

Epi Update for Friday, March 24, 2017
Center for Acute Disease Epidemiology (CADE)
Iowa Department of Public Health (IDPH)

Items for this week's EPI Update include:

- **Measles case reported in eastern Nebraska**
- **Measles activity in the United States – no cases in Iowa**
- **Resources for developing measles protocols**
- **Refresher on measles vaccination recommendations**
- **Iowa Acute Disease Monthly Update**
- **Infographic: Measles isn't just a little rash**
 - **Meeting announcements and training opportunities**

Measles case reported in eastern Nebraska

Nebraska has announced a laboratory confirmed case of measles, with exposures in the Omaha area. Exposure information and links to additional information is included below.

Public exposure locations/times include:

- Delta flight 798 from Minneapolis to Omaha March 12, 2017 (8:00pm-10:30pm)
- Eppley Airfield South Terminal (Omaha) March 12-13, 2017 (10:30pm – 1:30am)
- Eppley Airfield South baggage claim (Omaha) March 12-13, 2017 (10:30pm – 1:30am)
- Hampton Inn, 12331 Southport Pkwy (La Vista) March 12, 2017 – March 17, 2017
- Urgent Care of Papillion, S 73rd Plaza (Papillion) March 15, 2017 (6:00pm – 8:30pm)
- CHI Urgent Care, S 96th St (La Vista) March 15, 2017 (7:00pm – 10:00pm)
- Bergan Mercy Hospital Emergency Department (Omaha) March 15, 2017 (8:30pm – 12:00am)

Health care providers who identify patients with rash/fever illness and exposures to the above venues should isolate the patient immediately and call IDPH. During business hours, call 800-362-2736. After business hours, call the Iowa State Patrol at 515-323-4360 and they will page the epidemiologist on-call.

For additional details,

visit www.douglascountyhealth.com/images/stories/disease/HAN%20Advisory%20Measles%20March%202023_2017.pdf.

Measles activity in the United States – no cases in Iowa

In addition to the case in Nebraska, 21 people from seven states (California, Colorado, Florida, New Jersey, New York, Pennsylvania, and Utah) were reported to have measles in the first eight weeks of 2017. This compares to 70 cases in 2016 and 188 in 2015. In 2014, the United States experienced 667 cases, the highest number of measles cases since elimination was documented in the U.S. in 2000. Reasons for recent outbreaks include large pockets of unvaccinated people, travelers with measles bringing the disease to the U.S., and a combination of those factors.

There are currently NO confirmed or suspected cases in Iowa; however, please remind Iowa health care providers in your jurisdiction/within your facility to be vigilant about measles.

- Evaluate the immunization status of all patients and staff to ensure they are up-to-date with MMR vaccinations.
- Consider measles in patients presenting with febrile illness and clinically compatible symptoms (the ‘Three Cs’ – cough, coryza, and conjunctivitis) followed by rash three to five days later; also, ask these patients about recent travel to U.S. (such as Omaha) and international areas with measles cases.

For more information, visit www.cdc.gov/measles/cases-outbreaks.html.

Resources for developing measles protocols

To help prepare for potential suspect measles cases, some key points are included below. 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). To access the Epi Manual, visit wiki.idph.iowa.gov/epimanual.

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):

- 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.
- Serology-collection: for adults, 4 to 6 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.
- If the symptomatic patient has a history of possible disease or vaccination, an IgG test may be appropriate.

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 throat 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 Bacterial PCR and DFA Test Request Form." Measles RT-PCR will be sent for testing as appropriate.
- 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: IDPH will help to arrange immediate transport to SHL for emergency testing to expedite test results.

For more information on serology collection at SHL, visit www.shl.uiowa.edu/kitsquotesforms/serologycollectioninstructions.pdf.

Refresher on measles vaccine 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 (however, 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. Any adults who 1) work in a health care facility, 2) plan international travel, or 3) are students in a post-secondary institution, should 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 then; however, at least 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.

Iowa Acute Disease Monthly Update

The new issue of the Iowa Acute Disease Monthly Update is available on our website. Visit idph.iowa.gov/CADE and scroll down to “Reports” or access the report directly with the following

link: idph.iowa.gov/Portals/1/userfiles/79/Reports/Misc/Monthly%20Report/IADMU%20March%2017%20-%20202.pdf.

Infographic: Measles isn't just a little rash



Infographic available at www.cdc.gov/measles/downloads/measles-infographic.pdf.

Meeting announcements and training opportunities

Iowa Infection Prevention and Control Seminar.

May 2-3, 2017 at the Cedar Rapids Marriott. For more information, visit www.continuetolearn.uiowa.edu/UIConferences/meetings.aspx?cnfcode=17-122-01.

Have a healthy and happy week!

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