

# Mobilizing for Action through Planning & Partnership (MAPP) Community Health Status Assessment 2011 Update Madison County, Kentucky

World Health Organization Safe Community







### **Acknowledgements**

This document serves as an update to the original Community Health Status Assessment 2007 collated and published on the Madison County Health Department's website. While all status areas from the original assessment are not presented in this version, some new areas have been added. Information included in this report has been obtained from reliable sources and is believed to be accurate.

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Another thanks goes to Amy Brassfield, RN, BSN, MSN Candidate (Eastern Kentucky University) who provided some assistance with data collection. She is employed by Chandler Medical Center, University of Kentucky.

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# Madison County, KY. Community Factors Affecting Residents' Health and Wellbeing

The Madison County community face many of the same factors and issues seen across the United States presently. Physical, social and psychology health of individuals are influenced by personal living space, workplace, family and support networks, indoor and outdoor environmental conditions, genetics, education, risk taking behaviors, lifestyle choices, and others. While many strategies are in place to assist county residents to strive to attain a high level of health, many conditions still pose many challenges for individuals as well as the entire community. Among these are:

- Slowed economy
- Struggling employment opportunities
- Loss of some industries
- Chronic diseases, i.e., heart, stroke, cancers, diabetes
- Lifestyle behaviors, i.e., high tobacco use/smoking, overweight/obesity of adults, prescription use/abuse, physical inactivity, inadequate nutrition, distracted drivers
- Risk-taking among teen & young adults
- Uninsured/underinsured
- Low birthweight infants
- High smoking during pregnancy

### Madison County, KY. County Health Rankings. 2011

The County Health Rankings show us that where we live matters to our health. The health of a community depends on many different factors - ranging from health behaviors, education and jobs, to quality of health care, to the environment.

Source: <a href="http://www.countyhealthrankings.org/">http://www.countyhealthrankings.org/</a>

In the County Health Rankings report, a county health status is ranked in two categories: **Health Outcomes and Health Factors.** 

**Health Outcomes** are the primary ranking used to rank the overall health of counties The county ranked number 1 is considered the healthiest county in the state.

In KY: No. 1 – Boone County No. 26 – Madison County

**Health Factors** in the County Health Rankings represent what influences the health of a county.

In KY: No. 1 – Woodford County No. 5 – Madison County

Of Kentucky's 120 counties, Madison County ranks among the healthiest counties. Focus on community changes such as those listed below are believed to have contributed the healthier status.

- Increase in walking/biking paths
- Cities & county parks
- Farmers Markets in both cities
- On-going education related to seat belt usage/child passenger seat usage; reduced driving speeds;
   Distracted Driver risks
- Madison County Health Department Clean Indoor Air Regulation (prohibiting smoking in indoor public places)
- Various agencies & schools emphasizing healthy lifestyle education and programs
- Developing Farm to School Program

### Madison County, KY. County Health Ranking in State of Kentucky. 2011

|                              | Madison Co. | KY    | Rank (of 120) |
|------------------------------|-------------|-------|---------------|
| Health Outcomes              |             |       | <u> 26</u>    |
| Mortality                    |             |       | 14            |
| Premature death *            | 7,388       | 8,859 |               |
| Morbidity                    |             |       | <u>46</u>     |
| Poor or fair health**        | 20.0%       | 22.0% |               |
| Poor physical health days*** | 4.7         | 4.7   |               |
| Poor mental health days****  | 3.9         | 4.3   |               |
| Low birthweight *****        | 9.0%        | 8.9%  |               |

<sup>\*</sup>Years of potential life lost before age 75 per 100,000 population (age-adjusted)

Analysis: Kentucky has 120 counties. In the 2011 County Health Rankings, Madison County ranked 26 out of the 120 counties for all Health Outcomes: 14th in the state for Mortality and 46th in the state for Morbidity.

Source: http://www.countyhealthrankings.org/kentucky/madison

<sup>\*\*</sup> Percent of adults reporting fair or poor health (age-adjusted)

<sup>\*\*\*</sup> Average number of physically unhealthy days reported in past 30 days (age-adjusted)

<sup>\*\*\*\*</sup>Average number of mentally unhealthy days reported in past 30 days (age-adjusted)

<sup>\*\*\*\*\*</sup>Percent of live births with low birthweight (< 2500 grams)

# Madison County, KY. Health Ranking in State of Kentucky. 2011

|                                       | Madison Co. | KY  | Rank(of 12 |
|---------------------------------------|-------------|-----|------------|
| Health Factors                        |             |     | <u>5</u>   |
| Health Behaviors                      |             |     | 6          |
| Adult smoking*                        | 24%         | 28% |            |
| Adult obesity**                       | 30%         | 31% |            |
| Excessive drinking***                 | 7%          | 11% |            |
| Motor vehicle crash death rate****    | 18          | 22  |            |
| Sexually transmitted infections ***** | 183         | 287 |            |
| Teen birth rate*****                  | 32          | 52  |            |

<sup>\*</sup>Percent of adults that report smoking >= 100 cigarettes and currently smoking

**Analysis**: Madison County showed high rankings in both Health Factors and Health Behaviors among the 120 counties in Kentucky. Related to all risk behaviors measured, county residents showed lowered than the state collectively.

Source: http://www.countyhealthrankings.org/kentucky/madison

<sup>\*\*</sup> Percent of adults that report a BMI >= 30

<sup>\*\*\*</sup> Binge plus heavy drinking

<sup>\*\*\*\*</sup> Motor vehicle crash deaths per 100,000 population

<sup>\*\*\*\*\*</sup> Chlamydia rate per 100,000 population

<sup>\*\*\*\*\*\*</sup> Teen birth rate per 1,000 female population, ages 15-19

### Madison County and KY. County Health Rankings. Clinical Care. 2011

Madison Co.

66%

KY

62%

Rank(of 120)

| Clinical Care                 |         |       | 33 |
|-------------------------------|---------|-------|----|
| Uninsured adults*             | 22%     | 19%   |    |
| Primary care physicians**     | 1,306:1 | 922:1 |    |
| Preventable hospital stays*** | 77      | 105   |    |
| Diabetic screening****        | 88%     | 82%   |    |

Mammography screening\*\*\*\*\*

**Analysis:** While Madison County ranked 33<sup>rd</sup> out of 120 counties for clinical care health factors, the percent of uninsured adults in the county is higher than the state. The number of primary care physician available to provide care for county residents is lower in the county than it is for the state. Both of these factors pose difficulty for county residents to receive need health care.

Source: http://www.countyhealthrankings.org/print/kentucky/madison

<sup>\*</sup>Percent of population under age 65 without health insurance

<sup>\*\*</sup> Ratio of population to primary care physicians

<sup>\*\*\*</sup>Hospitalization rate for ambulatory-care sensitive conditions per 1,000 Medicare enrollees

<sup>\*\*\*\*</sup>Percent of diabetic Medicare enrollees that receive HbA1c screening

<sup>\*\*\*\*\*</sup>Percent of female Medicare enrollees that receive mammography screening

# DEMOGRAPHIC AND SOCIO-ECONOMIC CHARACTERISTICS

### Madison County and KY. County Health Rankings Social and Economic Factors. 2011

|   | Madison Co. | KY    | Rank(of 120) |
|---|-------------|-------|--------------|
| Social & Economic Factors                   |             |       | 5            |
| High school graduation *                    | 88.0%       | 84.0% |              |
| Some college**                              | 59.0%       | 54.0% |              |
| Unemployment ***                            | 9.2%        | 10.5% |              |
| Children in poverty****                     | 18.0%       | 23.0% |              |
| Inadequate social support *****             | 12.0%       | 20.0% |              |
| Children in single-parent households ****** | 31.0%       | 32.0% |              |
| Homicide rate******                         |             | 5     |              |

<sup>\*</sup>Percent of ninth grade cohort that graduates in 4 years

**Analysis:** In all the above factors, Madison County residents faired better than the state as a whole. With the state of the economy, the unemployment rate and children in single-parent households and living in poverty pose many challenges within the county.

Source: http://www.countyhealthrankings.org/print/kentucky/madison

<sup>\*\*</sup> Percent of adults aged 25-44 years with some post-secondary education

<sup>\*\*\*</sup> Percent of population age 16+ unemployed but seeking work

<sup>\*\*\*\*</sup> Percent of children under age 18 in poverty

<sup>\*\*\*\*\*</sup> Percent of adults without social/emotional support

<sup>\*\*\*\*\*\*</sup> Percent of children that live in household headed by single parent

<sup>\*\*\*\*\*\*\*</sup> Deaths due to homicide per 100,000 population (age-adjusted)

### Madison County & KY. General Population

|                                  | Madison Co. | KY        |
|----------------------------------|-------------|-----------|
| Population,2010                  | 82,916      | 4,339,367 |
| Population,% change,2000 to 2010 | 17.0%       | 7.4%      |
| Population,2000                  | 70,872      | 4,042,288 |
| Persons <5 y.o., %, 2009         | 6.3%        | 6.7%      |
| Persons <18 y.o.,%, 2009         | 21.3%       | 23.5%     |
| Persons 65 y.o. and over,%, 2009 | 10.8%       | 13.2%     |
| Female persons, percent, 2009    | 51.6%       | 50.9%     |

**Source:** U.S. Census Bureau. State and County QuickFacts. Madison County. <a href="http://quickfacts.census.gov/qfd/states/21/21151.html">http://quickfacts.census.gov/qfd/states/21/21151.html</a>

#### Madison County & KY. Population by Race. 2010

|  | Madison Co. | KY    |
|--|-------------|-------|
| White persons,%, 2010 (a)                            | 91.6%       | 87.8% |
| Black persons,%, 2010 (a)                            | 4.4%        | 7.8%  |
| American Indian & Alaska Native persons,%, 2010 (a)  | 0.3%        | 0.2%  |
| Asian persons,%, 2010 (a)                            | 0.9%        | 0.1%  |
| Native Hawaiian & Other Pacific Islander,%, 2010 (a) | Z           | 0.1%  |
| Persons reporting two or more races,%, 2010          | 2.0%        | 1.7%  |
| Persons of Hispanic or Latino origin%, 2010 (b)      | 2.2%        | 3.1%  |
| White persons not Hispanic, persons, 2010            | 90.4%       | 86.3% |

**Analysis:** Madison County has been one of the fastest growing counties in the Commonwealth of Kentucky. In the decade from 2000-2010, a 17 percent population increase brought additional housing, industries and businesses, schools, and expanded community resources. Interstate 75, crossing through the county from north to south, influenced the growth of the county. Interstate accessibility provided opportunities both in and out of the county for labor, shopping, and access to additional services not available locally.

**Source:** U.S. Census Bureau, State and County QuickFacts. Madison County <a href="http://quickfacts.census.gov/qfd/states/21/21151.html">http://quickfacts.census.gov/qfd/states/21/21151.html</a>

### Madison County & KY. General Population. 2005-2009

|   | Madison C | Co. KY  |
|---|-----------|---------|
| Living in same house 1 year ago, %, age1+, 2005-2009          | 75.3%     | 83.7%   |
| Foreign born persons, %, 2005-2009                            | 2.5%      | 2.8%    |
| Language other than English spoken at home, % age 5+,         | 3.7%      | 4.4%    |
| 2005-2009   |           |         |
| High school graduates,% age 25+, 2005-2009                    | 82.6%     | 80.3%   |
| Bachelor's degree or higher, % age 25+, 2005-2009             | 26.4%     | 20.0%   |
| Veterans, 2005-2009   | 5,584     | 334,465 |
| Mean travel time to work (minutes), workers age 16+, 2005-200 | 9 21.9    | 22.5    |

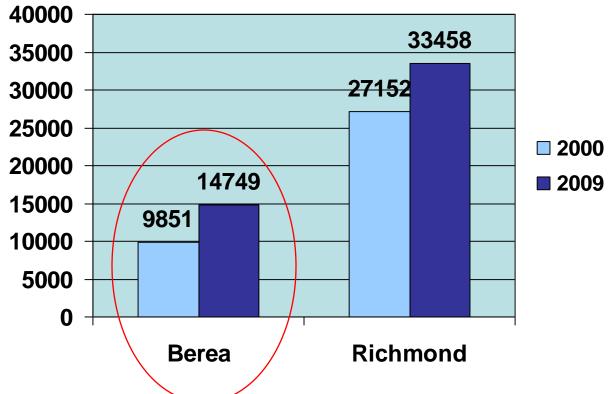
Source: U.S. Census Bureau. State and County QuickFacts. <a href="http://quickfacts.census.gov/qfd/states/21/21151.html">http://quickfacts.census.gov/qfd/states/21/21151.html</a>

# Madison County & KY. Housing and Income Per Population. 2005-2009

|   | Madison Co  | o. KY     |
|---|-------------|-----------|
| Housing units, 2009   | 33,806      | 1,934,973 |
| Homeownership rate, 2005-2009                                   | 61.4%       | 70.2%     |
| Housing units in multi-unit structures, %, 2005-2009            | 27.2%       | 17.5%     |
| Median value/owner-occupied housing units, 2005-2009            | 9 \$136,900 | \$113,100 |
| Households, 2005-2009   | 29,720      | 1,674,738 |
| Persons per household, 2005-2009                                | 2.54        | 2.47      |
| Per capita money income in past 12 months (2009 \$\$) 2005-2009 | \$20,649    | \$22,284  |
| Median household income, 2009                                   | \$40,241    | \$40,061  |
| Persons below poverty level, percent, 2009                      | 19.2%       | 18.4%     |

**Source:** U.S. Census Bureau. State and County QuickFacts. Madison County <a href="http://quickfacts.census.gov/qfd/states/21/21151.html">http://quickfacts.census.gov/qfd/states/21/21151.html</a>

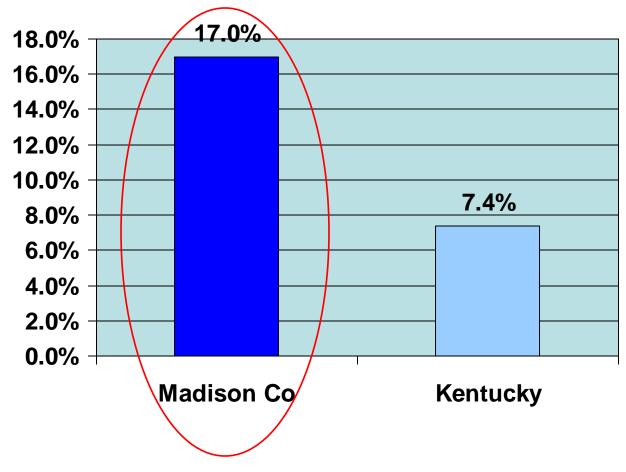
#### Berea and Richmond: Population Change, 2000-2009



**Analysis:** Between 2000 and 2009, both primary cities in Madison County-Berea and Richmond enjoyed a growth in population. The community of Berea saw the largest increase, with a 49.7% increase. Richmond had a population change of 23.2%. These changes were reflected in new ranking for the state, in terms of population change, with **Berea ranking the 7**th most change witnessed and **Richmond, placing 30**th on the list in terms of change.

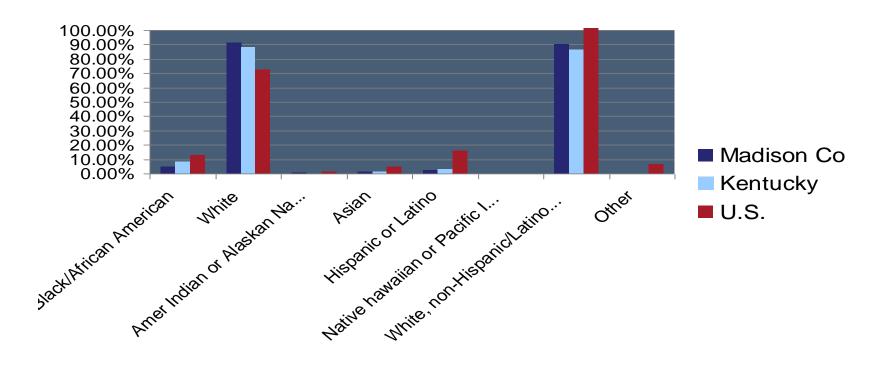
Source: U.S. Census Bureau, 2005-2009 American Community Survey. <a href="http://www.bls.gov/cps/">http://www.bls.gov/cps/</a>

### Madison County and KY. Population Change, 2000-2010



**Source:** U.S. Census Bureau. State and County QuickFacts. Madison County. <a href="http://quickfacts.census.giv/qfd/states/21/21151.html">http://quickfacts.census.giv/qfd/states/21/21151.html</a>

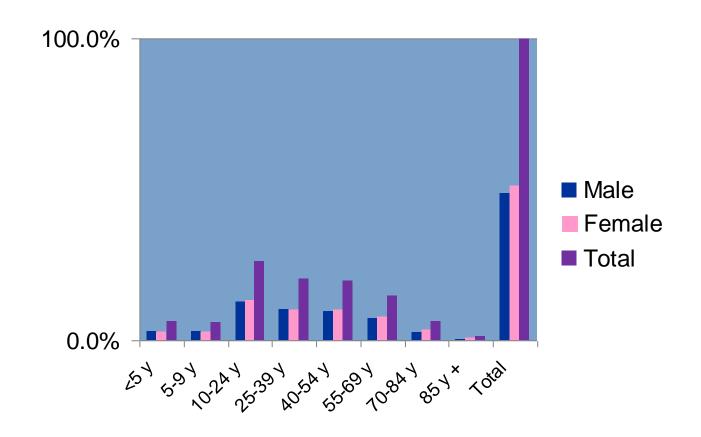
### Madison, KY and U.S.: Population Subgroups, 2010



**Analysis:** Madison County has been one of the fastest growing counties in the Commonwealth of Kentucky. In the decade from 2000-2010, a 17 percent population increase brought additional housing, industries and businesses, schools, and expanded community resources. Interstate 75, crossing through the county from north to south, influenced the growth of the county. Interstate accessibility provided opportunities both in and out of the county for labor, shopping, and access to additional services not available locally.

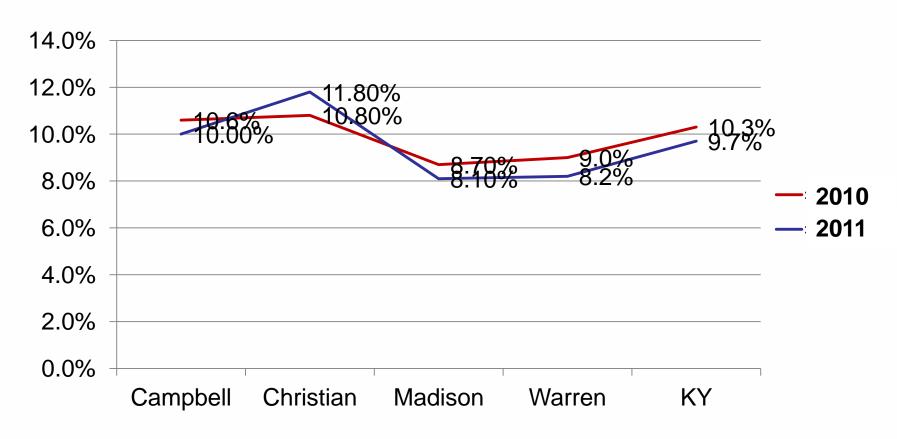
Sources: Kentucky Demographic Data. (2010). *U.S. Census Bureau*. <a href="http://ksdc.louisvilleedu/census/2010demoprofiles/Kentucky\_dp2010.pdf">http://ksdc.louisvilleedu/census/2010demoprofiles/Kentucky\_dp2010.pdf</a>. Census Data. (2010). *U.S. Census Bureau*. <a href="http://2010.census.gov/2010census/data/">http://2010.census.gov/2010census/data/</a>

#### Madison County. Demographic Profile, Age and Sex. 2010



**Source:** Profile of General Population & Housing Characteristics. (2010). *U.S. Census Bureau*. http://ksdc.louisville.edu/census/2010demoprofiles/dp076.pdf.

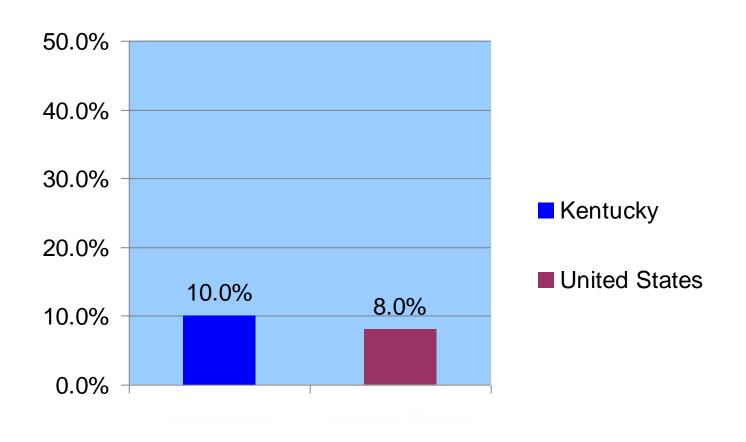
### KY, Madison & Peer Counties. Unemployment. 2010 & 2011



Analysis: Madison and peer counties have seen changes in in unemployment in the population from June 2010 to June 2011. Madison County has experienced a lower rate of unemployment than comparison counties, KY and the U.S. (9.3% in June 2011).

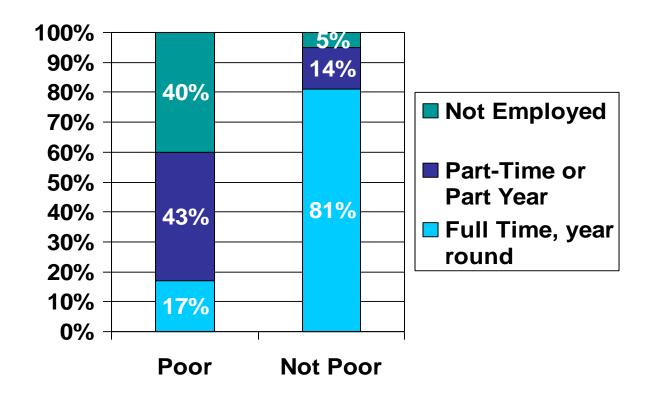
Source: http://workforce.ky.gov/June11charts.pdf

# KY and U.S. Proportion of Teens (16-19) Who are Not in School and Not Working. 2008



**Source:** The Annie E. Casey Foundation(2009). KIDS COUNT 2008 data book online. <a href="http://datacenter.kidscount.org/">http://datacenter.kidscount.org/</a>.

#### Parents' Employment Status in KY by Income Level. 2009



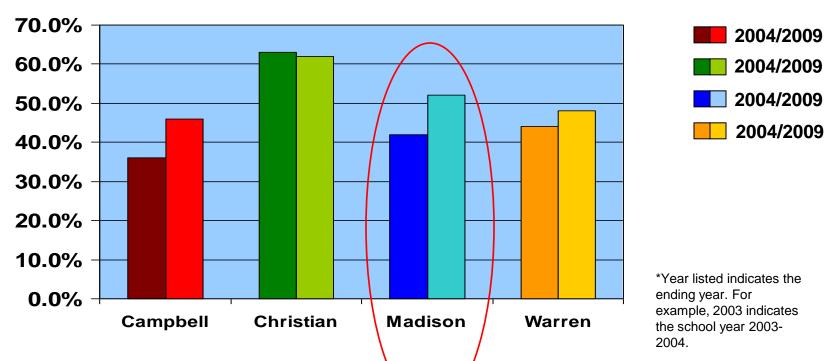
**Analysis:** 17% (43,353) of children in poor families have at least one parent who is employed full-time, year-round.

43% (108,770) of children in poor families have at least one parent who is employed either part-year or part-time.

40% (100,664) of children in poor families do not have an employed parent

**Source:** National data were calculated from the Annual Social and Economic Supplement (the March supplement) of the Current Population Survey from 2010, representing information from the previous calendar year. State data were calculated from the 2009 American Community Survey, representing information from 2009.

### Madison and Peer Counties. Children Receiving Free Lunch or Reduced Price Meals. 2004-2009



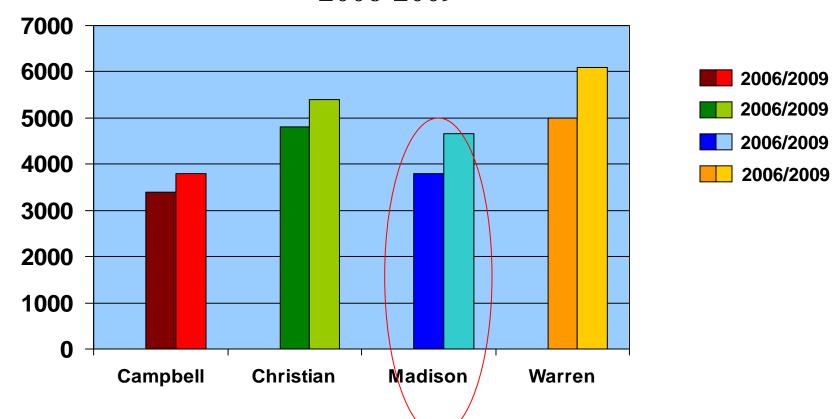
Analysis: In the six year time period, Madison County saw a high of approximately 50% of students in the public school system receive free or reduced priced lunches in the school year ending in 2009. This represented an 8% increase from 2004, when the rate was 42%. Of the peer counties, Christian County had the highest average % of children receiving free or reduced meals, but stayed rather steady over the same time period (~62%). Campbell County had the highest percentage of increase over the six year period, demonstrating a 10% increase between 2004-2009 of public school students receiving the same assistance.

**Definitions:** Average monthly number of children under 18 who participated in the Supplemental Nutrition Assistance Program (SNAP, formerly called food stamps).

**Source:** Kentucky Cabinet for Health & Family Services, Dept. for Community Based Services.

http://www.kyyouth.org/documents/kya databook10.pdf

### Madison and Peer Counties. Children Receiving Food Stamps. 2006-2009

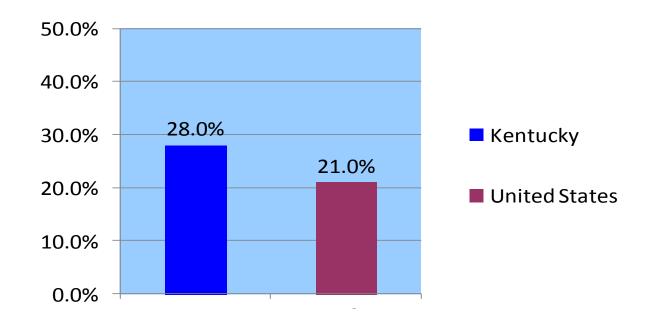


Analysis: Of the peer counties studied, all had an increase in the numbers of youth under the age of nineteen who received food stamps from 2006-2009. Warren County had the greatest increase. Campbell County had the lowest increase. Christian and Madison County also demonstrated an increase during the same time period of persons receiving food stamps. Madison County had an increase of 850 children receiving food stamps from 2005 to 2009.

**Definitions:** Average monthly number of children under 18 who participated in the Supplemental Nutrition Assistance Program (SNAP, formerly called food stamps).

**Source:** <a href="http://datacenter.kidscount.org/data/bystate/Rankings.aspx">http://datacenter.kidscount.org/data/bystate/Rankings.aspx</a>?

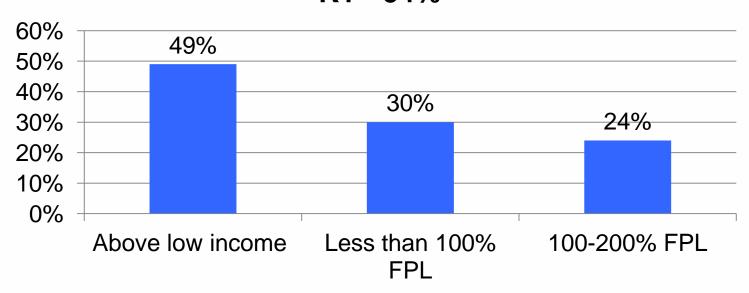
# Proportion of Children <6 y. o. Living below the Federal Poverty Level. 2008



**Source:** The Annie E. Casey Foundation(2009). KIDS COUNT 2008 data book online. <a href="http://datacenter.kidscount.org/">http://datacenter.kidscount.org/</a>

# KY. Young Children (under age 6) by Income According to Federal Poverty Level\* Guidelines . 2009

### Young children living in low Income in KY= 54%

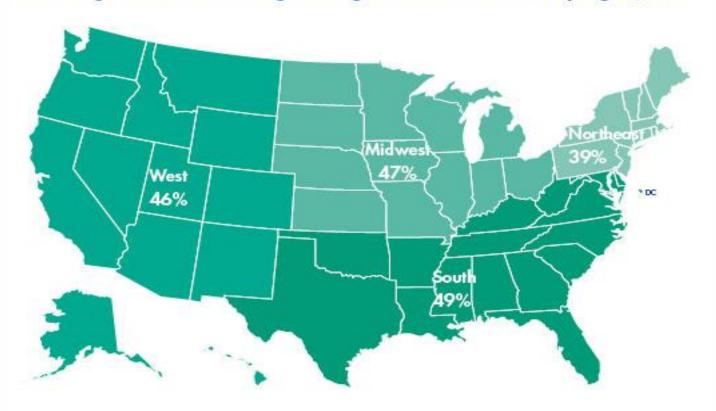


**Analysis:** Among young low-income children, 15% live in extreme poverty (less than 50% FPL). In 2009, there were 337,726 children under the age of 6.

Source: http://www.nccp.org/profiles/pdf/profile early childhood KY.pdf

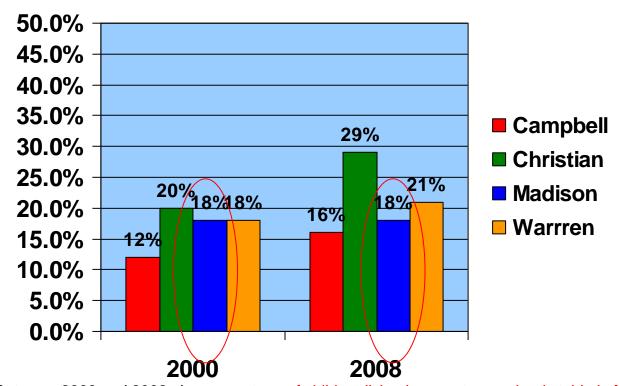
<sup>\*</sup> Federal Poverty Level (FPL)

#### Percentage of children under age 6 living in low-income families by region, 2009



© National Center for Children in Poverty (www.nccp.org)
Basic Facts About Low-Income Children, 2009: Children Under Age 6

## Madison and Peer Counties. Children Living In Poverty (%) Estimates. 2000 vs. 2008



**Analysis:** Between 2000 and 2008, the percentage of children living in poverty remained stable in Madison County, at 18%. Of the peer counties considered, all three witnessed and increase in this number with Christian County showing the greatest increase—9% higher in 2008 than 2000 estimates.

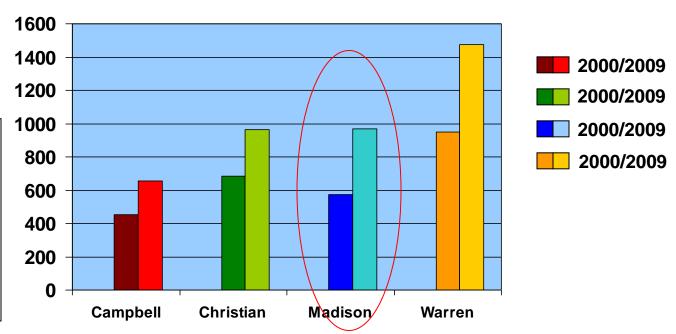
Source: U.S. Census Bureau, Census 2000 and 2008 Small Area Income and Poverty Estimates.

**Data Notes:** Census 2000 poverty measurements were based on income earned in the previous year. The poverty level for a family of four with two children in 1999 was \$16,895.Small Area Income and Poverty Estimates reflect data for the income year 2008. The poverty threshold for 2008 for a family of four with two children was \$21,834. The poverty universe is persons for whom the U.S. Census Bureau can determine poverty status.

Rate Calculation: (number of children living in poverty in 1999 \* 100) / (total number of children in the poverty universe in 2000) (number of children living in poverty in 2008 \* 100) / (total number of children in the poverty universe in 2008)

# Madison and Peer County Averages. KY Child Health Insurance Program (KCHIP\*). 2000 vs. 2009

\* KCHIP is a federal and state funded program to provide health insurance to children (ages 0-19) in families that earn too much income to be eligible for Medicaid or do not receive health insurance for dependents through an employer.



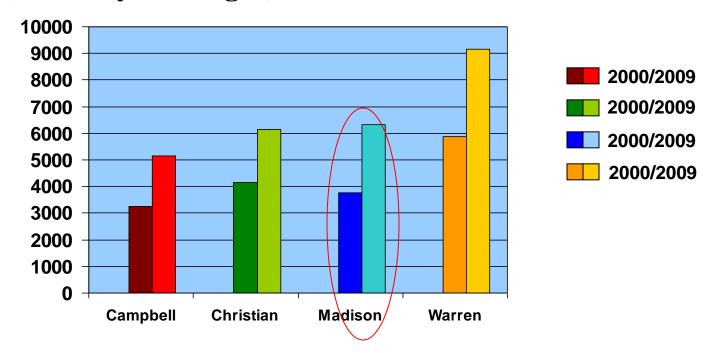
**State Comparative Analysis:** In 2009, an average of 60,778 children were enrolled in KCHIP each month, up 35% from 2000 (45,063)

**Analysis:** Of the peer counties studied, all had an increase in the numbers of youth who received assistance between 2000-2009. Warren County had the greatest increase of ~526 (monthly average) recipients. Campbell County had the lowest increase at ~205 (monthly average) individuals, whereas Christian and Madison County also demonstrated an increase during the same time period of ~279 and ~395 (monthly average) persons receiving food stamps, respectively.

Source: Kentucky Cabinet for Health and Family Services, Department for Medicaid Services.

**Data Note:** Children counted as receiving Medicaid during the reported year may also have received KCHIP at a different point during the year.

## Madison and Peer County. Children Enrolled in Medicaid (Monthly Averages). 2000 vs. 2009



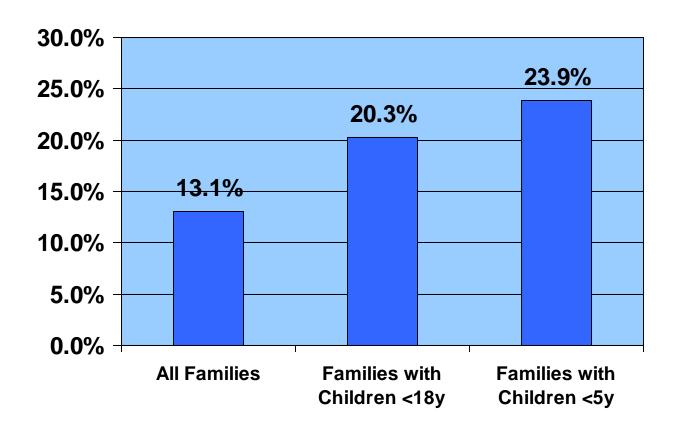
**State Comparative Analysis:** In 2009, an average of 386,775 Kentucky children were enrolled in Medicaid each month, compared to 356,919 children in 2008. Statewide, Medicaid enrollment grew by 47 percent (over 123,000 children) from 2000 to 2009.

Analysis: Of the peer counties studied, all had an increase in the numbers of youth who received assistance between 2000-2009. Warren County had the greatest increase of ~3263 (monthly average) recipients, with Madison County having the second greatest increase at 2593. Campbell County had the lowest increase at ~1894 (monthly average) individuals, whereas Christian demonstrated an increase during the same time period of ~1991 (monthly average) persons enrolled in Medicaid.

**Source:** Kentucky Cabinet for Health and Family Services, Department for Medicaid Services.

**Data Note:** Children counted as receiving Medicaid during the reported year may also have received KCHIP at a different point during the year.

#### KY. Poverty Rates by Family Type. Estimate, 2008

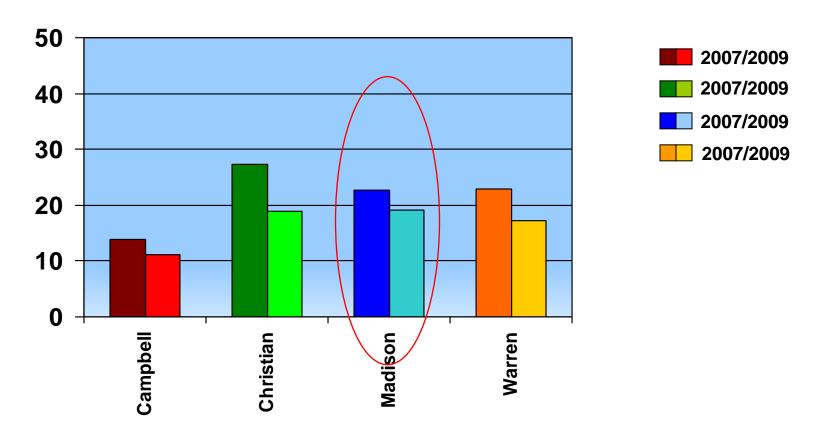


**Source:** U.S. Census Bureau, Census 2000 and 2008 Small Area Income and Poverty Estimates.

**Data Notes:** Census 2000 poverty measurements were based on income earned in the previous year. The poverty level for a family of four with two children in 1999 was \$16,895.Small Area Income and Poverty Estimates reflect data for the income year 2008. The poverty threshold for 2008 for a family of four with two children was \$21,834. The poverty universe is persons for whom the U.S. Census Bureau can determine poverty status.

Rate Calculation: (number of children living in poverty in 1999 \* 100) / (total number of children in the poverty universe in 2000) (number of children living in poverty in 2008 \* 100) / (total number of children in the poverty universe in 2008)

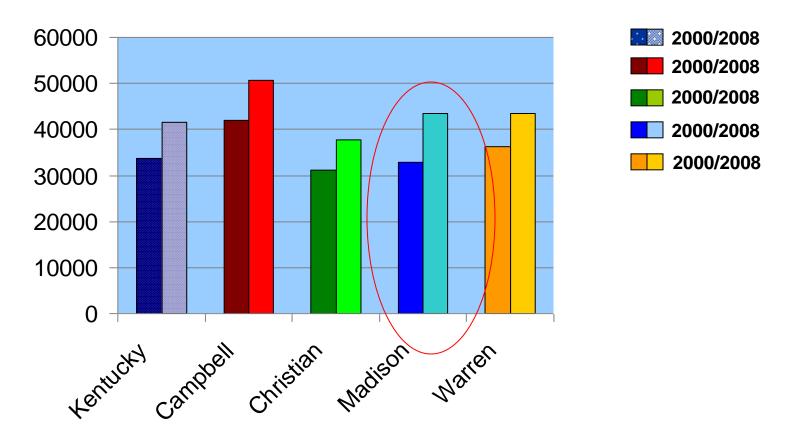
### Madison and Peer Counties. Percent of Poverty. All Ages. 2007-2009



**Analysis**: All peer counties experienced a gradual decrease in the percentage of poverty for all ages from 2007 to 2009. Christian County realized the greatest decrease, whereas Madison and Warren County also saw a decrease in the percentage of recipients in 2008, but both began an upward trend in 2009.

**Source:** Kentucky Cabinet for Health and Family Services, Department for Medicaid Services . http://www.kyyouth.org/documents/kya\_databook10.pdf

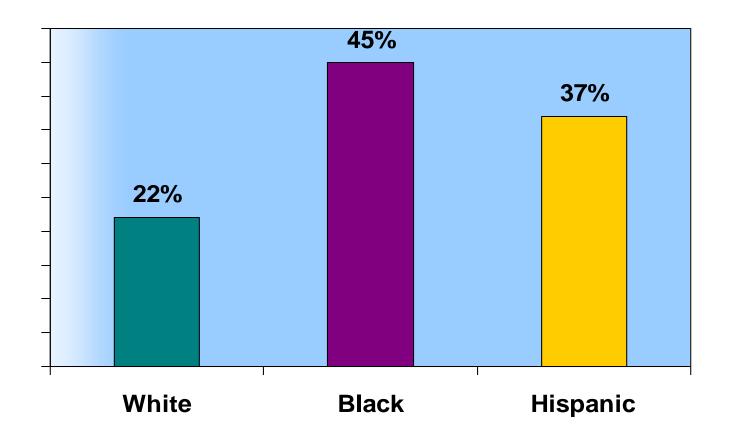
### KY, Madison and Peer Counties. Median Household Income. 2000 vs. 2008



**Analysis:** Between 2000 and 2008, Median Household income rose for the state of Kentucky, as well as Madison and peer counties. Madison County saw the greatest increase, with an average of \$10,400 increase in median household income.

**Source:** U.S. Census Bureau, Census 2000 and 2008 Small Area Income and Poverty Estimates. **Data Notes:** Census 2000 data reflect income earned in the previous year, 1999. Small Area Income and Poverty Estimates reflect data for the income year 2008. Households include all persons occupying a single residence, regardless of their relationship to one another.

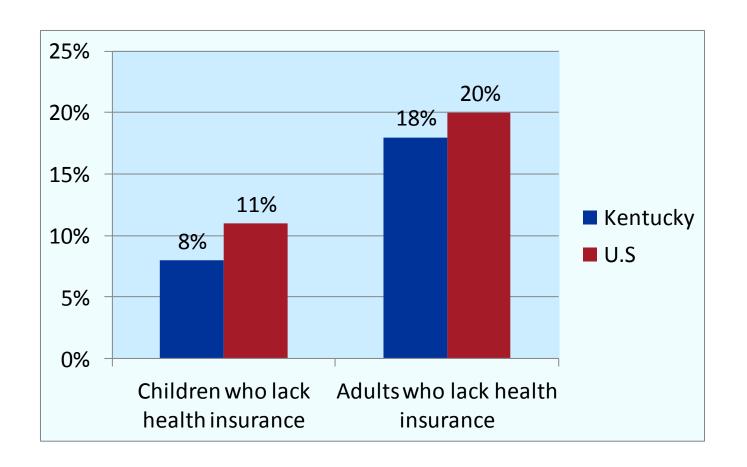
#### KY. Children in Poor Families by Race. 2009



**Analysis:** 22% or 183,415 of white children live in poor families. 45% or 37,735 of black children live in poor families. 37% or 16,718\*\*\* of Hispanic children live in poor families

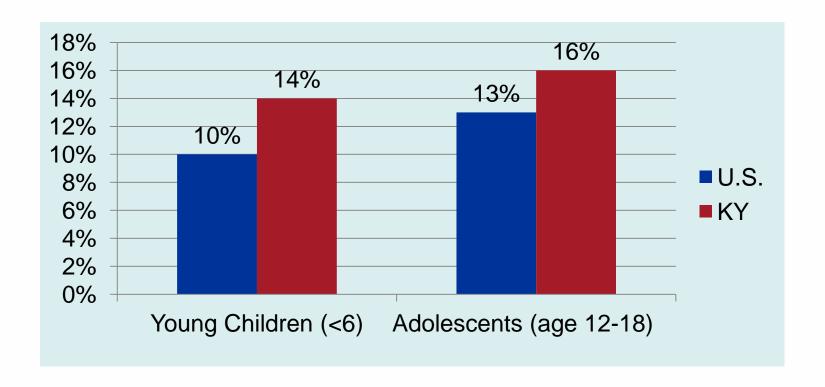
Source: Kentucky Demographic Profiles. National Center for Children in Poverty. www.nccp.org

### KY and U.S. Health Insurance Status by Age. 2007



Source: Kentucky Demographic Profiles. National Center for Children in Poverty. www.nccp.org

### KY and U.S. Young Children & Adolescent Who Lack Health Insurance. 2009



**Analysis:** Young children who lacked health insurance coverage increased from 2007-2009. In Kentucky, approximately 8% lacked coverage (see previous slide); in 2009 the percentage had increased to approximately 10% for young children in KY.

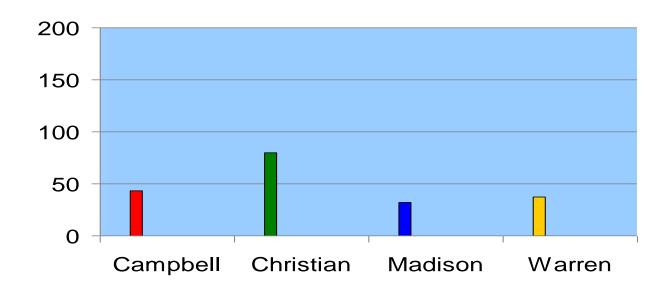
Source: www.nccp.org

### **Appendix A: Federal Poverty Guideline Definitions**

- The federal poverty guidelines are issued annually by the U.S. Department of Health and Human Services.
- The demographic findings on this page were calculated using a more complex version of the federal poverty measure—the thresholds issued by the U.S. Census Bureau. For more information about federal poverty measures, see <a href="https://doi.org/10.1001/jhes.2010/
- **Child**: A child is defined as an individual under the age of 18. Children living independently, living with a spouse, living in group quarters, and children ages 14 and under living with only unrelated adults are excluded from these data.
- Low Income Families and children are defined as low-income if the family income
  is less than twice the federal poverty threshold (see Poor).
- Parent: Among children who do not live with at least one parent, parental characteristics are those of the householder and/or the householder's spouse.
- Poor Families and children are defined as poor if family income is below the federal poverty threshold.
- The federal poverty level for a family of four with two children was \$22,050 in 2010, \$22,050 in 2009, and \$21,200 in 2008.

### MATERNAL AND CHILD HEALTH

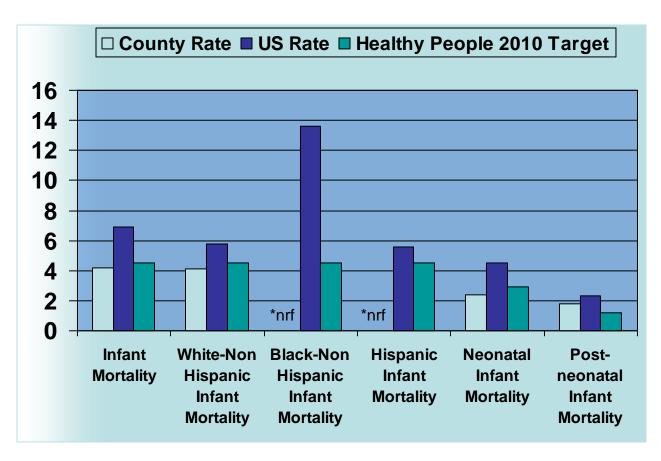
#### Madison and Peer Counties Ranking. Teen Births. 2011



**Analysis:** Madison County had a lower teen birth rate than comparison counties . Among Kentucky's 120 counties, Madison County ranked  $32^{nd}$ ; Warren County ranked  $37^{th}$ ; Campbell County ranked  $43^{rd}$ ; and Christian County ranked  $80^{th}$ .

**Source:** County Health Rankings. <a href="http://www.countyhealthrankings.org/kentucky/ohio/14">http://www.countyhealthrankings.org/kentucky/ohio/14</a>

### **Madison County. Infant Mortality. 2009**

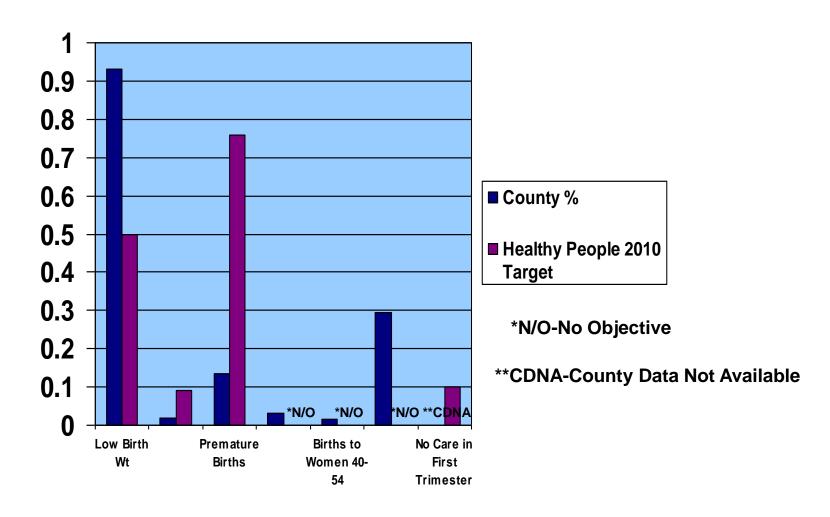


<sup>\*</sup>nrf- no reportable Figure

**Source:** Community Health Status Indicators, 2009.

<sup>\*</sup>Infant mortality: deaths per 1000 live births (Neonatal: <28 days; post-neonatal: day 28 to under one year).

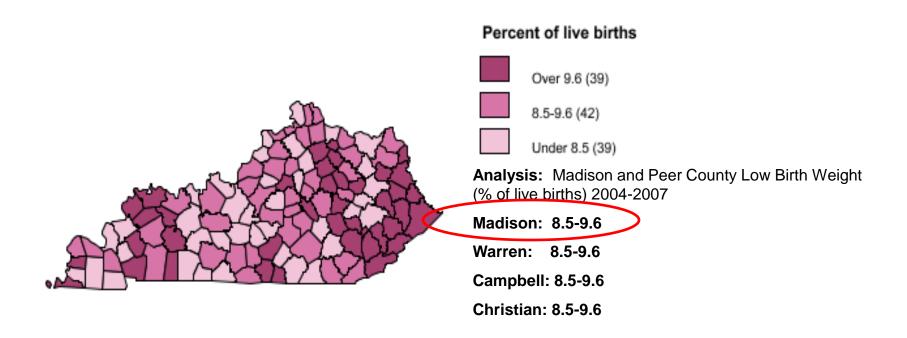
## Madison County and HP 2010 Target. Community Health Status Indicators, 2009



**Source**: Community Health Status Indicators, 2009.

http://communityhealth.hhs.gov/MeasuresOfBirthAndDeath.aspx?GeogCD=21151&PeerStrat=22&state=Kentucky&county=Madison

## KY State Data-Low Birth Weight.\* 2004-2007 Average

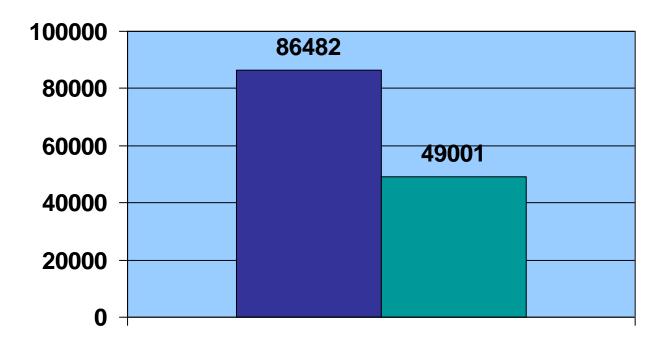


**Analysis**: The percentage of low birth weight infants for all peer counties considered was similar for the time period reviewed.

Low birth weight\* is less than 2500 grams (5 1/2 pounds).

**Source:** National Center for Health Statistics, final natality data. <a href="www.marchofdimes.com/peristats">www.marchofdimes.com/peristats</a>

#### KY Grandparents as Caregivers.\* 2009

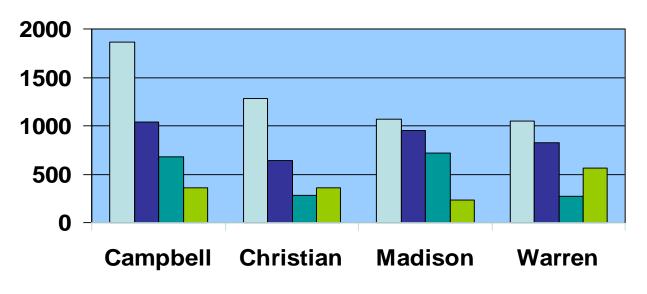


- Living with Own Grandchildren <18 years
- Grandparent Resonsible for Own Grandchildren <18 years</p>

**Source:** U.S. Census Bureau, 2007-2009 American Community Survey. Grandchildren under 18 years living with a grandparent householder by grandparent responsibility and presence of parent. Data Set: 2007-2009 American Community Survey 3-Year Estimates

<sup>\*</sup>Universe Population- Age 30 years and Older: 2,533,345

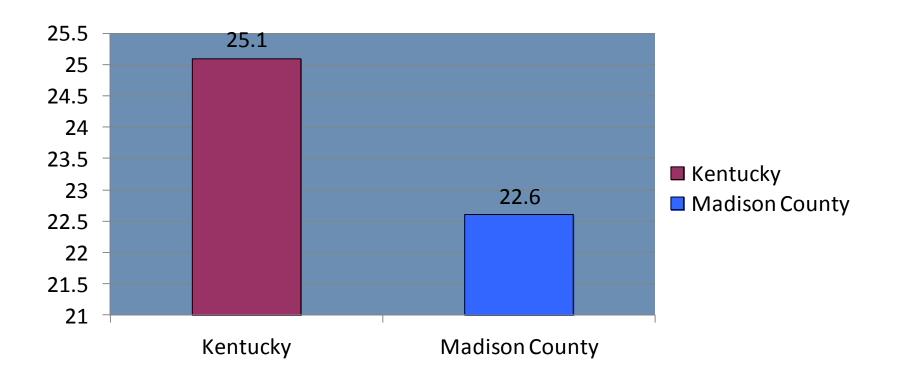
## Grandchildren Under 18 Years Living With A Grandparent Householder. 2007-2009



- Total
- Grandparent responsible for own grandchildren <18 years old
- **■** Parent Present
- **No Parent Present**

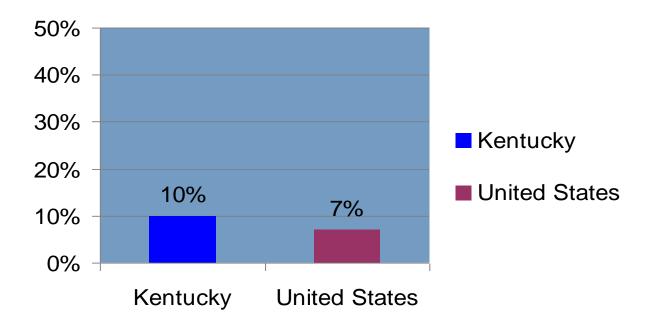
**Source:** U.S. Census Bureau, 2007-2009 American Community Survey. Grandchildren under 18 years living with a grandparent householder by grandparent responsibility and presence of parent. Data Set: 2007-2009 American Community Survey 3-Year Estimates

## Kentucky and Madison County, Smoking During Pregnancy, 2007



**Source**: Kentucky Department for Public Health, Office of Vital Statistics, 2007. Data are considered preliminary. Use caution when interpreting this estimate.

## U.S. and Kentucky-Proportion of Children <18y Without Health Insurance, 2009



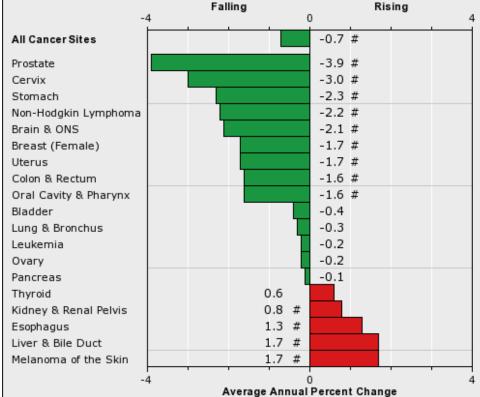
**Source:** Population Reference Bureau, analysis of data from the U.S. Census Bureau, 2008, 2009 American Community Survey.

The Annie E. Casey Foundation(2009). KIDS COUNT 2008 data book online. <a href="http://datacenter.kidscount.org/">http://datacenter.kidscount.org/</a>

### DEATH, ILLNESS AND INJURY

#### 5-Year Rate Changes - Mortality Kentucky, 2003-2007 All Ages, Both Sexes, All Races (incl Hisp)





Created by statecancerprofiles.cancer.gov on 02/28/2011 3:35 pm.

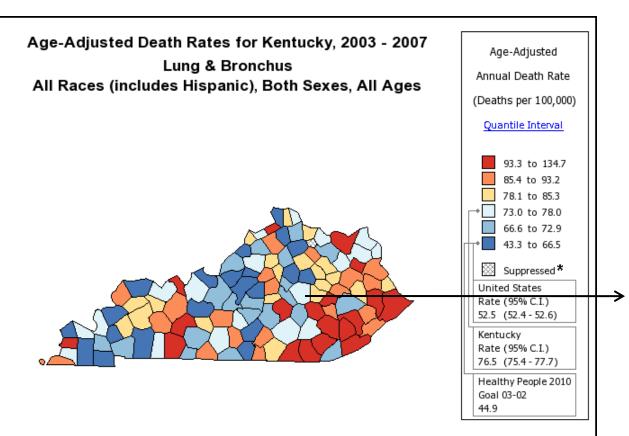
Source: Death data provided by the National Vital Statistics System public use data file. Death rates calculated by the National Cancer Institute using SEER\*Stat. Death rates (deaths per 100,000 population per year) are age-adjusted to the 2000 US standard population (19 age groups: <1, 1-4, 5-9, ..., 80-84, 85+). Population counts for denominators are based on Census populations as modified by NCI. The US populations included with the data release have been adjusted for the population shifts due to hurricanes Katrina and Rita for 62 counties and parishes in Alabama, Mississippi, Louisiana, and Texas. The 1969-2007 US Population Data File is used with mortality data.

Please note that the data comes from different sources. Due to different years of data availability, most of the trends are AAPCs based on APCs but some are EAPCs calculated in SEER\*Stat. Please refer to the source for each graph for additional information.

# - The annual percent change is significantly different from zero (p<0.05).

Analysis: Declines were seen in the state for certain cancers., i.e., Brain, oral cavity and pharynx, stomach, bladder, and colon cancers. Most notably, there were decreases in Prostate and cervical cancers. Liver and Bile Duct and melanoma of the skin were the leading cancers showing increase in the state's population from 2003-2007.

**Source:** http://www.statecancerprofiles.cancer.gov/cgi



Madison County-74.2 (65.1-84.1) Age Adjusted Death Rate

Created by statecancerprofiles.cancer.gov on 02/28/2011 3:37 pm.
State Cancer Registries may provide more current or more local data.

Data presented on the State Cancer Profiles Web Site may differ from statistics reported by the State Cancer Registries (for more information).

Source: Death data provided by the National Vital Statistics System public use data file. Death rates calculated by the National Cancer Institute using <a href="SEER\*Stat">SEER\*Stat</a>. Death rates (deaths per 100,000 population per year) are age-adjusted to the <a href="2000 US standard population">2000 US standard population</a> (19 age groups: <1, 1-4, 5-9, ..., 80-84, 85+). The Healthy People 2010 goals are based on rates adjusted using different methods but the differences should be minimal. Population counts for denominators are based on the Census 1969-2006 US Population Data File as modified by NCI.

The US populations included with the data release have been adjusted for the population shifts due to hurricanes Katrina and Rita for 62 counties and parishes in Alabama, Mississippi, Louisiana, and Texas.

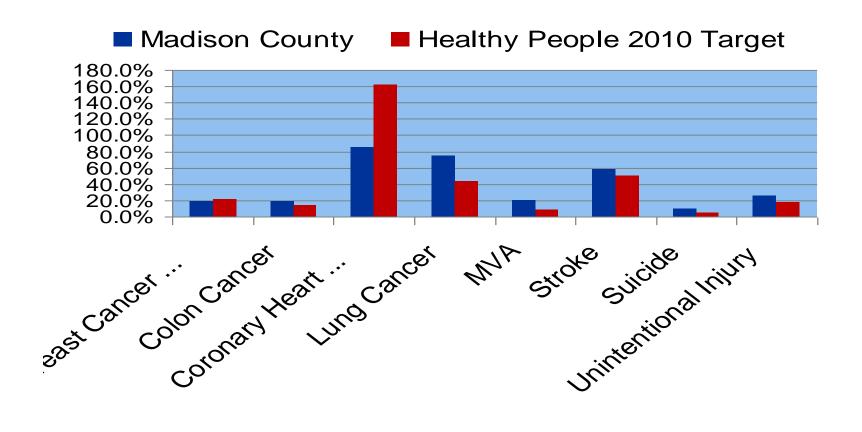
- \* Data have been <u>suppressed</u> to ensure confidentiality and stability of rate estimates. Counts are suppressed if fewer than 16 cases were reported in a specific area-sex-race category.
- \*\* Data have been <a href="suppressed">suppressed</a> for states with a population below 50,000 per sex for American Indian/Alaska Native or Asian/Pacific Islanders because of concerns regarding the relatively small size of these populations in some states. Healthy People 2010 Goal 03-02: Reduce the lung cancer death rate to 44.9.

Healthy People 2010 Objectives provided by the Centers for Disease Control and Prevention.

Analysis: From 2003-2007, Kentucky showed a higher ageadjusted death rate due to lung cancer than the nation. Madison County's rate was slightly lower than the state rate of 76.5, but still much higher than the national rate of 52.5.

Source: http://www.statecancerprofiles.cancer.gov/cgi

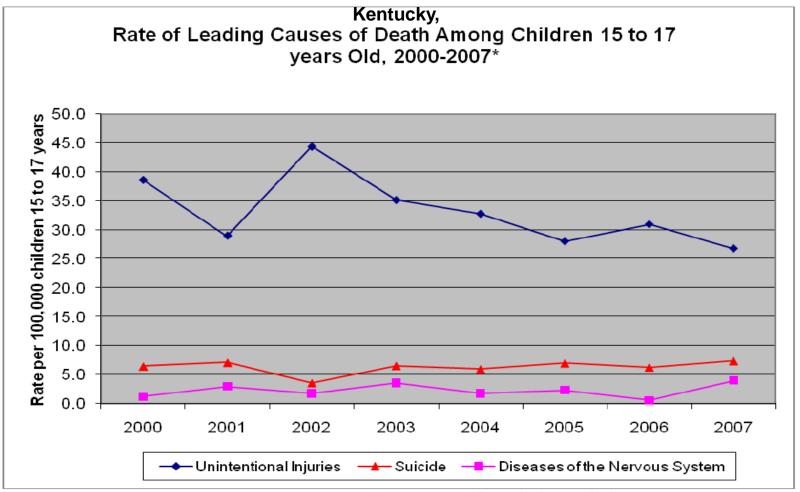
## Madison County and Healthy People 2010 Targets, Death Measures.



Source: Community Health Status Indicators, 2009.

http://communityhealth.hhs.gov/MeasuresOfBirthAndDeath.aspx?GeogCD=21151&PeerStrat=22&state=Kentucky&county=Madison

<sup>\*</sup>Rates are age-adjusted to the year 2000 standard; per 100,000 population.



Data Source: Kentucky Vitals Statistics, 2000-2007

From 2000 to 2007 the leading cause of death among Kentucky teens 15 to 17 years old was unintentional injury (Figure 13). Teens 15 to 17 years old have the highest rate of death from unintentional injury for all years shown, compared to other age groups. The next leading causes of death for 15 to 17 year old teens are suicide and diseases of the nervous system.

**Source:** Child Fatality Review System 2009 Annual Report. <a href="http://chfs.ky.gov/NR/rdonlyres/D80C7244-8F07-43A7-8642-44750715340D/0/2009CFRReport121809.pdf">http://chfs.ky.gov/NR/rdonlyres/D80C7244-8F07-43A7-8642-44750715340D/0/2009CFRReport121809.pdf</a>

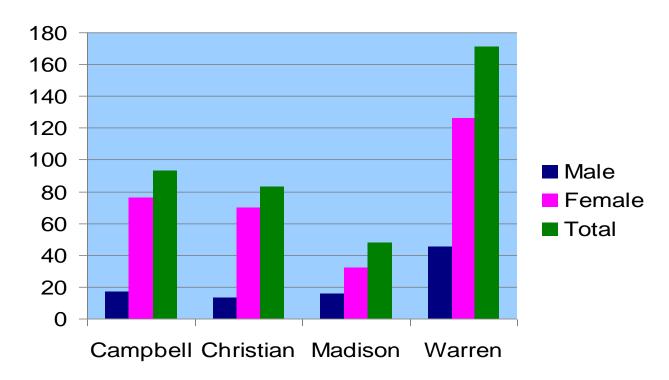
<sup>\*</sup>Rates based on 20 or fewer deaths and may be unstable. Use with caution.

# Falls related hospitalizations in Bluegrass Area Development District,\* 2003-2007

| Area              | 2005 Population Estimate | Numbers       | Age-<br>Adjusted<br>Rate | Average<br>Crude<br>Rate | TBI    |
|-------------------|--------------------------|---------------|--------------------------|--------------------------|--------|
| Kentucky          | F0F 764                  | 20.472        | 1194.8                   | 1159.2                   | 9.07%  |
| Madison<br>County | 525,764<br>7,824         | 30,472<br>211 | 570.2                    | 539.4                    | 15.17% |

**Source:** KIPRC Unintentional Falls for all of Kentucky . <a href="http://www.kspan.uky.edu/injind0105.pdf">http://www.kspan.uky.edu/injind0105.pdf</a> \* Madison County is part of the Bluegrass Developmental District.

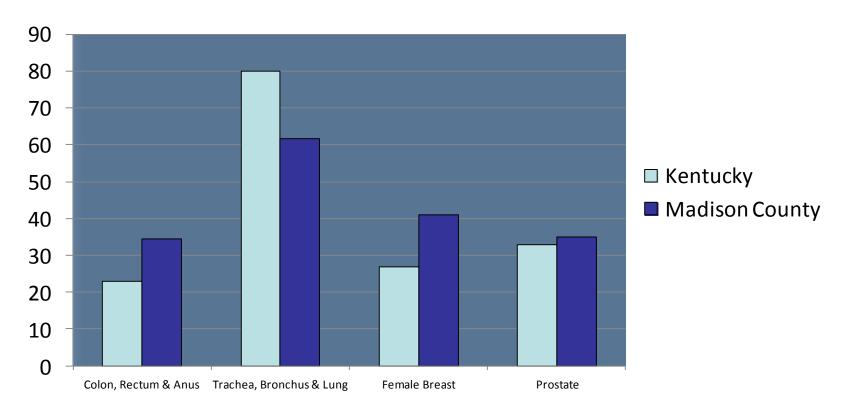
# Madison and Peer Counties, Discharge Status for Fall-Related Hospitalizations Involving Residents, Ages 65+, 2007



**Analysis:** Falls remain a major health problem for individuals age 65+. Females, more than males are affected but both genders are frequently hospitalized as a result of injuries sustained by the fall.

Source: KIPRC Unintentional Falls for all of Kentucky. <a href="http://www.kspan.uky.edu/injind0105.pdf">http://www.kspan.uky.edu/injind0105.pdf</a>

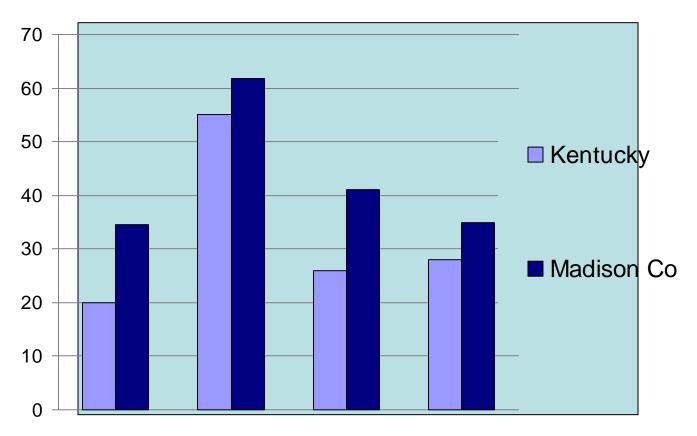
## Kentucky and Madison County, Percent of Resident Deaths from Selected Cancers (Neoplasms), 2007



Analysis: In 2005, cancer of the trachea, bronchus and lung was the highest among the state and county populations. High smoking rates among the adult population at both levels was believed to be the major contributing factor. Madison County fell below state levels in all areas.

Source: http://chfs.ky.gov/NR/rdonlyres/FC7DA2C5-D3FB-4560-95FF-F9D8821AD6B8/0/DeathTables2S.pdf

## Kentucky and Madison County, Percent of Resident Deaths from Selected Cancers (Neoplasms), 2005



**Analysis**: In 2005, cancer of the trachea, bronchus and lung remained the highest among the state and county populations. High smoking rates among the adult population at both levels was believed to be the major contributing factor.

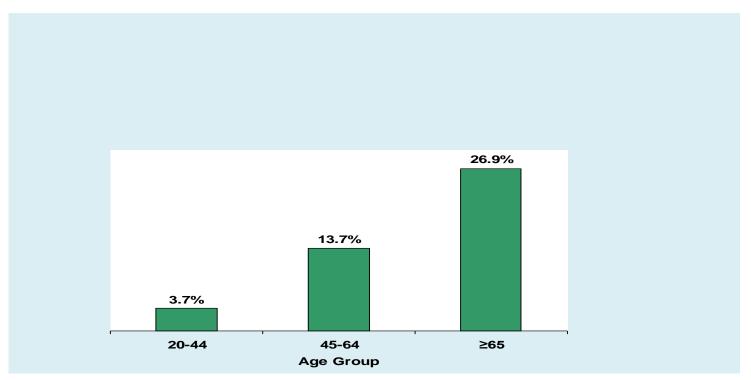
Source: <a href="http://chfs.ky.gov/NR/rdonlyres/FC7DA2C5-D3FB-4560-95FF-F9D8821AD6B8/0/DeathTables2S.pdf">http://chfs.ky.gov/NR/rdonlyres/FC7DA2C5-D3FB-4560-95FF-F9D8821AD6B8/0/DeathTables2S.pdf</a>

### **Diabetes**

### **Kentucky and Madison County- Diabetes Health Facts**

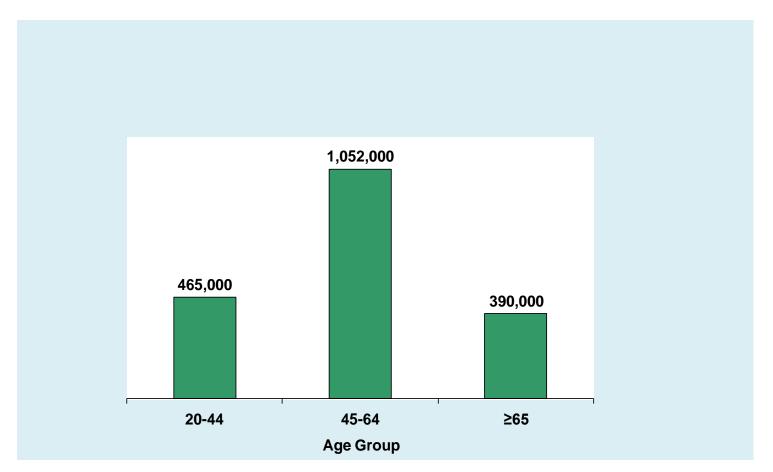
- It is estimated that:
  - 8.5% of Kentucky's adult population has been diagnosed with diabetes
  - 29% of Kentucky's adults have undiagnosed diabetes
  - It is believed that approximately 40% of Kentuckians have pre-diabetes.
  - The state ranks #1 in the nation for lack of physical activity and 5th in the nation for obesity, both of which are major contributing factors for developing the disease and having a major impact on maintenance of the disease process
  - In 2003, the state ranked 7th in the nation for the highest percentage of adults diagnosed with the disease.
  - In the Bluegrass Area Development District (BGADD)--of which Madison County is a part— an estimated 8-9 % of adults had been diagnosed in 2003.

# U.S., Estimated Percentage of People aged 20 years and older, with Diagnosed and Un-diagnosed Diabetes, by Age Group. 2005-2008



**Source:** 2007–2009 National Diabetes Information Clearinghouse. National Health Interview Survey estimates projected to the year 2010. <a href="http://diabetes.niddk.nih.gov/dm/pubs/statistics/#fast">http://diabetes.niddk.nih.gov/dm/pubs/statistics/#fast</a>

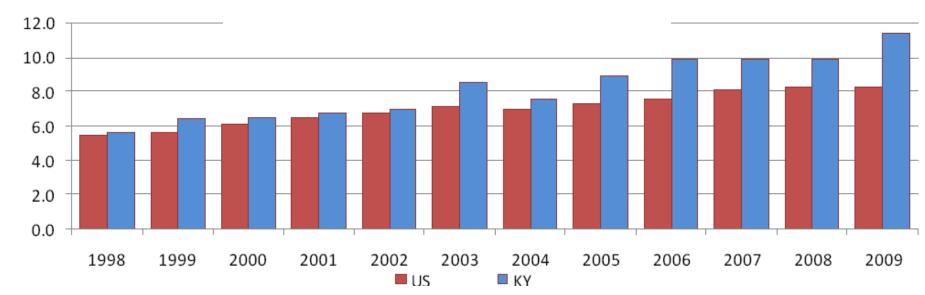
# U.S., Estimated Number of New Cases of Diagnosed Diabetes Among People Aged 20 years or Older, by Age Group. 2010



**Source**: 2007–2009 National Diabetes Information Clearinghouse. National Health Interview Survey estimates projected to the year 2010. <a href="http://diabetes.niddk.nih.gov/dm/pubs/statistics/#fast">http://diabetes.niddk.nih.gov/dm/pubs/statistics/#fast</a>

### U.S. and KY. Prevalence of Diagnosed Diabetes.





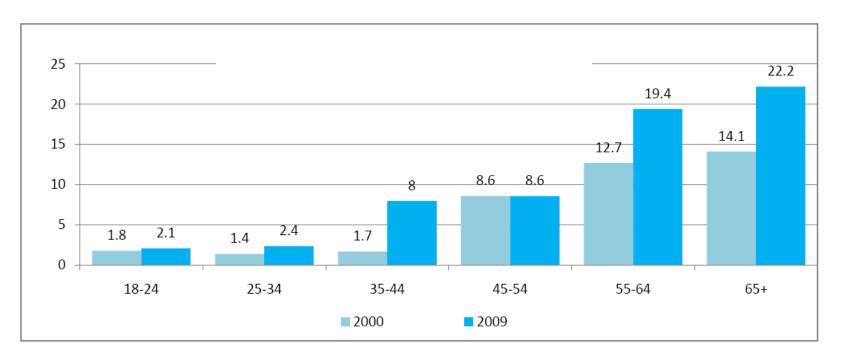
•The burden of diabetes in Kentucky and in the nation is large and growing

Percentage

- •In 1998, only 5.6% of Kentuckians had been diagnosed with diabetes compared to a rate of 5.4% nationwide
- •As of 2009, 11.4% of Kentuckians are estimate to have diabetes compared to 8.3% of adults nationwide.
- •In 2009, the Kentucky rate for diagnosed diabetes was the 4<sup>th</sup> highest in the nation (50 States and DC) at 11.4% as compared to the national median of 8.3%.
- •This translates to an estimated 366,000 adults in Kentucky having been diagnosed with diabetes.

**Source:** 2010 Kentucky Diabetes Fact Sheet. <a href="http://chfs.ky.gov/NR/rdonlyres/835DBEC3-BCDC-4A67-BA63-4D817010C4D7/0/KentuckyDiabetesFactSheetSept20102.pdf">http://chfs.ky.gov/NR/rdonlyres/835DBEC3-BCDC-4A67-BA63-4D817010C4D7/0/KentuckyDiabetesFactSheetSept20102.pdf</a>

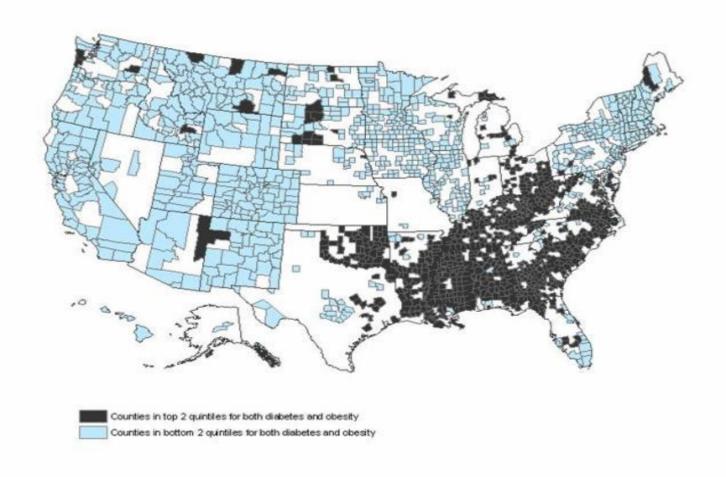
### KY. Change in Diabetes Prevalence by Age. 2000 and 2009



- •Diabetes is becoming more prevalent among younger adults. In 2000, fewer than 2% of Kentuckians aged 35-44 had been diagnosed with diabetes, but by 2008-that number had more than quadrupled to a rate of 8%
- •Diabetes is also becoming far more common among older adults who have traditionally experienced higher rates of diabetes. In 2000, 14% of those 65 and older had diabetes compared to 22% in 2009.

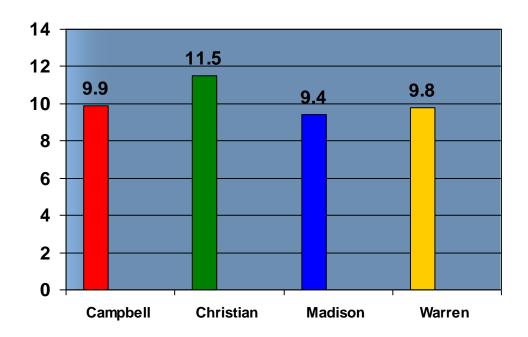
**Source:** 2010 Kentucky Diabetes Fact Sheet. <a href="http://chfs.ky.gov/NR/rdonlyres/835DBEC3-BCDC-4A67-BA63-4D817010C4D7/0/KentuckyDiabetesFactSheetSept20102.pdf">http://chfs.ky.gov/NR/rdonlyres/835DBEC3-BCDC-4A67-BA63-4D817010C4D7/0/KentuckyDiabetesFactSheetSept20102.pdf</a>

### County Level Map for Diabetes & Obesity, 2007



Source: http://www.cdc.gov/diabetes/pubs/factsheets/countylvlestimates.htm

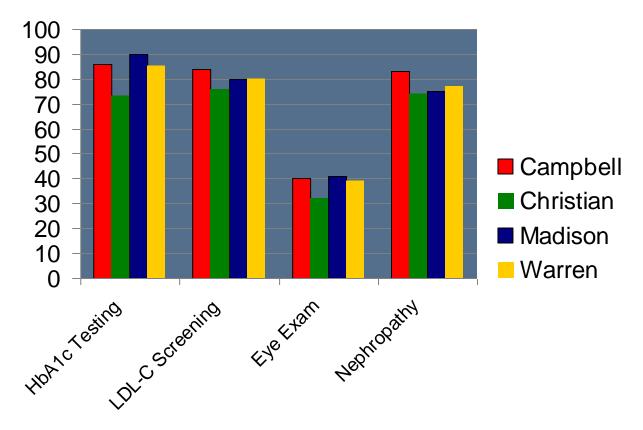
## KY, Madison County and Peer County Comparison. Adults with Diagnosed Diabetes. 2008



**Analysis:** According to 2008 data, Madison County—when compared to peer counties of Campbell, Christian and Warren—had the lowest percentage of adults diagnosed with diabetes. Christian County had the highest, followed by Campbell and Warren, which were almost even.

**Source:** Centers for Disease Control and Prevention: National Diabetes Surveillance System. http://apps.nccd.cdc.gov/DDTSTRS/default.aspx.

## KY, Madison County, and Peer County Comparison. Select Preventative Care Measures for Diabetes (%). 2009



**Analysis**: According to data on select diabetic preventative care measures taken in 2009, Madison County exceeded comparable peer counties in HbA1c testing, and ranked highly in the areas of LDL screening and nephropathy evaluation. All counties fell behind in preventative eye exams.

**Source**: <a href="http://www.khcollaborative.org/kentuckiana/wp-content/uploads/2011/01/KentuckyAggregate.pdf">http://www.khcollaborative.org/kentuckiana/wp-content/uploads/2011/01/KentuckyAggregate.pdf</a>

### **Prevention**

## Madison County and Kentucky. County Health Rankings. Physical Environment. 2011

|   | Madison Co. | KY  | Rank(of 120) |
|---|-------------|-----|--------------|
| Physical Environment                    |             |     | 5            |
| Air pollution-particulate matter days * | 0           | 2   |              |
| Air pollution-ozone days**              | 0           | 2   |              |
| Access to healthy foods***              | 67%         | 44% |              |
| Access to recreational facilities ****  | 15          | 8   |              |

<sup>\*</sup>Annual number of unhealthy air quality days due to fine particulate matter

**Analysis:** Madison County residents have minimal exposure to measured air pollution. Also, access to healthy food sources and recreational facilities are far greater in the county when compared to the state as a whole.

Source: <a href="http://www.countyhealthrankings.org/print/kentucky/madison">http://www.countyhealthrankings.org/print/kentucky/madison</a>

<sup>\*\*</sup> Annual number of unhealthy air quality days due to ozone

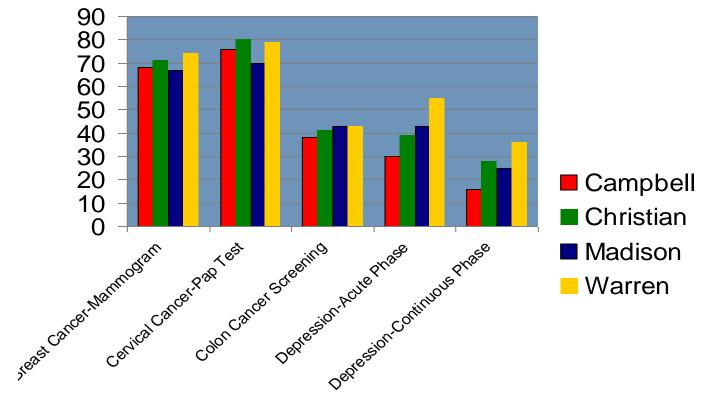
<sup>\*\*\*</sup> Healthy food outlets include grocery stores and produce stands/farmers' markets

<sup>\*\*\*\*</sup> Rate of recreational facilities per 100,000 population

## Madison County Resources for Healthy Foods and Recreational Facilities

- > Both cities of Berea and Richmond have summer Farmers Market.
- > Several local farmers sell garden produce at roadside stands from late spring through early fall.
- Berea College Farms offer and indoor Farmers Market during most of the winter months.
- A local Farm to School has developed as collaboration between some local farmers, the two school districts and several local and state agencies. Website can be accessed @ <a href="http://www.wix.com/mcosafetycoalition/farm2school">http://www.wix.com/mcosafetycoalition/farm2school</a>
- Several county and city parks exist offer walking and biking trails. Many facilities provide a variety of opportunities for physical activity. Madison County Physical Activity Directory can be accessed @ <a href="http://www.madisoncountyhealthdept.org/Documents/Community/PhysicalActivityDirectory.pdf">http://www.madisoncountyhealthdept.org/Documents/Community/PhysicalActivityDirectory.pdf</a>

## KY, Madison County, and Peer County Comparison. Select Preventative Care Measures (%). 2009



**Analysis:** According to data on select general preventative healthcare measures taken in 2009, Madison County exceeded comparable peer counties in cervical cancer screening and ranked highly in preventative breast cancer-mammogram screenings. Of the compared peer counties, all four ranked lower in rates for screening for colon cancer and both the acute and the continuous treatment of depression.

Source: <a href="http://www.khcollaborative.org/kentuckiana/wp-content/uploads/2011/01/KentuckyAggregate.pdf">http://www.khcollaborative.org/kentuckiana/wp-content/uploads/2011/01/KentuckyAggregate.pdf</a>

## Resources Highlighting Selected Prevention Programs Information and Data

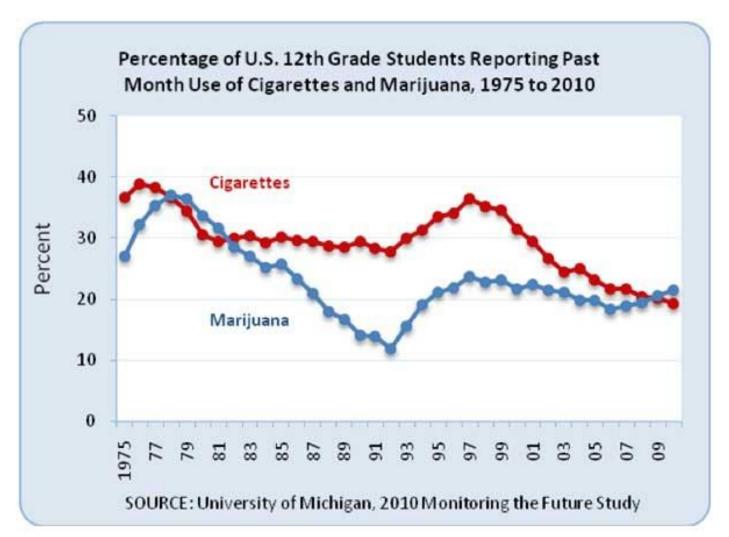
- Adult Prevention Program. KY Department for Public Health. <a href="http://chfs.ky.gov/dph/info/dpgi/cd/adultpreventive.htm">http://chfs.ky.gov/dph/info/dpgi/cd/adultpreventive.htm</a>
- Arthritis Program. KY Department for Public Health. <a href="http://chfs.ky.gov/dph/info/dpqi/cd/arthritis.htm">http://chfs.ky.gov/dph/info/dpqi/cd/arthritis.htm</a>
- Current US Motorcycle and Bicycle Helmet Laws. Insurance Institute for Highway Safety, Highway Loss Data Institute. 2010.
   <a href="http://www.iihs.org/laws/HelmetUseCurrent.aspx">http://www.iihs.org/laws/HelmetUseCurrent.aspx</a>
- Diabetes Prevention and Control Program. KY Department for Public Health. <a href="http://chfs.ky.gov/dph/info/dpqi/cd/diabetes.htm">http://chfs.ky.gov/dph/info/dpqi/cd/diabetes.htm</a>
- Heart Disease and Stroke Prevention Program. KY Department for Public Health. <a href="http://chfs.ky.gov/dph/info/dpqi/cd/cardiovascular.htm">http://chfs.ky.gov/dph/info/dpqi/cd/cardiovascular.htm</a>
- Kentuckian a Health Collaborative. Aggregate Kentucky State Report, Select Preventive Care Measures, January 09-December 09. (Provides county specific data on selected health factors & screenings)
  <a href="http://www.khcollaborative.org/kentuckiana/wp-content/uploads/2010/10/KentuckianaAggregate.pdf">http://www.khcollaborative.org/kentuckiana/wp-content/uploads/2010/10/KentuckianaAggregate.pdf</a>
- National Center for Children in Poverty. Kentucky Adolescent Profile. Updated June 1, 2011.
   <a href="http://www.nccp.org/profiles/pdf/profile\_adolescent\_KY.pdf">http://www.nccp.org/profiles/pdf/profile\_adolescent\_KY.pdf</a>
- **Nutrition Services Branch.** KY Department for Public Health. <a href="http://chfs.ky.gov/dph/mch/ns/nutrition+services+branch.htm">http://chfs.ky.gov/dph/mch/ns/nutrition+services+branch.htm</a>
- Osteoporosis. KY Department for Public Health. <a href="http://chfs.ky.gov/dms/hi/osteoporosis.htm">http://chfs.ky.gov/dms/hi/osteoporosis.htm</a>
- Physical Activity Program. KY Department for Public Health. <a href="http://chfs.ky.gov/dph/info/dpqi/hp/physicalactivityprogram.htm">http://chfs.ky.gov/dph/info/dpqi/hp/physicalactivityprogram.htm</a>
- Respiratory Disease Program. KY Department for Public Health. <a href="http://chfs.ky.gov/dph/info/dpqi/cd/respiratorydisease.htm">http://chfs.ky.gov/dph/info/dpqi/cd/respiratorydisease.htm</a>
- State-Level School Health Policies and Practices. A State-by-State Summary from the School Health Policies and Programs Study 2006. Centers for Disease Control and Prevention Table 1.5.
   www.cdc.gov/HealthyYouth/SHPPS/2006/summaries/pdf/State Level Summaries SHPPS2006.pdf.
- Tobacco Prevention and Cessation Program. KY Department for Public Health. <a href="http://chfs.ky.gov/dph/info/dpqi/hp/tobacco.htm">http://chfs.ky.gov/dph/info/dpqi/hp/tobacco.htm</a>
- The States' Voice on Highway Safety. 2010. Cell Phone and Texting Laws. Governors Highway Safety Association <u>www.ghsa.org/html/stateinfo/laws/cellphone\_laws.html</u>.
- **Web-based Injury Statistics Query and Reporting System (WISQARS).** National Center for Injury Prevention and Control, Centers for Disease Control and Prevention. 2009. <a href="https://www.cdc.gov/ncipc/wisqars">www.cdc.gov/ncipc/wisqars</a>.

### **DRUG USE & ABUSE**

## Research Studies Focusing on Drug Use and Other Risk Taking Behaviors Among Teens

- Since 1975, the **Monitoring the Future (MTF) a continuing study of American youth**, has measured drug, alcohol, and cigarette use and related attitudes among adolescent students nationwide. Survey participants report their drug use behaviors across three time periods: lifetime, past year, and past month; for some drugs, daily use is also reported. Initially, the survey included 12th-graders only, but in 1991 it was expanded to include 8th- and 10th-graders. The MTF survey is funded by NIDA and is conducted by he University of Michigan's Institute for Social Research. The 36th annual study was conducted during 2010. **Source:** <a href="http://monitoringthefuture.org/">http://monitoringthefuture.org/</a>
- Beginning in 2003 and on "every even-numbered year thereafter, the Kentucky Division of Behavioral Health, with the support of the Governor's Office of Drug Policy and the Federal Center for Substance Abuse Prevention, jointly sponsor the **Kentucky Incentives for Prevention (KIP)** survey to assess the extent of alcohol, drug, and tobacco use among 11-18 year-olds throughout Kentucky and to evaluate the impact of prevention efforts aimed at reducing substance use." **Source:** <a href="http://www.reachoflouisville.com/kip.htm">http://www.reachoflouisville.com/kip.htm</a>
- In June 2011, **The Prescription Drug Misuse, Community Report for Madison County, KY** was made available to the public. This report includes data from "103 youth who participated in a youth focus groups as a means to gather qualitative data on what is happening in Madison County" around prescription drug use/misuse. "This report also includes results from a community survey that targeted parents. Though this was a multi-county survey, Madison County had the largest percentage of respondents of any county."

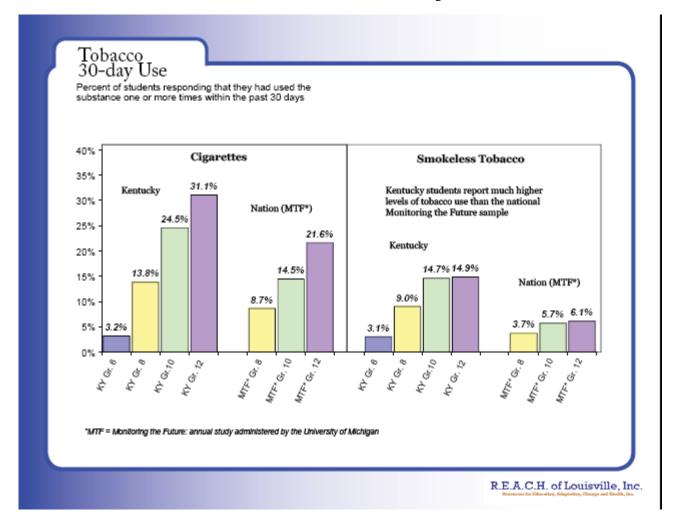
Source: http://madisoncountyhealthdept.org/Documents/Community/Drug%20Forum%20082211.pdf



**Analysis:** Marijuana use is now ahead of cigarette smoking on some measures (due to decreases in smoking and recent increases in marijuana use). In 2010, 21.4 percent of high school seniors used marijuana in the past 30 days, while 19.2 percent smoked cigarettes.

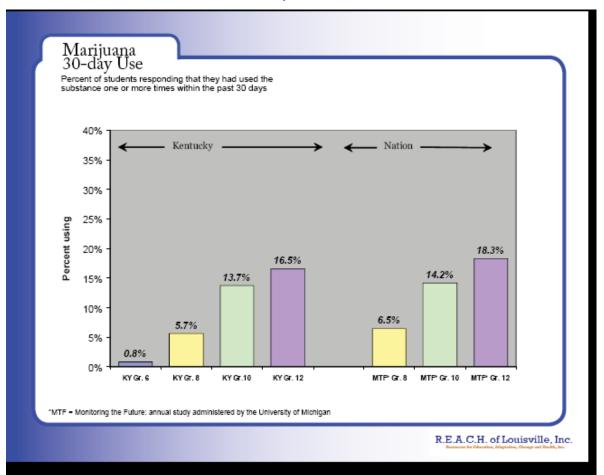
Source: National Institute on Drug Abuse. <a href="http://drugabuse.gov/newsroom/10/images/mtf2010fig1-600x443.jpg">http://drugabuse.gov/newsroom/10/images/mtf2010fig1-600x443.jpg</a>

#### KY. Tobacco Past 30-day Use. 2010

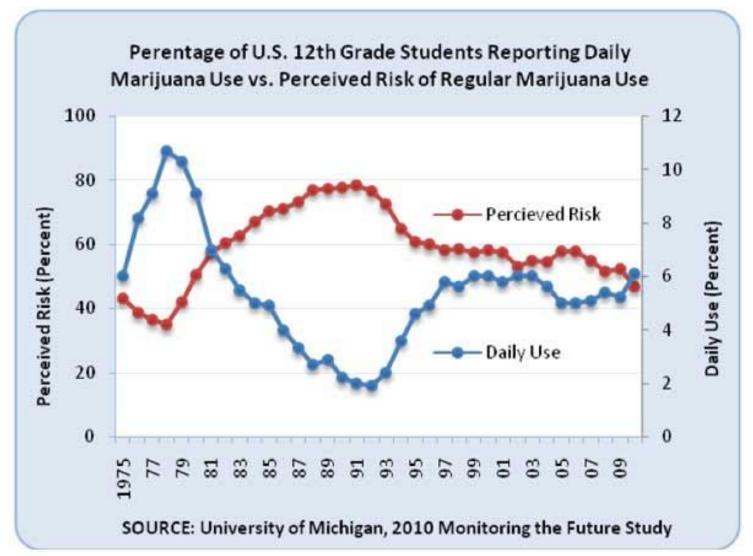


**Source:** <a href="http://www.reachoflouisville.com/kip/index.htm">http://www.reachoflouisville.com/kip/index.htm</a>

#### Kentucky, Marijuana Past 30-day Use, 2010

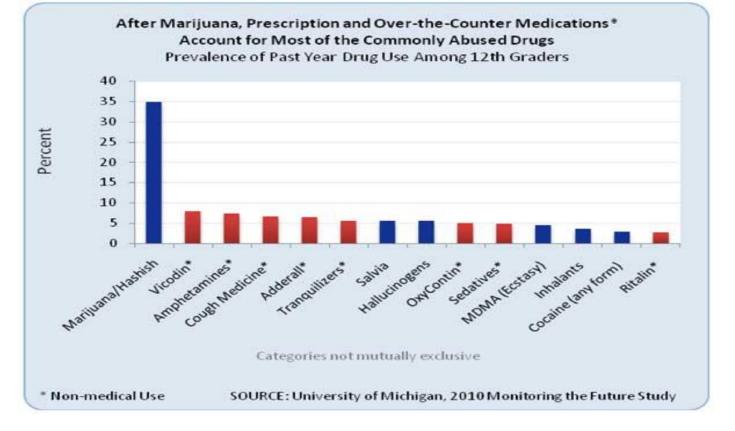


Source: http://www.reachoflouisville.com/kip/index.htm



**Analysis:** Daily Marijuana use increased among 8th, 10th, and 12th graders from 2009 to 2010. Among 12th graders it was at its highest point since the early 1980s at 6.1%. This year, perceived risk of regular marijuana use also declined among 10th and 12th graders suggesting future trends in use may continue upward.

Source: National Institute on Drug Abuse. <a href="http://drugabuse.gov/newsroom/10/images/mtf2010fig1-600x443.jpg">http://drugabuse.gov/newsroom/10/images/mtf2010fig1-600x443.jpg</a>

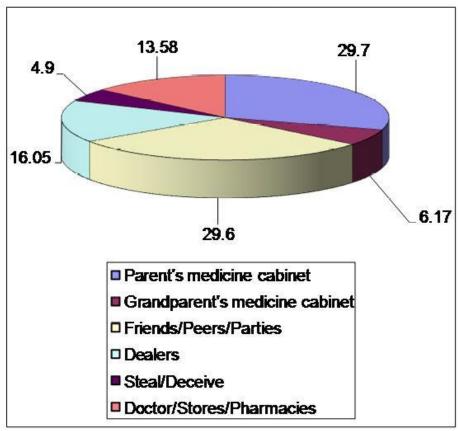


Analysis: Nationally, after marijuana, prescription and over-the-counter medications account for most of the top drugs abused by 12th graders in the past year. Among 12th graders, past year nonmedical use of Vicodin decreased from 9.7% to 8%. However, past year nonmedical use of OxyContin remains unchanged across the three grades and has increased in 10th graders over the past 5 years. Moreover, past-year nonmedical use of Adderall and over-the-counter cough and cold medicines among 12th graders remains high at 6.5% and 6.6%, respectively. After several years of decline, current and past year use of Ecstasy has risen among 8th and 10th graders. From 2009 to 2010, lifetime use of ecstasy among 8th graders increased from 2.2% to 3.3%, past year use from 1.3% to 2.4%, and current use 0.6% to 1.1%. This follows declines in perceived risk associated with MDMA use seen over the past several years.

Alcohol use has continued to decline among high school seniors with past-month use falling from 43.5% to 41.2% and alcohol binge drinking (defined as 5 or more drinks in a row in the past 2 weeks) declining from 25.2% to 23.2%. Declines were also observed for all measures among 12th graders reporting the use of flavored alcoholic beverages. Past-year use fell from 53.4% to 47.9%.

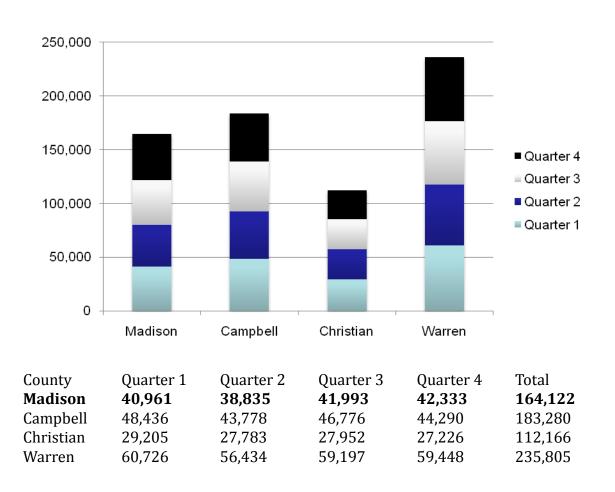
Source: National Institute on Drug Abuse. <a href="http://drugabuse.gov/newsroom/10/images/mtf2010fig1-600x443.jpg">http://drugabuse.gov/newsroom/10/images/mtf2010fig1-600x443.jpg</a>

## Madison County. Where Do You Think High Schoolers Get Their Prescription Drugs That Are Not Prescribed to Them? 2011



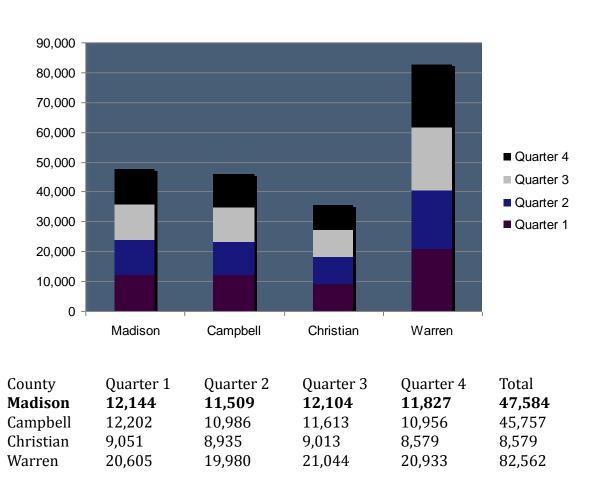
Source: http://madisoncountyhealthdept.org/Documents/Community/Drug%20Forum%20082211.pdf

## Madison and Peer Counties. Actual Number of All Controlled Substances Prescription. 2010



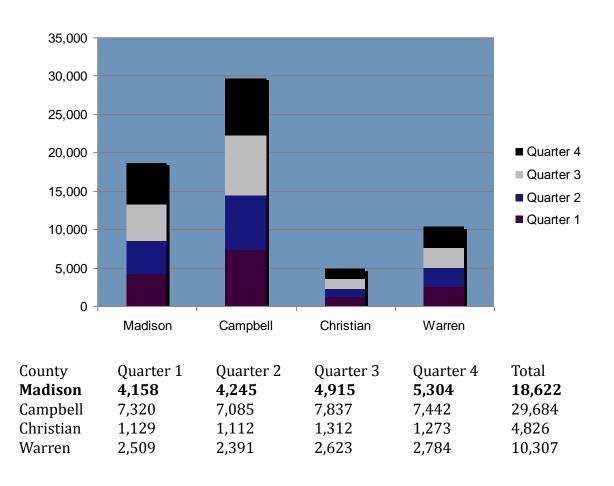
Source: <a href="http://chfs.ky.gov/os/oig/kasper.htm">http://chfs.ky.gov/os/oig/kasper.htm</a>

## Madison and Peer Counties. Actual Number of Hydrocodone Prescriptions. 2010



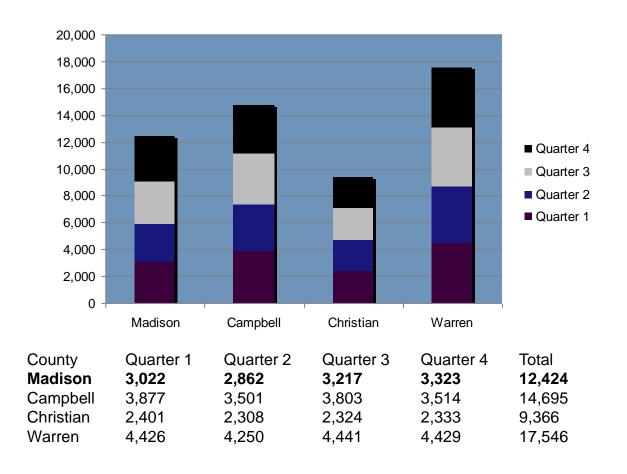
Source: <a href="http://chfs.ky.gov/os/oig/kasper.htm">http://chfs.ky.gov/os/oig/kasper.htm</a>

## Madison and Peer Counties. Actual Number of Oxycodone Prescriptions. 2010



Source: http://chfs.ky.gov/os/oig/kasper.htm

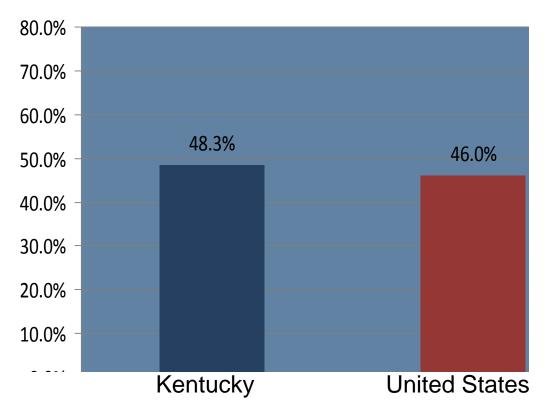
## Madison and Peer Counties-Actual Number of Alprazolam (Xanax) Prescriptions, 2010



Source: http://chfs.ky.gov/os/oig/kasper.htm

#### SEXUAL RISK-TAKING BEHAVIOR AMONG TEENS

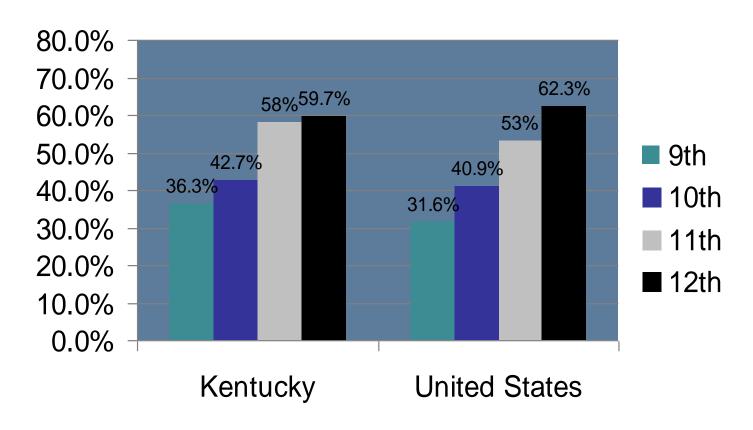
## KY and United States. Percentage of Teens (13-17) Considered "Sexually Experienced." 2009



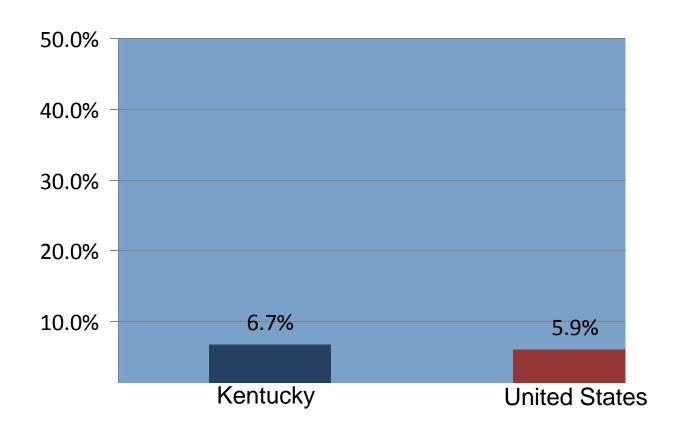
<sup>\*</sup>Sexually Experienced is defined as ever having had sexual intercourse in one's lifetime.

**Source:** Centers for Disease Control and Prevention. National Center for Health Statistics. VitalStats: Birth Data Files. http://www.cdc.gov/nchs/vitalstats.htm [December 2010]

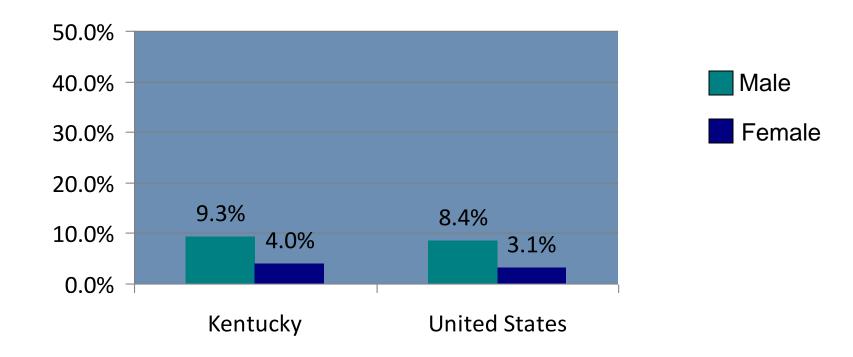
#### KY and U.S. Percentage of Teens (13-17) Considered "Sexually Experienced" by Grade. 2009



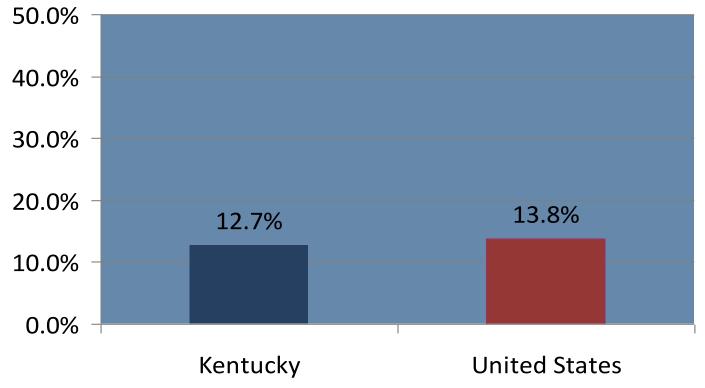
## KY and U. S. Percentage of Teens Admitted to Having Sex before Age 13. 2009



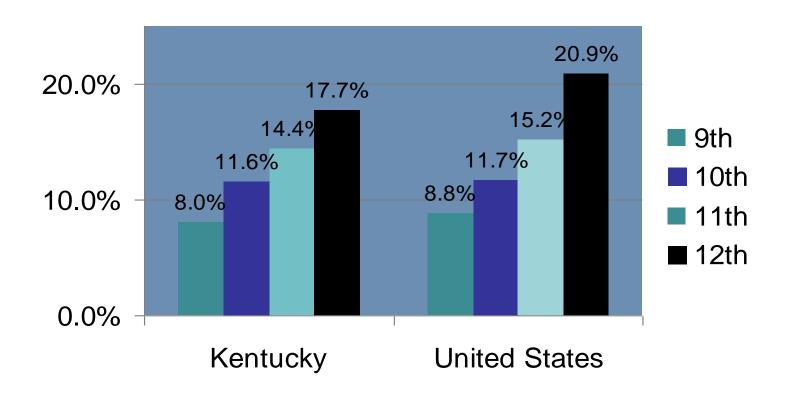
## KY and U. S. Percentage of Teens Admitted to Having Sex before Age 13 by Gender. 2009



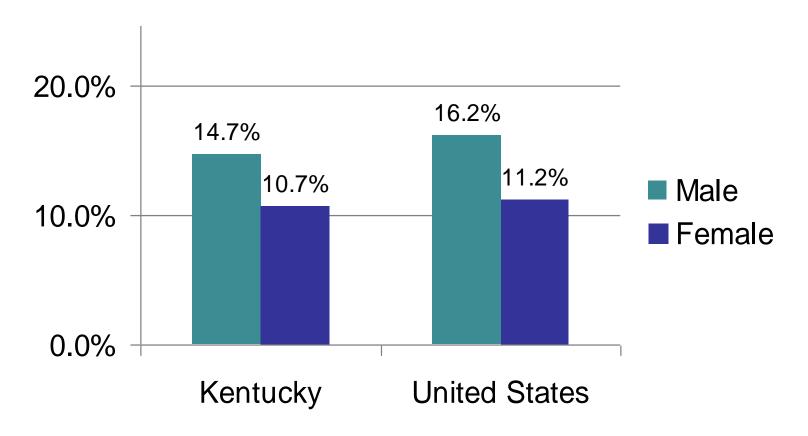
# Kentucky and U.S.- Proportion of High School Students with Four or More Lifetime Sexual Partners, 2009



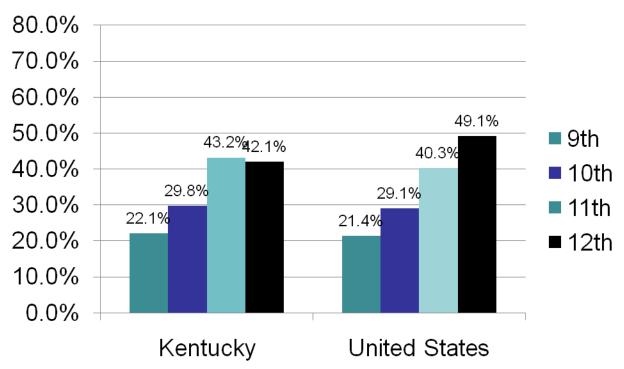
## KY and U.S. Proportion of High School Students with Four or More Lifetime Sexual Partners by Grade. 2009



## KY and U.S. Proportion of High School Students with Four or More Lifetime Sexual Partners by Sex. 2009

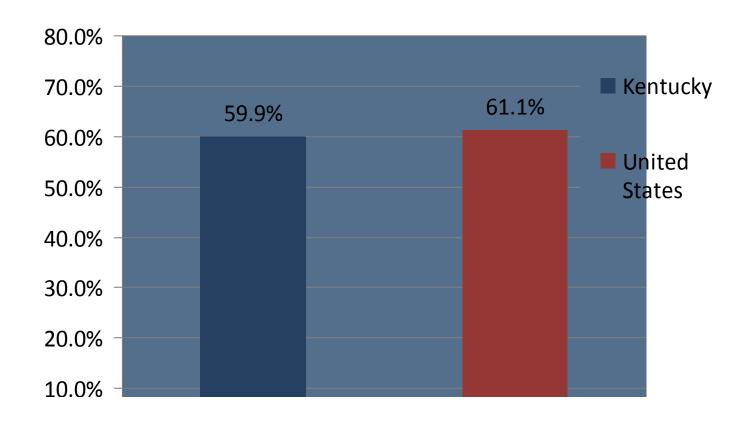


#### KY and U.S. Sexual Activity\* By Grade. 2010

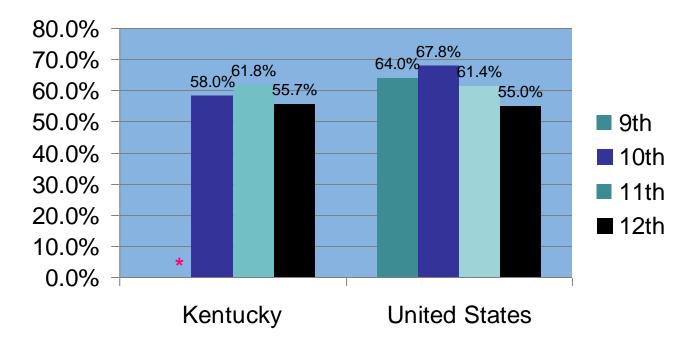


<sup>\*</sup>According to the Federal Judiciary, *sexual activity* is defined as vaginal intercourse, anal intercourse, oral sex between persons regardless of gender. Penetration, however slight, is sufficient to complete vaginal intercourse, anal intercourse or oral sex and does not require emission of semen. Penetration may be committed by an object manipulated by the person into the genital or anal opening of the complainant's body.

## KY and U.S. Percentage of High School Students who Regularly Use a Condom. 2009



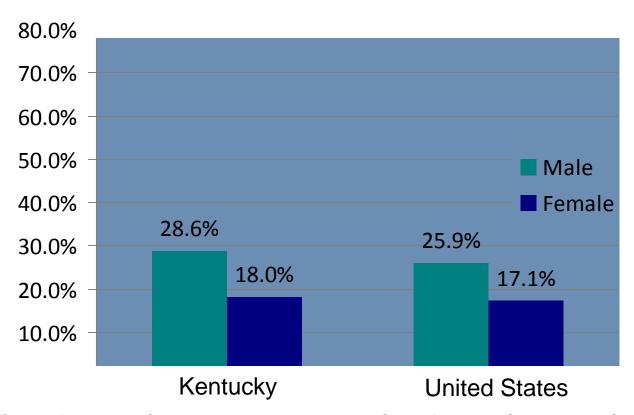
### KY and U.S. Proportion of High School Students who Used a Condom at Last Sex. 2009



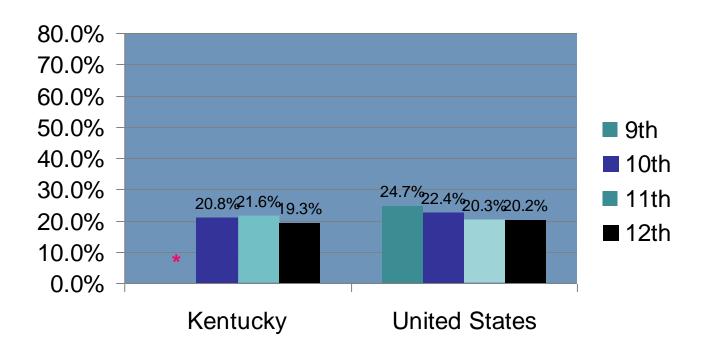
**Source:** Centers for Disease Control and Prevention. National Center for Health Statistics. VitalStats: Birth Data Files. <a href="http://www.cdc.gov/nchs/vitalstats.htm">http://www.cdc.gov/nchs/vitalstats.htm</a> [December 2010]

\*No Data available for 9th grade condom use in Kentucky

## KY and U.S. Proportion of High School Students Admitting to Having Last Sex Under the Influence of Drugs or Alcohol by Gender. 2009



## KY and U.S. Proportion of High School Students Admitting to Having Last Sex Under the Influence of Drugs or Alcohol by Grade. 2009

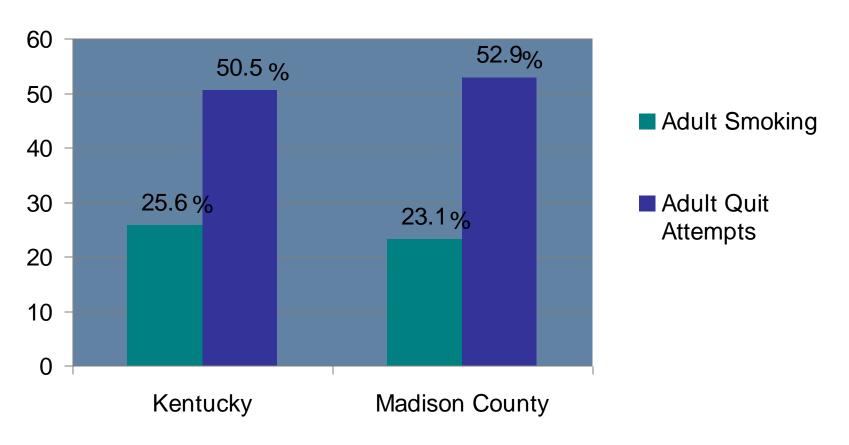


**Source:** Centers for Disease Control and Prevention. National Center for Health Statistics. VitalStats: Birth Data Files. <a href="http://www.cdc.gov/nchs/vitalstats.htm">http://www.cdc.gov/nchs/vitalstats.htm</a> [December 2010]

\*No Data available for 9th graders in Kentucky

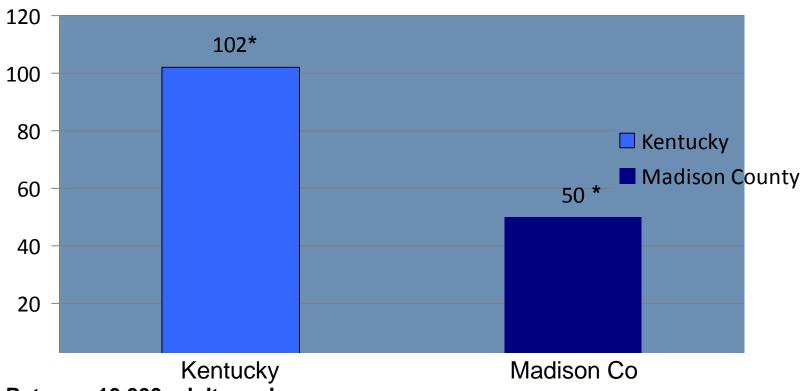
#### **TOBACCO USE & CESSATION**

### KY and Madison County. Smoking and Cessation Attempts. 2006-2008



**Source:** Kentucky Behavioral Risk Factor Surveillance System, 2006-2008. http://www.mc.uky.edu/tobaccopolicy/KCSP/FactSheets2010/MadisonCounty2010.pdf

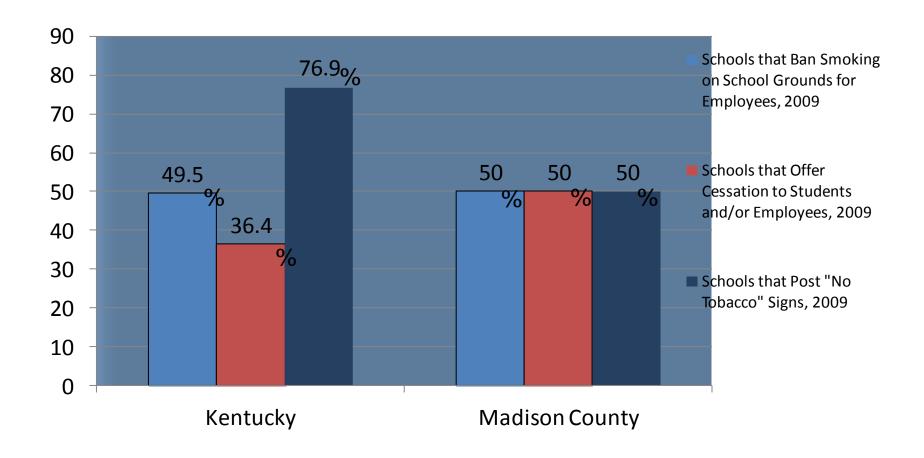
### KY and Madison County. Adult Participation in Tobacco Cessation. 2009



\* Rate per 10,000 adult smokers

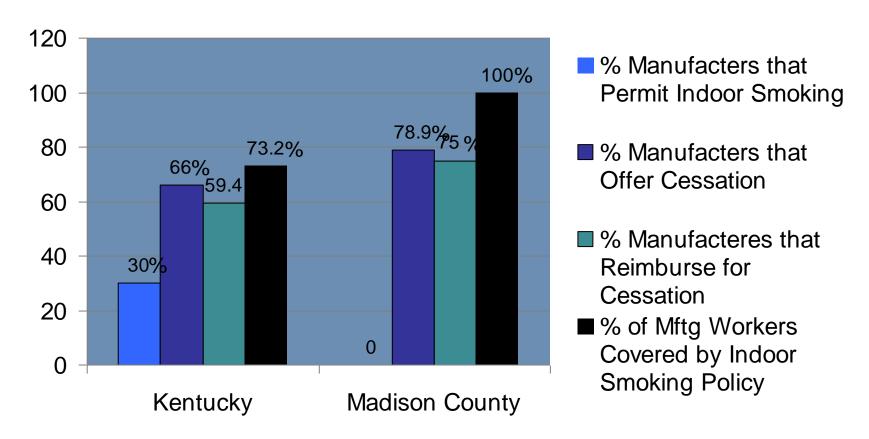
**Source:** Local Health Department Tobacco Cessation Survey, 2009. http://www.mc.ukv.edu/tobaccopolicy/KCSP/FactSheets2010/MadisonCounty2010.pdf

#### KY and Madison County. School Policy on Tobacco. 2009



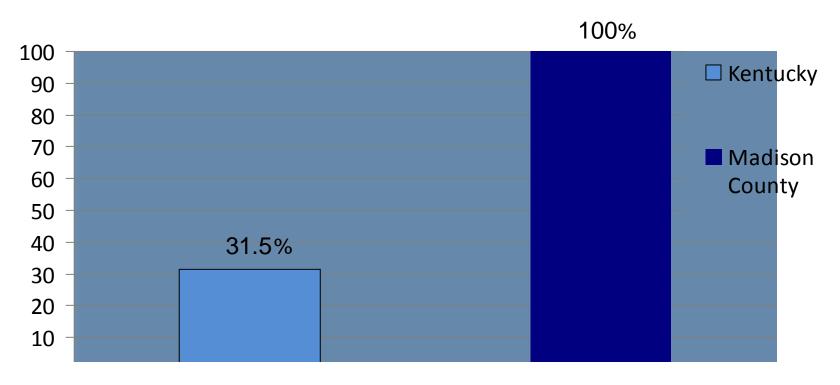
**Source:** UK Tobacco Policy Research Program. <a href="http://www.mc.uky.edu/tobaccopolicy/KentuckyDataReports/">http://www.mc.uky.edu/tobaccopolicy/KentuckyDataReports/</a> School Policy 2009. School policy study includes public and private middle and high schools.

#### KY and Madison County. Employer Policy. 2008



**Source:** UK Tobacco Policy Research Program. <a href="http://www.mc.uky.edu/tobaccopolicy/KentuckyDataReports/">http://www.mc.uky.edu/tobaccopolicy/KentuckyDataReports/</a> Workplace policy 2008. Workplace policy study includes only manufacturers with 50 or more employees.

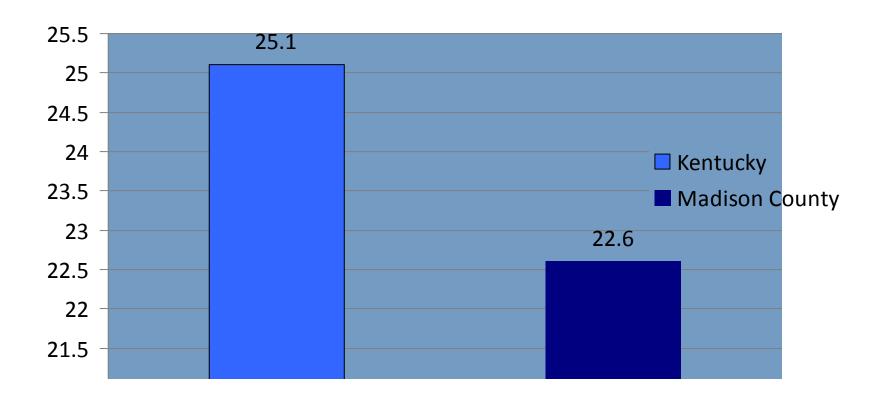
## KY and Madison County. Percent of Residents Covered by a 100% Smoke-Free Workplace Ordinance. 2010



**Source:** UK Tobacco Policy Research Program, Percent Covered Database. <a href="http://www.mc.uky.edu/tobaccopolicy/Ordinances/Smoke-freeOrdinances.HTM">http://www.mc.uky.edu/tobaccopolicy/Ordinances/Smoke-freeOrdinances.HTM</a>

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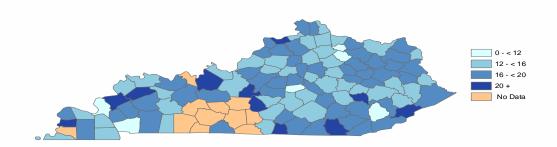
## Kentucky and Madison County – Smoking During Pregnancy, 2007



Source: Kentucky Department for Public Health, Office of Vital Statistics, 2007.

#### **OBESITY**

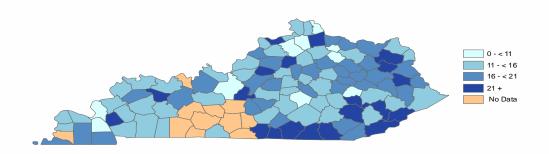
## KY Prevalence of Overweight,\* Among Children aged 2 - <5, by County. 2010



Analysis: Madison County children showing prevalence of overweight range from 12% to 16 % according to the 2010 KY PedNSS Table B6. \*Overweight is defined as equal to or more than 85 - <95 percentile BMI for age according to the CDC Growth Charts, 2000. 10% are expected to fall between the 85-95 percentiles.

Source: http://chfs.ky.gov/dph/mch/ns/PEDNSS.htm

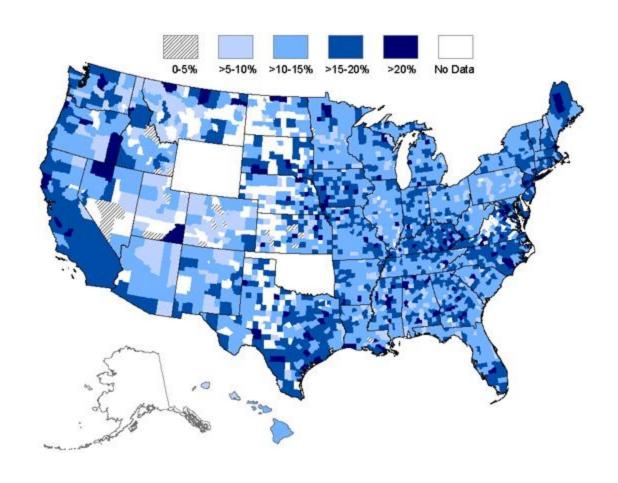
## KY. Prevalence of Obesity,\* Among Children aged 2 - <5, by county. 2010



Analysis: : Madison County children showing prevalence of obesity range from 11 to <16 according to the 2010 KY PedNSS Table B6. \*Overweight is defined as equal to or more than 95 percentile BMI for age according to the CDC Growth Charts, 2000. 5% are expected to fall 95 percentiles.

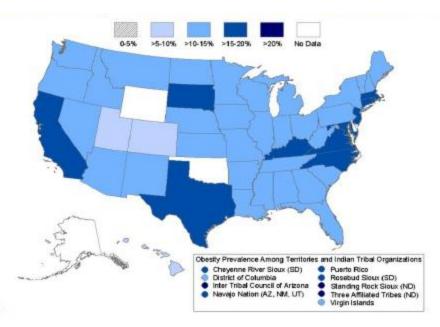
Source: <a href="http://chfs.ky.gov/dph/mch/ns/PEDNSS.htm">http://chfs.ky.gov/dph/mch/ns/PEDNSS.htm</a>

## U.S. by County Obesity Prevalence Among Low-Income Children Aged 2 to 4 Years. 2007—2009



**Source:** Division of Nutrition, Physical Activity and Obesity, National Center for Chronic Disease Prevention and Health Promotion. www.cdc.gov/obesity/childhood/lowincome/html

### U.S. by State Obesity Prevalence Among Low-Income Children, Aged 2-4 Years. 2009

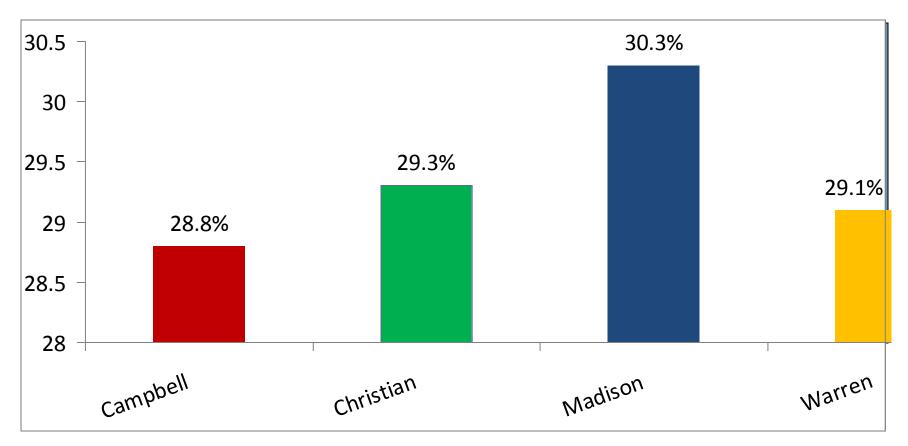


#### **Key Statistics**

- 1 of 7 low-income, preschool-aged children is obese.
- 37.4% of counties with at least 100 records in the PedNSS have childhood obesity rates exceeding 15%.
- 5.5% of such counties have childhood obesity rates exceeding 20%.
- In 2009, American Indian or Alaska Native children had the highest prevalence of obesity (20.7%), followed by Hispanic (17.9%), non-Hispanic white (12.3%), non-Hispanic black (11.9%), and Asian/Pacific Islander (11.9%) children. The only increase in obesity rates since 2004 occurred among American Indian or Alaska Native children (1.7% increase).
- County obesity rates are variable within states. Even states with the lowest prevalence of obesity have counties where many lowincome children are obese and at risk for chronic diseases.

**Source:** Division of Nutrition, Physical Activity and Obesity, National Center for Chronic Disease Prevention and Health Promotion. www.cdc.gov/obesity/childhood/lowincome/html

## Madison and Comparison Counties-, Age-Adjusted Estimates of the Percentage of Adults† Who Are Obese, 2008



†≥ 20 years old.

**Source**: Centers for Disease Control and Prevention: National Diabetes Surveillance System. http://apps.nccd.cdc.gov/DDTSTRS/default.aspx.

# MOTOR VEHICLE CRASHES & & SEAT BELT USAGE

#### Kentucky Nonfatal Crash Outcome Indicators: Motorcycle Crashes (2008 Crashes)

| Kentucky Crash Outcome Data Evaluation System (CODES) Oct 2010   |            |
|--|------------|
| Indicator  | Value      |
| Number (and rate per 1,000 licensed KY motorcyclists) of motorcyclists who received inpatient care at KY hospitals as a result of crashes on KY roads in 2008  | 355 (2.65) |
| Number (and rate per 1,000 licensed KY motorcyclists) of motorcyclists who received outpatient care at KY hospitals as a result of crashes on KY roads in 2008 | 868 (6.47) |

#### At a glance...

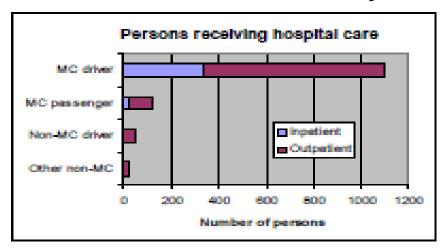
- There were 1,153 motorcycle crashes on KY roads in 2008 that resulted in at least one person receiving care at a hospital in KY (on average, more than 3 such crashes per day)
- For every fatality resulting from a motorcycle crash on KY roads in 2008, there were 13 persons who received care at a hospital in KY
- \$28 million were billed by KY hospitals for short-term medical care of persons injured in MC crashes on KY roads in 2008
- In 76% of motorcycle crashes in which at least one person received care at a KY hospital, the at-fault unit was a motorcycle

Source:

Crash Outcome Data Evaluation System (CODES)

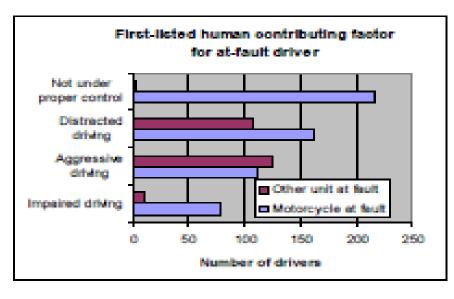
Kentucky Injury Prevention and Research Center
University of Kentucky College of Public Health
Questions/comments: Michael Singleton (859) 257-5809

## Persons Receiving Hospital Care and First-listed Human Contributing Factor for At-Fault Driver of Motorcycle Crashes on KY Roadways. 2008



### Persons receiving hospital care

- Motorcycle crashes on KY roads in 2008 resulted in 1,294 persons receiving care at a KY hospital
- 1,223 (95%) of those persons were motorcyclists
- 71 (5%) were non-motorcyclists

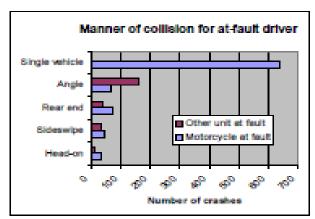


### **Human factors**

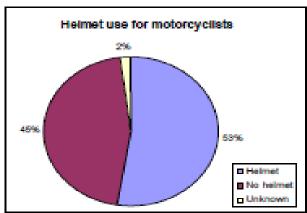
- This chart shows the most common firstlisted human contributing factors in MC crashes in which at least one person received care at a KY hospital
- "Not under proper control" was the most common human factor for at-fault motorcycle operators
- Distracted and aggressive driving were common for both motorcyclists and other at-fault units
- Impaired driving was a common factor for at-fault motorcyclists

Source:

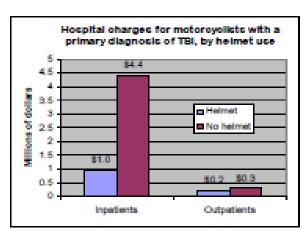
## Motorcycle Collisions, Helmet Use, Hospital Charges and Potential Long- term Injuries on KY Roadways



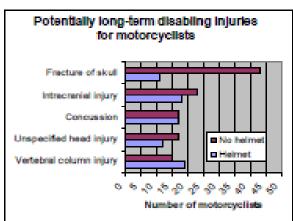
 More than half of the motorcycle crashes in which at least one person received care at a KY hospital were single-vehicle crashes



 In MC crashes in which at least one person received care at a KY hospital, 53% of motorcyclists were reported as wearing a helmet



 Total hospital charges for brain-injured motorcyclists who were not wearing a helmet were nearly 4 times more than for brain-injured motorcyclists who wore a helmet



43 unhelmeted motorcyclists who received care at a KY hospital had a principal diagnosis of skull fracture, compared to 11 motorcyclists who wore a helmet

### Source:

### Kentucky Nonfatal Crash Outcome Indicators: Aggressive Driving (2008 Crashes)

| Kentucky Crash Outcome Data Evaluation System (CODES) Oct 2010  |               |
|---|---------------|
| Indicator   | Value         |
| Number (and rate per 100 million vehicle miles) of persons receiving inpatient care at a KY hospital as a result of crashes on KY roads in 2008 caused by an aggressive |               |
| driver (AD)   | 787 (1.67)    |
| Number (and rate per 100 million vehicle miles) of persons receiving outpatient care  |               |
| at a KY hospital as a result of crashes on KY roads in 2008 caused by an AD   | 10,208 (21.8) |

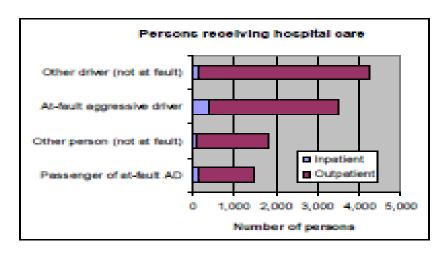
### At a glance...

- Aggressive drivers caused 21 crashes per day on KY roads in 2008 that resulted in at least one person receiving care at a hospital in KY
- For every fatality on KY roads in 2008 caused by an aggressive driver, there were 39 persons who received care at a hospital in KY
- \$70 million were billed by KY hospitals for short-term medical care of persons injured in AD crashes in 2008
- Hundreds of Kentuckians injured in aggressive driving crashes will experience long-term disabilities

Source: Crash Outcome Data Evaluation System (CODES)

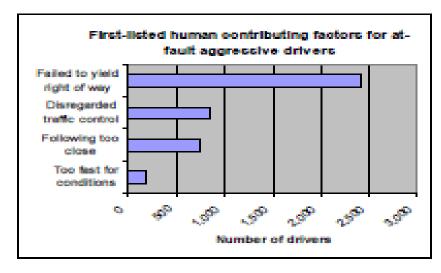
Kentucky Injury Prevention and Research Center
University of Kentucky College of Public Health
Questions/comments: Michael Singleton (859) 257-5809

## Persons Receiving Hospital Care and First-listed Human Contributing Factors for At-Fault Aggressive Drivers on KY Roadways. 2008



#### Persons receiving hospital care

- Crashes caused by an aggressive driver led to 10,995 persons receiving care at a KY hospital in 2008
- 4,961 of those persons were the at-fault aggressive driver or their passengers
- 6,034 (55%) were persons other than aggressive drivers or their passengers



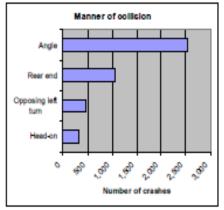
### Human factors for aggressive drivers

- This chart shows the most common firstlisted human contributing factors in crashes where an aggressive driver caused injury to another person (not their passenger) that required treatment at a Kentucky hospital
- Failure to yield right of way was the most common first- listed factor for the aggressive driver in such crashes
- In preparing this chart we did not include single vehicle crashes involving only an aggressive driver and their passengers

Source:

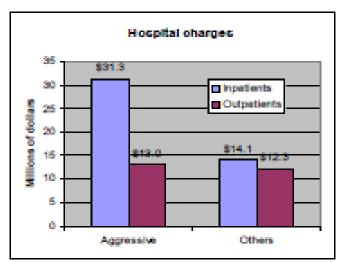
Collisions, Hospital Charges, & Potential Long-term Disabling Injuries Due to

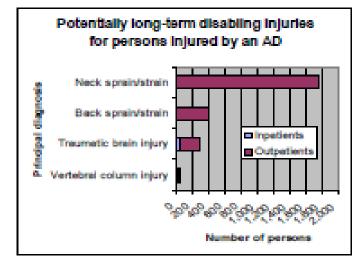
Aggressive Driving on KY Roadways. 2008



#### Manner of collision

- This chart shows the most common manners of collision for crashes where an aggressive driver caused injury to another person (not their passenger) who was treated at a Kentucky hospital
- Angle was the most commonly listed manner of collision in such crashes
- In preparing this chart we did not include single vehicle crashes involving only an aggressive driver and their passengers





- AD crashes in 2008 resulted in \$70 million billed by Kentucky hospitals for short-term medical care of injured persons
- \$26 million was charged for treatment of persons injured by aggressive drivers
- \$44 million was for treatment of at-fault aggressive drivers and their passengers.
- At least 2,500 persons who were injured by an aggressive driver and treated at a hospital in Kentucky were diagnosed with injuries having potential to cause long-term disability.
- This number does not include the at-fault aggressive drivers and their passengers

### Source:

### Kentucky Nonfatal Crash Outcome Indicators: Impaired Driving (2008 Crashes)

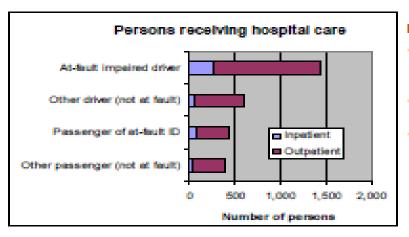
| Kentucky Crash Outcome Data Evaluation System (CODES) Oct 2010  |             |
|---|-------------|
| Indicator   | Value       |
| Number (and rate per 100 million vehicle miles) of persons receiving inpatient care at a KY hospital as a result of crashes on KY roads in 2008 caused by an impaired driver (ID) | 435 (0.92)  |
| Number (and rate per 100 million vehicle miles) of persons receiving outpatient care at a KY hospital as a result of crashes on KY roads in 2008 caused by an ID                  | 2,429 (5.1) |

### At a glance...

- Impaired drivers caused 6 crashes per day on KY roads in 2008 that resulted in at least one person receiving care at a hospital in KY
- For every fatality on KY roads in 2008 caused by an impaired driver, there were nearly 17 persons who received care at a hospital in KY
- \$40 million were billed by KY hospitals for short-term medical care of persons injured in impaired driving crashes in 2008

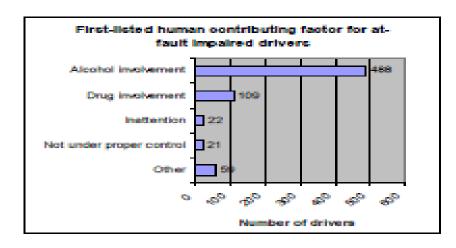
Source:

## Persons Receiving Hospital Care and First-listed Human Contributing Factor for At-fault Impaired Drivers on KY Roadways. 2008



#### Persons receiving hospital care

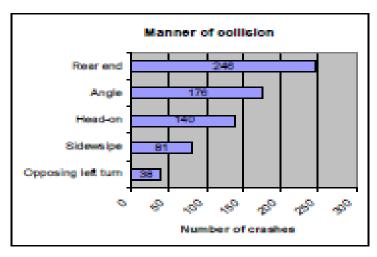
- Crashes caused by an impaired driver led to 2,864 persons receiving care at a KY hospital in 2008
- 1,865 of those persons were the at-fault impaired driver or their passengers
- 999 (35%) were persons other than impaired drivers and their passengers



#### Human factors for impaired drivers

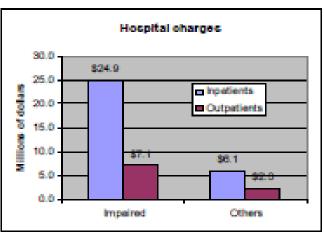
- This chart shows the most common first-listed human contributing factors in crashes where an impaired driver caused injury to another road user (not their passenger) that required treatment at a Kentucky hospital
- Alcohol involvement was the most common first-listed factor in such crashes.
   Drug involvement was second.
- In preparing this chart we did not include single vehicle crashes involving only an impaired driver and their passengers

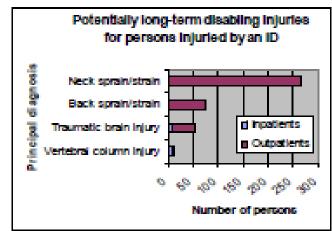
## Collisions, Hospital Charges, and Potentially Long-term Disabling Injuries for Persons Injured by an Impaired Driver on KY Roadways. 2008



#### Manner of collision

- This chart shows the most common manners of collision for crashes where an impaired driver caused injury to another road user (not their passenger) that required treatment at a Kentucky hospital
- Rear end was the most commonly listed manner of collision in such crashes
- In preparing this chart we did not include single vehicle crashes involving only an impaired driver and their passengers





- ID crashes in 2008 resulted in more than \$40 million billed by Kentucky hospitals for short-term medical care of injured persons
- \$8.4 million was billed for treatment of persons injured by impaired drivers
- \$32 million was for treatment of at-fault impaired drivers and their passengers
- At least 400 persons who were injured by an impaired driver and treated at a hospital in Kentucky were diagnosed with an injury having potential to cause long-term disability
- This number does not include the at-fault aggressive drivers and their passengers

### Source:

### Kentucky Nonfatal Crash Outcome Indicators: Young Drivers (2008 Crashes)

| Kentucky Crash Outcome Data Evaluation System (CODES) Oct 2010  |              |
|---|--------------|
| Indicator   | Value        |
| Number (and rate per 100 million vehicle miles ) of persons who received inpatient care at a KY hospital as a result of a crash on KY roads in 2008 involving a young driver (YD) | 488 (1.03)   |
| Number (and rate per 100 million vehicle miles ) of persons who received inpatient care at a KY hospital as a result of a crash on KY roads in 2008 involving a YD                | 8,344 (17.7) |

### At a glance...

- On average there were 17 crashes per day on KY roads in 2008 involving a young driver that resulted in at least one person receiving care at a hospital in Kentucky
- For every fatal crash on Kentucky roads in 2008 that involved a young driver, there were 54 crashes involving a YD in which at least one person received care at a hospital in KY
- More than \$35 million were billed by KY hospitals for treatment of injuries resulting from crashes in 2008 in which a young driver was at fault
- In crashes that involved at least one young driver in 2008, a young driver was at fault 77% of the time

#### otes

- A "young driver" was defined as a driver between the ages of 16 and 20, inclusive.
- "Persons receiving care at a KY hospital" includes persons who were admitted to ("inpatients"), or treated and released without being admitted at ("outpatients"), a non-VA hospital in Kentucky.
   Most outpatient visits are emergency room visits, but can also include outpatient surgeries and observational stays. Persons who died in the hospital were counted as fatalities and were NOT included in this analysis.

### Sources:

### Kentucky Nonfatal Crash Outcome Indicators: Distracted Driving (2008 Crashes)

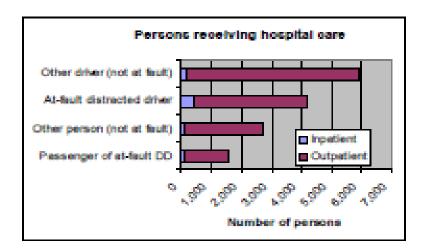
| Kentucky Crash Outcome Data Evaluation System (CODES) Oct 2010  |               |
|---|---------------|
| Indicator   | Value         |
| Number (and rate per 100 million vehicle miles) of persons who received inpatient care at a KY hospital as a result of a crash on KY roads in 2008 caused by a distracted | 004 /4 70     |
| driver (DD)   | 804 (1.70)    |
| Number (and rate per 100 million vehicle miles) of persons who received outpatient care at a KY hospital as a result of a crash on KY roads in 2008 caused by a DD        | 13,658 (28.9) |

### At a glance...

- Distracted drivers caused 29 crashes per day on KY roads in 2008 that resulted in at least one person receiving care at a hospital in KY
- For every fatality on Kentucky roads in 2008 caused by a distracted driver, there were 78 persons who received care at a hospital in KY
- Nearly \$73 million were billed by KY hospitals for short-term medical care of persons injured in DD crashes in 2008
- Hundreds of Kentuckians injured by distracted drivers will experience long-term disabilities

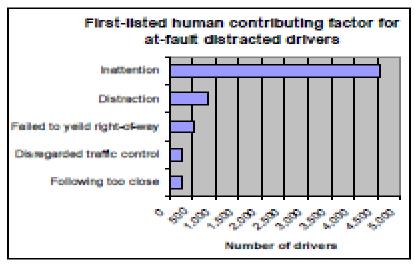
Source:

## Persons Receiving Hospital Care & First-listed Human Contributing Factor for At-fault Distracted Drivers on KY Roadways. 2008



### Persons receiving hospital care

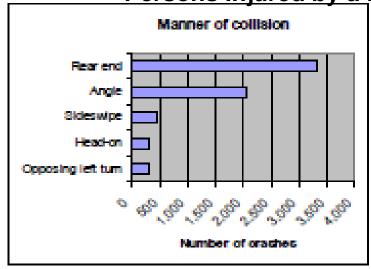
- Crashes caused by a distracted driver led to 14,462 persons receiving care at a KY hospital in 2008
- 5,817 of those persons were the at-fault distracted driver or their passengers
- 8,645 (60%) were persons other than distracted drivers and their passengers



#### Human factors for distracted drivers

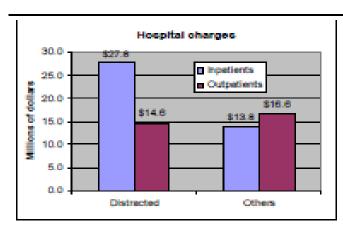
- This chart shows the most common first-listed human contributing factors in crashes where a distracted driver caused injury to another road user (not their passenger) that required treatment at a Kentucky hospital
- Inattention was by far the most common first-listed factor in such crashes
- In preparing this chart we did not include single vehicle crashes involving only a distracted driver and their passengers

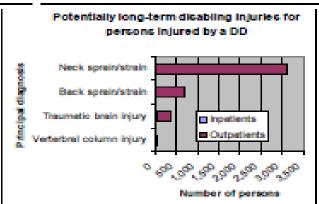
Collisions, Hospital Charges, & Potentially Long-term Disabling Injuries for Persons Injured by a Distracted Driver on KY Roadways.



### Manner of collision

- This chart shows the most common manners of collision for crashes where a distracted driver caused injury to another person (not their passenger) who was treated at a Kentucky hospital
- Rear end was the most commonly listed manner of collision in such crashes
- In preparing this chart we did not include single vehicle crashes involving only a distracted driver and their passengers

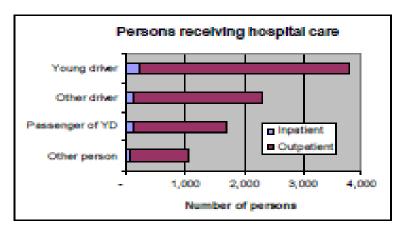




- Distracted driving resulted in nearly \$73 million billed by Kentucky hospitals for short-term medical care of injured persons
- \$42.4 million was charged for treatment of persons injured by distracted drivers
- \$30.4 million was for treatment of at-fault distracted drivers and their passengers
- At least 4,200 persons who were injured by a distracted driver and treated at a hospital in Kentucky were diagnosed with injuries having potential to cause long-term disability.
- This number does not include the at-fault distracted drivers and their passengers

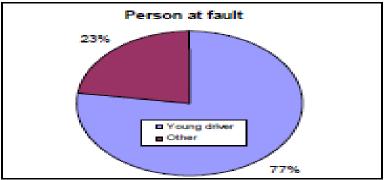
### Source:

## Persons Receiving Hospital Care & Crashes Involving Young Drivers on KY Roadways. 2008



### Persons receiving hospital care

- Crashes involving a young driver resulted in 8,832 persons receiving care at a Kentucky hospital in 2008
- 5,483 (62%) of those persons were young drivers or one of their passengers
- 3,349 (38%) persons other than a young driver or one of their passengers

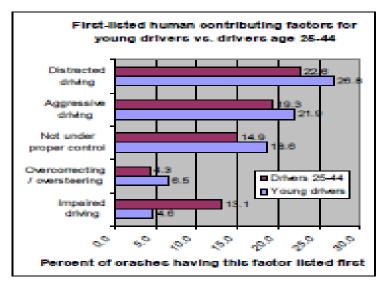


#### **Human factors**

 In crashes involving young drivers in 2008 in which at least one person involved in the crash received treatment at a hospital in Kentucky, a young driver was at fault 77% of the time

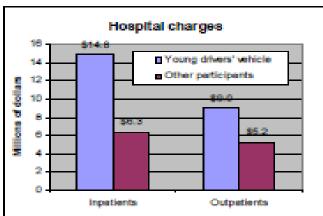
### Source:

# First-Listed Human Contributing Factors for Young Drivers vs. Drivers age 25-45, Hospital Charges, & Potentially Long-term Disabling Injuries in Crashes Involving Young Drivers on KY Roadways

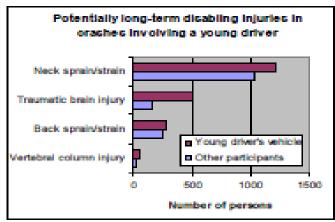


#### **Human factors**

- This chart shows the most common firstlisted human contributing factors in crashes where at least one person received care at a hospital in KY
- The blue bars show the most common human factors for young drivers who were at fault in such crashes, and the red bars provide a comparison to drivers age 25-44
- At-fault young drivers were somewhat more likely than at-fault drivers ages 25-44 to have distraction/inattention, aggressive driving, loss of vehicle control, and overcorrecting or oversteering listed first; and considerably less likely to have impaired driving listed first



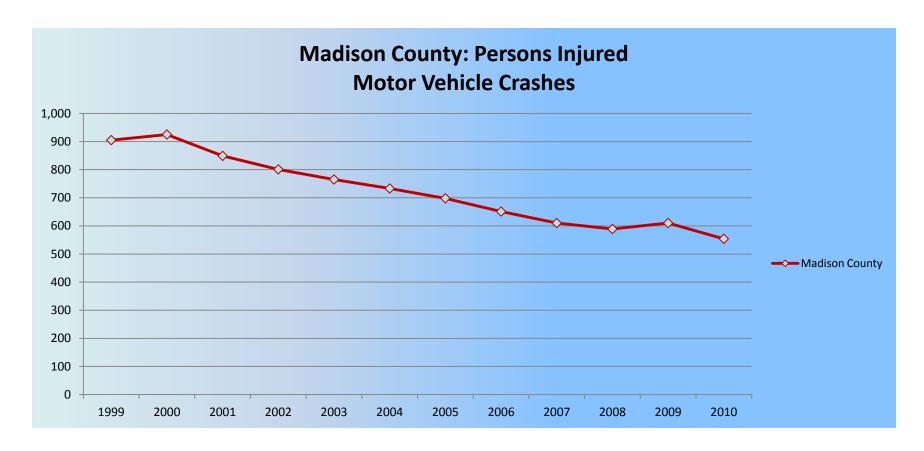
 More than \$35 million in hospital charges were billed by Kentucky hospitals for shortterm medical care of injured persons resulting from crashes in which a young driver was at fault



 At least 3,600 persons who were injured in crashes in KY involving a young driver, and treated at a hospital in Kentucky, were diagnosed with injuries having potential to cause lone-term disability.

### Source:

# Madison County. Persons Injured in Motor Vehicle Crashes. 1999-2010



**Analysis:** Persons injured in motor vehicle crashes has declined over the years from 1999-2010. Increased attention to seat belt usage and other vehicle safety strategies have result in the decline.

Sources: http://www.ktc.uky.edu/rep\_TS\_Collision\_Facts.html

# Madison County Drivers & Front Seat Passengers Safety Belt Usage. 2008-2011

| <u>Year</u> | <u>% Usage</u> |
|-------------|----------------|
| 2008        | 79.5           |
| 2009        | 81.0           |
| 2010        | 83.3           |
| 2011        | 84.2           |

**Analysis:** Safety (seat) belt usage data collected over the past four years has shown an increase. Fourth years nursing students, studying Community Health Nursing in the Baccalaureate Nursing Program (BSN) at Eastern Kentucky University (EKU), have conducted surveys of drivers though out assigned locations in Madison County. Collection of data has been consisted with the process used by the Kentucky Transportation Center for its Safety Belt Usage Survey in Kentucky.

**Sources:** <u>www.ktc.uky.edu</u> & Madison County Safety Collision in collaboration with EKU/BSN Student Surveys

### **HEALTH CARE ACCESS**

### **Health Care Services & Emergency Resources**

### **Hospitals**

- Pattie A. Clay Regional Medical Center, Richmond 105 beds, acute care community hospital that serves Madison & surrounding counties
- St. Joseph Berea, Berea 25 beds, critical access hospital that serves residents of Madison, Jackson, Estill,
   Garrard, and Rockcastle counties

### **Clinics**

- White House Clinics Richmond & Berea locations, as well as in adjoining counties of Jackson & Estill; a
  Federally Qualified Health Care Center offering pediatric, family, internal medicine, dentistry, mental health and
  pharmacy
- Berea Rural Health Ministry Clinic Berea, is a primary care clinic serving persons from Madison, Jackson, Estill,
   Garrard, Clark, Clay, Laurel, Rockcastle & Powell counties; No person is refused to be seen due to inability to pay
- Several clinics, mostly specialty in scope, operate in both Richmond & Berea

### **Ambulance Service**

Madison County Emergency Medical Services – operate four (4) stations & six (6) 24 hour crews for the county

### **Fire Departments**

• Fire departments are operated by city governments of Richmond, Berea & the Madison County Fiscal Court; small rural community fire departments, mostly volunteer, exist in the county

### **Law Enforcement**

 Police departments are operated by the city governments of Richmond & Berea, Eastern Kentucky University (campus patrol); Madison County Sheriff Department is housed in Richmond; A Kentucky State Police Post is located in Richmond

### **Emergency Preparedness**

 Chemical Stockpile Emergency Preparedness Program (CSEPP) – Richmond- Provides education and enhanced emergency preparedness in Madison & communities surrounding the chemical stockpile stored in Madison County @ the Blue Grass Army Depot

### **Emergency and Urgent Need Resources**

Emergency Management Agency (EMA) - Richmond; <a href="http://www.madison-county-ema.com">http://www.madison-county-ema.com</a>

**9-1-1** Emergency needs

American Red Cross - 230 W. Main Street, Richmond - (859)623-1336

### **Food Banks**

Alms Outreach (859) 623-2220

210 Geri LN

Richmond, KY 40475

Berea Community Food Bank (859) 985-1903

103 Parkway Ave.

Berea, KY 40403

God's Outreach Madison County Food Bank

P.O. Box 1226

Richmond, KY 40476

### Basic & Emergency Assistance, Housing, Hearting Assistance

Kentucky River Foothills Development Council, Inc. – Richmond; <a href="http://foothilscap.org/Services/Service.html">http://foothilscap.org/Services/Service.html</a>

### **<u>2-1-1 Urgent Needs</u>** – United Way of the Bluegrass (includes Madison County)

- Dial 2-1-1 from any landline or cell phone and be connected to a trained specialist who may help.
  - Food, shelter, employment and other basic needs
  - Support for children, families & seniors
  - Healthcare access
  - Volunteer opportunities

# **Kentucky and Madison County. Health Care Providers Madison Co. KY**

| Personal Doctor or Health Care Provider (% add | lts) 87% | 82% |
|--|----------|-----|
|--|----------|-----|

About the indicator: Percent of adults reporting there was one person they think of as their personal doctor or health care providers.

### **Health Care Providers Per 1,000 Population**

| Primary Care Physicians | 0.8  | 1.0  |
|-------------------------|------|------|
| Physician Specialists   | 0.5  | 1.4  |
| Registered Nurses       | 13.0 | 11.2 |
| • Pharmacists           | 1.0  | 1.1  |
| • Dentists              | 0.4  | 0.6  |

**About the Indicator:** Physician and Dentist data based on provider's county of practice as reported to the Kentucky Board of Medical Licensure or Kentucky Board of Dentistry. Nurse, Physician Assistant, and Pharmacist data based on provider's county of residence.

Source: <a href="http://www.kentuckyhealthfacts.org/data/location/show.aspx?cat=5&loc=73">http://www.kentuckyhealthfacts.org/data/location/show.aspx?cat=5&loc=73</a>

Data Sources: Kentucky Board of Medical Licensure, Kentucky Board of Dentistry, Kentucky Board of Nursing, Kentucky Board of Pharmacy

### **Health Care Providers Available**

| • | All Physicians          | 108   | 10,11 <u>5</u> |
|---|-------------------------|-------|----------------|
| • | Primary Care Physicians | 67    | 4,241          |
| • | Physician Specialists   | 41    | 5,874          |
| • | Registered Nurses       | 1,072 | 47,948         |
| • | Nurse Practitioners     | 56    | 2,797          |
| • | Physician Assistants    | 15    | 772            |
| • | Pharmacists             | 86    | 4,524          |
| • | Dentists                | 31    | 2,461          |

About the Indicator: Physician and Dentist data based on provider's county of practice as reported to the Kentucky Board of Medical Licensure or Kentucky Board of Dentistry. Nurse, Physician Assistant, and Pharmacist data based on provider's county of residence. Source: <a href="http://www.kentuckyhealthfacts.org/data/location/show.aspx?cat=5&loc=73">http://www.kentuckyhealthfacts.org/data/location/show.aspx?cat=5&loc=73</a>

Data Sources: Kentucky Board of Medical Licensure, Kentucky Board of Dentistry, Kentucky Board of Nursing, Kentucky Board of Pharmacy

# Kentucky and Madison County Comparison. Physician Providers Available.

|           |                           | Madison Co. | <u>KY</u> |
|-----------|---------------------------|-------------|-----------|
| <u>PI</u> | nysicians Available       |             |           |
| •         | Total Physicians          | 108         | 10,115    |
| •         | Total Primary Care        | 67          | 4,241     |
| •         | Family Practice           | 27          | 1,547     |
| •         | General Practice          | 3           | 116       |
| •         | Internal Medicine         | 22          | 1,375     |
| •         | Obstetrics and Gynecology | 5           | 493       |
| •         | Pediatrics                | 10          | 710       |
| •         | Other Specialty           | 41          | 5,874     |

**Source:** http://www.kentuckyhealthfacts.org/data/location/show.aspx?cat=5&loc=73.

Data source: Kentucky Board of Medical Licensure.

### **EDUCATIONAL RESOURCES**

### Madison County. Educational Resources

- Madison County School District (K-12) 18 school sites; 10,000+ students
- Berea Independent School District (K-12) elementary, middle & high schools located on one campus; 1,000 students
- Eastern Kentucky University (EKU) Model School (Pre-K-12)located in Richmond on EKU campus; 700+ students
- St. Marks Catholic School (Pre-K-4<sup>th</sup> grade) located in Richmond
- Head Start Program (Operated by Kentucky River Foothills Development Council, Inc. – several locations throughout the county; <a href="http://foothillscap.org/Services/HeadStart.html">http://foothillscap.org/Services/HeadStart.html</a>
- Berea College 4 year liberal arts college; <u>www.berea.edu</u>
- EKU (a Kentucky regional university) Richmond; undergraduate doctoral programs; <u>www.eku.edu</u>