

# EPI Update

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## Hey Doc, Have You Had Your Flu Shot Yet?

Every year Influenza continues to be a significant cause of morbidity and mortality. An average of 226,000 influenza related hospitalizations occur each year and an average of 35,000 influenza related deaths occur each year in the United States, this in spite of ample vaccine supply. Low vaccination rates among school-aged children and health care workers are felt to contribute to the introduction of influenza to high-risk groups and the continued morbidity and mortality of influenza. Though the rate of vaccine coverage among health care providers has increased since 1989 when it was a low of 17% it remains poor at only 42% in 2006. This year the Advisory Counsel on Immunization Practices (ACIP) is placing new emphasis on vaccinating health care providers in an effort to reduce transmission of influenza to those at highest risk for complications. One survey demonstrated that 23% of health care providers were sero-positive for influenza during the influenza season. Most were mild or sub-clinical cases, meaning the health care provider continued to work and potentially infect those for whom they were caring. In long-term care facilities increased vaccination rates among employees inversely correlates with out patient visits and hospitalizations for flu related illness in the residents.

The ACIP and the Tennessee Department of Health encourage routine influenza vaccination among healthcare providers. Furthermore encouraging employers to put policies in place, which will increase vaccination rates, and to monitor vaccination rates among employees as part of a patient safety quality assurance program. One simple way to increase influenza vaccination rates is to make the vaccine readily available and economically affordable for all employees. The ACIP also recommends having health care providers who do not wish to receive an influenza vaccination to sign a declination of vaccination.

It is ironic that those dedicated to improving the health of others would choose not to get an influenza vaccination knowing it is the best way to decrease the chances of getting the flu and potentially transmitting it to those they care for. Maybe when a patient is offered an influenza vaccine they should ask their health care provider if they have had theirs.



# EPI Update

## Pandemic Influenza Preparedness Update

Although the visibility of avian influenza and pandemic preparedness has waned in the media, the threat for an influenza pandemic has not. An influenza pandemic occurs when a new strain of influenza virus emerges in which humans have little or no immunity resulting in a global outbreak of disease. Avian influenza or the *highly pathogenic avian influenza A H5N1* (H5N1) has the potential to evolve into a pandemic. The threat of a pandemic must be taken seriously. Maintaining vigilance and developing mitigation strategies can decrease the burden of widespread illness and death. Two regional level pandemic influenza exercises were conducted during the summer to identify plans, gaps, and issues in pandemic preparedness.

## Regional Pandemic Influenza Tabletop Exercise

A Pandemic Influenza Community Tabletop Exercise (CTE) was conducted by the East Tennessee Region and Knox County on June 7, 2007. This exercise established a learning environment for familiarizing state and local personnel with pandemic influenza response issues. Current concepts, plans, and capabilities for responding to a pandemic were discussed focusing on the critical decisions at the local level which are necessary to protect the community, limit spread of the illness, and save lives with limited resources. Participants identified strengths of the exercise, areas requiring attention, and future training needs. This was the region's first exercise to bring together agencies from across disciplines that would respond to the introduction of pandemic influenza in the East Tennessee area. Participants recommended:

- Additional drills and exercises to test the multi-jurisdictional response to an emergency.
- Continued development of working relationships across agencies.
- Updates to, and coordination of, local emergency response plans.



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## Regional Hospital Pandemic Influenza Exercise

This functional exercise conducted on August 22, 2007 gave participants an opportunity to evaluate their current hospital response plans to an influenza pandemic scenario in Tennessee. The exercise was conducted at twenty-two individual hospitals simultaneously, as well as at a venue site with hospital, EMS, and public health representatives present. Each hospital reacted to the scenario in accordance with its current plans and procedures. Actions based on current facility plans were evaluated for consistency with the Tennessee Department of Health's Pandemic Influenza Plan.

This exercise also involved extensive utilization of the Tennessee Health Alert Network (THAN) and the Hospital Resources Tracking System (HRTS). These two communication systems were implemented to assist the hospital and health authorities to rapidly disseminate health information and to assist in tracking and allocation of medical resources.

Participants felt the exercise was beneficial and further defined strengths and weaknesses of response plans. Some of the participant suggestions from an internal hotwash included:

- Pandemic Influenza Planning is a work in progress and will need to continue.
- Networking with other hospitals and agencies was beneficial.
- Routine testing of THAN and HRTS will enhance the proficiency and effectiveness of these systems.
- Developing criteria for the admission of patients during a pandemic would increase consistency and accountability across the state.

This training experience provided an opportunity to assess the participants' knowledge of their current response plans. Preparedness, planning, and response activities exercised on a continual basis can improve and optimize capabilities to serve our communities.

## One-Stop Source for Current Information on Product Recalls

From bacteria in produce to lead-painted toys to ground meat to automobiles, it seems as if an ever-increasing range of consumer products are the focus of government recalls of one sort or another. With overlapping authorities of the FDA, Consumer Product Safety Commission, CDC, and EPA, there is a need for a central clearinghouse of information on recalls - and now one exists: <http://www.recalls.gov>. Six federal agencies, as diverse as the Department of Agriculture and the Coast Guard, have joined to create a web portal where one can see the latest recalls, search recalls, and sign up for e-mail announcements of recalls. The information is also available in Spanish. A site worth book marking for future reference!

# EPI Update

## 2007 - 2008 Influenza Prevention and Control Update

The 2007 recommendations include six principal changes or updates:

- ACIP reemphasizes the importance of administering 2 doses of vaccine to all children aged 6 months–8 years if they have not been vaccinated previously at any time with either LAIV (doses separated by >6 weeks) or TIV (doses separated by >4 weeks), on the basis of accumulating data indicating that 2 doses are required for protection in these children.
- ACIP recommends that children aged 6 months–8 years who received only 1 dose in their first year of vaccination receive 2 doses the following year.
- ACIP reiterates a previous recommendation that all persons, including school-aged children, who want to reduce the risk of becoming ill with influenza or of transmitting influenza to others, should be vaccinated.
- ACIP emphasizes that immunization providers should offer influenza vaccine and schedule immunization clinics throughout the influenza season.
- ACIP recommends that health-care administrators consider the level of vaccination coverage among healthcare personnel (HCP) to be one measure of a patient safety quality program and implement policies to encourage HCP vaccination (e.g., obtaining signed statements from HCP who decline influenza vaccination).
- The 2007–2008 trivalent vaccine strains are A/Solomon Islands/3/2006 (H1N1)-like (new for this season), A/Wisconsin/67/2005 (H3N2)-like, and B/Malaysia/2506/2004-like viruses.

From Prevention & Control of Influenza - Recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2007 Jul 13;56(RR06):1-54.



## Hunter Safety

How can hunters protect themselves against diseases of wildlife?

Tennessee's first frost in the coming weeks should put an end to the state's outbreak of Epizootic Hemorrhagic Disease (EHD) in white-tailed deer. Hemorrhagic disease is the most important and common viral disease of white-tailed deer in the United States, and outbreaks occur every year in the Southeast. The disease is caused by an orbivirus (Reoviridae) transmitted by biting flies in the genus *Culicoides*. The flies are commonly known as biting midges, but are also called gnats, no-see-ums, and punkies. The seasonal occurrence (late summer and early fall) of EHD coincides with the abundance of biting midges, and with the onset of freezing temperatures in late fall usually brings a sudden end to EHD outbreaks.

*Continued on page 5*

# EPI Update

Dry conditions are concentrating deer near water sources, increasing the chances of biting midges transmitting EHD from deer to deer. Infections can range from mild or no disease to episodes of high mortality. Acutely infected deer show severe edema of the head, neck, tongue, eyelids, and lungs, and may die from hemorrhages or congestion in the heart within 72 hours. Chronically infected deer typically have interrupted hoof growth and edematous, hemorrhagic, or ulcerative lesions, and may slowly deteriorate for months from lameness and starvation. Symptoms of EHD can be very similar to those of another progressive, fatal illness of deer called Chronic Wasting Disease (CWD). However, at this time CWD has not been found in Tennessee.

With opening of deer hunting season, hunters are concerned about their health and the safety of eating venison from infected deer. **The virus causing EHD does NOT infect humans, and humans are not at risk by being bitten by infected biting midges.** Eating the meat of deer that appear to be healthy poses no risk to humans even if the deer is infected with EHD. However, hunters should not consume animals that appear emaciated, due to the risk of secondary infections. EHD can cause large abscesses to form in the body cavity, the muscle tissue, or under the skin. These abscesses render the meat inedible. Hunters should be aware that they may see emaciated deer during the hunting season and should not harvest deer that do not appear healthy.

## Simple Advised Precautions for Hunters

- Do not harvest, handle or consume any animal that appears sick or behaving abnormally
- Wearing disposable gloves while field dressing animals reduces the risk of pathogens and parasites on the animal's skin, blood and digestive tract
- Wash hands, equipment, and anything else that came in contact with carcass fluids thoroughly with soap and water; use knives and equipment dedicated to field dressing
- Remove loins as boneless cuts; do not saw or cut through the spine or skull
- Avoid consuming internal organs, spinal cord, or lymph nodes from harvested animals
- Cook game meat thoroughly to kill disease organisms and parasites



# EPI Update

## Selected Diseases Reported by County, East TN January - September 2007 Year-to-Date

Disease	<i>Campylobacter</i>	<i>Salmonella</i>	<i>Shigella</i>	Hep A	Hep B	DRSP	Pen Sen Strep	MRSA	<i>Chlamydia</i>	Syphilis	Gonorrhea	HIV / AIDS	TB	LAC
<b><i>Knox County</i></b>														
YTD '07	21	35	5	1	3	14	51	100	1298	73	649	25/6	5	2
YTD '06	31	59	7	1	2	16	50	110	1126	89	691	16/9	4	2
<b><i>East Tennessee Region</i></b>														
Anderson	4	9	0	0	2	2	1	3	185	0	60	4/2	0	1
Blount	5	11	2	2	4	1	6	12	151	0	37	1/2	4	0
Campbell	0	4	3	0	0	1	0	4	31	0	4	0/0	1	0
Claiborne	2	2	0	0	0	0	1	6	57	0	6	1/0	0	1
Cocke	1	4	0	0	0	0	1	6	76	0	21	0/0	2	2
Grainger	8	3	0	0	1	0	2	6	27	0	1	0/1	1	1
Hamblen	2	3	1	0	1	0	1	8	157	0	25	1/1	1	0
Jefferson	5	3	0	0	1	1	5	6	93	0	11	1/0	1	0
Loudon	3	7	0	1	0	2	2	6	74	0	5	0/0	1	0
Monroe	2	2	1	0	0	0	5	8	107	1	7	3/0	2	0
Morgan	1	0	1	0	1	0	3	2	32	0	0	0/0	0	0
Roane	3	4	1	0	0	1	5	8	60	0	8	0/0	0	0
Scott	1	2	0	0	2	1	1	4	23	0	1	0/0	1	0
Sevier	3	6	4	0	1	0	4	9	127	0	3	5/2	0	0
Union	3	2	0	0	0	1	1	3	8	0	2	0/0	1	1
YTD '07	43	62	13	3	13	10	38	91	1208	1	191	16/8	15	6
YTD '06	32	68	7	4	7	28	69	124	944	16	209	16/10	7	3

Note: These data only include new cases with a diagnosis of HIV infection (not AIDS) and a concurrent diagnosis of HIV infection and AIDS (AIDS at first diagnosis).

LAC = LaCrosse Encephalitis

# EPI Update

Epi Update  
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## Animals Tested for Rabies in East TN January - September 2007



County	Bats	Skunks	Dogs	Cats	Raccoons	Foxes
Anderson	3	0	8	8	1	0
Blount	4	2	13	10	2	0
Campbell	2	0	1	2	0	0
Claiborne	0	0	1	2	1	0
Cocke	3	0	3	4	0	0
Grainger	3	0	5	2	5	0
Hamblen	4	2	4	3	2	0
Jefferson	3	4	4	2	5	0
Knox	27	6	78	61	33	10
Loudon	3	2	9	8	0	1
Monroe	1	4	0	2	0	0
Morgan	0	0	1	0	0	0
Roane	3	0	6	5	1	0
Scott	1	0	0	1	0	0
Sevier	1	0	30	28	5	0
Union	1	0	3	1	0	1
<b>Total</b>	<b>59</b>	<b>20</b>	<b>166</b>	<b>139</b>	<b>55</b>	<b>12</b>

### Rabies Positives Reported

County	Bats	Skunks	Dogs
Anderson	1	0	0
Cocke	1	0	0
Hamblen	0	1	1
Jefferson	0	3	1
Knox	3	0	0
Scott	1	0	0
<b>Total</b>	<b>6</b>	<b>4</b>	<b>2</b>



Note: All rabid skunks and rabid dogs were infected with  
 skunk rabies variant.

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