

Measles Emergency EPI Update #1 Tuesday, May 24, 2011

The IDPH has confirmed a case of measles in a Dallas County resident.
The following locations have been identified as potential sites of exposure:

May 11 - American Airlines Flight AA3965
Departed Chicago O'Hare: 11:55 a.m.
Arrived Des Moines International Airport: 1:05 p.m.

Des Moines International Airport – main terminal and baggage area
1:00 to 3:45 p.m.

May 14th – Mercy Central Pediatric Clinic
330 Laurel St, Ste 2100, Des Moines Iowa
10:00 a.m. to close (offices closed at 2:00 p.m.)

May 14th – Mercy Medical Center – Main Entrance, including waiting room,
registration, outpatient testing and blood draw station area
1111 6th Avenue, Des Moines, Iowa
Noon to 3:00 p.m.

Due to delayed reporting, administration of vaccine or immunoglobulin will not prevent illness in individuals exposed to this case. For public health purposes, surveillance will continue for two incubation periods past the last infectious day of the index case. This would be through June 28th.

Healthcare providers should **IMMEDIATELY** report suspect cases of measles to the Iowa Department of Public Health. Call 800-362-2736 (after hours call 515-323-4360 - this will connect you to the State Patrol, and the IDPH Duty Officer will return your call).

Immediate notification of public health is critical to preventing further illness.

All Iowa health care providers and their staff should have had two documented doses of MMR or serology evidence of immunity to measles. In addition, during routine office visits assure that the patients MMR vaccine is up-to-date.

When examining a patient with potential measles, healthcare providers must make arrangements to see the patient in a manner that does not expose others. For example, see the patient outside, at the end of the day, or 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:

Three specimens are needed. Specimens should be submitted to the State Hygienic Laboratory:

1. Blood Specimen for Serologic Testing

- 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, 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.
- If the symptomatic patient has a history of possible disease or vaccination, an IgG test may be appropriate.

2. 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.

Guidelines for Measles Post Exposure:

Prophylaxis can be administered up to six days post exposure. It is too late to protect anyone exposed to this index case. The following guidelines should be applied to contacts of secondary cases:

Infectious Period: four days before rash onset through four days after rash onset

Vaccination History: No doses of MMR

1. Children (less than 12 months of age)

Recommendation: Day 0-6 Post Exposure: Administer Immunoglobulin

2. Children (older than 12 months of age) and adults with no documented doses of MMR

Recommendation: Day 0-3 Post Exposure: Administer MMR

Day 4-6 Post Exposure: Administer Immunoglobulin

Vaccination History: One documented dose of MMR

Healthy adults and children (older than 12 months of age) who have a documented history of one dose of MMR more than 28 days ago

Recommendation: Administer MMR #2 (should have protection from MMR #1)

Special Situations:

1. Adults or children (older than 12 months of age) with either one or no documented doses of MMR, AND meet one of the following criteria:

- Individuals who have used oral or injectable steroids within the past month (2mg/kg or 20 mg/day for 14 days)
- Individuals who are undergoing chemotherapy for treatment of cancer or autoimmune disorders
- Individuals with HIV who are severely immunocompromised
- Individuals with genetic immunodeficiency syndromes
- Pregnant women who are not immune to measles

Recommendation: Days 0-6 Post Exposure: Administer Immunoglobulin

2. Individuals who do not need immunoglobulin or MMR:

- Individuals who know that they have had measles in the past (typically lowans who are mid-50s or older)
- Individuals who have a documented history of two doses of MMR
- Individuals who have laboratory-confirmed immunity to measles (positive measles IgG antibody)
- Individuals who were exposed more than six days ago, thus too late to provide preventive treatment. May need to be quarantined at home – contact public health.

Everyone should be educated to watch for the signs and symptoms of measles.

- Signs include fever, rash, coryza/runny nose, conjunctivitis, and cough.
- Rash begins on the face 3 face three to five days after onset of symptoms spreading to trunk and extremities.

Educate anyone who might have been exposed, that if symptoms develop they should call a health care provider before presenting for health care. Patients should not go to the doctor's office, ER, local public health agency, or a walk-in clinic until arrangements are made to be seen by the health care provider at a place and in a manner that will not potentially expose others to measles.