

Measles Identified in Michigan

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On March 28, 2017, the Michigan Department of Health and Human Services (MDHHS) confirmed Michigan's first measles case of 2017. The case was reported in a Southeast (SE) Michigan resident, who had recently returned from extensive international travel. The Region 2 North and Region 2 South Epidemiologists assisted local health jurisdictions (LHJs) in the follow-up of several hospital emergency department (ED) contacts that were exposed to the case prior to the measles diagnosis. In total, there were 16 patients that were identified as being exposed to the case in the ED. LHJs notified contacts of their exposure, verified their vaccination status, and provided recommendations on post-exposure prophylaxis (PEP). From the LHJ follow-up, an additional 17 family contacts were identified as also being exposed in the same ED waiting area. Among those identified, 82% were either appropriately vaccinated or brought up to date during the PEP window.

As the case was infectious during their return travel, which included two international flights and one domestic flight, MDHHS notified the Centers for Disease Control and Prevention (CDC). The CDC recommended further follow-up to the jurisdictions of the flight contacts considered to be exposed. One of the exposed flight contacts, a Region 1 resident, was confirmed on April 14 as Michigan's second case of measles for 2017. The Region 1 Epidemiologist assisted the LHJ in the extensive contact tracing. Family and friend contacts identified as being exposed to this second case were contacted to verify their immune status and were provided information on measles and its associated signs and symptoms. Due to the nature of the case's occupation, multiple exposures at various worksite locations were discovered during the course of the investigation and more than 50 co-workers were considered exposed. Additional exposures occurred at healthcare facilities that the case had visited while infectious.

Because of the number of individuals that needed to be contacted, one LHJ brought in their local Medical Response Corp to assist. Over 150 people were called and provided information on measles, their potential exposure details, and how to watch for signs and symptoms.

Also during the investigation, it was determined that the case visited three restaurants while infectious. Public notifications regarding the restaurant exposures were issued by the LHJs who license and regulate those facilities. These notifications included exposure dates and times, measles signs and symptoms, and vaccine information. In addition, a press release identified a healthcare facility where exposures may have taken place, as not all individuals at that particular location could be identified and directly contacted.

At this time, there have been no additional cases identified relative to the exposures at the worksite, the three restaurants, or the healthcare provider sites. The follow-up efforts undertaken by the LHJs and MDHHS shows the importance of routine vaccination for both children and adults, and the need for healthcare and worksite facilities to have a response plan for potential measles exposures in their facilities.