Items for this week’s EPI Update include:

- Refresher on measles vaccination recommendations
- Measles activity in the U.S. – no cases in Iowa
- Measles activity in neighboring states
- Resources for developing measles protocols
- Medical office telephone evaluation of patients with possible influenza
- Meeting announcements and training opportunities

Refresher on measles vaccination recommendations
Two doses of MMR are required for elementary and secondary school entry in Iowa. The first dose can be given at 12 months of age and the second dose can be administered 28 days later (the second dose is commonly administered as part of the kindergarten shots given between 4-6 years of age). Generally, persons who started elementary school in Iowa after 1991 and were up-to-date on all school entry vaccine requirements will have received two doses of MMR vaccine.

It is recommended that adults born in 1957 or later receive at least one documented dose of MMR vaccine, or have proof of immunity (measles-IgG positive titer), in order to be considered fully immunized. It is especially important for adults in that age category, and 1) work in a health care facility, 2) plan international travel, or 3) are students in a post-secondary institution, receive a second dose to be considered fully immunized.

Adults born prior to 1957 are presumed to have had measles and are immune since measles was so common back then; however, one dose of MMR (or other proof of immunity) is still recommended if they plan to travel internationally or are health care workers.

Vaccination in those who have already had measles or have already received the recommended vaccination is not harmful; it only boosts immunity. Therefore, if someone is unable to verify prior vaccination or prior history of illness, vaccination with MMR is appropriate.

For additional information about measles vaccination, visit www.cdc.gov/measles/vaccination.html.

Measles activity in the U.S. – no cases in Iowa
So far this year, 84 confirmed cases of measles have been identified in 14 states across the U.S. Of the 84 cases, at least 56 have been linked to Disneyland Resorts (11 cases identified in 2014 were also linked to Disneyland Resorts).

Many of our neighboring states have identified cases of measles, including South Dakota, Minnesota, Nebraska and Illinois. As of today, NO cases have been identified in...
Iowa and no identified cases in others states have reported travel to Iowa during their infectious periods; however, Iowa is a high risk of having measles brought into the state.

Please contact IDPH immediately to report any Iowans (whether vaccinated or not) possibly exposed to measles to discuss necessary actions. **All suspected measles cases should be immediately reported to IDPH as well.** IDPH will coordinate with SHL to expedite specimen transport and testing.

To reach IDPH during business hours call 800-362-2736 and after hours call 515-323-4360 (the Iowa State Patrol will contact the person on call).

For additional information about measles activity in the U.S., visit www.cdc.gov/measles/cases-outbreaks.html

**Measles activity in neighboring states**
Measles cases have recently been identified in four of our neighboring states. Exposure information and links to additional information by state is included below.

**Illinois (one confirmed case):**
Public exposure locations/times include:
- Patients and visitors at the Northwest Community Hospital emergency room (800 West Central Road, Arlington Heights) on January 14 from 7 p.m. to 12:30 a.m. and January 17 from 4 p.m. to 10:30 p.m.
- Customers at the Supermercado Guzman (1611 North Baldwin Road, Palatine) on January 12 and 13 between 5:30 p.m. to 8 p.m.
- Patients and visitors at the Vista Clinic (1585 North Rand Road, Palatine) on January 16 between 12:30 p.m. to 4 p.m.

For additional details, visit www.dph.illinois.gov/news/one-confirmed-case-measles-illinois

**Minnesota (one confirmed case):**
For details, visit www.health.state.mn.us/news/pressrel/2015/measles012815.html

**Nebraska (two confirmed cases):**
Case 1: Public exposure locations/times:
- Country Bible Church (Blair) January 11, 2015 (11:00 p.m. – 2:00 p.m.)
- Costco, 12300 W. Dodge Rd. (Omaha) January 12, 2015 (6:30 p.m. – 9:30 p.m.)
- Omaha Children’s Museum January 15, 2015 (12:15 p.m. – 5:30 p.m.)
- Blair Dance Center (Blair) January 15, 2015 (4:15 p.m. - 7:05 p.m.)

Case 2: Public exposure locations/times:
- Little Blossoms Day Care (Blair) January 20-23, 2015 (7:00 a.m. - 6:30 p.m.)
- Jakes’ Bar and Grill (Blair) January 22, 2015 (6:30 p.m. - 10:00 p.m.)

For additional details, visit www.douglascountyhealth.com/measles-information
South Dakota (10 confirmed cases):
1 case in Sioux Falls area:
Public exposure location:
Holy Spirit Elementary School (Sioux Falls) on January 22, 2015

Nine cases in Mitchell area residents:

Resources for developing measles protocols
Recently, IDPH has received calls from our health care partners who are updating procedures for dealing with suspect measles cases. Some key points are included below and the CADE Epi Manual is also a great resource with a chapter on measles, as well as fact sheets for the public in three languages (English, Bosnian, and Spanish).


IDPH recommends:
• All Iowa health care providers and their staff should have had two documented doses of MMR or serologic evidence of immunity to measles.
• During routine office visits, assure that all patients are up-to-date on their MMR vaccine.
• Please contact public health immediately to report any Iowans (whether vaccinated or not) possibly exposed to measles to discuss necessary actions.
• When examining a patient with potential measles, health care providers must make arrangements to see the patient in a manner that does not expose others. For example, have the patient come in a back door. Do not allow patients with possible measles to sit in the waiting room. See the patient immediately, document specific onset dates of cough, coryza, fever, rash and initial presentation and spread of rash.
• Patient presenting with signs of measles (fever, rash, coryza/runny nose, conjunctivitis, and cough) should be tested as follows:

  Blood Specimen for Serologic Testing: (most important specimen to collect)
  o Measles IgM test: obtain testing when patient first presents - do not wait. Tests that are negative in the first 72 hours after rash onset may need to be repeated. IgM is detectable for at least 28 days after rash onset.
  o Serology-collection: for adults, 7 to 10 ml of blood in a red top or serum separator tube (SST); for infants, 2 to 3 ml of blood in a red top or serum separator tube (SST). Send to SHL on a cold pack, (not frozen) with a completed virus “Serology” test request form.
  o If the symptomatic patient has a history of possible disease or vaccination, an IgG test may be appropriate.
Nasopharyngeal Swab and Throat Swab:
These specimens should also be obtained when the suspect case first presents to the health care provider.
- RT-PCR for measles and virus culture requires a nasopharyngeal swab and a throat swab collected and placed in separate M4 viral transport media (VTM). The VTM is kept cold and should be sent on a cold pack, (not frozen) with a completed "Viral and Chlamydia Detection and Bacterial PCR." Measles RT-PCR will be sent to CDC for testing as appropriate.
- Virus culture for further characterization of the virus.
- If initial measles testing is positive, viral isolates will be sent to CDC for genotyping. Viral genotyping is an important component of measles surveillance and can help determine the source of the virus (i.e. country of origin).

Shipment of specimens: SHL will conduct testing for suspect measles cases at no charge. For assistance with specimen transport and transport for emergency testing, contact SHL at (319)335-4500.

Medical office telephone evaluation of patients with possible influenza
To improve the appropriate use of antivirals during this influenza season, CDC released a new tool for "Medical Office Telephone Evaluation of Patients with Possible Influenza." This new tool was developed for medical office staff as they conduct telephone triage for patients who call with flu-like symptoms to help them identify when it might be appropriate to initiate antiviral treatment before an office visit. Patient triage or prescribing of prescription medicines should be done under the direction of a licensed physician or other licensed health care provider.

To access the tool, visit www.cdc.gov/flu/professionals/antivirals/office-evaluation.htm.

Meeting announcements and training opportunities
None

Have a healthy and happy (and measles-free!) week!
Center for Acute Disease Epidemiology
Iowa Department of Public Health
800-362-2736