

KENTUCKY COUNTY HEALTH PROFILES, 2002

SUMMARY

HEALTH AND SOCIAL INDICATORS

POPULATION: Accurate and reliable population statistics are fundamental to any population-based health status analysis. All population figures used in this report are 2002 population estimates provided by Kentucky Population Research, Urban Studies Institute, University of Louisville, and all population-based rates have been computed using these numbers. These counts were provided in three racial categories: White, Black (African American), and Other (see Technical Notes for change in the definition of Other). Races other than White and Black comprised 2.6 percent of the enumerated population of Kentucky in 2002. Due to limitations of space and the extremely small numbers of the Other population at the county level, statistics disaggregated by race in this report are presented for the White and Black populations only.

Also due to limitations of space, rates for many indicators in this report have not been included. Basic population data have been provided to allow the reader to calculate additional rates as need be.

TOTAL BIRTHS: Birth statistics are extremely important measures of health status as they serve as an indicator of a broad range of nutritional, environmental, and other health-related factors in a population.

Crude birth rate: In 2002, the crude birth rate in Kentucky was 13.1 births per 1,000 population, down slightly from 13.3 in 2001. The rate ranged from 8.1 per 1,000 in Lyon County to 21.7 per 1,000 in Christian County.

Under 18 birth rate: Births to teen mothers are a major public health concern as they are associated with higher rates of low birthweight and infant mortality and create educational, social, and economic problems for both mother and child. In 2002, the under 18 age-specific birth rate in Kentucky was 9.8 births per 1,000 females aged 10-17, down from 10.0 in 2001. The rate ranged from 0.0 per 1,000 in Robertson County to 30.3 per 1,000 in Powell County. Statewide, 4.0% of all births were to mothers under 18, unchanged from 2001.

Weight less than 2,500 grams: Low birth weight is a major contributing factor in infant mortality and long-term disability. In 2002, 8.6% of children born in the state weighed less than 2,500 grams (5 lb. 8 oz.), a slight increase

from the 2001 rate of 8.3. By county, this percent varied from a high of 14.9% in Livingston County to a low of 3.8% in Owsley County.

Mothers without prenatal care, 1st trimester: Early prenatal care is associated with decreased risk of low birthweight and infant mortality. In 2002, 14.3% of Kentucky mothers did not receive prenatal care during the first trimester of pregnancy, unchanged from 2001. This measure ranged from 33.7% in Crittenden County to 4.0% in Robertson County.

Unmarried mothers: Unmarried mothers tend to have poorer birth outcomes than married mothers because they are disproportionately young, less educated, and are more likely to be poor. Among the factors related to births to unmarried mothers are higher rates of teenage pregnancy, lack of prenatal care, and low weight births. Statewide, the rate of births to unmarried mothers in 2002 was 333.0 per 1,000 live births, an increase from 318.2 in 2001. Fulton County had the highest rate, at 565.2 per 1,000, and Elliott County had the lowest rate, 174.6 per 1,000.

WHITE BIRTHS: Due to the preponderance of whites in the total population of Kentucky (90.0%), birth indicators for the white population closely mirror the total in both ranking and rates, but tend to be slightly lower.

BLACK BIRTHS: The major indicators of birth outcomes continued to be less favorable for blacks than for the rest of the population, but the gap between blacks and whites narrowed for some indicators. The percent of low birth weight births to black mothers increased from the previous year, from 13.4 to 14.4, and the gap between blacks and whites in the under 18 birth rate narrowed slightly from 19.1 to 9.3 per 1,000 in 2001 to 16.5 to 9.4 in 2002. For the fourth consecutive year, more than one-fifth (20.1%) of black mothers did not receive prenatal care during the first trimester (compared to 13.6% for whites). Single-year black birth statistics, in particular, in most Kentucky counties should be used with great caution due to the very small numbers involved.

INFANT MORTALITY: The infant mortality rate is one of the most universal and understandable measures of a population's health status. In 2002 the statewide rate was 7.2 infant deaths per 1,000 live births. Twenty-nine counties recorded no infant deaths in 2002. Statewide, the infant mortality rate for whites was 6.6 deaths per 1,000 births, and for blacks it was 14.0 per 1,000. One should be particularly careful in using these rates at the county level due to the small numbers involved.

REPORTABLE DISEASE CASES: Despite the significant progress made in the reduction in incidence of infectious diseases in this century, they remain an important cause of illness and death. In addition, surveillance of infectious diseases continues to be of extreme importance in the face of new diseases and newly resistant pathogens, which may emerge in the future. This report records the number of cases reported during 2002 of syphilis, pertussis, hepatitis A, hepatitis B, tuberculosis, *Chlamydia trachomatis* infections, animal rabies, and an index of foodborne diseases, the sum of *Salmonella*, *Shigella*, and *Campylobacter* infections.

SOCIOECONOMIC INDICATORS: Economic and social factors have long been associated with health status. Living conditions and health behaviors associated with poverty have such enormous implications for health that they cannot be ignored in any investigation of health status.

Medicaid eligible, 2002 and Medicaid utilizers, unduplicated, 2002: These indicators measure medical care coverage by the Medicaid program for the financially and/or medically indigent. In the calendar year 2002, more than 844,000 people, 20.6% of the population of Kentucky, were eligible for Medicaid services. The number of unduplicated utilizers, i.e., eligible members having one or more paid claims, was over 836,000 persons, and comprised 20.4% of the population, an increase of 1.9% from 2001. Owsley County ranked highest in Medicaid eligible percent (59.6), and Oldham County ranked lowest (5.6). The highest Medicaid utilizer percent was also in Owsley County (59.3), and the lowest was in Oldham County (5.7).

Food stamp recipients, AFDC (Aid to Families with Dependent Children) recipients, and WIC (Women, Infants, and Children) recipients: These measures present data on the proportions of the population who accessed programs for the indigent. In calendar year 2002, 11.4% of the total population received food stamps, and 2.7% of the total population were served by the WIC program. In 2002, 2.8% received AFDC benefits. Livingston County ranked highest in food stamp percent (58.8) and Owsley County was highest in AFDC percent (9.2). Wolfe County was highest in WIC percent (6.7).

Persons in poverty, 2002: In 2002 statistics, 14.8% of the population in Kentucky were below the poverty level, a narrow increase from 14.7% in 2001. Kentucky counties ranged from 37.0% in Owsley County to 5.1% in Oldham County.

Persons < 18 in poverty, 2002: It is estimated that over one-fifth (21.1%) of the total population under the age of 18 lived in poverty in 2002, a slight increase from 19.8% in 2001. Owsley County topped the list at 45.7%.

Unemployed: Unemployment rates, not seasonally adjusted, in 2002 ranged from a high of 11.5% in Magoffin County to 3.9% in Oldham County. The statewide rate was 5.7%.

Median household income, 2002: According to 2002 statistics, the median household income in Kentucky was \$35,875, down from \$35,977 in 2001. By county, median household income ranged from \$65,123 in Oldham County to \$16,610 in Owsley County.

EDUCATION: Educational attainment is closely related to socioeconomic status and also has implications for health.

Mothers with less than 12 years of education: In 2002, over one in five (21.1%) women giving birth had less than a high school education, a slight improvement over the 2001 percent of 21.2. This measure ranged from 41.0% in Crittenden County to 8.2% in Oldham County.

Transition rate (2001-2002): This indicator measures the percent of high school graduates who successfully make the transition to employment, military service, or further schooling. Statewide, for the 2001-2002 school year, 95.7% of graduates made the transition successfully. Six counties recorded 100%. Allen County had the lowest rate at 75%.

Dropout rate (2001-2002): During the 2001-2002 Kentucky school year, 2.6% of students in grades 7-12 dropped out of school. This rate ranged from 5.6% in Clay County to 0.0% in Hancock County.

OCCUPATIONAL INJURIES: In 2002, there were 134 fatal occupational injuries in the state, 25 agricultural, and 109 nonagricultural. Agricultural injury fatalities decreased, from 27 in 2001, and nonagricultural injury fatalities increased from 78. A complete accounting of occupational injuries other than those resulting in fatality is difficult to obtain in Kentucky. The most complete nonfatal injury data available by county are from Workers' Compensation claims, which do not record all occupational injuries, particularly agricultural. Nevertheless, 36,994 nonfatal occupational injuries were reported in 2002, down from 39,601 in 2001. In 2002, 440 agricultural and 36,554 nonagricultural injuries were recorded.

ADULT ABUSE: Adult abuse and neglect are important causes of injury and death, and they are increasingly recognized as public health problems. In Kentucky in 2002, there were 699 substantiated incidents of adult abuse (abuse by someone other than spouse or partner), a rate of 0.2 per 1,000 persons 18 and older, and 2,704 substantiated incidents of spouse abuse, a rounded rate of 0.9 per 1,000. Substantiated incidents of partner abuse numbered 1,331, a rate of 0.4 per 1,000.

CHILD ABUSE AND NEGLECT: Statewide in calendar year 2002, there were 3,168 substantiated incidents of child physical abuse, 1,232 of child sexual abuse, and 10,303 of child neglect. These resulted in rates of 3.2, 1.2, and 10.3 per 1,000 persons under age 18, respectively. Child physical abuse and child neglect both decreased from the previous year. The child sexual abuse rate decreased slightly from 1.3 in 2001.

VIOLENT CRIMES: Violence, both domestic and nondomestic, is increasingly recognized as a serious public health problem. Acts of intentional violence are often related to socioeconomic conditions and have major impact

on the health of a community. In 2002, 196 homicides occurred in Kentucky, a decrease from 218 in 2001. The numbers of assaults were significantly down from the previous year, but the number of robberies and rapes increased. Data on violent crimes are reported by county of occurrence.

MOTOR VEHICLE CRASHES: Motor vehicle crashes are one of the greatest causes of unintentional injury and death, and affect all age groups. In 2002, there were 915 persons killed and 50,128 persons injured in motor vehicle crashes in Kentucky.

The number of 2002 fatalities increased by 71 from the 2001 total of 844, while 2002 nonfatal injuries decreased by 1,132 from the previous year total of 51,260. Data also indicate that alcohol was a frequently contributing factor, often in fatal crashes, in which over a fourth (25.1%) involved drinking drivers. Data on motor vehicle crashes are presented in the health and social indicators table by county of occurrence.

TOBACCO USAGE AMONG PREGNANT WOMEN: Smoking during pregnancy can cause many medical problems including increased risk of premature birth, low birth weight, miscarriage, and stillbirths. Cigarette smoke contains many toxic chemicals and is extremely hazardous to a developing baby. In 2002, 12,896 Kentucky mothers or 24.4%, out of 52,845 known responses, voluntarily reported tobacco usage during their pregnancy.

LEADING AND SELECTED CAUSES OF RESIDENT DEATHS

Cause of death statistics have long been among the most ascertainable, readily available, and comparable of all health status indicators for a population. Virtually 100% of deaths are recorded, and causes of death are assigned by established and consistent nosological procedures. Numbers and crude rates for all ages and each of eight age groups, age-adjusted rates (AAR), and years of potential life lost prior to age 75 (YPLL-75) are shown for each leading and selected cause. Explanations of the calculation of age-adjusted rates and YPLL-75 are included in Definitions and Technical Notes in the Appendix. The ten leading causes for the total, white, and black populations, as well as a set of selected causes are presented for each county.

LEADING CAUSES - TOTAL POPULATION: In Kentucky in 2002, there were 40,378 total resident deaths resulting in a crude rate of 986.5 deaths per 100,000 population. The age-adjusted rate (adjusted to the 2000 U.S. standard population) was 1002.2 deaths per 100,000, an increase from 980.5 in 2001. By county, the age-adjusted rate ranged from 1579.0 per 100,000 in Owsley County to 770.8 in Carlisle County.

The top five leading causes of death, diseases of heart, malignant neoplasms, cerebrovascular disease, chronic lower respiratory diseases, and unintentional injuries, accounted for nearly seven out of every ten (69.2%) deaths.

Diseases of heart accounted for almost one-third (28.7%) of total deaths, and was the leading cause of death in 2002, as it has been for many years. It was the leading cause in 107 of the state's 120 counties, and also accounted for almost one-fifth (18.3) of years of potential life lost. The statewide age-adjusted rate was 290.0 deaths per 100,000, down from 294.2 in 2001. The AAR ranged from 578.8 per 100,000 in Martin County to 157.9 in Oldham County.

Malignant neoplasms (cancer), the second leading cause, was responsible for nearly a quarter (23.2%) of deaths statewide, and was the leading cause in 10 counties. Three counties reported the same number of deaths relating to diseases of the heart and malignant neoplasms. Malignant neoplasms, being more prevalent than heart disease among persons under 65, accounted for 22.7% of total YPLL. The statewide AAR, 227.4 per 100,000, had a slight decrease from 228.2 in 2001. Gallatin County had the highest AAR, 361.3 per 100,000, and Washington County had the lowest, 120.3

Cerebrovascular disease (stroke), the third leading cause statewide, was responsible for 6.3% of total deaths, but only 2.4% of YPLL. The statewide AAR was 64.3 per 100,000, up from 63.6 in 2001. The AAR ranged from 191.2 per 100,000 in Hancock County to 10.4 in Bracken County.

Chronic Lower Respiratory Diseases (CLRD) (previously called chronic obstructive pulmonary diseases, or COPD) includes such diseases as chronic bronchitis, emphysema, and asthma. CLRD was the fourth leading cause of death in Kentucky in 2001, accounting for 5.9% of total deaths. The statewide AAR was 58.9 per 100,000, which was higher than the 2001 rate of 56.1. Among the counties, Metcalfe had the highest AAR, at 169.3 per 100,000, and Robertson County had the lowest at 0.0 per 100,000.

Unintentional injuries, the fifth leading cause, accounted for only 5.1% of total deaths. However, due to their affect on younger as well as older age groups, they were the third greatest cause of years of potential life lost prior to age 75, making up 17.4% of the total. Unintentional injuries were the leading cause of death for ages 1-44.

The statewide AAR, 50.8 per 100,000, was higher than the 2001 rate of 46.5. The AAR ranged from 167.0 per 100,000 in Owsley County to 0.0 in Trimble County.

SELECTED CAUSES - TOTAL POPULATION: The following causes were selected as a result of their being included either in the Assessment Protocol for Excellence in Public Health (APEXPH) core data set or in the Centers for Disease Control's consensus set of health status indicators.

Lung cancer accounted for over one-third (35.5%) of all cancer deaths and was a major cause of death for persons 45 and older in 2002. The statewide age-adjusted rate was 80.0 per 100,000, down from 82.5 in 2001. Lee County had the highest rate at 183.6 per 100,000, and Washington County had the lowest, 16.7 per 100,000.

Motor vehicle crashes were the greatest single cause of unintentional injuries resulting in death, responsible for almost half (43.5%) of such deaths. In addition, they accounted for 52.1% of all years of potential life lost due to unintentional injuries. The statewide AAR for motor vehicle crash deaths was 21.9 per 100,000, a slight increase from 20.6 in 2001. By county, the AAR ranged from 106.9 per 100,000 in Cumberland County to 0.0 (five counties had no resident motor vehicle crash fatalities).

Female breast cancer was responsible for approximately one of every seven (15.1%) cancer deaths in women in 2002. The statewide age-adjusted rate was 27.8 deaths per 100,000 female population, the same as 2001. Carroll County had the highest AAR, at 94.8 per 100,000 women. Fifteen counties had no deaths attributable to female breast cancer.

The remaining selected causes, chronic liver disease and cirrhosis, assault (homicide), congenital malformations, and drug-induced deaths had relatively low age adjusted rates, but are important indicators for particular age groups and because of their relationships to socioeconomic and lifestyle factors.

LEADING CAUSES - WHITE: As is the case for birth statistics, due to the preponderance of whites in the total population of Kentucky, the leading causes

of death for the white population closely mirror the total population in both ranking and rates.

LEADING CAUSES - BLACK: Age-adjusted rates for most leading causes of death for blacks were greater in 2002 than those for whites. Statewide, the rate for all causes was 1204.0 per 100,000, higher than the rate of 1002.5 for whites, and an increase from 1169.6 in 2001. Blacks experienced the same top three leading causes, but their AARs were considerably higher. Diabetes mellitus was the fourth leading cause with an AAR of 64.9 per 100,000, over twice the rate of 29.4 for whites. Unintentional injuries were the sixth leading cause among blacks, with an age adjusted rate of 30.6 per 100,000, lower than the white rate of 53.3. Assault was the eighth leading cause of death for blacks. Alzheimer's disease, the eighth leading cause among whites, was not among the top ten causes for blacks. The reader should be particularly cautious in using black rates in many counties since they are based on very small populations.

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