

Epigram

The Newsletter of the Georgia Emerging Infections Program

January 2009

Antiviral Resistance in Influenza A Viruses

An official CDC Health Advisory was issued December 19, 2008 with recommendations for the use of antiviral medications in the setting of oseltamivir resistance among Influenza A (H1N1) viruses for the 2008-09 season. Three strains of influenza are currently circulating among humans; influenza B and two types of influenza A (H1N1 and H3N2). Medications used to prevent and/or treat influenza include: two neuraminidase inhibitors [oseltamivir (Tamiflu®) and zanamivir (Relenza®)], and two adamantanes (amantadine and rimantadine). At this early stage in the flu season, activity is low. However, emerging patterns suggest that influenza A, and particularly influenza A (H1) may be a predominant pathogen, and is associated with antiviral resistance. Based on this information, CDC has developed interim guidance for antiviral use. When influenza A (H1N1) virus infection is suspected, zanamivir or a combination of oseltamivir and rimantadine are more appropriate options than oseltamivir alone. The 2008-09 influenza vaccine is expected to be effective in preventing or reducing the severity of illness with currently circulating influenza viruses, including oseltamivir-resistant influenza A (H1N1) virus strains. Thus, CDC recommends that influenza vaccination efforts continue. More information may be found on the CDC website at <http://www2a.cdc.gov/HAN/ArchiveSys/>. Accessed January 7, 2009 at http://www.emergency.cdc.gov/coca/ppt/Antivirals_update_010809_Fiore.pps. Flu season officially began October 1, 2008. GAEIP has identified 6 hospitalized laboratory confirmed influenza cases in HD3. We appreciate the HD3 laboratories and infection prevention's cooperation this season. This year's special study: Estimating the effectiveness of TIV in preventing laboratory-confirmed influenza hospitalizations among adults aged 50 years and older.

Surveillance Update: CHROMagar™ Candida Detects Dual Species

The *Candida* bloodstream surveillance study is off to a great start, with almost 350 isolates submitted from the eight-county Atlanta surveillance area. As of January 2009, hospital lab-reported species breakdowns of isolates show the following: *C. albicans* 38%, *C. glabrata* 30%, *C. parapsilosis* 17%, *C. tropicalis* 9%, *C. krusei* 2%, other or pending 3%.

An interesting early observation is the number of patients with two different *Candida* species isolated from their incident culture. To date, ten such cases have been identified by hospital laboratories in the surveillance area. At least one additional case was identified by the CDC when the culture was plated on CHROMagar™ *Candida* agar [BBL] and two species were readily apparent by the color differences on this medium. Several other suspected mixed populations are awaiting final confirmation.

Dual infection with more than one *Candida* species may have direct clinical relevance because of differences in anti-fungal drug susceptibility. For example, the presence of *C. glabrata* in a blood culture usually calls for use of an echinocandin drug, while *C. albicans* and *C. tropicalis* remain largely susceptible to azole drugs such as fluconazole.

These early findings indicate that bloodstream infections with multiple *Candida* species may be more common than previously thought. We look forward to continuing to examine candidemia patterns and speciation in the Atlanta metropolitan area, and we appreciate the continued submission of isolates by area hospital labs.

 **6th Annual EIP Conference**
When: March 17, 2009
Where: Emory Conference Center

Topics: Viral Diagnostics, Epidemiology and Laboratory issues associated with MRSA and other resistant organisms, Outbreak investigations, STEC, TB, and a panel discussion related to *C. difficile* infections. There will also be a SENDSS demonstration, as well as a specimen shipping regulations demonstration.

E-mail Suzanne Segler at ssegler@learnlink.emory.edu to reserve your spot!



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EIP on the Web

Georgia Emerging Infections Program

<http://health.state.ga.us/eip>

ABCs Web Page

www.cdc.gov/ncidod/dbmd/abcs

FoodNet Web Page

www.cdc.gov/foodnet/

CDC Influenza Web Page

www.cdc.gov/flu/

Georgia Division of Public Health

www.health.state.ga.us/

SENDSS disease reporting

<https://sendss.state.ga.us/sendss/login.screen>



The Georgia Emerging Infections Program is a collaboration between:



Be on the look out!!

The GAEIP conducts active surveillance for all the organisms listed below. Please be sure to continue to set aside these isolates for us!

Isolates from sterile sites:

- Group A *Streptococcus*
- Group B *Streptococcus*
- *Haemophilus influenzae*
- *Neisseria meningitidis*
- *Streptococcus pneumoniae*
- Methicillin-resistant *S. aureus*
(at selected facilities in HD3)

Isolates from any site

(if not sent directly to state lab):

- *Campylobacter*
- *E. coli* O157:H7 & Shiga toxin-producing *E. coli*
- *Listeria monocytogenes*
- *Salmonella*
- *Yersinia*
- *Vibrio*
- *Shigella*

Isolates from blood (*HD3 labs only):

◆ ***Candida* (all species)**

* HD3 consists of Clayton, Cobb, DeKalb, Douglas, Fulton, Gwinnett, Newton & Rockdale counties.

**In addition to these organisms we also conduct "paper" surveillance for *Cryptosporidium* and *Cyclospora*. We are not currently collecting these isolates, but do review laboratory and/or infection control records for these organisms.

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