Measles Surveillance Toolkit

For Healthcare Settings

Updated: August 13, 2024



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Disease Description

Measles is a highly contagious viral disease that is easily spread through coughing and sneezing, and can remain in the air of a room for up to two hours even if the infected person is no longer there. Although the number of cases in the U.S. is low, measles is still common in other countries and is often imported through international travel.

Measles Facts^{1,2}

Healthcare providers and laboratories are required to report confirmed or suspect cases within 24 hours under Arizona Administrative Code (A.A.C.) R9-6-202. Please call your local health agency to submit your report.

Clinical Symptoms

Symptoms of measles include a prodrome of:

- Fever (may spike up to more than 104°F),
- · Cough,
- · Coryza,
- · Conjunctivitis, and
- Koplik spots tiny white spots with bluish/white centers found inside the mouth.

After 2–4 days, the prodrome is followed by the characteristic maculopapular rash that starts at the hairline and progresses down the body.

Incubation and Infectious Periods

The average incubation period for measles is 14 days, with a range of 7–21 days. Persons with measles are usually considered infectious four days before and four days after the appearance of a rash with the rash onset considered as day zero. Immunocompromised individuals may shed the virus longer and can be contagious for the duration of the illness.

Transmission

Measles is spread from person to person through the air by infectious droplets. Up to 9 out of 10 susceptible persons exposed to someone with measles will develop the disease.

At-Risk Groups and Complications

Measles can be dangerous in all age groups, yet some are more likely to suffer from measles complications than others:

- · Children younger than 5 years of age,
- · Adults older than 20 years of age,
- · Pregnant women, and
- · Immunocompromised individuals.

Severe cases of measles can cause pneumonia, convulsions, encephalitis, and death. Out of every thousand children in the U.S. who contract measles, one to three may die from respiratory and neurologic complications.

Subacute sclerosing panencephalitis (SSPE) is one of several examples of the complications that can develop. Although a very rare disorder, it affects the central nervous system and is fatal. SSPE generally develops 7 to 10 years after a person has been infected with measles, regardless of whether the individual appears to have fully recovered. Individuals infected before the age of 2 years may be at higher risk for SSPE.

Laboratory Testing^{1,3,4}

Testing should be performed if a patient has clinically compatible symptoms. If the patient received measles vaccine 6–45 days before rash onset, contact your local public health department to determine appropriate testing.

For measles serologic testing please consider the following:

- Measles IgM testing is readily available at several commercial laboratories.
- This test can be complicated to interpret if the individual has been previously vaccinated.
- In an unvaccinated individual, IgM antibodies appear within the first few days (1–4 days) of rash onset and will peak within the first week.
- There may not be an IgM response or it may be transiently present in vaccinated individuals. Serology results should not be used to rule out a measles diagnosis.

Throat or nasopharyngeal (NP) swabs and urine can be sent to the Arizona State Public Health Laboratory (ASPHL) for PCR testing, provided your local public health department approves of testing prior to submission. They can also assist with questions specimen collection and transport.

Vaccination Information 1,5,6,7

Recommended Schedule

The best way to prevent measles spread is through vaccination. The Centers for Disease Control and Prevention's (CDC) <u>recommended immunization schedule</u> is safe and effective. For children, two doses of a measles-containing vaccine (e.g., MMR) is generally recommended under the following schedule:

- First dose of MMR administered between 12-15 months of age
- Second dose of MMR administered between 4-6 years of age

In the case of traveling to a country where measles is endemic or a place experiencing an outbreak, A dose of MMR can be given to an infant as young as 6 months. However, a dose of MMR given to an infant before their first birthday is considered invalid and should resume their routine vaccine schedule by receiving two additional doses of MMR, administered no earlier than 28 days after the first dose.

Unvaccinated or nonimmune adults should receive either 1 or 2 doses of the MMR vaccine, depending on their risk factors. Students attending post-high school education that are unvaccinated or are nonimmune should get two doses spaced by at least 28 days.

Vaccine Contraindications

The MMR vaccine is contraindicated but not limited to the following individuals:

- · Pregnant women,
- · Immunocompromised,
- Moderate to severe acute illness,
- Personal or family history of seizures,
- Known previous allergic reaction to the vaccine,
- Receipt of antibody-containing blood products within the past 11 months.

Antibody-Containing Blood Products Recommendations:

Individuals who have recently received (≤11 months) antibody-containing blood products such as IG or a blood transfusion should see <u>ACIP's</u>
recommendations for MMR or MMRV administration.

Presumptive Evidence of Immunity

For the general population, individuals that have evidence of immunity are considered immune and do not require additional MMR doses. Acceptable presumptive evidence of immunity against measles includes at least one of the following:

- · Written documentation of adequate vaccination:
 - One or more doses of a measles-containing vaccine administered on or after the first birthday for preschool-age children and adults not at high risk, or
 - > Two doses of a measles-containing vaccine for school-age children and adults at high risk, including college students, healthcare personnel (HCP), and international travelers.
- · laboratory evidence of immunity;
- · laboratory confirmation of disease; or
- birth before 1957.

All persons who work in healthcare facilities should have presumptive evidence of immunity to measles. The criteria for presumptive evidence of immunity is much more stringent for HCP. Regardless of birth year,* HCPs should have written documentation of vaccination with 2 doses of a measles-containing vaccine administered at least 28 days apart, § ¥ laboratory evidence of immunity, or laboratory confirmation of disease. This information should be documented and readily available (ideally through electronic medical records) at the work location.

^{*}Although birth before 1957 is considered as presumptive evidence of immunity, for unvaccinated HCP born before 1957 that lack laboratory evidence of measles immunity or laboratory confirmation of disease, healthcare facilities should consider vaccinating personnel with two doses of MMR vaccine at least 28 days apart.⁶

[§]Some adults may have received the inactivated measles vaccine used between 1963 and 1967. <u>ACIP recommends</u> that any individual vaccinated with the inactivated vaccine or vaccine of unknown type during this time period should be revaccinated.⁶

[¥] For HCP who have two documented doses of a measles-containing vaccine or other acceptable evidence of immunity to measles, serologic testing for immunity is not recommended. In the event that an HCP with 2 documented doses of MMR vaccine is tested serologically and determined to have negative or equivocal measles titer results, it is not recommended that the person receive an additional dose of MMR vaccine. Such persons should be considered to have presumptive evidence of measles immunity. Documented age-appropriate vaccination supersedes the results of subsequent serologic testing. Because rapid vaccination is necessary to halt disease transmission, during outbreaks of measles, serologic screening before vaccination is not recommended.^{5,6}

Healthcare Settings

Healthcare personnel (HCP) are people who work in healthcare facilities in any capacity, both paid and unpaid. This includes volunteers, trainees, nurses, physicians, technicians, receptionists, and other clerical and support staff. Due to the work environment, HCPs are at an increased risk of exposure to the virus and risk of transmission to susceptible persons. All persons who work in such facilities should have presumptive evidence of immunity to prevent any potential outbreak.

Prevention & Control Strategies in Medical Settings⁸⁻¹³

Prevention

The best approach in preventing healthcare-associated measles transmission is an effective vaccination program. This includes vaccine outreach, vaccine administration, and management of records. Through the guidance of the Healthcare Infection Control Practices Advisory Committee (HICPAC), CDC recommends that secure (preferably computerized) systems should be used to manage vaccination records for HCP. This allows for an easier retrieval of vaccination history and timely response in the case of a possible exposure or outbreak.

When a patient with suspected measles visits a healthcare setting, the following precautions should be taken:

- If an appointment is scheduled, the patient should be advised to call upon arrival and wait outside for HCP to greet them,
- Patient should be given a mask before entering the facility,
- Patient should be taken immediately to a negative pressure isolation room,
- HCP without presumptive evidence of immunity should not enter a known or suspected measles patient's room,
- Implementation of airborne precautions* in addition to respiratory etiquette, and
- Provide patient with clear instructions on self-isolation, respiratory etiquette and hand hygiene.

^{*} For information on airborne precautions, airborne infection isolation rooms (AIIR), and environmental infection see <u>airborne precautions</u>. Note that patients should remain in airborne precautions for 4 days after rash onset. Immunocompromised patients with measles should remain in airborne precautions for the duration of illness due to prolonged virus shedding.⁸

Control Strategies

When a suspected measles case occurs in a healthcare facility, including outpatient and long-term care, the following measures should be undertaken during and after patient care is completed:

- Implement environmental infection control,
- · Immediate review of presumptive evidence of immunity in all exposed staff, patients & visitors,
- · Contact local public health and report exposure,
- Administer post-exposure prophylaxis in accordance with public health recommendations,
- HCP without presumptive evidence of immunity should be offered the MMR vaccine and excluded from work from day 5 to day 21 following exposure, and
- Exclusion of HCP with active measles illness from all patient contact and excluded from the facility for 4 days following rash onset.

A readily available vaccine record management program of all HCP will help public health and infection preventionists determine the recommendations to set for staff during a measles exposure or outbreak.

Serological testing, if performed, can inform the need for a second MMR vaccine dose, however, serologic screening of HCP during an outbreak to determine measles immunity prior to vaccination is not recommended. Preventing measles transmission requires the rapid vaccination of HCP without presumptive evidence of immunity and its timeliness can be impeded by the duration of screenings and the subsequent contacting and vaccination of susceptible persons.

Healthcare facilities should provide the MMR vaccine to all of its workers without presumptive evidence of measles immunity at no charge. Recently vaccinated HCP do not require any restriction in their work activities. All workers with documentation of just one dose may remain at work and should receive a second dose. All personnel that were possibly exposed should be asked to self-monitor for compatible symptoms of measles for 21 days after their last known exposure.

Hospital contacts of a case-patient, who do not have presumptive evidence of measles immunity, should be vaccinated or offered immunoglobulin (IG). If IG is administered to an exposed person, observations for signs and symptoms of measles should be continued for 28 days after exposure since immunoglobulin may prolong the incubation period.

Quick Tips:

- Isolate patients presenting with suspected measles.
- Immunocompromised patients may not have rash or present with atypical rash.
- IMMEDIATELY consult with your local health department for suspected measles cases.
- Ensure patients and staff are up to date on MMR vaccine and other vaccinations.

Post-Exposure Prophylaxis^{1,7}

HCP, patients, and visitors exposed to measles who cannot provide presumptive evidence of immunity should be offered post-exposure prophylaxis (PEP) in attempts to prevent or mitigate the disease. There are two forms of PEP for measles that can be given following exposure:

- MMR vaccine within 72 hours of initial exposure for all healthy individuals, OR
- Immunoglobulin within 6 days of initial exposure for all at risk of severe illness or complications.

The MMR vaccine should **not** be given simultaneously with IG as this practice invalidates the vaccine. If the MMR vaccine is not administered within 72 hours of the initial exposure, the vaccine should still be offered to healthy individuals to provide protection from future exposures.

If either the MMR vaccine or IG is given as PEP, they should still be monitored for symptoms for at least 1 incubation period. All HCP without presumptive evidence of immunity, regardless if given PEP, should be excluded from duty from day 5 after first exposure to day 21 after the last exposure.

Special consideration should be given in an outbreak setting and for those at high risk of complications (e.g., pregnant women, immunocompromised individuals, and children <12 months of age).

Recommendations for Accelerated MMR Schedule in Children

During a community-wide measles outbreak, the local health department may recommend the acceleration of MMR vaccination in children.

In this situation, MMR can be given to infants as young as 6 months of age. MMR vaccine that is given between 6–11 months of age is not considered valid and for this reason, the child will need two additional MMR doses once turning 12 months or older. It is important to have a minimal interval of 4 weeks between the vaccine given under 12 months of age and the first valid vaccine dose.

The second valid MMR dose is usually scheduled at 4–6 years of age. The second dose may be given sooner as long as there is a minimal interval of 4 weeks between the first and second valid doses of MMR.

Children <12 Months of Age

Children 6–11 months old who are exposed to measles should receive one dose of MMR vaccine within 72 hours of exposure. An MMR vaccine dose in this age group is not considered valid and for this reason, the child will need two additional MMR doses once turning 12 months or older. If the MMR vaccine cannot be given within this time period, the child should receive 0.5 mL/kg of body weight (max dose 15mL) of intramuscular immunoglobulin (IMIG) within 6 days of exposure.

Children under 6 months of age who are exposed to measles should receive one dose of IMIG (0.5 mL/kg) as soon as possible or within 6 days of exposure. Children who have received 0.5mL/kg of IMIG should wait at least 6 months before receiving any recommended MMR or varicella vaccine.

Immunocompromised Individuals

Immunocompromised people who are exposed to measles should receive IVIG (IV Immunoglobulin, 400 mg/kg) as soon as possible or within 6 days of exposure to a confirmed case of measles.

Severely immunocompromised people include:

- · Persons with severe primary immunodeficiency,
- Persons who have received a bone marrow transplant until at least 12 months after completing all immunosuppressive treatment (and longer in those who have developed graft vs host disease),
- Persons receiving treatment for acute lymphocytic leukemia within and until 6 months after completion of immunosuppressive chemotherapy,
- · Persons who are post solid organ transplant,
- Persons receiving high-dose corticosteroid therapy for ≥14 days, or
- Persons with a diagnosis of AIDS or HIV-infected persons with severe immunosuppression defined as CD4 <15% (all ages) or CD4 count <200 lymphocytes/mL3 (aged >5 years).

Pregnant Women

Pregnant women cannot be immunized against measles during pregnancy. Those who have previously received two doses of a measles-containing vaccine are considered immune. Unvaccinated or those without evidence of immunity (documentation of at least 1 dose of MMR or having had the disease) are presumed susceptible to measles. They should receive IVIG (IV Immunoglobulin 400 mg/kg) as soon as possible or within 6 days of exposure to a confirmed case of measles. Any non-immune person exposed to measles who received IVIG should subsequently receive the MMR vaccine no earlier than 8 months after IVIG administration, provided that the vaccine is not otherwise contraindicated.

If a pregnant woman has been exposed to measles but have documentation of 2 previous doses of MMR at least one month apart (given on or after their first birthday) and has a negative measles IgG result are still presumed immune to measles and do not need to receive IVIG.

Household members of pregnant women should be fully immunized (age appropriate) against measles. It is safe to give household contacts of pregnant women the MMR vaccine, since MMR vaccine recipients are not able to transmit the vaccine virus.

County Resources & Contact List

Contact your local county health department for:

- · Evaluation and classification of a possible clinical case,
- · Guidance for communicable disease reporting including measles,
- · Specimen collect and submission information, and
- · Subject matter expertise.

Arizona County Contact Information

County Day Time Hours After Hours Apache 928-337-4364 928-245-7639 Cochise 520-432-9400 800-423-7271 Coconino 928-679-7272 928-255-8715 Gila 928-402-8811 (Globe) 928-474-1210 (Payson) 928-701-1610 Graham 928-428-1962 928-965-8921 Greenlee 928-865-2601 928-701-7000 La Paz 928-669-1100 928-669-2281 Maricopa 602-506-6767 602-747-7111 (Banner Poison Control) Mohave 928-753-0714 928-718-4927 Navajo 928-524-4750 (Holbrook) 928-524-6050 (Show Low) 928-241-0593 Pima 520-724-7797 520-743-7987 Pinal 520-866-7281 520-566-6239 Santa Cruz 520-375-7900 877-202-0586 520-375-7774 Yavapai 928-771-3134 928-442-5262 Yuma 928-317-4550 928-317-4624			
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If you are unable to reach the local health department, please call the Arizona Department of Health Services at 602-364-3676 or after hours at 480-303-1191.



2.

How contagious is measles?

Measles is a highly contagious virus that lives in the nose and throat of an infected person, and can remain airborne for up to two hours after an infected individual sneezes or coughs. Measles is so contagious that 90% of unprotected individuals that are exposed will become infected. An infected individual can spread the virus 4 days before to 4 days after rash onset. Immunocompromised individuals have prolonged viral shedding and may be contagious through the duration of their illness.

Who is considered high risk for exposure to measles?

Individuals can be broken down into two groups: high risk and low risk.

- High risk persons are individuals at increased risk for exposure or transmission. This includes college students, healthcare personnel, and international travelers.
 - Should receive two doses of MMR separated by 4 weeks
 - Low risk are any individuals that are not included in the above group
 - Should receive one dose of MMR
 - Adults at low risk should receive 1 dose of MMR vaccine
 - Children should receive 2 doses: the first dose at 12–15 months of age and the second dose at 4–6 years of age

How effective is the MMR vaccine in preventing measles?

The measles component of the MMR vaccine is very effective. One dose of MMR is 95% effective, and two doses can be up to 97% effective in providing protection against the virus. Studies show that more than 99% of people who receive two doses of the MMR (with the first dose administered no earlier than the first birthday) develop serologic evidence of immunity to measles.

What is the recommendation for people traveling to countries or places experiencing outbreaks to measles?

Children 6–11 months of age may receive a dose of MMR before travel. MMR vaccine that is given between 6–11 months of age is not considered a valid dose, and the child should still receive 2 additional doses of MMR in accordance with the regular childhood vaccination schedule. It is important to have a minimum interval of 4 weeks between the vaccine given under 12 months of age and the first valid vaccine. Children less than 6 months of age should not receive MMR.

All unimmunized or unprotected travelers should plan to be fully vaccinated at minimum two weeks before departure.

How long does it take for the measles vaccine to work in the body?

Detectable antibodies generally appear within just a few days after vaccination, and people are usually fully protected after 2–3 weeks following vaccination. Though approximately 2–5% of people do not respond to the first dose of MMR, most of these individuals will respond to the second dose.

What laboratory testing is needed? Do I need to collect specimens?

Measles IgM serology tests can be sent out to commercial laboratories. Contact your <u>local health department</u> to see if additional testing is warranted and how to coordinate specimens to be sent to the Arizona State Public Health Laboratory (ASPHL). If your local health department approves specimens to be sent to ASPHL, throat or NP swabs and urine specimens should be collected.

What post-exposure prophylaxis is available to those exposed to measles?

HCP, patients, and visitors exposed to measles who cannot provide presumptive evidence of immunity should be offered post-exposure prophylaxis (PEP) in attempts to prevent or mitigate the disease. All healthy individuals without presumptive evidence of immunity should be offered a dose of MMR vaccine within 72 hours of initial exposure. Individuals at risk for severe illness or complication should be offered immunoglobulin (IG) within 6 days of initial exposure. For special populations including pregnant women and immunocompromised individuals, see section on PEP.

Are there atypical symptoms that can occur in a measles patient?

Outside of the general display of rash, fever, and the "three 'C's" (cough, coryza & conjunctivitis), additional symptoms may include anorexia, diarrhea (especially in infants), and generalized lymphadenopathy. Additionally, specific populations of people may present with "atypical" or "modified" measles.

Atypical measles occurs only in persons in the U.S. who received the killed measles vaccine from 1963–1967. Symptoms of atypical measles include fever, pneumonia, pleural effusions, and petechial or maculopapular rash on the extremities.

Modified measles may occur in persons who are previously vaccinated, recently received immunoglobulin, or in infants who still have some maternal measles antibodies. There can be a prolonged incubation period in people with modified measles, from which they will experience a mild prodrome and a nonspecific rash of short duration.

Clinician Measles Fact Sheet

Suspected measles should be reported within 24 hours to public health

Symptoms

Measles is an acute viral illness characterized by:

- Prodrome of fever and malaise and:
 - Cough, coryza, and/or conjunctivitis.
- Maculopapular rash starts 2–4 days after prodrome and begins at the hairline and moves downward and outward.

Transmission

- Airborne* by respiratory droplets, or
- Contact with nasopharyngeal secretions of an infected person.
- * Measles can linger in the air for up to two hours after an infected patient sneezes or coughs. If a patient is suspected of measles, implement airborne precautions immediately.

Infectious Period

• 4 days prior to rash onset through 4 days after rash onset.

*Immunocompromised individuals may shed the virus longer.

Laboratory Testing

Throat or NP swabs and urine can be sent to the Arizona State Public Health Laboratory (ASPHL) for measles PCR once local public health approves testing.

· Local public health can help with questions about transport of the specimens to ASPHL.

Measles IgM serology tests can be sent out to commercial laboratories. Please consider the following:

- This test can be complicated to interpret if the individual has been previously vaccinated.
- In an unvaccinated individual, IgM antibodies appear within the first few days (1–4) of rash onset and will peak within the first week.
- Ideally, specimens should be collected 72 hours after rash onset for optimal results.
- In a vaccinated individual, there may not be an IgM response, or it may be transient. Serology results should not be used to rule measles out in these individuals.

Suspecting Measles? Things to ask:

Asking additional information can help public health determine the risk of measles. Consider the following:

- Presentation of symptoms: How did the rash present? Highest recorded fever?
- Travel: Any international travel or travel to places with known measles outbreaks?
- · Vaccination status/evidence of immunity: Has the patient ever been vaccinated? How many vaccinations?
- Person at high risk for exposure (healthcare worker, college student, international traveler)
- Has the patient had contact with a sick person with similar symptoms?

Vaccination

- The MMR vaccine can be administered to infants 6–11 months if traveling internationally
- Recommended schedule for childhood immunization:
 - o 1st dose of MMR given between 12–15 months
 - o 2nd dose of MMR given between 4–6 years
- Unvaccinated teenagers should receive both doses of MMR spaced at least 28 days apart
- Unvaccinated/Nonimmune adults who are not high risk should receive at least 1 MMR
- Unvaccinated/Nonimmune travelers should receive a dose no later than 2 weeks before travel

Evidence of Immunity

The following chart reviews acceptable evidence of immunity for healthcare workers and the general public.

Evidence of Immunity	Healthcare Workers	General Public
Written documentation of <u>one</u> or more age appropriate MMR vaccinations or for low risk individuals		~
Written documentation of <u>two</u> doses of MMR vaccination for high risk individuals, administered 28 days apart.	✓	~
Laboratory evidence of disease	✓	*
Laboratory evidence of immunity	✓	~
Birth before 1957		*

Measles Suspect Checklist for Providers

implement airborne precautions.	urine specimens.
Is the patient displaying measles like symptoms?	Provide patient education for self isolation and limiting exposure.
Gathered information on travel, exposure, vaccination status.	Offer post-exposure prophylaxis (PEP) as necessary to exposed contacts.
Contact local public health department to report suspect case, asses risk, and coordinate lab testing.	Implement environmental cleaning/ disinfecting of exposed areas.

Resources

- Arizona Department of Health Measles Toolkit
- ADHS Measles FAQs
- <u>Communicable Disease</u> <u>Report Form</u>
- CDC for Providers
- CDC Pink Book
- Measles multimedia
- Local County Health
 Department Resource
 list





Measles symptoms include a FEVER and the following:



Cough



Runny Nose



Red Eyes



Rash

If so, please remain outside and call us at:





Do you think you have symptoms of measles?

Measles symptoms include a **FEVER** and the following:



Cough



Runny Nose



Red Eyes



Rash

If so, please remain outside and call us at:





Do you think you have symptoms of measles?

Measles symptoms include a FEVER and the following:



Cough



Runny Nose



Red Eyes



Rash

If so, please remain outside and call us at:



Do you think you have symptoms of measles?



Measles symptoms include a FEVER and the following:



Cough



Red Eyes



Runny Nose



Rash

If so, please remain outside and call us at:



Measles Notification Letter Example (General)

XXX XX, 20XX

To whom it may concern:

On XXX, we became aware that you, and anyone accompanying you, may have been exposed to measles at the (Location/Facility), (Address), from (identified possible exposure period).

Measles is a vaccine-preventable disease that is spread through coughing, sneezing, and contact with mucus or saliva from the nose, mouth, or throat of an infected individual. The measles virus can also survive in the air for several hours and may be transmitted to other individuals even after the infected person left the room.

Measles is a highly contagious viral illness. The illness begins with symptoms which include fever (101 degrees F or higher), red, watery eyes, cough and runny nose. This is followed by a rash that is red, raised, and blotchy. The rash begins on the head at the hairline and moves down the body. The rash may last for 5–6 days and may turn brownish. Symptoms typically appear 8–12 days after exposure to measles but may take up to 21 days. A person with measles is considered to be contagious 4 days before rash onset until 4 days after.

Individuals born before 1957 are considered immune and protected from measles. People who have had two measles vaccinations (such as two MMR Vaccines) are also considered immune and protected from measles. If you are unsure of vaccination history, or have had only one MMR, discuss with your physician or public health clinic to determine if you need a vaccine now.

If you develop symptoms of measles as described above, please self-isolate and avoid contact with other people. Please contact your healthcare provider by phone and let them know you have been exposed to measles and have symptoms. They will let you know when to visit their office so as not to expose others in the waiting area. If you develop symptoms and do not have a healthcare provider, you may need to be seen at your local hospital emergency room/urgent care center. IF YOU HAVE SYMPTOMS, PLEASE CALL BEFORE GOING TO ANY HEALTHCARE PROVIDER TO LET THEM KNOW YOU MAY HAVE MEASLES.

If you or your healthcare provider thinks that you have measles, please notify (county health department or point of contact) immediately so that appropriate follow-up can be initiated. Please phone (XXX) XXX-XXXX Mon–Fri 8am–5pm, or (XXX) XXX-XXXX after hours, holidays and weekends and ask to speak with XXXX.

Sincerely,

Measles Notification Letter Example (Healthcare Setting)

XXX XX, 20XX

To whom it may concern:

On XXX, we became aware that you, and anyone accompanying you, may have been exposed to measles at the (Location/Facility), (Address), from (identified possible exposure period).

Measles is a vaccine-preventable disease that is spread through coughing, sneezing, and contact with mucus or saliva from the nose, mouth, or throat of an infected individual. Measles virus can also survive in the air for several hours and may be transmitted to others even after the infected person has left the room.

Measles is a highly contagious viral illness that usually begins with symptoms such as fever (101 degrees F or higher), red, watery eyes, cough and runny nose. This is followed by a maculopapular rash that is red, raised, and blotchy that starts on the head at the hairline and moves down the body. The rash may last for 5–6 days and may turn brownish. Symptoms typically appear 8–12 days after exposure to measles but may take up to 21 days. A person with measles is considered to be contagious 4 days before rash onset until 4 days after.

If you develop symptoms of measles as described above, please self-isolate and avoid contact with other people. Please contact your healthcare provider by phone and let them know you have been exposed to measles and have symptoms. They will let you know when to visit their office so as not to expose others in the waiting area. If you develop symptoms and do not have a healthcare provider, you may need to be seen at your local hospital emergency room/urgent care center. IF YOU HAVE SYMPTOMS, PLEASE CALL BEFORE GOING TO ANY HEALTHCARE PROVIDER TO LET THEM KNOW YOU MAY HAVE MEASLES.

As a healthcare worker, documentation for presumptive evidence of immunity (listed below) will need to be established before you can return to work.

- Laboratory evidence of immunity; OR
- Documentation of 2 doses of live MMR vaccine; OR
- Laboratory confirmation of disease

If you or your healthcare provider think that you may have measles, please notify (county health department or point of contact) immediately so that the appropriate follow-up can be initiated. Please phone (XXX) XXX-XXX Mon–Fri 8am–5pm, or (XXX) XXX-XXXX after hours, holidays and weekends and ask to speak with XXXX.

Sincerely,

References & Resources

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 Red Book: Report of the Committee of Infectious Diseases – 33rd Edition (April 2024)
 https://publications.aap.org/redbook

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http://www.cdc.gov/vaccines/pubs/surv-manual/chpt07-measles.html

4. Arizona Department of Health Services Measles Testing at the Arizona State Public Health Laboratory https://www.azdhs.gov/documents/preparedness/epidemiology-disease-control/measles/measles-clinician-guide.pdf?v=20220901

Center for Disease Control and Prevention
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 https://www.cdc.gov/vaccines/imz-schedules/index.html

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 Prevention of Measles, Rubella, Congenital Rubella Syndrome, and Mumps, 2013: Summary Recommendations of the Advisory Committee on Immunization Practices (ACIP)
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Measles Vaccine Recommendations - Post-exposure prophylaxis for measles

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PEP for Measles Exposures
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17. Arizona Department of Health Services
Guide to Laboratory Services: Microbiology
https://www.azdhs.gov/documents/preparedness/state-laboratory/public-health-microbiology/lab-guide.pdf

18. Arizona Department of Health Services Communicable Disease Reporting http://www.azdhs.gov/phs/oids/reporting/index.htm

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