Measles in Michigan Questions and Answers

How many cases of measles do we have in Michigan and where are the cases?

We currently have 44 cases of measles in the state, 40 in Oakland County, 1 in Wayne County and 1 in the City of Detroit. In addition, we have 1 case in Washtenaw County and 1 case in St. Clair County related to international travel. Testing is being conducted by the Michigan Department of Health and Human Services Bureau of Laboratories daily, Monday, Wednesday and Friday, so new cases will be announced as they are confirmed. Visit Michigan.gov/MeaslesOutbreak for the latest information.

The state case count was recently reduced by two cases, what happened?

Two children had been recently vaccinated. Their symptoms and initial test results classified them as measles cases. Initial testing by MDHHS was positive for measles. The MMR vaccine contains a weakened live virus that cannot cause measles but can result in positive lab tests. The MMR vaccine also has the potential to cause a mild rash and fever. Due to the evolving measles outbreak in Southeast Michigan, the local health departments took appropriate steps to limit further spread of measles and responded to protect the public's health by:

- Promptly alerting the public about potential exposure sites.
- Identifying potential contacts.
- Offering post-exposure protection with either MMR vaccine or immune globulin (IG).

Where exactly do these people live, what town or community? Am I at risk?

We are providing county of residence only. However, information about known exposure sites is being provided at Michigan.gov/MeaslesOutbreak to help others determine if they may have been exposed to the measles.

Were any of these people vaccinated?

- Cases complete with MMR (one or two documented MMR doses depending on age): 6
- Cases incomplete MMR or unverified/unknown MMR vaccination status: 38

Some of the people were vaccinated; why did they still get the measles?

Very few people – about three out of 100 – who get two doses of measles vaccine will still get measles if exposed to the virus. Two doses of MMR vaccine are about 97% effective at preventing measles; one dose is about 95% effective. The fact there have been cases among individuals who have been vaccinated (one or two doses of MMR depending on their age) does not mean the vaccine did not work. The number of individuals exposed to measles during this outbreak and protected by the vaccine is unknown and could be in the thousands.

At least one of the people who got the measles was born before 1957. I thought if you were born before 1957 you couldn't get the measles. Why did this person?

It is assumed anyone born before 1957 had the measles as the disease was very common at that time. But it is possible this individual did not have it, making them vulnerable to it now. Michiganders of all ages are encouraged to talk with their healthcare providers about their vaccination status to determine if they should be vaccinated now.

What is the recommendation for the measles vaccine?

- Two doses of measles-containing vaccine, as combination MMR (measles-mumps-rubella), separated by at least four weeks, are routinely recommended for all children 12 months of age or older.
- The first dose should be given on or after the first birthday, ages 12-15 months
- The second dose should routinely be given at ages 4 through 6 years.
    - Second dose may be administered as soon as 28 days after the first dose.
    - **For international travel only,** infants as young as 6 months should be vaccinated against measles.
- Adults should have one dose of MMR vaccine or know immunity.

Should people get a booster shot for measles?

The Centers for Disease Control and Prevention (CDC) considers people who received two doses of measles vaccine as children according to the U.S. vaccination schedule protected for life, and they do not ever need a booster dose. We are recommending that people check on their immunization status with their healthcare provider if they do not know if they have been vaccinated against the measles. If their healthcare provider cannot verify their vaccination status, the provider may recommend that they be vaccinated now.

Why aren't titers being checked with bloodwork as a matter of course to make sure adults are protected and have measles antibodies?

There is not recommendation for the general population to obtain titers to check their immune status for measles. Unfortunately, the titer results are not always reflective of the protection you have against the disease. We encourage physicians to evaluate immunization status of all individuals at every visit to be sure they are currently on all vaccines.

Can you get the measles from the measles vaccine?

The MMR vaccine is very safe and effective. MMR vaccine should not be administered to individuals who are severely immunocompromised because of the rare possibility of reaction to the vaccine since it is a live attenuated vaccine. There has never been a situation where an individual who received a vaccine infected another individual. MMR vaccine is an attenuated vaccine which means the virus has been weakened but is similar enough to the wild virus to illicit an immune response to protect an individual against measles in the future. Some

people may develop a mild rash as a result of the vaccine, but they are not able to transmit the virus to others.

Has the measles vaccine changed? Is this why we are seeing an increased number of cases?

The measles vaccine has not changed recently. According to the CDC's website: In 1954, John F. Enders and Dr. Thomas C. Peebles collected blood samples from several ill students during a measles outbreak in Boston, Massachusetts. They wanted to isolate the measles virus in the student's blood and create a measles vaccine. They succeeded in isolating measles in 13-year-old David Edmonston's blood.

In 1963, John Enders and colleagues transformed their Edmonston-B strain of measles virus into a vaccine and licensed it in the United States. In 1968, an improved and even weaker measles vaccine, developed by Maurice Hilleman and colleagues, began to be distributed. This vaccine, called the Edmonston-Enders (formerly "Moraten") strain has been the only measles vaccine used in the United States since 1968. The measles vaccine began being combined with mumps and rubella in the MMR (MMR) vaccine in 1971. Learn more about measles vaccine.

I visited one of the locations listed as an exposure site, what do I do now?

- Unvaccinated individuals need to get vaccinated within 72 hours of exposure. If you do not have documentation of two measles (MMR) vaccines from a doctor or Michigan Care Improvement Registry (MCIR), unsure if you have been vaccinated, or unsure if you have had measles in the past, contact your healthcare provider or the local health department about getting vaccinated.
- Immune Globulin (Ig) treatment is effective within six days of exposure for high-risk individuals including those who are unvaccinated or unsure about vaccination status, pregnant women and those with a weakened immune system due to illness and diseases like HIV, malnutrition, and/or medications.
- Watch for symptoms for 21 days after potential exposure. Call your preferred healthcare provider if symptoms develop and you believe you were exposed.

What is the procedure for notifying a potential exposure site/how is it determined what can be a potential exposure site?

The local health department interviews individuals who have confirmed cases of the measles, asking them about the places they have been since the first onset of symptoms. Locations they visited during their contagious period – roughly four days before rash onset and four days after – are notified that an individual who had measles had visited their location. Exposure sites are encouraged to notify staff, patrons and students/parents if the location is a school.

Are those sites required to do anything such as clean, throw out food, etc.?

Measles is a highly contagious virus that lives in the nose and throat mucus of an infected person. It can spread to others through coughing and sneezing. Also,

measles virus can live for up to two hours in an airspace where the infected person coughed or sneezed. No special cleaning is required at exposure locations as the virus is no longer live after two hours and notifications are often made days or even a week after an exposure has occurred. Food items do not need to be thrown away.

What are the symptoms of measles?

Symptoms usually begin 7-14 days after exposure, but can appear up to 21 days after exposure and may include:

- High fever (may spike to over 104˚F)
- Cough
- Runny nose
- Red, watery eyes (conjunctivitis)
- Tiny white spots on the inner cheeks, gums, and roof of the mouth (Koplik Spots) 2-3 days after symptoms begin
- A rash that is red, raised, blotchy; usually starts on face, spreads to trunk, arms, and legs 3-5 days after symptoms begin

What do I do if I have symptoms?

If symptoms develop, contact your healthcare provider. ***Do not visit your doctor, Urgent Care or emergency room unless you call ahead so they can take precautions to prevent exposure to other individuals.***

What do I do if I am diagnosed with the measles?

Stay home if you are sick and don't allow visitors in your home as measles is highly contagious. The virus is spread by direct person-to-person contact, and through the air. It can live in the air for up to two hours where the infected person was present. If your symptoms persist and get worse, contact your health care provider.

A New York county instituted a requirement that all unvaccinated children remain at home for the next 30 days, as health officials try to knock out new exposures to the virus. Would something like that ever be considered in Michigan?

This has not been discussed as a tactic in Michigan. We are urging Michiganders to get vaccinated if they have not been vaccinated for the measles and to check with their healthcare provider if they are unsure of their vaccination status.

This document will be updated regularly. For questions contact Lynn Sutfin, MDHHS PIO, at 517-284-4772 (desk); 517-230-6231 (cell); or sutfinl1@michigan.gov.