



Epidemiologic Notes & Reports

Kentucky West Nile Virus Surveillance in 2001

Sue K. Billings, DVM, MSPH

The Kentucky Department for Public Health (KDPH), in cooperation with the Department of Fish and Wildlife Resources (DFW), the local health departments, the University of Kentucky Livestock Disease Diagnostic Center (UKLDDC), the Kentucky Department of Agriculture, the United States Department of Agriculture (USDA), veterinarians and private citizens, is completing a successful surveillance effort for West Nile Virus in 2001.

The movement of West Nile virus in the United States has been dramatic in 2001. Kentucky reported the first confirmation of the virus in the state on August 31 with a positive IgM ELISA test from a horse in Bourbon County. From that date through November 30, we have reported 7 additional horses, 44 birds and 6 mosquito pools positive for West Nile Virus. The first birds to test positive were submitted to the UKLDDC during the first week of September. The first positive mosquito pool was also collected the first week of September. The cumulative results for 2001 are listed in Table 1. These totals may change some before the end of the year, as the UKLDDC is still receiving and testing samples. Map 1 shows all the counties that submitted either birds or equine samples, or participated in mosquito collection. Counties that had confirmed positive birds, mosquito pools or equine samples are depicted on Map 2. Thirty-two human samples have been submitted to the State Public Health Laboratory for arboviral testing, with no positive results to date.

Sparrows and robins were the most frequently submitted birds of those properly identified. Positive crows (15) and blue jays (9) accounted for 55% of the total positive birds.

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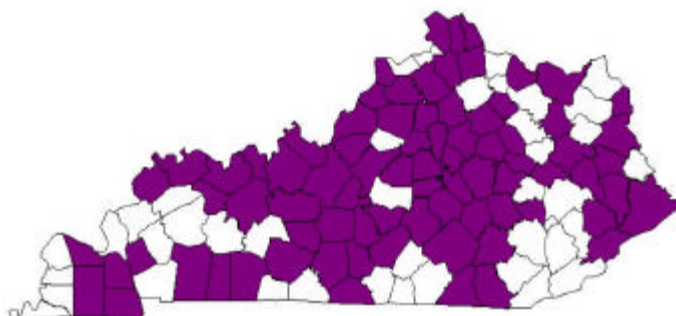
The equine cases have been from 8 separate counties—Bourbon, Woodford, Fayette, Fleming, Jessamine, Bullitt, Oldham and Jefferson.

Two of the positive mosquito pools were in Fayette County; one was a pool of *Culex pipiens/resturans* and the second, a pool of *Culex species*. Four positive pools were identified in Jefferson County. One pool was *Culex pipiens*, one was *Culex pipiens/resturans* and the other two pools were *Culex species*.

Table 1—Kentucky West Nile Virus Surveillance in 2001

Type of Species	# Reported	# Tested
Dead Birds (excluding crows)	706	504
Crows	33	30
Equines	146	146
Mosquitoes Collected	5,329 speciated	381 pools

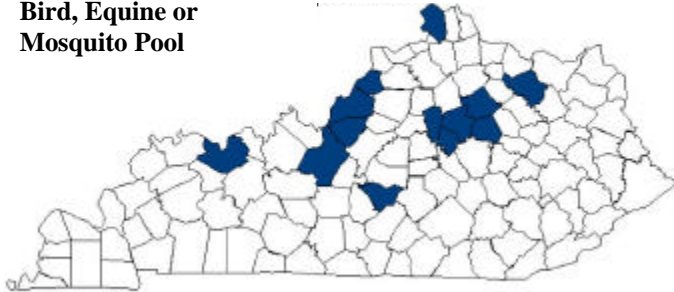
Map 1— Counties that Submitted
Specimens for WNV Testing



Kentucky West Nile Virus Surveillance in 2001

(Continued)

Map 2—Counties with Positive WNV Results: Bird, Equine or Mosquito Pool



The total cases on a national level are still changing weekly, but as of December 6, 2001, there were 53 human cases from 9 states—Connecticut, Florida, Georgia, Louisiana, Maryland, Massachusetts, New Jersey, New York and Pennsylvania. Five of the human cases have been fatal. Twenty-seven states and the District of Columbia have reported 4604 positive crows and 1497 birds of other species positive. Seventeen states have reported 756 WNV-positive mosquito pools.

The number of horses reported West Nile Virus positive on the USDA site through November 20, 2001, is 416 from 19 states. According to the case definition, some of the horses counted as cases in Kentucky are only considered as probable cases by the USDA and are not included in their count.

Final numbers and adjustment to the national maps should be made by late January 2002.

Kentucky's First Statewide AIDS Conference

The first Kentucky Statewide HIV/AIDS Conference was held November 15-16 at the Galt House in Louisville.

The conference, co-sponsored by the Department for Public Health and Heartland Cares, INC., was designed for health care and social service professionals who are involved in planning or providing direct delivery of services to persons living with HIV/AIDS in Kentucky. It was also intended for people who are interested in improving the quality of life for people living with HIV/AIDS in their communities.

(Continued on Page 4.)

A Cancer Clip

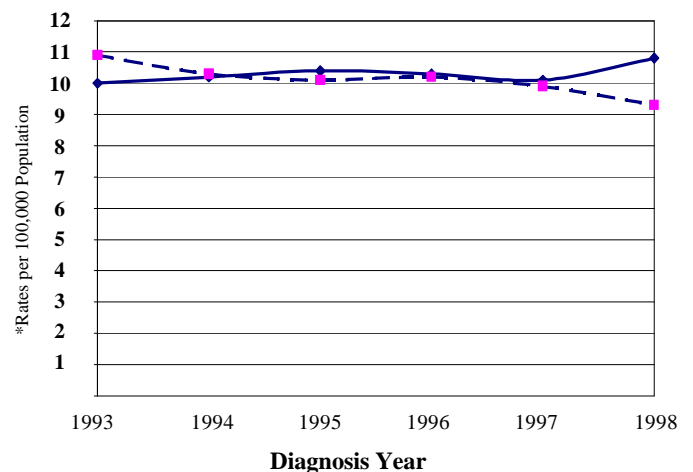
from the Kentucky Cancer Registry
at the
University of Kentucky Markey Cancer Center
By Mark Lancaster, MS

Each year, over 400 Kentuckians are diagnosed with oral cancer. In the U.S., tobacco and alcohol are the primary causes of these cancers and account for approximately 75% of all oral cancers.

In the graph below, the incidence rates (age-adjusted to the 1970 U.S. standard population) are calculated from the Kentucky Cancer Registry for 1993-1998 and are compared to data from the Surveillance, Epidemiology, and End Results (SEER) Program at the National Cancer Institute. Data from SEER are often used as an estimate for national incidence rates.

Since 1973, the SEER incidence rates for oral and pharyngeal cancers have been declining, with the highest rate of 12.1 (per 100,000 population) occurring in 1979. For 1993-1998, the SEER incidence rates decreased by approximately 15%. Incidence rates for Kentucky during the same time period increased by 8%.

Oral Cavity and Pharynx Cancer Incidence Rates*
KY versus SEER
1993 - 1998



— Kentucky
- - SEER

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Kentucky Epidemiologic Notes and Reports, Volume 36, 2001

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 Abbreviated Guidelines for Appropriate Antibiotic Use in Respiratory Infections March

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 Selected Reportable Diseases in Kentucky, January 1, 2000, through December 31, 2000 May
 Selected Reportable Diseases/Conditions in Kentucky, Year-to-Date through May 2001 July
 Selected Reportable Diseases/Conditions in Kentucky, January 1, 2001, through July 31, 2001 (Insert) September
 Selected Reportable Diseases/Conditions in Kentucky, Year-to-Date, January 1 through November 30, 2001 December

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 Reportable Disease/Conditions in Kentucky (Insert) January
 The Kentucky Behavioral Risk Factor Surveillance System February
 Occupational Burn Surveillance in Kentucky May
 Spinal Cord Injury August
 Implementation of the Year 2000 Age-Adjustment Standard August

WEST NILE VIRUS

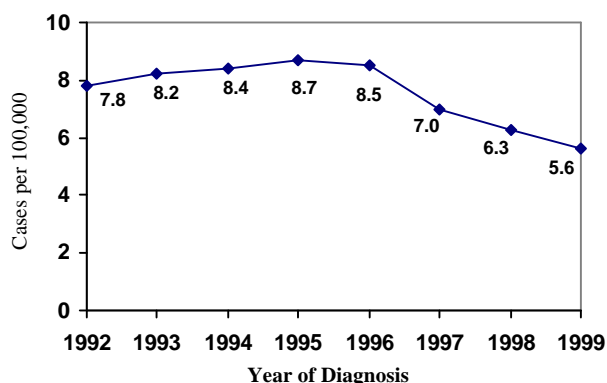
West Nile Virus Activity in the United States in 2000 February
 Kentucky West Nile Virus Surveillance in 2001 December

AIDS in Kentucky

Melissa McCracken, MPH

As statistics indicate, AIDS remains a serious public health problem in Kentucky. As of June 30, 2001, there have been 3,481 Kentuckians reported with AIDS of which 1,774 are still living. Advances in antiretroviral therapies and treatments for opportunistic infections, which were introduced in 1995, have reduced AIDS incidence and deaths among Kentuckians. The rate of new AIDS cases has decreased from 8.7 per 100,000 persons diagnosed in 1995 to 5.6 per 100,000 diagnosed in 1999 (Figure 1). Compared to other states, Kentucky ranked 29th in the number of cases reported in 1999.

Figure 1—Kentucky AIDS Incidence Rate By Year of Diagnosis*



*Cases reported through June 30, 2001

A decline in the number of AIDS deaths has also been observed in Kentucky. AIDS deaths declined 49% from 153 in 1996 to 78 in 1998. The overall number of Kentucky AIDS deaths declined in 1996, 1997, and 1998 due to the success of highly effective therapies for HIV and opportunistic infections. Although AIDS incidence and deaths have declined in recent years, the prevalence, or number of persons living with AIDS in Kentucky, has increased. AIDS prevalence has increased 27% from 1,289 persons living with AIDS as of December 31, 1998 to 1,774 persons living with AIDS as of June 30, 2001.

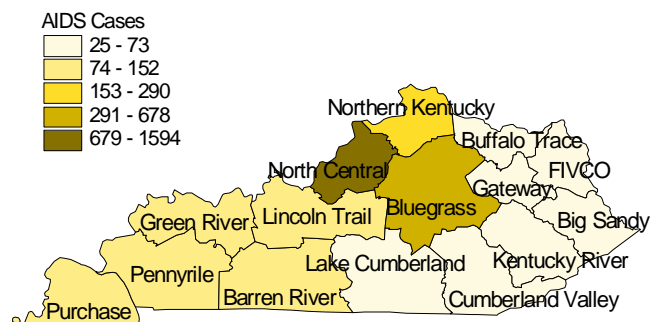
The majority, 87%, of AIDS cases reported in Kentucky are male. The male AIDS rate is approximately 6 times higher than the female rate. However, the proportion of female AIDS cases has increased from 6% in 1985 to 23% in 1999. The majority, 69%, of Kentucky AIDS cases are white; however, African Americans are disproportionately affected by the epidemic. For instance, in 1999 African Americans comprised 7% of the total population, yet were 39% of AIDS cases. The AIDS rate for African Americans is approximately 6 times higher than the rate for persons of white and other races. The largest percentage of Kentucky AIDS cases, 48%, are diagnosed in their thirties.

HIV is transmitted by three primary routes: sexual, parenteral (blood-borne) and perinatal (from mother to infant). Among cumulative Kentucky Adult/Adolescent AIDS cases, the highest percentage report Men Having Sex with Men (MSM)

to be their main mode of exposure at 59%. The next highest risk factor is Injecting Drug Use (IDU) at 13%, followed by Heterosexual contact at 11%.

The impact of the AIDS epidemic in Kentucky is not uniformly distributed across the state. Although persons with AIDS have resided in every Kentucky Area Development District (ADD), most persons are from metropolitan areas. The largest percentage of AIDS cases, 46%, stated that the North Central ADD, which includes Louisville, was their ADD of residence at the time of diagnosis. The next highest percentage, 19%, resided in the Bluegrass ADD, which includes Lexington, followed by Northern Kentucky at 8% (Figure 2).

Figure 2—Cumulative AIDS Cases by Area Development District, June 30, 2001



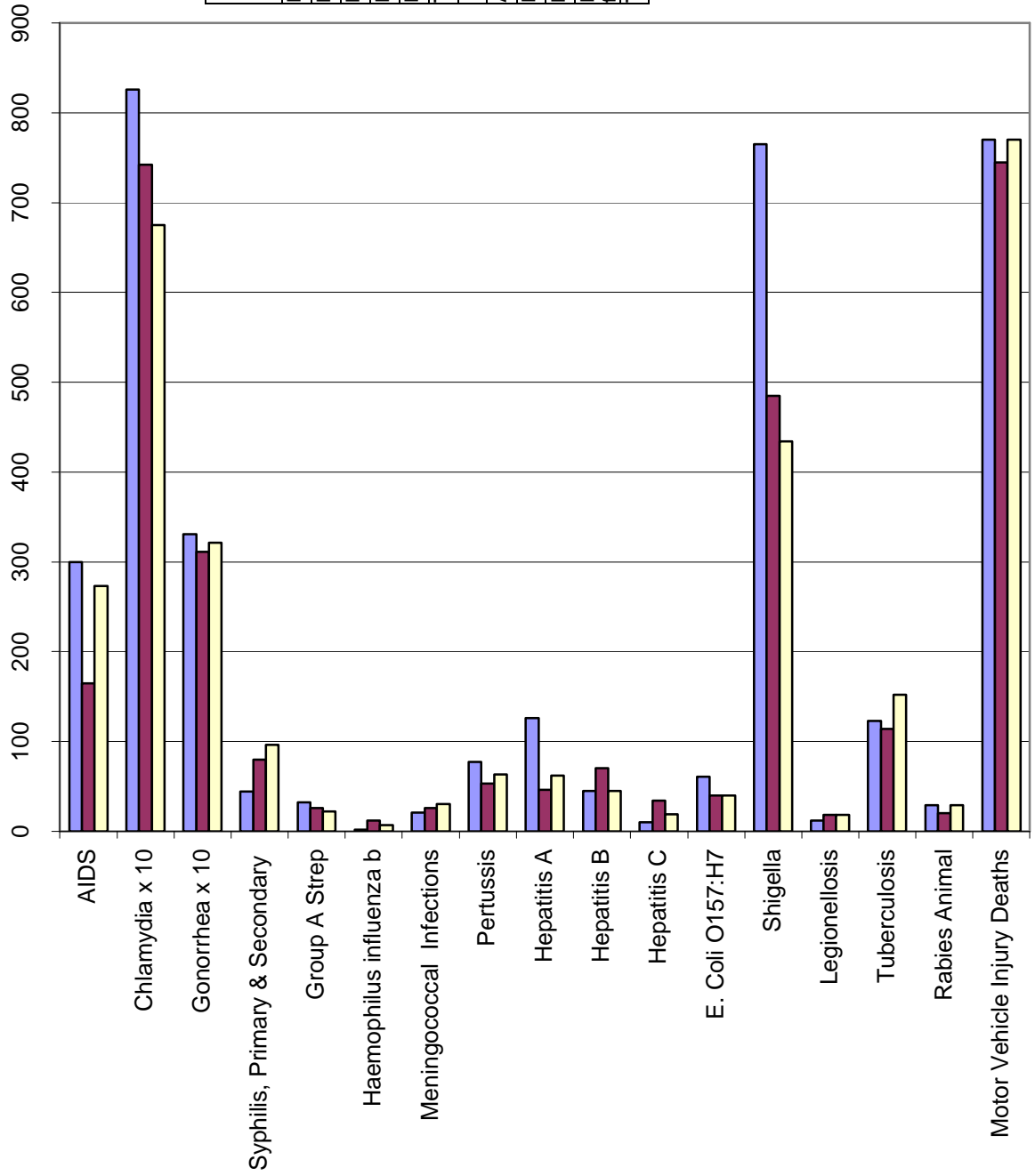
Although AIDS incidence and deaths have declined in recent years, AIDS remains a serious public health concern in Kentucky. With the success of combination therapies, more people are living with HIV and AIDS. Medical, financial, and other support systems must be maintained in order to extend quality years of life. In addition, prevention efforts targeting those at high risk for HIV infection and those currently living with HIV infection must also continue. These efforts must be tailored for populations at risk, while remaining sensitive to differences in race, gender, age, and economic status.

Kentucky's First Statewide AIDS Conference (Continued from Page 2.)

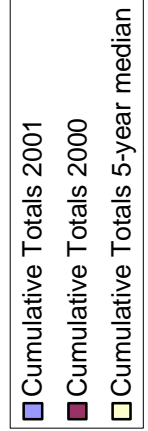
Conference keynote speaker was Dr. Michael Saag, a graduate of the University of Louisville Medical School, who is currently the director of the AIDS Outpatient Clinic at the University of Alabama at Birmingham.

Approximately 175 people attended the 2001 conference and plans are now being made to organize a second conference to be held in Lexington during the first week of November 2002.

**CASES OF SELECTED REPORTABLE DISEASES/CONDITIONS IN KENTUCKY,
YEAR TO DATE (YTD), JANUARY 1 THROUGH NOVEMBER 30, 2001**



Diseases Of Low Frequency Occurrence	2001 YTD	2000 Annual Totals
Diphtheria	0	0
Measles	2	0
Mumps	3	1
Polio	0	0
Rubella	0	1
Tetanus	0	1
VECTOR-BORNE DISEASES		
Arboviral encephalitis	0	2
Lyme Disease	22	13
Malaria	12	18
Rocky Mountain spotted fever	2	4
Tularemia	3	3



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