# EPI Update for Friday, November 4, 2011
# Center for Acute Disease Epidemiology (CADE)
# Iowa Department of Public Health (IDPH)

**Items for this week's EPI Update include:**

- **New gold standard for influenza detection for diagnostic purposes**
- **Prevent the spread of norovirus**
- **Meeting announcements and training opportunities**

**New gold standard for influenza detection for diagnostic purposes**

The new "gold standard" for influenza detection for diagnostic purposes is the PCR method. This has proven to be more sensitive and specific than virus culture, direct fluorescent antibody staining, or rapid testing.

In the past, serologic testing for specific antibodies (IgG, IgM) was used before viral detection tests, such as the rapid tests, became commonly available. Virus detection is clearly superior to antibody determination for diagnosis of influenza virus infections. However, antibody testing may be useful as a complementary tool to confirm the diagnosis retrospectively. Since influenza virus infection usually is a reinfection, most people have some pre-existing immunity. Therefore, the detection of influenza-specific IgG or total antibodies on a single serum specimen is not very useful to diagnose a recent infection. The definitive serological diagnosis of acute influenza requires the demonstration of increasing antibody titers on paired acute and convalescent serum samples.

To diagnose influenza virus infection, physicians should now only order PCR, a rapid test, direct fluorescent antibody staining or culture, and relegate serology to special circumstances of retrospective evaluations.

**Prevent the spread of norovirus**

Norovirus activity is traditionally higher in winter months because people are indoors more and in closer contact. With the chill in the air this past week, reports of norovirus activity have also increased. Most laboratories cannot perform norovirus testing; however, the State Hygienic Laboratory (SHL) offers norovirus testing by PCR. When norovirus outbreaks are suspected, submit freshly collected stool in Enteric Transport Medium to SHL. While the specimen does not require cold shipment or storage, temperature extremes must be avoided.

Norovirus should be suspected when:

- Ill individuals have vomiting and/or diarrhea.
- The average time between exposure and illness is 24 to 48 hours.
- The duration of illness for most persons is 12 to 60 hours (usually 24 to 48 hours).

Please share the following norovirus prevention and control recommendations with patients:

- Thorough hand washing should be encouraged, especially before, during, and after preparing food; before eating food; and after restroom use.
- Anyone who is ill with diarrhea, vomiting or fever should not work with food, the elderly, in healthcare or child care. Anyone working in these occupations with these symptoms should leave work. Food recently prepared by this person should be discarded.
- Maintaining a clean environment is important in containing and preventing the spread of norovirus.

Please visit the following links for additional resources.
Norovirus factsheet:
www.idph.state.ia.us/idph_universalhelp/main.aspx?system=IdphEpiManual&context=Norovirus_factsheet
Environmental cleaning recommendations:
http://www.idph.state.ia.us/idph_universalhelp/main.aspx?system=IdphEpiManual&context=norovirusenvirocleaning_fs

**Meeting announcements and training opportunities**

**Iowa Local Board of Health Guidebook**
The local board of health guidebook has been updated. For a copy, visit www.idph.state.ia.us/hpcdp/local_board_of_health.asp.

**Registrations now open for "What to Do When You Suspect a Select Agent" webinar**
The State Hygienic Lab is planning a new series of noon webinars related to topics of laboratory preparedness. The first webinar is scheduled for November 10, 2011 from 12:00 noon to 1:00 p.m. This first webinar, presented by Dr. Michael Pentella is titled "What to Do When You Suspect a Select Agent?"

The topics to be covered are:

- Sentinel Lab Definition
- When to suspect a select agent
- Safety issues
- Communication with SHL
- Shipping precautions
- Destruction of agents
- Form 4
- Post exposure concerns

The webinar is free to participants. If you would like to register, please email Rick Bonar at richard-bonar@uiowa.edu. If you have multiple people who wish to participate, please register once as a site and let Rick Bonar know how many will be attending.

**Have a healthy, happy week!**
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