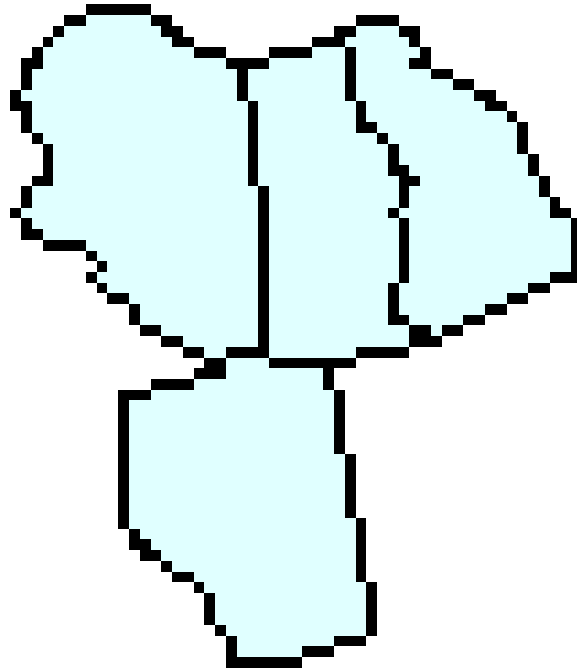


Northern Kentucky Health District Community Health Profile



NOTES ON HEALTH DATA

BACKGROUND:

The Northern Kentucky Health District *Community Health Profile* is a product of the Community Health Status Assessment (CHSA) Committee utilizing the Mobilizing for Action through Planning and Partnerships (MAPP) process. MAPP was developed by the National Association of County and City Health Officials (NACCHO) and the Centers for Disease Control and Prevention (CDC). The task of the CHSA committee was indicated by *Essential Public Health Service Number One: Monitor health status to identify community health problems*. This was to review the existing Community Health Profile, determine a course of action and provide recommended changes to the profile.

METHODOLOGY:

The CHSA committee reviewed the existing profile based on the Public Health Domains of the MAPP guidance document. The 11 Public Health Domains are:

- Community Assets and Quality of Life
- Environmental Health
- Demographic Characteristics
- Socioeconomic Characteristics
- Health Status Indicators
- Maternal and Child Health
- Behavior Risk Factors
- Sentinel Events
- Social and Mental Health
- Infectious Disease
- Health Resource Availability

Based on the review of these domains, indicators were removed from the profile as determined by statistical trends or if the local community did not consider them a priority issue. Several indicators were placed in different categories due to the “best fit” principle and others were incorporated into broader categories to provide a better “picture” of an indicator, such as age groups for Health Status Indicators. New indicators were added to the profile as needed.

The indicators provided in the following tables reflected those of the Public Health Domains. The tables are based on the most recent data available for the district, state and the nation when available. Unless otherwise indicated data is from 1999. Population data is from Census 2000. The data presented in this book are cross-sectional – they represent a snapshot of Northern Kentucky for a given year.

DISTRICT PROFILE

Community Assets and Quality of Life

Indicator ¹	Measure
Proportion of adults stating they are satisfied with the health system in the jurisdiction.	Approximately 90%
Proportion of persons stating they are satisfied with the quality of life in the jurisdiction	-

Analysis:

Satisfaction with the health system includes: the quality of health care, availability of health care, and the cost of health care. Approximately 90% of the adults in the Health District are satisfied with the quality of health care they receive and 83% are satisfied with the availability of health care when they need it. Almost 56% of the adults in the District feel that the cost of health care is reasonable.

Citizens who reside in rural counties are more likely to be dissatisfied with the quality of care they receive than those living in urban areas. Adults aged 18 to 29 and with income below the poverty level are also more likely to be dissatisfied with the quality of health care they receive.

Adults most likely dissatisfied with the availability to health care are male, between the ages of 18-45, and divorced/separated or never married.

Adults living in the District’s rural county (Grant) are more likely to feel the cost of health care is unreasonable than those residing in Boone, Campbell and Kenton Counties. This is primarily due to income and health insurance availability. The adults range in age from 30 to 64 and are high school graduates or have less than a high school education.

Environmental Characteristics

Indicator ^{2, 3, 4, 5, 6}	Measure
Area	820.4 sq. mi.
Population Density	400.6 sq. mi
District Location	Upper Bluegrass Region; Ohio and Licking River Watersheds
Main Topographical Features Rivers and Creeks Lakes Mountains Predominate Soil Type	Licking River; Ohio River; Bullock Pen; Banklick; Gunpowder Bullock Pen; Williamstown; Corinth; A.J. Jolly; Doe Run Rolling Hills Eden; Nicholson; Faywood; Rossmoyne; Jessup; Licking
Main Cities	Covington; Florence; Newport; Alexandria; Ft. Thomas; Erlanger; Elsmere; Edgewood; Independence; Dry Ridge; Williamstown; Crittenden; Walton; Union
% Urban	82.9%
% Rural	17.1%
Main Industries	LaFarge Gypsum; Newport Steel; Ashland Inc.; Mazak Corp.; DANA; Delta; Toyota Mfg. N.A.; Levi Strauss; Fidelity Investments; Citibank; Gap, Inc.; DHL; SSE Mfg.
Land Use % Agricultural % Crops % Livestock % Developed % Retail Commercial % Households % Industrial % Park and Recreational Land % Forest % Undeveloped % Other	52.9% 31.9% 21.1%

Analysis:

Northern Kentucky Health District is comprised of Boone, Campbell, Grant and Kenton Counties and is located in the Upper Bluegrass Region of the Commonwealth within the Ohio and Licking River Watersheds. The four counties cover an area of 820.4 square miles (sq. mi.) with a population density of 400.6 persons per sq. mi. The area is approximately 83% urban, mainly in Northern Boone, Campbell and Kenton Counties and 17% rural mostly within Grant County. Major cities within the region include: Alexandria, Covington, Crittenden, Dry Ridge, Florence, Independence, Newport, Walton, Union and Williamstown.

Environmental Health Measures

Human Health and Environmental Outcomes			
Indicators^{1, 6, 7, 8}	Unit of Measurement	Total Measure	
		District	State
Birth Defects (Congenital Anomalies)	Rate/1,000 total live births	2.4	3.6
Blood Lead Levels in Children	% children tested w/blood lead levels exceeding 10 micrograms/deciliter	13.2%	9.7%
Childhood Cancers	Rate/100,000 age specific (< age 12)	-	-
Environmentally Linked Cancers	Rate/100,000 age specific (> age 11)	-	-
Food and Water Borne Illnesses	Rate of reported cases/100,000 pop.	29.3	34.4
Forest Health	Tree (Mortality, Damage, Growth, Regeneration), Crown Condition	-	-
Hospitalization for Chronic Obstructed Pulmonary Disease (COPD)	Number of cases reported/patient days of hospitalization	865/3,331	-
Surface Water Not Meeting Standards for Use	% miles of streams and lakes measured not fully supporting all uses	11.1% Streams < 1.0% Lakes	11.8% Streams 50.1% Lakes
Threatened and Endangered Species	% change in the number of threatened/endangered species on federal/state lists	-	0
Wetlands	% change in the number of wetland acres	-	+ 0.5%

Analysis:

The percent of children tested, in Northern Kentucky; with blood lead levels exceeding 10 micrograms/deciliter suggests that there are areas within the district needing an evaluation for potential sources of lead poisoning.

The lakes and streams throughout the Commonwealth are becoming more and more polluted and are not able to fully support all uses (aquatic growth, recreation, etc). Increased expansion and waste run-off from industry are two of the leading causes of total maximum daily load deficiencies.

Environmental Health Measures

Environmental Stressors, Exposures and Pathways			
Indicators ^{6, 8, 9}	Unit of Measurement	Total Measure	
		District	State
Air Quality Pollutant Standard Index	Avg. Annual Pollutant Standard Index (PSI) Score	38	-
Commercial Lawn Care and Agricultural Chemicals	Tons of chemicals sold	-	Agri – 925 Thousand Comm. – 9.20 m lbs
Food Establishments With Critical Violations	% establishments w/critical violations	24.5%	-
Hazardous Waste Generated	Tons of hazardous waste produced	-	182,262 Tons
Open Dumps	Number of identified open dumps	45	2,304
Radon	Avg. picocuries/liter of air measured over a four-day exposure	2-4 pc/l	-
Soil and Groundwater Contamination	Number of identified sites in the county that have not been mitigated	-	62%
Solid Waste Generated	Tons of solid waste generated as a sum of waste disposed of and waste recycled	415,915 Tons	6,741,020 Tons
Toxic Release Inventory*	Lbs/tons of specific toxic chemicals released/yr & lbs/tons stored/transferred	2,549,437 lbs (R) 5,154,907 lbs (T)	93,317,537 lbs (R) 107,328,039 lbs (T)
Waste Recycled	Rate of material (tons) recycled/pop.	4,786 Tons/100,000	47,238 Tons/100,000

*“R “ indicates Released; “T” indicates Transferred

Note: Data for these areas are more readily available for the state than on the local level.

Analysis:

The Average Annual Pollutant Standard Index Score for the Health District indicates that our air quality is healthy. Recent trends of high heat and humidity, pushing heat indices over 100° F, have increased the frequency of smog (mostly ozone and particulate matter from diesel emissions) alerts, therefore producing periods of unhealthy air quality.

There is no statutory definition for open dumps; however the Clean County Program defines an open dump as one that contains anything that is one-half of a regular pick-up truck in volume.

The Toxic Release Inventory is an indicator of the quantity of specific toxic chemicals released annually into the air, water, or ground by industry measured in pounds/tons. These chemicals are toxic pollutants and can either be cancer producing or non-cancer producing. Industries throughout Kentucky generate significant amounts of toxic chemicals. According to the *Scorecard* some of the main cancer causing pollutants in Northern Kentucky are organic/inorganic compounds of Arsenic; Chromium and Chromium compounds; Lead and Lead compounds; Trichloroethylene; Nickel and Benzene. Non-cancer producing pollutants include Copper; Mercury and Mercury compounds and Manganese compounds.

Environmental Health Measures

Infrastructure, Sources, and Activities			
Indicators ^{6,8}	Unit of Measurement	Total Measure	
		District	State
Drinking Water Violations	Number of violations reported.	11	316
Garbage Collection	% households served	> 90%	80%
Public Sewer Systems	% households connected to a sewer system & a regulated & monitored sewage treatment facility	-	55%
Public Water Systems	% households connected to public water systems	-	87%
Smoke-free Workplaces	% businesses having a smoke-free workplace policy	36% [#]	-

[#]Restaurants only

Analysis:

It can be estimated that greater than 90% of the households within the Northern Kentucky Health District have regular garbage collection compared to eighty percent of Kentucky's households. Garbage collection in the Commonwealth is termed *universal* meaning it is not mandatory for every county or local jurisdiction. In the Health District only Grant and Kenton Counties have mandatory collection. Two of the factors that affect non-mandatory collection are open dumps and the burning of trash.

There are also differences in how apartment and condominium complexes are defined. In some areas, apartment complexes and condominiums are considered commercial collection instead of residential. This is due to the number of units per structure and if the landlord wants to pay for a dumpster versus each tenant being considered an individual household.

Demographic Characteristics Domain

Overall Demographic Information ^{2,3}								
1990 Population			2000 Population			Net Change		
District	State	U.S.	District	State	U.S.	District	State	U.S.
300,219	3,686,962	248,709,873	348,455	4,041,769	281,421,906	+16.1%	+9.6%	+13.2%

Demographic Profile: Age and Sex^{2,3}

Age	Population			Percent of Population								
	District			District			State			U.S.		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
<1	2,621	2,500	5,171	1.5	1.4	1.5	1.4	1.3	1.3	1.5	1.3	1.4
1-14	38,021	35,371	73,392	22.3	19.9	21.1	20.1	18.2	19.1	21.0	19.2	20.1
15-24	23,600	23,619	47,219	13.8	13.3	13.6	14.8	13.6	14.2	14.5	13.3	13.9
25-44	55,356	55,954	111,310	32.5	31.5	31.9	30.5	29.4	30.0	30.8	29.6	30.2
45-64	36,349	38,002	74,351	21.3	21.4	21.3	22.9	23.1	23.0	21.8	22.2	22.0
65+	14,611	22,401	37,012	8.6	12.6	10.6	10.3	14.6	12.5	10.4	14.4	12.4
Total	170,558	177,897	348,455	100.0	100.1	100.0	100.0	100.2	100.1	100.0	100.0	100.0

Demographic Profile: Race/Ethnic Distribution^{2,3}

Population Subgroup	District		State		U.S.	
	Number	Percentage	Number	Percentage	Number	Percentage
White	331,821	95.2	3,640,889	90.1	211,460,626	75.1
Black	8,567	2.5	295,994	7.3	34,658,190	12.3
Asian	2,543	0.7	29,744	0.7	2,475,956	0.9
Other	5,524	1.6	75,142	1.9	32,827,134	11.7

Hispanic/Latino	4,368	1.3	59,939	1.5	35,305,818	12.5
-----------------	-------	-----	--------	-----	------------	------

Note: The Hispanic/Latino population is a percent of the entire population.

Analysis:

In contrast to the United States, where approximately one-fourth of the population is non-white, there continues to be a large disparity between the white and non-white populations in the Commonwealth of Kentucky and Northern Kentucky Health District. Minority populations (African American, Asian/Pacific Islanders, Native Americans) comprise 4.8% of the District and about 10% of the Commonwealth's total population. These populations have grown steadily over the past decade but tend to be located in specific areas within the counties.

In comparison to Kentucky and the United States, the 25-44 year old age group in the District comprises a slightly higher percent of the population. It is interesting to note that greater than 50% of the population for the District, Commonwealth and the Nation fall within the 25-44 year old and 45-64 year old age groupings. This indicates that not only is our population becoming older so is the country.

Socioeconomic Characteristics Domain

Socioeconomic Measure^{2, 3, 5, 7, 10, 11}	District		State		U.S.	
Employment – Percent Unemployed	3.2		4.1		4.0	
Percent Below Poverty Level						
Children < 18 years of age	10.0		18.1		13.6	
Families	6.6		12.7		9.2	
Total	8.5		15.8		12.4	
Median Household Income*	\$44,248		\$33,672		\$41,994	
Special Populations	Number	% Total Pop.	Number	% Total Pop.	Number	% Total Pop.
Migrant persons						
Homeless persons						
Non-English speaking persons	12,204	3.5	148,473	3.9	46,951,595	17.9
Persons age 25 and older with less than a high school education	40,331	18.1	685,000	25.9	35,715,625	19.6
Persons age 25 and older with a college or higher level of education	47,791	21.4	453,469	17.1	44,462,605	24.4
Single parent families	12,121	34.9	141,133	37.6	9,752,863	39.3
Dropout Rate	1.6%		3.2%			
Persons without health Insurance	12.7 (NKADD)		14.1		11.8	
Population per Primary Care Provider	946.9		1,017.3		-	
WIC eligibles: Percent of total population	32.1%		30.2%		-	
WIC recipients: Percent of eligible population	5.9%		9.3%		-	
Medicaid eligible, FY Percent of total population	7.6% (FY99)		13.7% (FY99)		-	
Medicaid recipients, Undup. FY: Percent of total population	5.0% (FY99)		11.2% (FY99)		-	
Food stamp recipients: Percent of total population	4.8%		10.1%		-	
Total AFDC recipients: Percent of total population	1.3%		2.4%		-	

Analysis:

In comparing the socioeconomic indicators available for Northern Kentucky, Kentucky and the Nation, this area has a lower rate of poverty, a higher median household income and a lower rate of unemployment. Northern Kentuckians possess a lower high school dropout rate than the state and nation. The District also exhibits a higher level of educational attainment than Kentucky, but is slightly lower the country. There is a strong, positive correlation between education and health - the more educated populations exhibit better health habits and healthy populations learn better. A strong relationship exists between income and health – higher income populations are more likely to practice preventative health.

Community Health Status Measures

Indicator ⁷	Measure
Percent respondents reporting their health status as: Excellent Very Good Good Fair Poor	BRFSS 2000 U.S. and State (Fair and Poor) District Data for ADD: 14.6%; KY-21.6%; U.S. – 14.0%

LEADING CAUSES OF MORTALITY BY AGE GROUP ^{7, 12, 13}								
Disease/Condition by Age Group	County Rate				District Rate	YPLL	State Rate	U.S. Rate
	Boone	Campbell	Grant	Kenton				
AGE <1-24								
Motor Vehicle Crashes	3.3	6.5	13.0	9.5	7.4	-	16.1	13.2
Malignant Neoplasms	3.3	0.0	0.0	2.0	1.6	-	2.3	3.3
Male								
Female								
White	3.3			2.0	1.7		2.4	
African American							1.6	
Other								
Heart Disease	0.0	0.0	13.0	4.9	1.6	-	2.3	2.6
Chronic Obstructed Pulmonary Disease	-	-	-	-	-	-	<1.0	<1.0
Cirrhosis of Liver	-	-	-	-	-	-	-	<1.0
White								
African American								
Other								
Diabetes Mellitus	-	-	-	-	-	-	-	<1.0
White								
African American								
Other								
Influenza & Pneumonia	-	-	-	-	0.0	-	<1.0	<1.0
White							<1.0	
African American							4.1	
Other								
Female Breast Cancer	-	-	-	-	-	-	-	-
Lung Cancer	-	-	-	-	-	-	-	<1.0
Cervical Cancer	-	-	-	-	-	-	-	<1.0
Colorectal Cancer	-	-	-	-	-	-	-	<1.0
Stroke	-	-	-	-	-	-	<1.0	<1.0
All Causes	59.0	42.4	65.0	64.3	57.5	-	78.5	74.2
Male								
Female								
White	60.1	40.0	65.5	55.7	53.4		70.0	
African American		3.3		283.6	249.8		118.5	
Other								

Community Health Status Measures

LEADING CAUSES OF MORTALITY BY AGE GROUP ^{7, 12, 13}								
Disease/Condition by Age Group	County Rate				District Rate	YPLL	State Rate	U.S. Rate
	Boone	Campbell	Grant	Kenton				
AGE 25-64								
Motor Vehicle Crashes	13.1	6.6	27.1	7.7	10.0	-	20.0	15.4
Malignant Neoplasms	82.7	127.4	153.8	124.1	116.3	-	135.3	110.2
Male								
White	84.2	127.1	154.6	124.7	116.8		134.1	
African American		232.0		142.7	139.6		161.6	
Other								
Heart Disease	52.2	98.9	72.4	70.4	73.1	-	105.6	45.2
Chronic Obstructed Pulmonary Disease	4.4	15.4	18.1	23.0	16.1	-	18.0	11.0
Cirrhosis of Liver	2.2	13.2	18.1	9.0	8.9	-	10.3	11.1
White				142.7	104.7			
African American								
Other								
Diabetes Mellitus	6.5	24.2	18.1	15.4	15.5	-	13.0	11.5
White	6.6	24.5	18.2	15.9	15.9		12.3	
African American							8.6	
Other								
Influenza & Pneumonia	-	-	-	1.3	0.6	-	2.7	4.0
White							2.2	
African American							8.6	
Other								
Female Breast Cancer	4.4	15.4	45.2	11.5	12.7	-	13.0	-
Lung Cancer	28.3	50.5	36.2	44.8	41.5	-	47.5	30.8
Cervical Cancer	-	-	-	-	-	-	-	1.8
Colorectal Cancer	-	-	-	-	-	-	-	9.6
Stroke	4.4	19.8	9.0	7.7	10.0	-	14.8	12.9
All Causes	235.1	393.3	434.2	354.5	338.8	-	427.5	368.0
Male								
Female								
White	237.2	388.1	436.4	343.4	333.4		418.0	
African American	317.5	1160.1		856.3	837.4		594.9	
Other								

Community Health Status Measures

LEADING CAUSES OF MORTALITY BY AGE GROUP ^{7, 12, 13}								
Disease/Condition by Age Group	County Rate				District Rate	YPLL	State Rate	U.S. Rate
	Boone	Campbell	Grant	Kenton				
AGE 65+								
Motor Vehicle Crashes	14.4	27.3	0.0	6.2	13.8	-	27.8	22.5
Malignant Neoplasms	1240.4	1363.0	1502.7	1221.2	1083.8	-	1229.8	1129.5
Male								
Female								
White	1236.9	1358.2	1503.4	1216.7	1280.4		1227.5	
African American		2222.2		1396.6	1455.3		1328.1	
Other								
Heart Disease	1687.6	1917.3	1551.1	1782.5	1791.8	-	2046.7	1758.1
Chronic Obstructed Pulmonary Disease	375.0	345.3	436.3	437.9	397.6	-	385.8	313.0
Cirrhosis of Liver	14.4	18.2	0.0	30.8	22.1	-	30.6	30.4
White								
African American								
Other								
Diabetes Mellitus	158.6	327.0	436.3	222.0	254.0	-	171.6	150.1
White	145.5	330.3	436.5	215.5	249.9		167.2	
African American	2941.2			558.7	623.7		254.4	
Other								
Influenza & Pneumonia	-		145.4		8.3	-	109.5	165.8
White		82.6	145.5	95.1	75.8		110.0	
African American							108.5	
Other								
Female Breast Cancer	167.7	148.3	168.6	148.1	93.9	-	116.5	-
Lung Cancer	375.0	336.2	630.2	376.2	378.2	-	414.0	314.0
Cervical Cancer	-	-	-	-	-	-	-	4.6
Colorectal Cancer	-	-	-	-	-	-	-	125.8
Stroke	490.4	454.3	242.4	419.4	443.5	-	499.8	430.2
All Causes	5163.7	5933.7	5283.6	5656.0	5596.2	-	5874.5	5203.6
Male								
Female								
White	5165.9	5937.4	5286.1	5716.1	5652.3		5865.1	
African American	7407.4	5555.6		4189.9	4573.8		6322.5	
Other								

Community Health Status Measures

LEADING CAUSES OF MORTALITY BY AGE GROUP ^{7, 12, 13}								
Disease/Condition by Age Group	County Rate				District Rate	YPLL 75*	State Rate	U.S. Rate
	Boone	Campbell	Grant	Kenton				
ALL AGES								
Motor Vehicle Crashes	8.4	9.2	19.2	8.2	9.2	4,055	19.6	15.5
Malignant Neoplasms	149.9	238.5	230.9	201.1	199.9	61,093	225.6	201.6
Male								214.5
Female								189.4
White	151.4	239.1	231.9	202.8	195.2		229.0	212.5
African American		311.9		196.6	195.0		202.4	177.7
Other								80.6
Heart Disease	169.1	293.6	197.2	234.3	231.3	69,736	311.5	265.9
Chronic Obstructed Pulmonary Disease	33.6	51.6	52.9	60.5	51.1	14,539	57.7	45.5
Cirrhosis of Liver	2.4	9.2	9.6	8.2	7.1	2,416	9.2	9.6
White								10.1
African American				65.5	48.8			8.1
Other								6.1
Diabetes Mellitus	16.8	53.9	52.9	32.6	35.4	10,299	28.2	25.1
White	15.9	54.8	53.1	32.5	35.5		27.9	24.3
African American	178.3			43.7	48.8		35.1	23.5
Other								14.2
Influenza & Pneumonia	4.8	10.3	14.4	10.9	8.0	-	15.3	23.4
White		10.5	14.5	11.3	8.5	2,623	15.4	25.2
African American							15.3	16.9
Other								8.8
Female Breast Cancer	21.1	37.5	66.8	31.5	32.9	5,058	30.1	29.5
Lung Cancer	46.8	68.8	81.8	65.2	62.6	18,963	76.7	55.8
Cervical Cancer	4.7	8.8	0.0	5.2	5.7	-	4.3	3.0
Colorectal Cancer	21.6	27.5	14.4	19.0	21.6	-	22.2	21.0
Stroke	43.2	67.7	28.9	50.3	51.7	15,210	70.2	61.4
All Causes	580.6	969.1	779.2	834.1	803.0	246,149	983.2	877.0
Male								882.0
Female								872.2
White	585.9	971.6	782.6	840.3	807.6		995.3	917.7
African American	534.8	1143.5		852.1	861.4		923.4	817.7
Other								332.8

*YPLL-75 cannot be calculated for the Health District. The numbers provided are for the ADD.

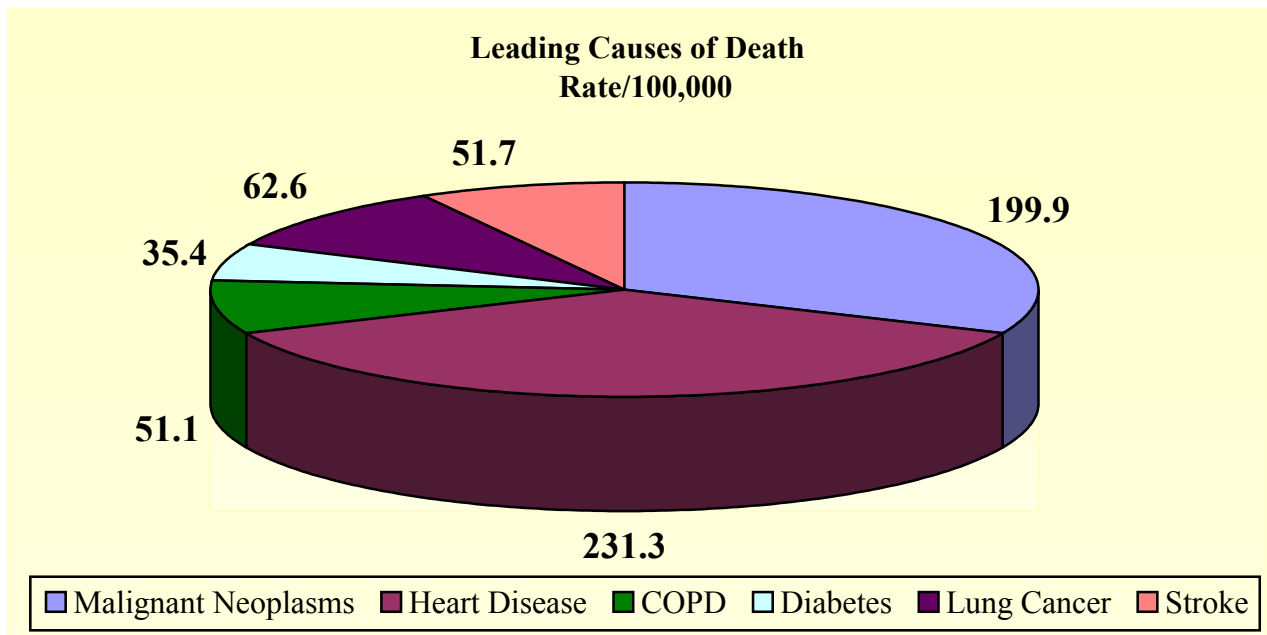
Analysis:

Results of the Behavior Risk Factor Surveillance System 2000 Report (BRFSS) are enumerated for the 8 county Northern Kentucky Area Development District (NKADD), Boone, Campbell, Carroll, Gallatin, Grant, Kenton, Owen and Pendleton, the Commonwealth and a median for the country. Respondents reporting their health status as both fair and poor (combined as a single percent in the BRFSS) were 14.6% for the NKADD, 21.6% for Kentucky and a national median of 14%. This data shows the vast majority of respondents consider their health status as good or better.

Heart disease is the leading cause of death for all persons 25 years of age and older, this is followed by cancer diabetes, stroke and Chronic Obstructed Pulmonary Disease (COPD). Cancer incidence and mortality by specific types will be discussed separately.

Mortality rates for heart disease, diabetes and stroke have been decreasing over the past 5 – 10 years indicating that people at risk are beginning to practice healthier lifestyles. These lifestyle changes are essential to the continuing decrease of these three inter-related conditions.

COPD is the fourth leading cause of death in the United States and tends to occur more frequently in persons 65 years and older. This factor is also true for the Health District and Kentucky. This can be directly related to years of smoking and increased exacerbation during the periods of poor outdoor air quality indices related to smog, molds and other particulate matter.



Community Health Status Measures

CANCER INCIDENCE						
Cancer Type ^{14,15}	District		State		U.S.	
	Number of Cases	Rate/100,000 Population	Number of Cases	Rate/100,000 Population	Number of Cases	Rate/100,000 Population
Lung	285	84.2	3,887	98.1	170,000	62.3
Female Breast	240	70.9	3,275	82.7	175,000	125.5
White/Other*	248	128.0	3,094	149.9		
African-American*	5	196.7	181	137.5		
Colorectal	194	57.3	2,551	64.5	132,700	48.6
White/Other*	221	66.7	2,398	64.2		
African-American*	2	46.2	153	69.5		
Prostate	158	96.4	2,606	135.5	179,300	134.5
Cervical	17	9.7	225	11.0	12,800	9.2
White						
African-American						
Other						
Oral	29	8.6	417	10.3	29,800	10.9
Melanoma	61	18.0	1,085	27.1	44,200	16.2

* Area Development District

CANCER MORTALITY						
Cancer Type ^{7,13}	District		State		U.S.	
	Number of Cases	Rate/100,000 Population	Number of Cases	Rate/100,000 Population	Number of Cases	Rate/100,000 Population
Lung	212	62.6	3,037	76.7	152,156	55.8
Female Breast	57	32.9	614	30.1	41,144	29.5
White					35,073	15.6
African-American					5,358	15.4
Other					713	5.4
Colorectal	73	21.6	880	22.2	57,155	21.0
White					49,374	22.0
African-American					6,777	19.4
Other					1,004	7.6
Prostate	33	20.1	461	24.0	31,729	23.8
Cervical	10	5.7	88	4.3	4,205	3.0
White					3,229	1.4
African-American					838	2.4
Other					138	1.0
Oral	13	3.8	126	3.2	7,486	2.7
Melanoma	10	3.0	112	2.8	7,215	2.6

Analysis:

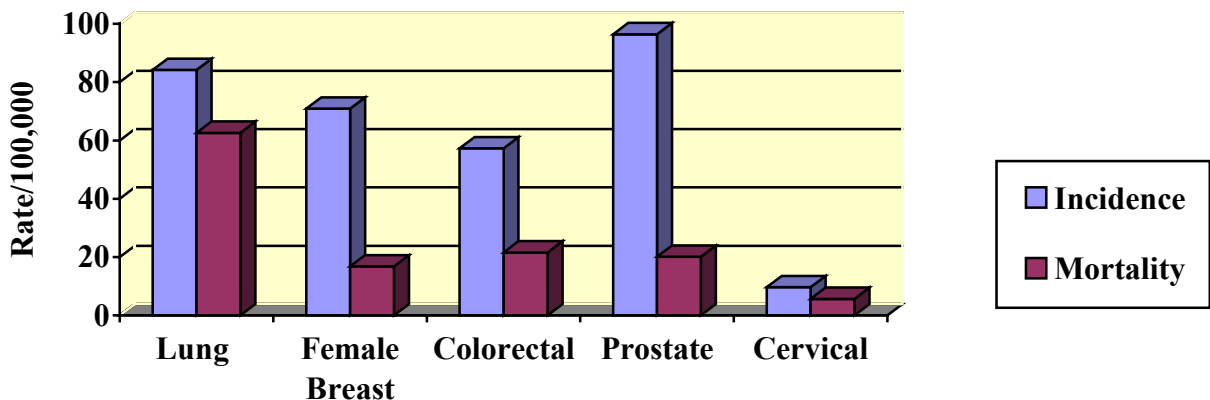
The Kentucky Cancer Registry provides incidence data for all forms of the disease, but does not include ethnic breakdowns for all of them. For those types that ethnic breakdown is provided, there are only two major categories: white/other and African American and the data is for Area Development Districts (ADD) and not county specific.

The female breast cancer incidence among African American women in the Northern Kentucky ADD is vastly disproportionate in contrast to the state where there is no disparity, in fact the rate for this group is lower than that for white/other females. Breast cancer is the second leading cause of death among females in the United States. The mortality rate for female breast cancer in the Health District is significantly lower than in the Commonwealth and is more in line with the country.

Incidence of colorectal cancer increases with age in both males and females. It occurs six times more often among persons ages 65 and older than among those 40-64 years of age. Seventy-three percent of newly diagnosed cases occur in persons 65 years of age and older. It occurs more frequently in men than in women. Because of increased survivability the mortality rate from colorectal cancer is significantly lower than the incidence rate.

Recent concern has been focused on oral and skin cancer. Incidence rates for oral cancer occur more often in men than women. The greatest incidence rate occurs in men 40 years of age and older. Causes of oral cancer include smokeless tobacco, excessive use of alcohol and smoking (cigarettes, cigars and pipes). The first year survival rate is over 80% and declines over the years. Skin cancer (melanoma) is a highly curable with approximately one million cases occurring annually. It is more common among individuals with lighter pigmented skin. White people have an incidence rate of greater than 10 times higher than in African Americans.

**Cancer Incidence and Mortality
Leading Causes**



Maternal and Child Health

PERINATAL INDICATORS							
Indicators ⁷	County Rate				District Rate	State Rate	U.S. Rate
	Boone	Campbell	Grant	Kenton			
Resident live births by age of mother (Rate = live births per 1,000 population)*							
< 15-19 Years	21.0	30.3	39.9	29.6	28.3	29.9	25.4
15-17 Years	25.3	35.4	22.3	34.9	31.7	30.2	28.7
All Ages	16.2	15.4	19.4	16.1	16.1	13.8	14.5
Low birth weight (Rate = percent of live births)/Very low birth weight (Rate – per 1,000 live births)							
< 2,500 Grams	6.9	6.8	6.9	8.1	7.4	8.3	7.6
< 1,500 Grams	23.6	12.7	0.0	13.9	15.0	15.9	15.0
Prenatal Care (Rate = percent of live births)							
Care Began in First Trimester	90.4	90.6	86.1	89.3	89.6	86.2	80.8
Care Began in Second Trimester	7.2	7.5	12.4	8.5	8.2	10.8	12.6
Care Began in Third Trimester	1.3	0.6	1.2	1.3	1.1	1.9	2.6
No Prenatal Care	1.0	1.4	0.5	1.2	1.1	0.8	1.1
Not Reported	0.3	0.1	0.5	0.1	0.2	1.0	2.6
Taking Folic Acid Daily [#]	-	-	-	-	56.5	42.4	43.8
Aware Folic Acid Prevents Birth Defects [#]	-	-	-	-	49.4	45.0	41.6
Live births with mortality/birth defects (Rate = per 1,000 live births. Perinatal per 1,000 total births)							
Perinatal Mortality	6.6	4.5	7.4	7.1	6.4	9.8	3.6
Stillbirth	1.5	2.2	7.4	3.8	3.1	6.4	
Under 1 Week	5.2	2.2	0.0	3.4	3.3	3.4	3.8
Infant Mortality	8.1	6.0	2.5	7.2	6.8	7.1	7.1
Neonatal Mortality	5.9	3.7	0.0	5.1	4.6	4.6	4.7
Congenital Anomalies	3.6	3.4	4.8	4.1	2.4	3.6	1.4

* Population is for females in the specified age groups, except for all ages, which is based on total population.

Under 15 years refers to females ages 10-14.

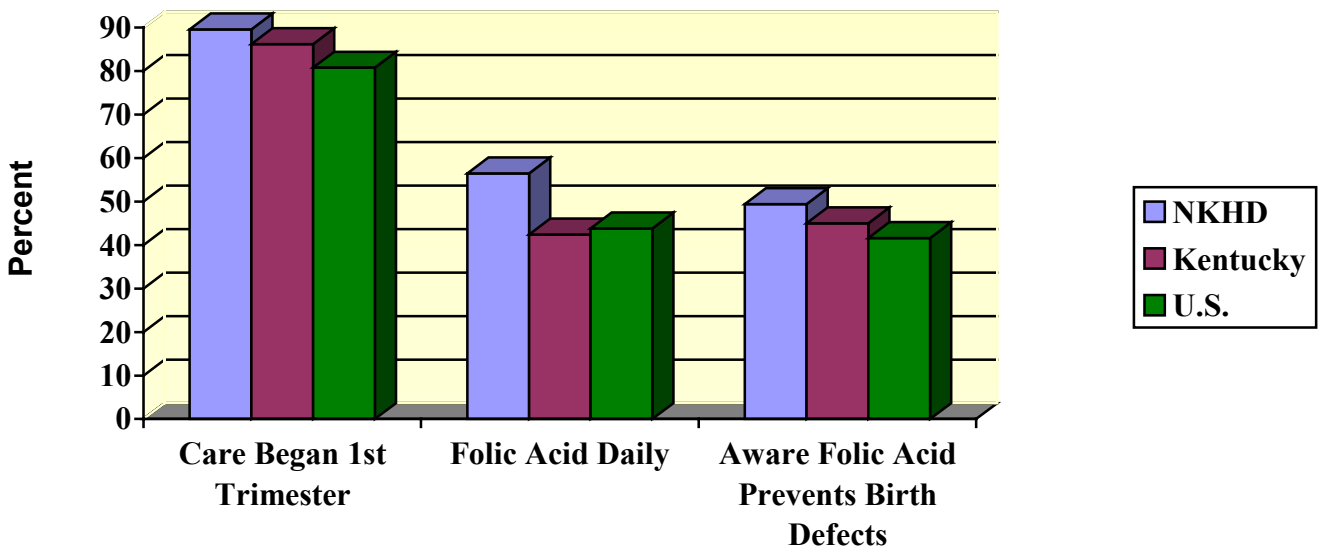
[#] Indicates data is only provided for the Area Development District and not county specific.

Analysis:

On mostly all of the perinatal indicators, Northern Kentucky fares better than the state and the nation. Almost 90% of women in the Health District began prenatal care during the first trimester and are less likely to avoid prenatal visits altogether. With the introduction of folic acid screening in 1997, the number of women ages 18-44 not taking folic acid daily and not aware that it prevents birth defects, particularly neural defects, has decreased. The most recent data, provided in the Kentucky Behavioral Risk Factor Surveillance System 2000 Report, indicates that women the Health District are more aware of the screening requirements than the state and country. There are fewer low birth weight babies, < 2,500 grams, born in the District, than in Kentucky and the country. The rate for very low birth weight babies, < 1,500 grams, born in the District and the United States were better than that of Kentucky. Low birth weight babies place financial strain on the health system. Poor and unknown prenatal care and unhealthy lifestyles such as smoking, alcohol use, lack of physical activity and poor nutrition, are risk factors for low birth weight. The best ways to prevent this are proper prenatal care and practicing healthy lifestyles.

The overall teen birth rate for Northern Kentucky is 28.3 live births per 1,000 population in the age group <15-19 years. The Kentucky Department for Public Health, Surveillance and Health Data Branch defines <15 as ages 10-14. The rate for 15-17 year old females in the District is 31.7 live births per 1,000 population in the specific age group. Another risk factor for LBW is the age of the mother, younger than 18 or older than 35 years of age.

Selected Prenatal Indicators



Behavioral Risk Factor Domain

BEHAVIORAL RISK FACTOR SURVEILLANCE			
Risk Factor/Health Measure^{7, 12}	Percent		
	District	State	U.S.
Tobacco Use (% Total Population)	52.7	53.5	47.5
Illegal Drug Use (% Total Population)	-	5.6	6.4
Binge Drinking (% Total Population)	-	18.3	20.2
Nutrition (% Total Population)	23.5	22.7	23.1
Obesity: Proportion of Population Age 18 and over who are obese)	19.6	23.0	20.1
Exercise (% Total Population)	14.4	14.3	21.8
Sedentary Lifestyle (% Total Population)	32.6	41.1	26.9
Seatbelt Use (% Total Population)	-	60.0	-
Child Safety Seat Use (% Total Population)	-	87.0	-
Bicycle Helmet Use (% Total Population)	-	-	-
Pap Smear (% Women 18+ Years) Past 3 Yrs.	89.4	86.4	86.8
*Mammography (% Women by Age Group) 40-49 50-59 60+ Mammography Ultrasound 30-39	(50+) 69.1	(40+) 87.1 (50+) 69.8	(50+) 71.1

* Screening mammograms

Sentinel Events

Vaccine Preventable Diseases						
Type ^{6, 16}	District		State		U.S.	
	Number	Rate	Number	Rate	Number	Rate
Measles Incidence Rate	-	-	2	< 1.0	81	< 1.0
Mumps Incidence Rate	-	-	1	< 1.0	7	< 1.0
Rubella Incidence Rate	-	-	1	< 1.0	152	< 1.0
Pertussis Incidence Rate	4	1.1	56	1.4	86	< 1.0
Tetanus Incidence Rate	-	-	-	-	26	< 1.0
Hepatitis B Incidence Rate	11	3.2	78	1.9	6,646	2.4
Invasive <i>Hemophilus influenza</i> B (Hib)	2	<1.0	12	<1.0	1,212	< 1.0
Influenza Incidence Rate (all types)	11	3.2	216	5.3	-	-

Avoidable Hospitalizations						
Indicator ¹	District		State		U.S.	
	Number	Rate	Number	Rate	Number	Rate
COPD Exacerbation	165	47.4	-	-	-	-
Asthma	1,291	370.5	-	-	-	-
Pediatric (≤ 21 y/o)	594	529.3	-	-	-	-
Adults	697	295.1	-	-	-	-
Cellulitis	1,077	309.1	-	-	-	-
Congestive Heart Failure	5,423	1,556.3	-	-	-	-
Diabetes Ketoacidosis	196	56.2	-	-	-	-
Gangrene	92	26.4	-	-	-	-
Influenza Pneumonia	2,749	788.9	-	-	-	-
Malignant Hypertension	92	26.4	-	-	-	-
Hypokalemia	1,451	276.8	-	-	-	-

Late Stage Cancer Diagnosis						
Indicator ¹⁴	District		State		U.S.	
	Number	Rate	Number	Rate	Number	Rate
Cervical Cancer	-	-	-	-	-	-
Breast Cancer	66	37.8	943	46.3	-	-

Sentinel Events

Workmen's Compensation						
Indicator^{10, 13}	District		State		U.S.	
	Number	Rate	Number	Rate	Number	Rate
Injuries	3,361	1,817.8	47,832	3,413.5	-	-
Death	3	1.6	117	5.9	5,651	2.6

Social and Mental Health

HEALTH RELATED INCIDENTS							
Incident^{6, 12}	County Rate				District Rate	State Rate	U.S. Rate
	Boone	Campbell	Grant	Kenton			
ADULT ABUSE (FY 98)							
Adult Abuse	257.4	534.0	285.4	481.2	431.0	330.8	-
Spouse Abuse	522.0	590.5	355.0	594.6	562.2	436.9	-
Neglect By Caretaker	30.2	28.3	7.0	15.1	21.7	29.3	-
Self Neglect	21.3	55.0	0.0	62.4	47.1	59.3	-
Exploitation	0.0	9.4	0.0	6.6	5.4	12.6	-
CHILD ABUSE/NEGLECT							
Physical Abuse	128.6	219.7	350.3	346.0	329.4	385.3	-
Sexual Abuse	41.5	56.0	16.7	145.9	119.3	109.0	-
Neglect	120.3	400.7	433.7	506.6	478.5	641.2	-
VIOLENT CRIMES – OCCURRENCE							
Homicide	0.0	1.1	4.8	6.1	3.2	5.3	-
Suicide Total Population	7.2	82.5	14.4	11.5	10.6	11.9	-
Teen Population					0.0	2.2	
OTHER							
Average number of days, during the past 30 days, for which adults report that their mental status was not good.	-	-	-	-	14.0	14.4	9.6
Psychiatric admissions	-	-	-	-	-	-	-

Infectious Diseases

REPORTABLE DISEASES						
Diseases reported ^{6, 7, 16}	District		State		U.S.	
	Number Reported	Rate	Number Reported	Rate	Number Reported	Rate
FOOD AND WATER BORNE DISEASES						
Foodborne Diseases	90	25.8	1,268	31.4	58,145	20.7
Amebiasis	-	-	-	-	-	-
Hepatitis A	2	< 1.0	50	1.2	12,275	4.4
<i>E.coli</i> O157:H7	10	2.9	72	1.8	4,910	1.7
Infant Botulism	-	-	-	-	-	-
VECTOR BORNE DISEASES						
West Nile	0	0	0	0	0	0
Rabies	-	-	-	-	2	< 1.0
Lyme Disease	2	< 1.0	12	< 1.0	13,309	4.7
Rocky Mountain Spotted Fever	-	-	-	-	424	< 1.0
SEXUALLY TRANSMITTED INFECTIONS						
Chlamydia	736	211.2	7,979	197.4	702,093	257.5
Gonorrhea	278	79.8	3,476	86.0	358,955	131.6
Syphilis (primary/secondary)	-	-	85	2.1	5,979	2.2
HIV (cumulative)	126	36.2	2,560	63.3	440,044	156.4
AIDS (total cases)	289	83.7	3,427	84.8	748,393	265.9
OTHER						
Hepatitis C	6	1.7	36	< 1.0	2,895	1.0
Viral Meningitis	-	-	-	-	-	-
Tuberculosis	10	2.9	114	2.8	12,942	4.6
Invasive Group A Streptococcal Infections	12	3.4	-	-	-	-
Other Bacteria Meningitis	1	< 1.0	-	-	-	-
Invasive Meningococcal Infections	-	-	26	< 1.0	2,035	< 1.0
Legionellosis	4	1.1	20	< 1.0	969	< 1.0

Health Resource Measures

ACCESS TO PRIMARY HEALTH CARE								
Primary Care Source^{17, 18}	District				State			
	Number	Rate	Specialty Pop/ Provider	Pop/ Provider	Number	Rate	Specialty Pop/ Provider	Pop/ Provider
Family Practice	110	31.6	na	3,167.8	1,283	31.7	na	3,150.2
Internal Medicine	120	34.4	na	2,903.8	1,229	30.4	na	3,288.7
General Practice	36	10.3	na	9,679.3	221	5.5	na	18,288.5
SUB-TOTAL	266	76.3	na	1,310.0	2,733	67.6	na	1,478.9
Pediatrics	67	19.2	na	5,200.8	728	18.0	na	5,551.9
Ob/Gyn	35	10.0	na	9,955.9	512	12.7	na	7,894.1
TOTAL	368	105.6	na	946.9	3,973	98.3	na	1,017.3
Licensed dentists	165	47.4	na	2,111.8	290	7.2	na	13,937.1

HOSPITALS AND CLINICS⁶		
Community Clinics	5	Health Point Family Health Centers; Pike St. Homeless Clinic, Newport Family Health, Dayton Family Health, Ida Spence Mission, Williamstown School Based Health Center (SBHC), Ludlow SBHC, Silver Grove SHBC, Erlanger Elsmere SBHC, Florence SBHC
Health Dist. Clinics	4	Boone County Health Center, Campbell County Health Center, Grant County Health Center, Kenton County Dressman Health Center
Hospitals	7	Health South Rehabilitation Hospital, Children’s Psychiatric Hospital No. KY, St. Elizabeth’s Medical Center - Grant County, St. Elizabeth’s North, St. Elizabeth’s South, St. Luke Hospitals, Inc. – St. Luke East, St. Luke West

Medicare/Medicaid	District		State	
	Number	Rate	Number	Rate
Per capita health care spending for Medicare beneficiaries (Senior Population)	-	-	-	-
Medicaid eligible to participating physicians	-	-	-	-
Percent of income spent on medications	-	-	-	-

Other Services¹	District		State	
	Number	Rate	Number	Rate
Visiting nurse services/in home support services	7	-	109	-
Proportion of population without a regular source of primary care (including dental)	-	-	-	-
Percent of Population using Emergency Departments for Primary Care	-	-	-	-

Health Resource Measures

Licensed Beds¹	Number	Location
Hospital Beds (Total)	1,058	St. Elizabeth Grant County; St. Elizabeth North; St. Elizabeth South; St. Luke East; St. Luke West
Hospital Beds (Acute)	956	St. Elizabeth Grant County; St. Elizabeth North; St. Elizabeth South; St. Luke East; St. Luke West
Hospital Beds (Specialty)	193	Health South; NorthKey; St. Elizabeth South; St. Luke East; St. Luke West
Hospital Beds (Rate per total population)	303.6	Health South; NorthKey; St. Elizabeth Grant County; St. Elizabeth North; St. Elizabeth South; St. Luke East; St. Luke West
Hospital Beds (Occupancy rate)	42.7	Health South; NorthKey; St. Elizabeth Grant County; St. Elizabeth North; St. Elizabeth South; St. Luke East; St. Luke West
Operational Beds (Total)	1,030	Health South; NorthKey; St. Elizabeth Grant County; St. Elizabeth North; St. Elizabeth South; St. Luke East; St. Luke West
Nursing Home Beds Skilled Other	-	-
Ambulatory Surgery Centers	3	Center for Surgical Care; Patient First; Tri-State Digestive Disorder Center
Adult Day Care Centers	8	Florence Park Care Center, Salvation Army, Almost Family, Baptist Live Communities, Cardinal Health, St. Charles, Active Day Care Center, Jones Hill Rest Home

DATA SOURCES:

The sources for the data vary widely and are listed below. Requests for more data, corrections to the data book, and questions about the health data may be directed to the Health Department.

- ¹*Health Improvement Collaborative of Greater Cincinnati*
- ²*United States Census Bureau*
- ³*Kentucky State Data Center*
- ⁴*Northern Kentucky Chamber of Commerce*
- ⁵*Tri-County Economic Development Corporation*
- ⁶*Northern Kentucky District Health Department*
- ⁷*Kentucky Department for Public Health*
- ⁸*Kentucky Natural Resources and Environmental Protection Cabinet*
- ⁹*Environmental Defense Scorecard*
- ¹⁰*Kentucky Cabinet for Workforce Development*
- ¹¹*Kentucky Department of Education*
- ¹²*Kentucky State Police*
- ¹³*National Center for Health Statistics*
- ¹⁴*Kentucky Cancer Incidence Report*
- ¹⁵*American Cancer Society*
- ¹⁶*Centers for Disease Control and Prevention*
- ¹⁷*Kentucky Physicians Licensure Board*
- ¹⁸*Kentucky Board of Dentistry*

Related Web Sites

- a. U.S. Census Bureau – www.census.gov
- b. Kentucky State Data Center – cbpa.louisville.edu/ksdc
- c. Northern Kentucky Chamber of Commerce – www.nkycc.org
- d. Northern Kentucky Independent District Health Department – www.nkyhealth.org
- e. Kentucky Department of Public Health– publichealth.state.ky.us
- f. Kentucky Natural Resources and Environmental Protection Cabinet – www.kyenvironment.org
- g. Scorecard – www.scorecard.org
- h. Kentucky Cabinet for Workforce Development – www.kycwd.org
- i. Kentucky Department of Education – www.kde.state.ky.us
- j. Kentucky State Police – www.kentuckystatepolice.org
- k. National Center for Health Statistics – www.cdc.gov/nchs
- l. Kentucky Cancer Registry – www.kcr.uky.edu
- m. American Cancer Society – www.cancer.org
- n. Centers for Disease Control and Prevention – www.cdc.gov