 and they were the leading cause of children's deaths in Boone, Campbell, Grant and Kenton Counties. No children died in Bracken and Gallatin Counties in 1995, and in Pendleton County one child died of suicide.[16]

In Indiana, 193 children ages 5-14 died in 1996. Leading cause of death were motor vehicle injuries (50), other injuries (46); malignant neoplasms (22), homicide (14), nervous system diseases(11), and heart diseases (11). In the five Indiana counties covered by The Health Foundation, seven children died in 1996 -- four of them from accidental injuries. [17]

IV. SPECIAL OPPORTUNITIES IN CHILDREN'S HEALTH

While there is reason for concern for the health of the children in the 20-county area served by The Health Foundation of Greater Cincinnati, there are also many efforts to improve the health of our children. They range in scope from federal and state programs to grass-roots community activities. Here is a brief look at three of those efforts.

Expanded Medicaid Eligibility

The Balanced Budget Act of 1997 created a special opportunity to improve children's health by establishing the States Children's Health Insurance Program (CHIP), a $20.3 billion program that expands Medicaid benefits to millions of medically uninsured children under the age of 19. Most are the children of workers in low-paying jobs.

The legislation gave states three options for developing a program to fit the state's needs. The first option was to develop a separate insurance program that utilizes deductibles and shared costs. The second option was to expand eligibility for the existing Medicaid program. The third option was to create a program that is a combination of the two plans.

Ohio and Indiana chose to expand eligibility for Medicaid to those under the age of 19 who live at or below 150% of the federal poverty level. (While Indiana chose this option for at least its first year of operation, the state has not yet determined if the model will remain the long-term plan.)

Kentucky chose the combination approach -- a Medicaid expansion and a separate state insurance program. CHIP funding is used to expand Medicaid coverage to children ages 14 to 19 whose families live below 100% of the federal poverty level. (Previously, a child this age was covered only if the family income was 33% of the federal poverty level.) The separate insurance program, called KCHIP, is for children from birth to 19, whose family income is between 100% and 200% of the federal poverty level.

These programs became operational in January, 1998. However, eligibility for health insurance does not necessarily mean that a child has coverage. First, the child must be signed up and determined eligible. To assist communities in enrolling eligible children in Medicaid, the

federal government is providing matching funds to support outreach activities that inform and encourage parents to seek CHIP coverage for their children.

The Center for the Promotion of Lifelong Health

To better serve the needs of children in its 20-county area, The Health Foundation has funded Children's Hospital Medical Center to establish the Center for the Promotion of Lifelong Health. The mission of the Center for Promotion of Lifelong Health is to bring together key community groups/institutions in a collaborative effort that promotes the health of Greater Cincinnati's children and to use an evidence-based approach to initiate and evaluate community health intervention programs focused on children.

The Center for Child Health Statistics is a component of the Center for the Promotion of Lifelong Health.

Data is a powerful information tool. It can measure the impact of policy, serve as an early detection system, and establish a measure of accountability. The attempts to secure data for this paper demonstrated that comparable, longitudinal data on children is often difficult to obtain. The newly established Cincinnati Center for Health Data Statistics will develop a community resource center for outcomes evaluation of school health programs. It will develop the infrastructure to support longitudinal evaluation of the impact of school-based health interventions on lifelong health. The Center will prepare an annotated and referenced summary report of available measures of regional child health status. Development of a user-friendly web site is a priority.

The Health Education Center of Greater Cincinnati

The Health Education Center of Greater Cincinnati, currently in the planning stages, is a non-profit learning center for people of all ages that will include activities and programs to help children and adolescents understand health issues. The center’s primary goal is to provide enjoyable, exciting learning experiences that motivate individuals to value health and to develop a commitment to healthy behaviors.

A site for the center will be chosen in 1999. When it becomes operational, the center and its mobile outreach van will feature hands-on, multi-media learning through interactive displays.

Additional planned activities include health fairs, parent education, teacher workshops, support groups, and distance learning.

School-Based Health Centers

The school setting offers a rich opportunity to provide primary care services to children who are uninsured, underinsured and may lack a family physician. The Health Foundation of Greater Cincinnati has chosen School-Based Child Health Interventions as one of its four focused areas of grantmaking.

In 1998, the Foundation awarded a grant to the Franciscan Health System of the Ohio Valley to establish a school-based health center that provides primary care services to 3,300 students in eight schools in the Southwest Ohio School District for two years. This was the first of many such grants.

In May 1999, the Foundation will award up to 10 grants worth up to $50,000 each for the planning and development of school-based health centers in the foundation's 20-county service area. In late 1999, the Foundation then will award up to eight three-year grants worth up to $350,000 each for the start-up of school-based health centers in the Foundation's 20-county service area. (Requests for proposals for planning grants will be issued in March, and for start-up grants in May; contact The Health Foundation for more information.)

IV. Conclusions

The advent of antibiotics and immunizations during the past 40 years have seen a move away from infectious diseases as the greatest cause of concern for children's health. However, the playing field is not level and all children do not participate in health care in the same way. Specifically, being born into a poor family may mean that lack of insurance limits access to health care. New programs and activities such as the States Child Health Insurance Program, the Center for the Promotion of Lifelong Health, the Health Education Center of Greater Cincinnati and school-based health centers hold promise for the future. Access to good health care during childhood can be instrumental in preventing diseases and can be decisive in promoting a healthy society.

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