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Division of Epidemiology & Health Planning
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Kentucky Influenza Season 2002-2003

By
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Local health departments are urged to obtain influenza viral culture kits in August or September and distribute them to local physicians during September. Physicians are requested to keep the kits on hand and collect specimens on patients with Influenza-like illness (ILIs), beginning the first week in October. The only cost is postage to mail the specimens back to the state Division of Laboratory Services. Local health departments may choose to pick up specimens from physicians' offices and mail them to the laboratory.

During the Kentucky 2001-2002 influenza season, 44 counties submitted 236 confirmed isolates/cultures to laboratories. (Figure 1.)

Of the 236 total cultures confirmed, 97.5% (230) were Type A; 2.5% (6) were Type B. (Table 1.).

The occurrence of confirmed Kentucky influenza cases is depicted by MMWR week in Figure 2 on page 2. The peak was week 10, March 3-9, with 86 cases.

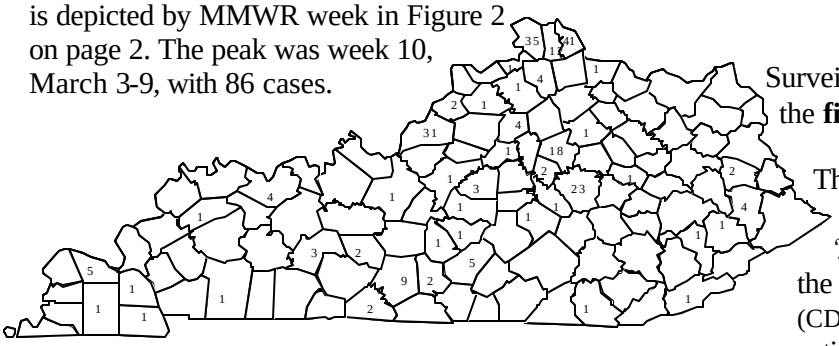

Figure 1. Number of laboratory confirmed cultures of influenza by county, October 2001-May 2002.

Strains of influenza can only be determined from cultures. Strain identification is necessary to detect epidemic or pandemic strains of influenza, to make informed decisions regarding the components of the next season's vaccine, and to determine whether strains of influenza are similar in all areas of the state.

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A	91
A: H1N1	1
A: H1N1 New Caledonia-like	1
A:H3N2	3
A: H3N2 Panama-like	134
B	3
B: Beijing-like	3
TOTAL	236

Table 1. Number of influenza culture types and strains—Kentucky, 2001-2002

Surveillance

Surveillance for the current influenza season will begin the **first week in October 2002**.

The Kentucky influenza surveillance network is composed of three essential components:

? **Sentinel physicians**, who report directly to the Centers for Disease Control and Prevention (CDC) with information pertaining to the number of patients (age grouped) who have been seen for each week with ILIs.

? **Sentinel Local Health Departments** that have agreed to participate in Kentucky's influenza network report ILIs information obtained from a nursing home for one week and from a school district for a specified day each week. In addition, local health departments in the surveillance network located in larger populated areas of the state obtain information on ILIs from a doctor's office and/or a hospital. This information is reported to the State Influenza Surveillance Coordinator.

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Kentucky Influenza Season 2002-2003

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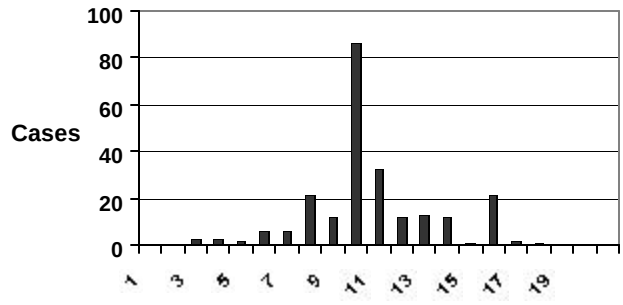
? **Laboratories** report isolate/culture confirmed influenza cases to the Division of Epidemiology and Health Planning in the Kentucky Department for Public Health (KDPH). All laboratories are required by law to participate by reporting isolates/cultures of influenza on a weekly basis to the KDPH.

Information from all three reporting areas is used to determine weekly influenza activity statewide.

Figure 2. Kentucky influenza cases for 2001-2002 by MMWR week



CDC's case definition for an ILI is: Fever greater than 100 degrees Fahrenheit and cough or sore throat with no other known cause. Rapid diagnostic tests can be useful to the practitioner for the purpose of treatment decision. However, the CDC considers influenza viral isolate/cultures as confirmation of an influenza case.

CDC's definitions for influenza activity are defined as:

? **No activity**—No ILIs or culture confirmed cases;
? **Sporadic activity**—ILIs or culture confirmed cases with no outbreaks;
? **Regional activity**—An outbreak of either ILIs or culture confirmed cases in less than 50% of the state's population;
? **Widespread activity**—An outbreak of either ILIs or culture confirmed cases in greater than 50% of the state's population.

The following information is taken from the *Morbidity and Mortality Weekly Report* Recommendations and Reports, April 12, 2002/Vol.51/No.RR-3:

Primary Changes & Updates in Recommendations

The 2002 recommendations include five principal changes or updates, as follows:

1. The optimal time to receive influenza vaccine is during October and November. However, because of vaccine distribution delays during the past 2 years, ACIP recommends that vaccination efforts in October focus on persons at greatest risk for influenza-related complications and health-care workers and that vaccination of other groups begin in November.

2. Vaccination efforts for all groups should continue into December and later, for as long as vaccine is available.

3. Because young, otherwise healthy, children are at increased risk for influenza-related hospitalization, influenza vaccination of healthy children aged 6-23 months is encouraged when feasible. Vaccination of children aged >6 months who have certain medical conditions continues to be strongly recommended.

4. The 2002-2003 trivalent vaccine virus strains are A/Moscow/10/99 (H3N2)-like, A/New Caledonia/20/99 (H1N1)-like, and B/Hong Kong/330/2001-like strains.

5. A limited amount of influenza vaccine with reduced thimerosal content will be available for the 2002-2003 influenza season.

April 2002 Recommendations for the Use of Influenza Vaccine may be viewed in their entirety on the CDC website at www.cdc.gov.

Information regarding influenza vaccine may be obtained at CDC/National Immunization Program's website at http://www.cdc.gov/nip/flu. Information regarding national influenza surveillance, prevention, detection, and control is available at http://www.cdc.gov/ncidod/diseases/flu/fluvirus.htm.

Information regarding state surveillance, statistics, and recommendations for vaccine for adults and antiviral drug use may be directed to Peggy Dixon, Communicable Diseases Branch, 502/564-3261, ext. 3583.

To request influenza collection kits, contact Diane Young, Division of Laboratory Services, 502/564-4446, extension 4483.

For information regarding ordering, distribution, information statements, and recommendations for Vaccines for Children influenza vaccine, contact the Immunization Program at 502/564-4478.

Hospital Discharge Records Reflect Health Status of State's Patients

By
David E. Clark, MPA, Health Policy Specialist, Health Policy Development Branch

(This report represents Kentucky hospital admission through discharge records only. Treating physician records, health department records, and other data are not included. Any inferences using the data in this report should be compared to other data sources before reaching broad conclusions.)

Every day, 1,357 Kentuckians and 20 residents of other states are discharged from Kentucky hospitals, following average stays of 4.5 days. What can their discharge records tell us about the health status of those treated?

Observation or treatment in a hospital is usually an indication of serious or acute illness or injury requiring focused medical intervention. Poor lifestyle choices and/or failure to employ prevention measures, or genetic predisposition may lead to many of the conditions that result in hospitalization. Because many illnesses take years to develop and are more common with advancing age, patient age influences the overall picture of hospitalization. By understanding the nature and frequency of hospitalizations, the illness and disease patterns of Kentuckians can be better understood.

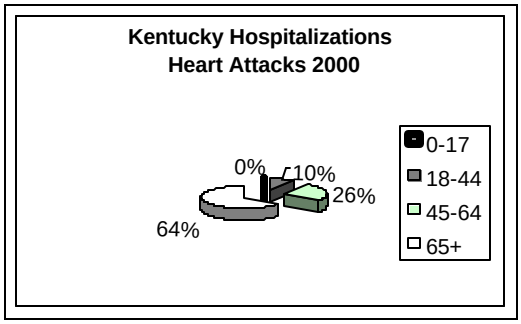
The data used in this article are taken from Kentucky hospital records from calendar year 2000. All admissions data represent Kentucky residents hospitalized in Kentucky hospitals. All data are based on a patient's primary diagnosis, although other secondary causes may have contributed to the hospital stay. The diagnoses presented here were selected, based not on frequency or volume, but rather to reflect the broad range of conditions that cause Kentuckians to be hospitalized.

Every day in Kentucky, 200 people are hospitalized due to heart disease.

In the year 2000, 73,271 Kentuckians were admitted to the hospital with a diagnosis of heart disease and stayed an average of 5 days. Roughly 13,000 of these admissions were for heart attacks. Because cardiovascular diseases are chronic in nature, the older the population, the greater the likelihood of heart disease and heart attacks. Figure 1 shows the number of heart attack diagnoses distributed by age group.

The majority (69%) of the heart attacks occurred in the 65+ age cohort. While men age 45+ are at significant risk for this condition, older women are more likely to

Figure 1.



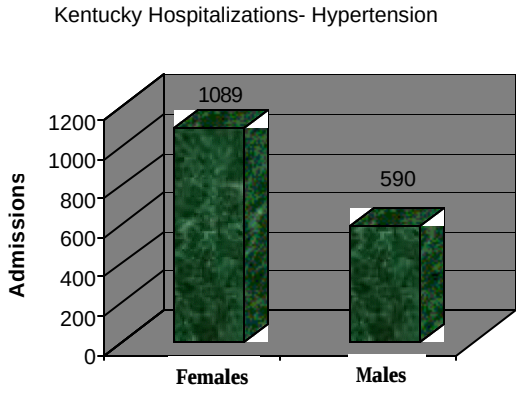
be hospitalized for a heart attack than older men in Kentucky. Among women hospitalized for heart attacks, more of them (68%) are 65+, compared to 47% of hospitalized men. These data have not been age-adjusted and may be influenced by the fact that women live longer than men.

Every day in Kentucky, approximately five people are hospitalized with a primary diagnosis of hypertension.

Hypertension is a chronic condition and hospitalization for this diagnosis is not a common occurrence. Hospitalization would occur when elevated blood pressure needs immediate treatment for control or is a precursor or complicating factor to another condition.

In 2000, 1,679 people were hospitalized with a primary diagnosis of hypertension and stayed an average of 3 days. Figure 2 shows hypertension admission by gender. The majority (65%) of Kentucky admissions for hypertension were female. Of this number, more than half (53%) of the female admissions were in the 65+ age group. Male hypertension admissions were most frequently found in the 45-64 age group (44%).

Figure 2.



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Hospital Discharge Records/Health Status

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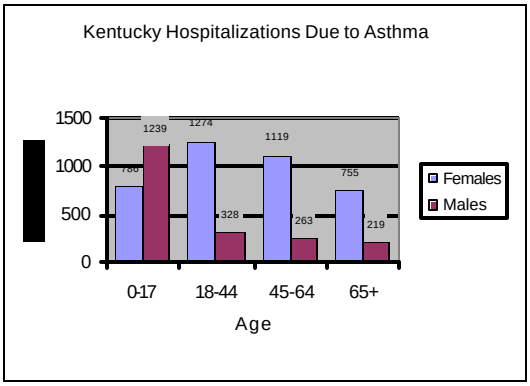
Every day in Kentucky, 178 people are hospitalized for respiratory diseases (asthma and chronic obstructive pulmonary disease).

In calendar year 2000, 65,351 people were admitted to Kentucky hospitals for respiratory diseases and stayed an average of 6 days. Roughly 9% of these admissions (5,983) were asthma-related. In 2000, admissions due to asthma stayed an average of 3 days. Females accounted for most (66%) of the asthma admissions.

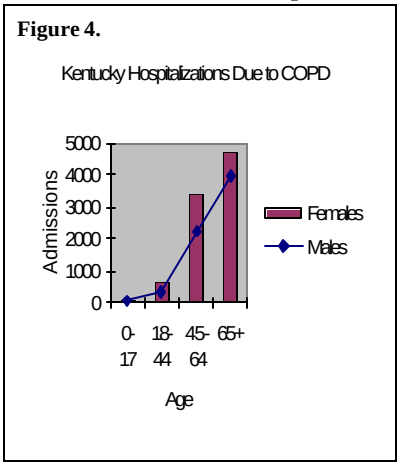
Most asthma admissions (61%) were in the age groups spanning 0-44 years. However, as Figure 3 shows, in the 0-17 age group more males were admitted than females. This trend is reversed in all other age groups, with more admissions for females than males.



Chronic Obstructive Pulmonary Disease (COPD) is another cause for many respiratory admissions. This illness includes bronchitis, emphysema, asthma, and other allied conditions. COPD also contributes to death from other causes, specifically heart disease and lung cancer. (In 1997, Kentucky's age-adjusted COPD death rate was fifth highest in the nation.)

In 2000, COPD was responsible for 15,361 admissions or nearly a quarter (23.5%) of all hospitalizations for respiratory conditions. Also a chronic condition, COPD is generally found among older Kentuckians (Figure 4). Female patients made up over half (57%) of all COPD hospital stays. Asthma and COPD accounted for 21,344 hospital stays, or 1/3 of all respiratory-related admissions in 2000.

Figure 4.



Every day in Kentucky, 40 people are hospitalized due to a cerebrovascular disease.

Between 1995 and 1997, approximately 2,558 Kentuckians died from cerebrovascular disease. Cerebrocascular disease has ranked as the third leading cause of death in Kentucky and the U.S. since 1985. (*Health Status of Kentuckians, 1999*.)

In 2000, 1,384 Kentuckians were admitted to the hospital with symptoms of a stroke and stayed an average of 9 days. In Kentucky, women made up the majority (56%) of all stroke admissions, with almost 7 in 10 of these admissions occurring to women over 65 years of age. Men in this age group had a corresponding stroke admission rate, with stroke accounting for approximately 6 in every 10 cerebrovascular admissions.

Every day in Kentucky, five people are hospitalized due to complications of osteoporosis.

A chronic condition that often leads to fractures and related problems, osteoporsis is more common among older women. In the year 2000, 1,776 Kentuckians were admitted to the hospital for osteoporosis and stayed an average of 4 days. Women over age 65 made up the majority (63%) of these admissions.

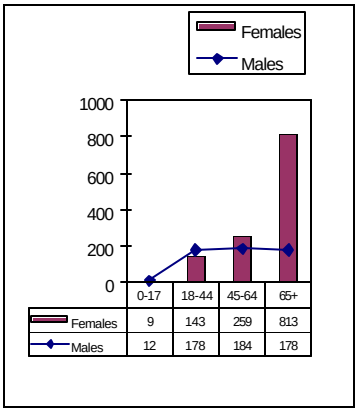
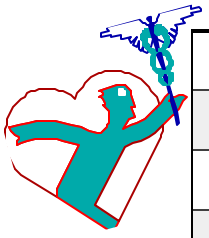


Figure 5. Hospitalizations due to osteoporosis

Every 36 minutes, a Kentuckian is hospitalized with a bone fracture.

In 2000, 14,478 Kentucky residents were hospitalized for bone fractures and stayed an average of 4 days. The majority of these fracture patients were females, representing 58% (8,428) of all cases, compared to 42% (6,050) for males. Among Kentuckians 65 and older hospitalized for fractures, approximately 65% were women, while men of the same age group accounted for 35%. Women led all age categories in hospitalizations due to bone fractures, except in the 18-44 age group. In this group, men accounted for 57% of the hospitalizations, while women represented 43%.

Cases of Selected Reportable Diseases in Kentucky
(YTD Through June for Each Year)



Disease	2002	2001	5 year median
AIDS	146	186	146
Chlamydia	4277	4374	4008
Gonorrhea	1688	1677	1580
Syphilis (Prim. and Sec.)	48	23	51
Group A Streptococcus	10	18	16
Meningococcal Infections	9	15	17
Haemophilus influenzae, invasive	2	2	5
Hepatitis A	34	38	34
Hepatitis B	27	25	25
E. coli O157H7	12	21	17
Salmonella	149	148	161
Shigella	66	266	109
Tuberculosis	69	61	69
Animal Rabies	15	11	15
Motor Vehicle Injury Deaths	379	367	368

Vaccine Preventable	2002-To Date	Total in 2001
Diphtheria	0	0
Measles	0	2
Mumps	4	3
Pertussis	23	96
Polio	0	0
Rubella	0	0
Streptococcus pneumoniae	10	28
Tetanus	0	0

Vector-Borne	2002-To Date	Total in 2001
Rocky Mountain Spotted Fever	2	2
Lyme Disease	9	23
Ehrlichiosis	0	2
Tularemia	1	4
Arboviral Encephalitis	0	0
Malaria	2	14

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Upcoming Kentucky Health Conferences

TB/HIV Connection Topic of Annual Seminar

"TB and the HIV Connection: Unlocking the Combination" will be the subject of the 7th annual Tuberculosis Management Seminar to be conducted August 29 and 30 at Kentucky Dam Village State Resort Park in Gilbertsville. Sponsored by the Department for Public Health's Tuberculosis Control Program, the course will address the current science and medical treatment of TB and the TB/HIV link. The seminar is targeted toward nurses, physicians, HIV health care workers, social workers, and outreach workers. Additional information may be obtained by contacting the Tuberculosis Control Program at 502-564-4276, ext. 3524.

Epidemiology Rapid Response Annual Conference

Previously trained Rapid Response Team Members will come together September 11-12 to share information and abstracts on disease outbreaks and investigations conducted in counties/districts during the past year. In addition, an immunization update will be included and bioterrorism issues will be addressed. The conference will be conducted at Lake Barkley State Resort Park. Contact Rebecca McCoy at 502-564-3261, ext. 3585.

2002 Maternal & Child Health Conference

The 45th annual Maternal & Child Health Conference will offer sessions on bioterrorism and children's mental health, low birthweight/prematurity, MCH health disparities, periodontal disease, and early childhood development. The conference, targeted toward public health professionals, is scheduled for September 18-19 at the Galt House in Louisville. Pre-registration is $36. Registration the day of the conference will be $40. CEUs are available at no charge. For more information contact Lorie Chestnut at 502-564-2154 or at lorie.chestnut@mail.state.ky.us.

2002 public health practice fall conferences:

"Risk Communication," October 1, Kentucky Dam Village; "Environmental Issues," October 15, Jenny Wiley State Resort Park; "Core Competencies in Disaster & Emergency Preparedness," October 25, Lake Cumberland State Resort Park; and "Leadership," October 29, General Butler State Resort Park. Contact Lucy Dean at 502-564-4990, ext. 3637, or at LucyDean@mail.state.ky.us.