October 2008

Chattanooga-Hamilton County Health Department
EPIDEMIOLOGY NEWSLETTER

Tennessee Reportable Diseases: What? Who? When? How?

More than 70 diseases are required by Tennessee law to be reported to public health authorities. The law states: "Whenever any physician examines or treats any person known or suspected by him(her) to be affected with any of the diseases or conditions declared to be notifiable…, he(she) shall give notice of such disease… to the local health department in the county, district or region in which such physician practices or to the Tennessee Department of Health giving the name, age, sex, race, and address of the patient and the name of the known or suspected disease or conditions."
(T.C.A. 1200-14-1-.03)

The Tennessee list of notifiable diseases is enclosed with this newsletter, as well as a reporting form. Because receiving notification directly from physician offices results in a more timely response, medical care providers are key participants in protecting and promoting the health of a community. **Reliance on laboratories alone for reporting requirements can result in delay in possible disease prevention interventions.**

Public health staff responds to disease reports in various ways. In order to implement specific therapeutic or other prevention control measures, contact investigations are initiated for certain communicable diseases such as Pertussis, Hepatitis A, *N. Meningiditis,* Measles, Mumps, Tuberculosis, and Sexually Transmitted Diseases. Interviews are conducted with cases of certain food and waterborne diseases to identify possible sources of contamination. Surveillance of communicable diseases in Hamilton County is conducted to identify potential disease clusters or outbreaks.

The enclosed form can be used to send reports to the Chattanooga-Hamilton County Health Department. Specific information for sending reports is included on the form. For answers to questions regarding notifiable disease in Tennessee, please call the Epidemiology Department at 423-209-8190. Additional information is also available at the Tennessee Department of Health, Communicable and Environmental Disease Services at the following website:
health.state.tn.us/ceds/notifiable.htm

Rabies Vaccine Supply is Limited

Recent limitations in the supply of rabies vaccine has resulted in the CDC recommending that health care providers, state and local public health authorities, animal control officials and the public take immediate steps to ensure appropriate use of human rabies biologics. Judicious and appropriate use of rabies vaccines is crucial to avert a situation in which persons exposed to rabies are put at increased risk due to depleted vaccine supplies. Precautions to avoid potential exposure to rabies virus include vaccinating pets and livestock that have close human contact, avoiding stray and wild animals and safely capturing or detaining biting animals (preferably using animal control officials) or obtaining owner contact information for follow up.

Persons with possible rabies exposure should be evaluated as soon as possible by a health care provider. **Since post exposure prophylaxis (PEP) is an urgent medical issue but not an emergency, it can be delayed until animal rabies testing or clinical observation is completed.** If the animal is not available for testing or observation, consultation with public health staff will be necessary prior to starting PEP. Please know that the requirement to consult with public health on each case prior to ordering vaccine is not meant to be restrictive. This approach not only limits administration of PEP to persons with confirmed rabies exposure, but it is also cost-saving and conserves limited resources.

Rabies Vaccine manufacturers may require a specific code for ordering vaccine. This code can be obtained from public health authorities at the local or state level. for consultation regarding possible animal exposure and necessity for initiation of PEP, Health Department staff are available during business hours 8:00 am to 4:00 pm, Monday through Friday, at 423-209-8190. Staff are also available after hours by calling 423-209-8010.
For additional information, please see www.cdc.gov/rabies.

2008-2009 Influenza Vaccine Updates

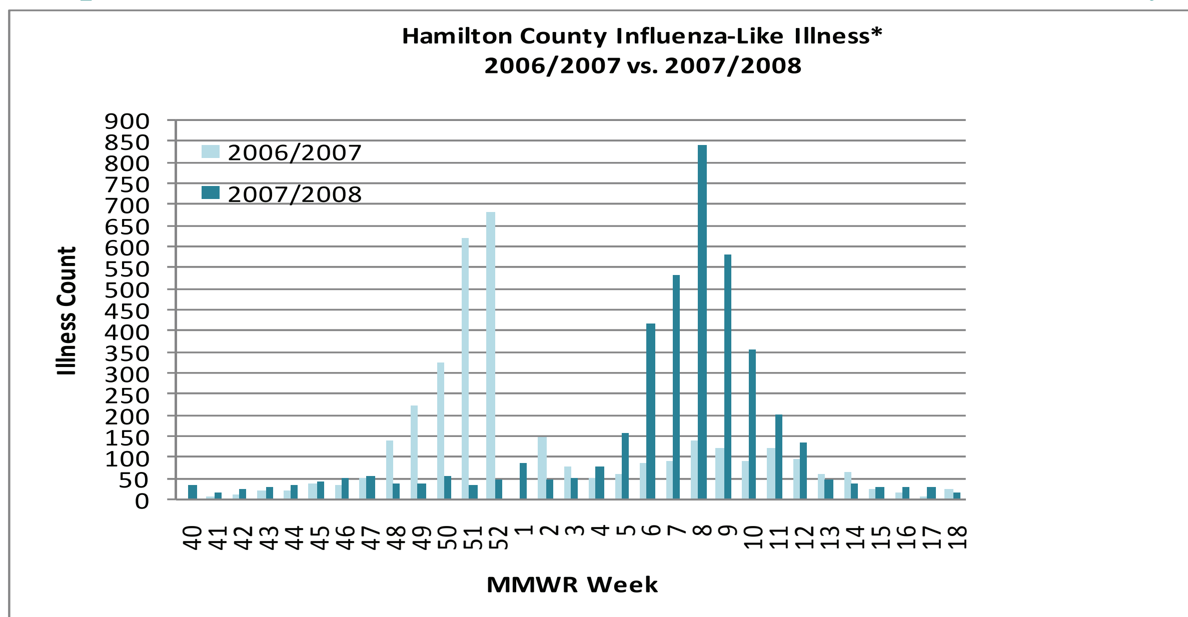
The 2008 recommendations include five principal changes or updates:

- Beginning with the 2008--09 influenza season, annual vaccination of all children aged 5--18 years is recommended. Annual vaccination of all children aged 5--18 years should begin in September or as soon as vaccine is available for the 2008--09 influenza season, if feasible, but annual vaccination of all children aged 5--18 years should begin no later than during the 2009--10 influenza season.
- Annual vaccination of all children aged 6 months--4 years (59 months) and older children with conditions that place them at increased risk for complications from influenza should continue. Children and adolescents at high risk for influenza complications should continue to be a focus of vaccination efforts as providers and programs transition to routinely vaccinating all children.
- Either TIV or LAIV can be used when vaccinating healthy persons aged 2--49 years. Children aged 6 months--8 years should receive 2 doses of vaccine if they have not been vaccinated previously at any time with either LAIV or TIV (doses separated by 4 or more weeks); 2 doses are required for protection in these children. Children aged 6 months--8 years who received only 1 dose in their first year of vaccination should receive 2 doses the following year. LAIV should not be administered to children aged <5 years with possible reactive airways disease, such as those who have had recurrent wheezing or a recent wheezing episode. Children with possible reactive airways disease, persons at higher risk for influenza complications because of underlying medical conditions, children aged 6--23 months, and persons aged >49 years should receive TIV.
- The 2008--09 trivalent vaccine virus strains are:
  A/Brisbane/59/2007 (H1N1)-like, A/Brisbane/10/2007 (H3N2)-like, and B/Florida/4/2006-like antigens.

Oseltamivir-resistant influenza A (H1N1) strains have been identified in the United States and some other countries. However, oseltamivir or zanamivir continue to be the recommended antivirals for treatment of influenza because other influenza virus strains remain sensitive to oseltamivir, and resistance levels to other antiviral medications remain high.

Source: Prevention & Control of Influenza - Recommendations of the Advisory Committee on Immunization Practices (ACIP) 2008. MMWR 2008 Jul 17; Early Release:1-60.

Outpatient Influenza-like Illness Surveillance-Hamilton County

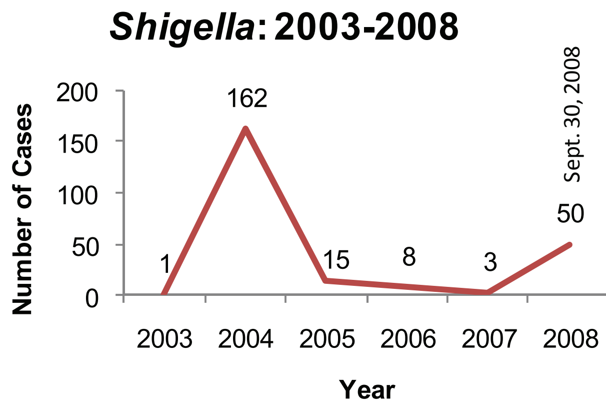


*Influenza-Like Illness is defined as fever greater than or equal to 100 degrees AND cough or sore throat (in the absence of a known cause).

Shigellosis in Hamilton County

A significant rise in the number of Shigellosis infections in Hamilton County has occurred in 2008. The majority of cases (75%) have occurred in children under age 10. Figure 1 shows data for *Shigella* for 2003 through September 2008.

Figure 1



Shigella is a bacterial infection affecting the large intestine. Symptoms include watery diarrhea, fever, stomach cramps, nausea and/or bloody stools. Illness can last from 4 to 7 days and typically starts 1 to 3 days after exposure to the bacteria. The disease is transmitted easily from person to person especially among children and others with inadequate hygiene practices. Parents of children in school should be encouraged to keep ill children out of school until symptoms have resolved.

A stool culture and sensitivity is recommended for symptomatic patients since it is not uncommon for *Shigella* isolates to be resistant to Ampicillin and Trimethoprim- Sulfamethoxazole. **If a stool culture shows that *Shigella* infection is present in a day care attendee or employee, or a food handler, that person should not return until they have two (2) negative stool cultures collected at least 24 hours apart and at least 48 hours after completing antibiotics, and the diarrhea has stopped for at least 24 hours.** This is important from a public health perspective to control the spread of this infection.

All lab confirmed cases of Shigellosis should be reported to the Epidemiology Department as soon as possible, allowing completion of appropriate follow up and investigation of possible common exposures. For more information or for a fact sheet on Shigellosis please visit our website or call our office at 423-209-8190.

Epidemiology Report*

January—September 2008

Hamilton County Diseases Reported	Cases
Campylobacteriosis	18
Cryptosporidiosis	0
Ehrlichiosis	1
Giardiasis	7
Group A Streptococcus, invasive	3
Group B Streptococcus, invasive	29
Guillain-Barre syndrome	3
Haemophilus influenzae, invasive	5
Hepatitis B, acute	3
Hepatitis C, acute	1
Legionellosis	3
Lyme disease	5
Malaria	0
MRSA (S.aureus, methicillin resistant), invasive	98
Neisseria meningitidis, invasive	0
Rocky Mountain spotted fever	10
Salmonellosis	23
Shigellosis	50
STEC (Shiga toxin-producing Escherichia coli)	3
Strep pneumoniae, drug resistant, invasive	19
Strep pneumoniae, invasive	42
Toxic-shock Syndrome, Staphylococcal	1
VRE (Vancomycin-Resistant Enterococcus), invasive	5
Vibriosis	1
Yersiniosis	0
Other Programs:	
Perinatal Hepatitis B Program	9
Restaurant Complaints Investigated	102
2007 Foodborne Outbreaks	6

The majority of Hepatitis B & C reports received are non-acute and not represented here.

* For a complete list of reportable diseases in Tennessee go to http://health.hamiltontn.org/Epidemiology/

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Mission:

To monitor and investigate epidemiologic trends and diseases to protect the health of the community.

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