

EPI Update for Friday, December 5, 2014
Center for Acute Disease Epidemiology (CADE)
Iowa Department of Public Health (IDPH)

Items for this week's EPI Update include:

- **Influenza update**
- **Ebola update**
- **Chikungunya virus update**
- **Meeting announcements and training opportunities**

Influenza update

According to the CDC, 48 percent of the influenza A (H3N2) viruses this season are "like" the 2014-2015 influenza A (H3N2) vaccine component, but 52 percent are antigenically different (drifted) from the H3N2 vaccine virus. In past seasons, during which predominant circulating influenza viruses have been antigenically drifted, decreased vaccine effectiveness has been observed; however, vaccination has been found to provide some protection against drifted viruses. Though reduced, this cross-protection might reduce the likelihood of severe outcomes such as hospitalization and death. In addition, vaccination will offer protection against circulating influenza strains that have not undergone significant antigenic drift from the vaccine viruses (such as influenza A (H1N1) and B viruses).

Because of the detection of these drifted influenza A (H3N2) viruses, CDC is emphasizing the importance of the use of antiviral medications for treatment and prevention of influenza, as an adjunct to vaccination.

The two prescription antiviral medications recommended for treatment or prevention of influenza are oseltamivir (Tamiflu®) and zanamivir (Relenza®). Evidence from past influenza seasons and the 2009 H1N1 pandemic has shown that treatment with neuraminidase inhibitors has clinical and public health benefit in reducing severe outcomes of influenza and, when indicated, should be initiated as soon as possible after illness onset. Clinical trials and observational data show that early antiviral treatment can:

- shorten the duration of fever and illness symptoms;
- reduce the risk of complications from influenza (e.g., otitis media in young children and pneumonia requiring antibiotics in adults); and
- reduce the risk of death among hospitalized patients.

Three strains of flu are now circulating in Iowa – A(H3N2), A(H1N1) and B(Victoria lineage). Influenza activity in Iowa has been upgraded from sporadic to local due to recent increases in flu activity. To see the Iowa Flu Report, visit www.idph.state.ia.us/Cade/Influenza.aspx?pg=FluSurveillance and for the IDPH press release on influenza A(H3N2) viral drift, visit www.idph.state.ia.us/IdphNews/Reader.aspx?id=82543CB7-4BF0-448D-9A1A-68ABB925B5E7.

Ebola update

There are no cases of Ebola in Iowa. No persons in Iowa are being tested for Ebola. This week there are two travelers who are considered to be at "low risk" of Ebola who are under a public health order to self-monitor for symptoms twice daily. For more information, visit www.idph.state.ia.us/IDPHChannelsService/file.ashx?file=817B08F7-61DA-41F7-96C5-908C143C3F09.

HHS issued a press release regarding Ebola treatment centers in the U.S. To read this release, visit www.hhs.gov/news/press/2014pres/12/20141202b.html.

New this week from CDC

1. Current list of Ebola Treatment Centers: www.cdc.gov/vhf/ebola/hcp/current-treatment-centers.html
2. Updated Interim Guidance: EMS Systems & 9-1-1 PSAPs www.cdc.gov/vhf/ebola/hcp/interim-guidance-emergency-medical-services-systems-911-public-safety-answering-points-management-patients-known-suspected-united-states.html
3. Factsheet: CDC's Ebola Response Team www.cdc.gov/vhf/ebola/pdf/ebola-response-team.pdf
4. Interim Guidance for U.S. Hospital Preparedness for Patients with Possible or Confirmed Ebola Virus Disease: A Framework for a Tiered Approach www.cdc.gov/vhf/ebola/hcp/us-hospital-preparedness.html
5. Interim Guidance for Preparing Frontline Healthcare Facilities for Patients with Possible Ebola Virus Disease: www.cdc.gov/vhf/ebola/hcp/preparing-frontline-healthcare-facilities.html
6. Interim Guidance for Preparing Ebola Assessment Hospitals: www.cdc.gov/vhf/ebola/hcp/preparing-ebola-assessment-hospitals.html
7. Interim Guidance for Preparing Ebola Treatment Centers: www.cdc.gov/vhf/ebola/hcp/preparing-ebola-treatment-centers.html
8. Factsheet: Why Ebola is Not Likely to Become Airborne: www.cdc.gov/vhf/ebola/pdf/mutations.pdf

Chikungunya virus update

As the winter holiday season starts and traveling increases, IDPH is encouraging providers to remind patients traveling to the Caribbean and other tropical areas to protect themselves from mosquito bites (that can carry Chikungunya virus) and to consider Chikungunya in patients with acute onset of fever and polyarthralgias who recently returned from places like the Caribbean. Thus far in Iowa, four Chikungunya virus cases have been reported. Three cases have occurred in travelers returning from affected areas in the Caribbean, and one from Samoa.

Chikungunya virus RT-PCR test, as well as IgM and IgG antibody assays are available at CDC, a few state health departments (but not at Iowa's SHL), and at least one commercial laboratory. Healthcare providers are encouraged to report suspected cases to IDPH, and to coordinate testing through the CDC.

For more information on Chikungunya, visit www.cdc.gov/chikungunya/.

Meeting announcements and training opportunities

None

Have a healthy and happy week!

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