

KENTUCKY COUNTY HEALTH PROFILES, 2001

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 2001 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 2001. 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 2001, the crude birth rate in Kentucky was 13.3 births per 1,000 population, down slightly from 13.8 and the first decrease in the rate since 1998. The rate ranged from 6.1 per 1,000 in Lyon County to 21.8 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 2001, the under 18 age-specific birth rate in Kentucky was 10.0 births per 1,000 females aged 10-17, down from 11.5 in 2000. The rate ranged from 0.0 per 1,000 in Hancock and Robertson Counties to 29.7 per 1,000 in Wolfe County. Statewide, 4.0% of all births were to mothers under 18, a decrease from 4.5% in 2000.

Weight less than 2,500 grams: Low birth weight is a major contributing factor in infant mortality and long-term disability. In 2001, 8.3% of children born in the state weighed less than 2,500 grams (5 lb. 8 oz.), unchanged from the 2000 rate. By county, this percent varied from a high of 15.9% in Nicholas County to a low of 0.0% in Lyon and Robertson Counties.

Mothers without prenatal care, 1st trimester: Early prenatal care is associated with decreased risk of low birthweight and infant mortality. In 2001, 14.3% of Kentucky mothers did not receive prenatal care during the first trimester of pregnancy, a slight decrease from 14.4% in 2000. This measure ranged from 32.1% in Todd County to 4.0% in Hancock 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 2001 was 318.2 per 1,000 live births, an increase from 310.0 in 2000. Fulton County had the highest rate, at 436.2 per 1,000, and Morgan County had the lowest rate, 163.5 per 1,000.

WHITE BIRTHS: Due to the preponderance of whites in the total population of Kentucky (90.1%), 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 decreased slightly from the previous year, from 13.7 to 13.4, and the gap between blacks and whites in the under 18 birth rate narrowed slightly from 21.9 to 10.8 per 1,000 in 2000 to 19.1 to 9.3 in 2001. For the fourth consecutive year, more than one-fifth (21.6%) 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 2001 the statewide rate was 5.9 infant deaths per 1,000 live births, the lowest ever recorded in the state. Thirty-seven counties recorded no infant deaths in 2001. Statewide, the infant mortality rate for whites was 5.4 deaths per 1,000 births, and for blacks it was 10.4 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 2001 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, 2001 and Medicaid utilizers, unduplicated, 2001: These indicators measure medical care coverage by the Medicaid program for the financially and/or medically indigent. In the calendar year 2001, more than 800,000 people, 20.3% 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 750,000 persons, and comprised 18.5% of the population, an increase from 14.4% in 2000. Owsley County ranked highest in Medicaid eligible percent (58.4), and Oldham County ranked lowest (5.5). The highest Medicaid utilizer percent was also in Owsley County (56.9), and the lowest was in Oldham County (4.5).

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 2001, 10.3% of the total population received food stamps, and 2.7% of the total population were served by the WIC

program. In fiscal year 2001, 3.0% received AFDC benefits. Owsley County ranked highest in both food stamp percent (40.6) and AFDC percent (11.7). Wolfe County was highest in WIC percent (6.5).

Persons in poverty, 2001: In 2001 statistics, 14.7% of the population in Kentucky were below the poverty level, a decrease from 13.9% in 2000. Kentucky counties ranged from 38.4% in Owsley County to 5.1% in Oldham County.

Persons < 18 in poverty, 2001: It is estimated that one-fifth (19.8%) of the total population under the age of 18 lived in poverty in 2001, a slight increase from 19.3% in 2000. Owsley County topped the list at 46.5%.

Unemployed: Unemployment rates, not seasonally adjusted, in 2001 ranged from a high of 10.4% in Carter County to 3.4% in Oldham County. The statewide rate was 5.3%.

Median household income, 2001: According to 2001 statistics, the median household income in Kentucky was \$35,977, up from \$35,150 in 2000. By county, median household income ranged from \$64,769 in Oldham County to \$16,435 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 2001, over one in five (21.2%) women giving birth had less than a high school education, a slight improvement over the 2000 percent of 21.4. This measure ranged from 40.9% in Todd County to 6.9% in Oldham County.

Transition rate (2000-2001): This indicator measures the percent of high school graduates who successfully make the transition to employment, military service, or further schooling. Statewide, for the 2000-2001 school year, 95.1% of graduates made the transition successfully. Five counties recorded 100%. Harrison County had the lowest rate at 74.6%.

Dropout rate (2000-2001): During the 2000-2001 Kentucky school year, 3.2% of students in grades 7-12 dropped out of school. This rate ranged from 9.3% in Breathitt County to 0.3% in Hancock County.

OCCUPATIONAL INJURIES: In 2001, there were 105 fatal occupational injuries in the state, 27 agricultural, and 78 nonagricultural. Agricultural injury fatalities increased, from 17 in 2000, and nonagricultural injury fatalities decreased from 107.

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, 39,601 nonfatal occupational injuries were reported in 2001, 411 agricultural and 39,190 nonagricultural, all decreases from the previous year.

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 fiscal year 2001, there were 760 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 2,927 substantiated incidents of spouse abuse, a rounded rate of 1.0 per 1,000. Substantiated incidents of partner abuse numbered 1,302, a rate of 0.4 per 1,000.

CHILD ABUSE AND NEGLECT: Statewide in calendar year 2001, there were 4,043 substantiated incidents of child physical abuse, 1,268 of child sexual abuse, and 10,639 of child neglect. These resulted in rates of 4.1, 1.3, and 10.7 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 remained the same as 2000.

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 2001, 218 homicides occurred in Kentucky, an increase from 199 in 2000. The numbers of assaults were 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 2001, there were 844 persons killed and 51,260 persons injured in motor vehicle crashes in Kentucky.

The number of 2001 fatalities increased by 34 from the 2000 total of 810, while 2001 nonfatal injuries decreased by 1,869 from the previous year total of 53,129. Data also indicate that alcohol was a frequently contributing factor, often in fatal crashes, in which over a fifth (22.8%) 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 2001, 12,663 Kentucky mothers or 24%, out of 52,688 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 2001, there were 39,371 total resident deaths resulting in a crude rate of 968.4 deaths per 100,000 population. The age-adjusted rate (adjusted to the 2000 U.S. standard population) was 980.5 deaths per 100,000, a decrease from 980.9 in 2000. By county, the age-adjusted rate ranged from 1535.4 per 100,000 in Owsley County to 794.5 in Morgan County.

The top five leading causes of death, diseases of heart, malignant neoplasms, cerebrovascular disease, chronic lower respiratory diseases, and unintentional injuries, accounted for seven of every ten (70.5%) deaths.

Diseases of heart accounted for almost one-third (29.9%) of total deaths, and was the leading cause of death in 2001, as it has been for many years. It was the leading cause in 105 of the state's 120 counties, and also accounted for almost one-fifth (19.2) of years of potential life lost. The statewide age-adjusted rate was 294.2 deaths per 100,000, down from 307.5 in 2000. The AAR ranged from 535.9 per 100,000 in Cumberland County to 155.4 in Edmonson County.

Malignant neoplasms (cancer), the second leading cause, was responsible for nearly a quarter (23.7%) of deaths statewide, and was the leading cause in 15 counties. Malignant neoplasms, being more prevalent than heart disease among persons under 65, accounted for 23.9% of total YPLL. The statewide AAR, 228.2 per 100,000, had a slight increase from 226.7 in 2000. Owsley County had the highest AAR, 380.7 per 100,000, and Rowan County had the lowest, 119.5

Cerebrovascular disease (stroke), the third leading cause statewide, was responsible for 6.4% of total deaths, but only 2.5% of YPLL. The statewide AAR was 63.6 per 100,000, down from 65.5 in 2000. The AAR ranged from 137.0 per 100,000 in Union County to 15.6 in Morgan 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 5.7% of total deaths. The statewide AAR was 56.1 per 100,000, which was higher than the 2000 rate of 53.5. Among the counties, Casey had the highest AAR, at 114.5 per 100,000, and Washington County had the lowest at 7.7 per 100,000.

Unintentional injuries, the fifth leading cause, accounted for only 4.8% 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 17.0% of the total. Unintentional injuries were the leading cause of death for ages 1-44. The statewide AAR, 46.5 per 100,000, was higher than the 2000 rate of 43.8. The AAR ranged from 155.9 per 100,000 in Owsley County to 11.1 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 (36.4%) of all cancer deaths and was a major cause of death for persons 45 and older in 2001. The statewide age-adjusted rate was 82.5 per 100,000, up from 81.4 in 2000. Metcalfe County had the highest rate at 171.4 per 100,000, and LaRue County had the lowest, 18.7 per 100,000.

Motor vehicle crashes were the greatest single cause of unintentional injuries resulting in death, responsible for almost half (44.7%) of such deaths. In addition, they accounted for 52.6% of all years of potential life lost due to unintentional injuries. The statewide AAR for motor vehicle crash deaths was 20.6 per 100,000, a slight increase from 19.7 in 2000. By county, the AAR

ranged from 132.4 per 100,000 in Owsley County to 0.0 (four counties had no resident motor vehicle crash fatalities).

Female breast cancer was responsible for approximately one of every seven (14.9%) cancer deaths in women in 2001. The statewide age-adjusted rate was 27.8 deaths per 100,000 female population, greater than the 2000 rate of 26.0. Owsley County had the highest AAR, at 116.3 per 100,000 women. Eleven 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. However, for most causes of death, white rates tend to be

slightly lower than the population as a whole, e.g., the AAR for all causes was 979.8 per 100,000 for whites compared to 980.5 for the total population.

LEADING CAUSES - BLACK: Age-adjusted rates for most leading causes of death for blacks were greater in 2001 than those for whites. Statewide, the rate for all causes was 1169.6 per 100,000, higher than the rate of 979.8 for whites, but a decrease from 1206.4 in 2000. Blacks experienced the same top three leading causes, but their AARs were considerably higher. Unintentional injuries was the fourth leading cause among blacks, with an age adjusted rate of 35.6 per 100,000, lower than the white rate of 48.2. Diabetes mellitus was the fifth leading cause with an AAR of 45.2 per 100,000, nearly twice the rate of 25.1 for whites. Assault was again the ninth 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.

References:

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