



## Epidemiologic Notes & Reports

Volume 39 Number 1

January-February 2004

### Public Health Revitalization — Regional Epidemiologists Now Across the State

John W. Poe, DVM, MPH, Kentucky Department for Public Health, Surveillance and Health Data Branch

One of the results of the September 11, 2001 attack on America and subsequent anthrax letters is the tremendous government and public awakening of the need to support and enhance public health infrastructure. The steady decline of communicable diseases in the last century contributed to an overall erosion in federal and state dollars for public health infrastructure, specifically of county and state health departments. The eradication of smallpox and the precipitous decline of poliomyelitis in this country led many policy makers and the general public to believe that medicine had conquered infectious disease in America. The first wake up call was the advent of Acquired Immunodeficiency Syndrome in 1981 and the second was the post 9/11/2001 era that saw anthrax (*Bacillus anthracis*) spores weaponized to ensure public panic. We now live in a new world order in which the general public, down to our school children, are well versed in the concept of Bioterrorism Preparedness and Readiness.

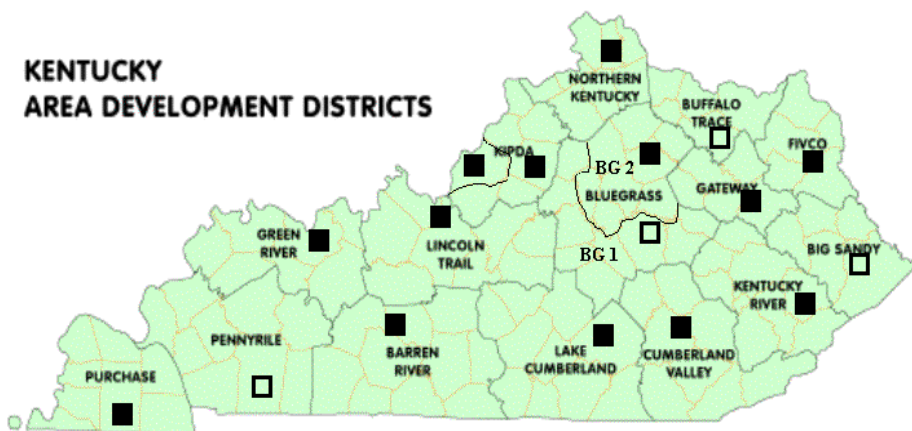
Kentucky was particularly fortunate to receive a Health

and Human Services grant in 2002 from the Centers for Disease Control and Prevention (CDC) that enabled our state to enhance our county and state public health infrastructure. A portion of this \$13 million grant went to establish a statewide system of epidemiologists that support and augment the current public health system of Reportable Diseases, outbreak investigation of infectious, food and waterborne illnesses and possible Bioterrorism events. These highly trained professionals are well schooled in the population dynamics of health and disease, grounded in the concept of prevention facilitated by measuring state mandated diseases and control efforts. The entire community will benefit from this new and enhanced system of medical investigative capacity. School nurses, private health care providers, local health departments and individual citizens can rely on these new members of the health care team for medical biostatistics, assessment of regional disease prevalence and current trends and issues in public health. This new capacity will not replace any previous job function and will only enhance and augment existing local and state health department capabilities and health care provider reporting responsibilities.

Merriam-Webster's Tenth (2001) Collegiate Dictionary defines epidemiology as "a branch of medical science that deals with the incidence, distribution and control of disease in a population. [Epidemiology is] the sum of the factors, controlling the presence or absence of a disease or pathogen [in a population.]" Epidemiology is positioned diametrically opposite to standard medical practice which deals with diagnosis and treatment of the individual case or patient. Physicians treat individuals and public health and epidemiologists are concerned with the population as a whole. The oppo-

*(Continued on page 2)*

#### KENTUCKY AREA DEVELOPMENT DISTRICTS



- = Regional Epidemiologist Site
- = Regional Epidemiologist Hired

## Public Health Revitalization

*(Continued from page 1)*

site focus of these groups historically has led to some tension between the two and resulted in poor compliance of the state mandated Reportable Disease System. Public health and epidemiologists are poised to capture some of the potential benefit that is brought on by the reduction in the inefficiencies of the individual reporting system.

The new system of regional epidemiologists, designed by the Kentucky Division of Epidemiology and Health Planning, is composed of up to 21 epidemiologists located across the state. There is to be one regional epidemiologist in each of the state's 15 Area Development Districts (ADD) and 2 in the heavily populated regions around Louisville and Lexington (Table 1). Each regional epidemiologist is housed in a centrally located county health department in that ADD and is required to serve all the counties in that Area Development District. North Central ADD has an epidemiologist assigned to the Louisville-Metro Health Department and another

one is assigned to the North Central Health Department located in Shelbyville. The large 17 county Bluegrass ADD was assigned one epidemiologist located in the Lexington-Fayette County Health Dept. to serve the northern/central core counties (Bluegrass ADD #2) and another one in Richmond in the Madison County Health Dept. to serve the southern/lower surrounding counties (Bluegrass ADD #1). Four are assigned to the state in the areas of public health laboratory services, environmental services, Bioterrorism preparedness and infectious/communicable disease.

The addition of these valuable positions will enable the public health community to detect and confirm routine and unusual health events in a timely and systematic manner.

### Free Vaccines for Eligible Children in Need

Laura Harrod Hilborn and Victor Negron

The Omnibus Budget Reconciliation Act (OBRA) created the Vaccines for Children (VFC) program as Section 1928 of the Social Security Act on August 10, 1993. The VFC program, which began October 1, 1994, represents an unprecedented approach to improving vaccine availability nationwide by providing vaccine free of charge to VFC-eligible children through public and private providers.

#### The VFC program:

- Provides public purchased vaccine, for eligible children, **at no charge** to public and private providers.
- Automatically covers vaccines recommended by the Advisory Committee on Immunization Practices (ACIP) and approved by the Centers for Disease Control and Prevention (CDC).
- Saves parents and enrolled providers out-of-pocket expenses for vaccine.
- Eliminates vaccine cost as a barrier to immunizing eligible children.
- Reduces the practice of referring children from the private sector to the public sector for vaccination, thereby keeping children in their medical home for comprehensive health care.

The VFC program marks the first time private providers in all States are able to receive publicly purchased vaccine. By eliminating cost as a barrier to immunizing children, and providing opportunities for vaccinations at many health provider locations, the VFC program supports improved immunization coverage levels among eligible children.

*(Continued on Page 3)*

Table 1.  
**Regional Epidemiologists by Area**

1	Purchase	Sivaram (Ram) Maratha	270-247-1490
2	Pennyrile	Open position	
3	Green River	Nivedita (Niv) Seerpi	270-852-5576
4	Barren River	Srihari (Sri) Seshadri	270-781-8039
5	Lincoln Trail	Ashoka Indukuri	270- 769-1601
6	North Central	Matt Groenewold – Jefferson	502-574-5292
		Vinay Chiguluri (other counties)	502-633-1243
7	Northern Kentucky	Scott Bowden	859-363-2033
8	Buffalo Trace	Open position	
9	Gateway	Sally Trent	606-674-6396
10	Fiveco	Kristy Wright	606-329-9444
11	Big Sandy	Open position	
12	Kentucky River	David Reese	606-439-2361
13	Cumberland Valley	Judy Collins	606-864-4764
14	Lake Cumberland	Jasie Jackson	606-678-4761
15	Bluegrass (1)	Open position	
	Bluegrass (2)	Sandy Conners	859-288-2340

## Free Vaccines for Eligible Children in Need

The goal is to ensure that no VFC-eligible child contracts a vaccine preventable disease because of his or her parent's inability to pay for the vaccine or its administration.

### Who can receive VFC Vaccine?

The children who get VFC vaccine are those children from birth through 18 year old who:

- Are eligible for Medicaid
- Have no health insurance
- Are Native American or Alaska Native, or are
- Underinsured (have health insurance that does not pay for vaccinations). To be supported with VFC-funded vaccine, underinsured children must be vaccinated at a Federally Qualified Health Center (FQHC) or Rural Health Clinic (RHC). However in order to avoid missed opportunities to immunize by having to refer underinsured children to FQHCs or RHCs, Kentucky VFC-enrolled clinics are provided state-funded vaccine.

**Children with insurance that includes vaccinations as a covered benefit, regardless of deductible or co-insurance amount, are not eligible for VFC vaccines. Providers for insured children should vaccinate them at their usual place of medical care with privately purchased vaccine.**

Children enrolled in the Kentucky Children's Health Insurance Program (KCHIP) Phase III, are not VFC-eligible because they are neither Medicaid-eligible nor uninsured. However, the Kentucky Department for Medicaid Services has entered into an agreement with the Kentucky Department for Public Health to be the purchasing and distribution agent of vaccines for children enrolled in the KCHIP Phase III program. Therefore, KCHIP providers, who are also VFC providers, may serve KCHIP Phase III recipients with vaccines supplied through the Kentucky Immunization Program. Providers must bill KCHIP for the administration fee.

### Is there a lot of paperwork involved?

You will be asked to screen your patients before administering pediatric vaccines to determine whether the child is VFC-eligible. This can be done with a quick check-off list in your charts. Once a year, you will be asked to estimate the number of children in your practice who are VFC-eligible so that the Kentucky Immunization Program can estimate how much vaccine funding they will need.

### Can I charge my patients for VFC vaccine?

No. The VFC vaccine is provided to you at no cost to your practice. (The VFC Program pays shipping costs,

as well.) You may not charge for this vaccine.

### Can I still charge administration visit fees?

You may charge administration fees up to the cap established by the Centers for Medicare and Medicaid Services (CMS); currently \$14.17 per dose. However, if a patient is unable to pay their administration fee, you may not deny them the vaccine. If the patient is on Medicaid, you may still submit claims for the administration fee as allowed by the Kentucky Department for Medicaid Services.

### Can I still charge office visit fees?

The office visit fee is between you and your patient. The VFC Program has no regulations governing the office visit fee. If your patient has no health insurance, he/she may qualify for Medicaid or low-cost insurance available through KCHIP.

### If I get VFC vaccine, do I have to follow ACIP recommendations?

You are expected to follow ACIP recommendations, unless in your medical judgment, and in accordance with accepted medical practice, you believe such compliance to be medically inappropriate.

### What do I have to do to join?

Enrollment is easy! Simply contact Laura Harrod Hilborn of the Kentucky Immunization Program by telephone at (502) 564-4478, and request an enrollment packet. You will be asked to provide:

- The address where you can receive vaccine shipments.
- The names, Medicaid ID's and License Numbers of all providers in your practice who administer vaccines.
- An estimate of the number of children eligible for VFC in your practice (this is done so that your VFC Program can estimate how much vaccine funding and inventory is needed for your area).

## Epidemiology Rapid Response Team Training

The Division of Epidemiology and Health Planning will be providing ERRT training in a new format in 2004. A core curriculum of 12 hours will be offered through PROACT via teleconference sites across the state. The courses will be offered in three hour segments on four separate days, followed by one day in Frankfort for the ERRT trainees.

Final details on dates and registration will be sent electronically to all health departments.

**Cases of Selected Reportable Diseases In Kentucky  
YTD Through December for Each Year**

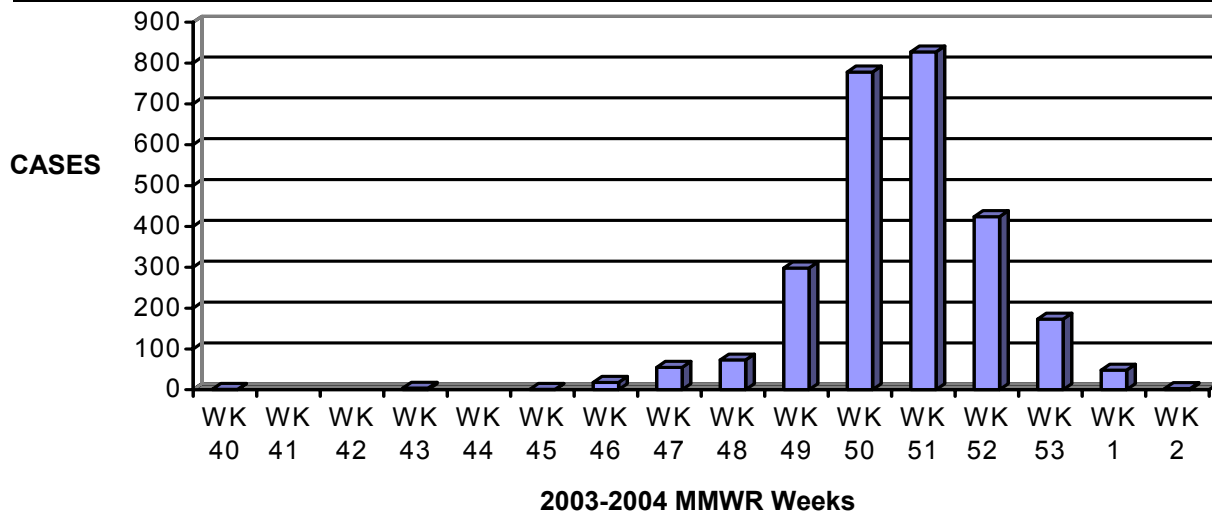
Disease	2003	2002	5 year median
AIDS	204	267	267
Chlamydia	7981	8756	8063
Gonorrhea	3578	3772	3578
Syphilis (Prim. & Sec.)	33	88	85
Group A Streptococcus	45	24	30
Meningococcal Infections	20	18	26
<i>Haemophilus influenzae</i> , invasive	6	10	9
Hepatitis A	32	46	63
Hepatitis B	76	67	67
E.coli O157H7	29	33	40
Salmonella	400	416	407
Shigella	132	210	235
Tuberculosis	139	146	147
Animal Rabies	39	28	30
Motor Vehicle Injury Deaths	920	917	847

Vector-Borne	2003 YTD	Total # 2002
Rocky Mountain Spotted Fever	3	5
Lyme Disease	15	25
Ehrlichiosis	5	2
Tularemia	2	2
Arboviral Encephalitis	14	44
Malaria	10	8

Vaccine Preventable	2003 YTD	Total in 2002
Diphtheria	0	0
Measles	0	0
Mumps	0	3
Pertussis	47	103
Polio	0	0
Rubella	0	0
<i>Streptococcus pneumoniae</i>	21	19
Tetanus	0	0
<b>Influenza Activity</b>	<b>2003-04</b>	<b>2002-03</b>
Viral Isolates	372 Type A	38 Type A 204 Type B
Rapid Antigen Positive	2945	Results NA

Influenza Surveillance = October –May

**Laboratory Positive Influenza Cases Reported Through January 14, 2004  
Includes Rapid Antigen Tests Results and Viral Culture Results**



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Year 1996 through the current issue are on the web site.



**KENTUCKY EPIDEMIOLOGIC NOTES & REPORTS**

Printed With State Funds  
by the  
Commonwealth of Kentucky  
Cabinet for Health and Family Services  
Department for Public Health  
275 East Main Street  
Frankfort, Kentucky 40621



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**Rice C. Leach, MD,**  
Commissioner, Department for Public Health  
**Steven J. Englander, MD, MPH,**  
State Epidemiologist and Director,  
Division of Epidemiology and Health Planning  
  
Sue K. Billings, DVM, MSPH Interim Editor

**RETURN SERVICE REQUESTED**

**Severe Acute Respiratory Syndrome**

Severe Acute Respiratory Syndrome (SARS) is a public health problem of potential broad community and international significance, which was first recognized in early 2003. Information, guidelines and recommendations concerning SARS are still evolving and being modified. For the most recent information, check the following links:

**What Everyone Should Know About SARS:**

<http://www.cdc.gov/ncidod/sars/basics.htm>

**Public Health Guidance for Community-Level Preparedness & Response to SARS**

<http://www.cdc.gov/ncidod/sars/guidance/index.htm>

**Kentucky Health Care Providers and Health Departments must contact the DPH Division of Epidemiology and Health Planning to arrange for SARS testing on patients who meet the CDC guidelines. Contact the Division at: 502-564-3261 or 1-888-9REPORT (1-888-973-7678)**

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**Insert** —Recommended Childhood and Adolescent Immunization Schedule—United States January—June 2004

State Epidemiologist—Steven J. Englander, MD, MPH	Communicable Disease 502-564-3261	Kentucky AIDS Hotline 1-800-420-7431
State Public Health Veterinarian— Michael Auslander, DVM, MSPH	Immunization Program 502-564-4478	HIV/AIDS Reporting 1-866-510-0008 (Toll Free)
	STD Program 502-564-4804	HIV/AIDS Branch 502-564-6539
	TB Program 502-564-4276	
<b>Division of Epidemiology/Health Planning 502-564-3418; 24HR/7Day Emergency—1-888-973-7678</b>		

# Recommended Childhood and Adolescent Immunization Schedule — United States, January – June 2004

Vaccine	Age	Range of Recommended Ages				Catch-up Immunization				Preadolescent Assessment			
		Birth	1 mo	2 mo	4 mo	6 mo	12 mo	15 mo	18 mo	24 mo	4-6 y	11-12 y	13-18 y
Hepatitis B <sup>1</sup>		HepB #1	only if mother HBsAg (-)										
			HepB #2		HepB #3				HepB series				
Diphtheria, Tetanus, Pertussis <sup>2</sup>			DTaP	DTaP	DTaP		DTaP			DTaP	Td	Td	
<i>Haemophilus influenzae</i> Type b <sup>3</sup>			Hib	Hib	Hib <sup>3</sup>	Hib							
Inactivated Poliovirus			IPV	IPV	IPV				IPV				
Measles, Mumps, Rubella <sup>4</sup>						MMR #1				MMR #2	MMR #2		
Varicella <sup>5</sup>						Varicella			Varicella				
Pneumococcal <sup>6</sup>			PCV	PCV	PCV	PCV			PCV		PPV		
----- Vaccines below this line are for selected populations -----													
Hepatitis A <sup>7</sup>									Hepatitis A series				
Influenza <sup>8</sup>					Influenza (yearly)								

This schedule indicates the recommended ages for routine administration of currently licensed childhood vaccines, as of December 1, 2003, for children through age 18 years. Any dose not given at the recommended age should be given at any subsequent visit when indicated and feasible.   Indicates age groups that warrant special effort to administer those vaccines not previously given. Additional vaccines may be licensed and recommended during the year. Licensed combination vaccines may be used whenever any components of the combination are indicated and the vaccine's other components are not contraindicated. Providers should consult the manufacturers' package inserts for detailed recommendations. Clinically significant adverse events that follow immunization should be reported to the Vaccine Adverse Event Reporting System (VAERS). Guidance about how to obtain and complete a VAERS form can be found on the Internet: <http://www.vaers.org/> or by calling 1-800-822-7967.

**1. Hepatitis B (HepB) vaccine.** All infants should receive the first dose of hepatitis B vaccine soon after birth and before hospital discharge; the first dose may also be given by age 2 months if the infant's mother is hepatitis B surface antigen (HBsAg) negative. Only monovalent HepB can be used for the birth dose. Monovalent or combination vaccine containing HepB may be used to complete the series. Four doses of vaccine may be administered when a birth dose is given. The second dose should be given at least 4 weeks after the first dose, except for combination vaccines which cannot be administered before age 6 weeks. The third dose should be given at least 16 weeks after the first dose and at least 8 weeks after the second dose. The last dose in the vaccination series (third or fourth dose) should not be administered before age 24 weeks.

Infants born to HBsAg-positive mothers should receive HepB and 0.5 mL of Hepatitis B Immune Globulin (HBIG) within 12 hours of birth at separate sites. The second dose is recommended at age 1 to 2 months. The last dose in the immunization series should not be administered before age 24 weeks. These infants should be tested for HBsAg and antibody to HBsAg (anti-HBs) at age 9 to 15 months.

Infants born to mothers whose HBsAg status is unknown should receive the first dose of the HepB series within 12 hours of birth. Maternal blood should be drawn as soon as possible to determine the mother's HBsAg status; if the HBsAg test is positive, the infant should receive HBIG as soon as possible (no later than age 1 week). The second dose is recommended at age 1 to 2 months. The last dose in the immunization series should not be administered before age 24 weeks.

**2. Diphtheria and tetanus toxoids and acellular pertussis (DTaP) vaccine.** The fourth dose of DTaP may be administered as early as age 12 months, provided 6 months have elapsed since the third dose and the child is unlikely to return at age 15 to 18 months. The final dose in the series should be given at age  $\geq 4$  years. **Tetanus and diphtheria toxoids (Td)** is recommended at age 11 to 12 years if at least 5 years have elapsed since the last dose of tetanus and diphtheria toxoid-containing vaccine. Subsequent routine Td boosters are recommended every 10 years.

**3. *Haemophilus influenzae* type b (Hib) conjugate vaccine.** Three Hib conjugate vaccines are licensed for infant use. If PRP-OMP (PedvaxHIB or ComVax [Merck]) is administered at ages 2 and 4 months, a dose at age 6 months is not required. DTaP/Hib combination products should not be used for primary immunization in infants at ages 2, 4 or 6 months but can be used as boosters following any Hib vaccine. The final dose in the series should be given at age  $\geq 12$  months.

**4. Measles, mumps, and rubella vaccine (MMR).** The second dose of MMR is recommended routinely at age 4 to 6 years but may be administered during any visit, provided at least 4 weeks have elapsed since the first dose and both doses are administered beginning at or after age 12 months. Those who have not previously received the second dose should complete the schedule by the 11- to 12-year-old visit.

**5. Varicella vaccine.** Varicella vaccine is recommended at any visit at or after age 12 months for susceptible children (i.e., those who lack a reliable history of chickenpox). Susceptible persons age  $\geq 13$  years should receive 2 doses, given at least 4 weeks apart.

**6. Pneumococcal vaccine.** The heptavalent pneumococcal conjugate vaccine (PCV) is recommended for all children age 2 to 23 months. It is also recommended for certain children age 24 to 59 months. The final dose in the series should be given at age  $\geq 12$  months. **Pneumococcal polysaccharide vaccine (PPV)** is recommended in addition to PCV for certain high-risk groups. See *MMWR* 2000;49(RR-9):1-38.

**7. Hepatitis A vaccine.** Hepatitis A vaccine is recommended for children and adolescents in selected states and regions and for certain high-risk groups; consult your local public health authority. Children and adolescents in these states, regions, and high-risk groups who have not been immunized against hepatitis A can begin the hepatitis A immunization series during any visit. The 2 doses in the series should be administered at least 6 months apart. See *MMWR* 1999;48(RR-12):1-37.

**8. Influenza vaccine.** Influenza vaccine is recommended annually for children age  $\geq 6$  months with certain risk factors (including but not limited to children with asthma, cardiac disease, sickle cell disease, human immunodeficiency virus infection, and diabetes; and household members of persons in high-risk groups [see *MMWR* 2003;52(RR-8):1-36]) and can be administered to all others wishing to obtain immunity. In addition, healthy children age 6 to 23 months are encouraged to receive influenza vaccine if feasible, because children in this age group are at substantially increased risk of influenza-related hospitalizations. For healthy persons age 5 to 49 years, the intranasally administered live-attenuated influenza vaccine (LAIV) is an acceptable alternative to the intramuscular trivalent inactivated influenza vaccine (TIV). See *MMWR* 2003;52(RR-13):1-8. Children receiving TIV should be administered a dosage appropriate for their age (0.25 mL if age 6 to 35 months or 0.5 mL if age  $\geq 3$  years). Children age  $\leq 8$  years who are receiving influenza vaccine for the first time should receive 2 doses (separated by at least 4 weeks for TIV and at least 6 weeks for LAIV).

For additional information about vaccines, including precautions and contraindications for immunization and vaccine shortages, please visit the National Immunization Program Web site at [www.cdc.gov/nip/](http://www.cdc.gov/nip/) or call the National Immunization Information Hotline at 800-232-2522 (English) or 800-232-0233 (Spanish).

Approved by the Advisory Committee on Immunization Practices ([www.cdc.gov/nip/acip](http://www.cdc.gov/nip/acip)), the American Academy of Pediatrics ([www.aap.org](http://www.aap.org)), and the American Academy of Family Physicians ([www.aafp.org](http://www.aafp.org)).