Measles Surveillance Toolkit

For Healthcare Settings

Updated: April 28, 2025

ARIZONA DEPARTMENT OF HEALTH SERVICES

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This resource is intended to support healthcare providers and public health partners in the identification, reporting, and management of suspect measles cases in Arizona. It includes current guidance on testing, isolation, specimen handling, and communication protocols.

For questions about this resource, please contact:
Vaccine Preventable Diseases
Arizona Department of Health Services
VPD@azdhs.gov

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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 regarding specimen collection and transport.

Vaccination Information[1,5,6,7]

Recommended Schedule

The most effective way to prevent measles transmission is through routine vaccination with a measles-containing virus, typically administered as MMR (measles, mumps, and rubella). The Centers for Disease Control and Prevention's (CDC) recommended immunization schedule is both safe and effective at preventing disease and reducing outbreaks.

Recommended Schedule for children

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

In outbreak settings or prior to international travel, one dose may be administered to infants as young as 6 months. However, doses administered before the first birthday are not considered valid. These children should still receive two additional doses after age 12 months, spaced at least 28 days apart.

Unvaccinated or non immune adults should receive 1 or 2 doses, depending on their risk.

- High-risk adults (e.g., healthcare personnel, international travelers, and students in post-secondary institutions) should receive 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,
- Persons with moderate to severe acute illness,
- Those with a personal or family history of seizures,
- Individuals with a known allergy to a component of the vaccine,
- Persons who have received 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 **ACIP's recommendations** for MMR or MMRV administration.

Presumptive Evidence of Immunity

Presumptive evidence of immunity is used to determine whether an individual is protected against measles and whether vaccination or exclusion is necessary. These requirements are stricter for healthcare personnel (HCP) than for the general public.

General Public

Acceptable presumptive evidence includes one or more of the following:

- Written documentation of vaccination:
    - ➢ At least one dose of measles-containing vaccine given on or after 12 months of age (for preschool-age children and low-risk adults)
    - ➢ Two doses for school-aged children and high risk adults (e.g., college students, international travelers)
- Laboratory evidence of immunity
- Laboratory confirmation of disease
- Birth before 1957.

Healthcare Personnel

All individuals working in healthcare settings - regardless of birth year - should have documented presumptive evidence of immunity, defined as:

- Two doses of measles-containing vaccine, at least 28 days apart, OR
- Laboratory evidence of immunity, OR
- Laboratory confirmation of measles infection

Although birth before 1957 is considered acceptable for the general public, it is not sufficient on its own for HCP. Facilities should consider vaccinating unvaccinated HCP born before 1957 who lack laboratory evidence of immunity or a documented history of measles.

Special Considerations for HCP

Some adults vaccinated between 1963 and 1967 may have received an inactivated measles vaccine, which is no longer considered effective. These individuals should be revaccinated with two doses of MMR, spaced at least 28 days apart.

For HCP who have two valid MMR doses, serologic testing is not recommended. If serologic testing is performed and results are negative or equivocal, the individual should still be considered immune and should not receive an additional dose.

During a measles outbreak, serologic testing should not delay vaccination, as rapid protection is critical for outbreak control.

Healthcare Settings

Healthcare personnel are people who work in healthcare facilities (e.g. hospitals, outpatient clinics, urgent care centers, long-term care settings, etc.) excluding residential care or group homes that do not provide skilled medical care —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 documented presumptive evidence of immunity, regardless of birth year. Facilities should maintain readily accessible vaccination records, ideally in secure electronic systems, to allow for rapid decision-making in the event of an exposure or outbreak.

It is recommended that healthcare facilities offer MMR vaccine at no cost to personnel without evidence of immunity. Recently vaccinated personnel do not require work restrictions. Staff with only one documented MMR dose may continue working but should receive a second dose as soon as possible.

Prevention & Control Strategies in Medical Settings[8-13]

Prevention

Preventing measles transmission in healthcare settings relies on a proactive vaccination program and strong infection control practices. This includes:

Precautions for Suspected Cases in Clinical Settings

When a patient with suspected measles visits a healthcare setting, the following actions are recommended:

- Advise the patient to call upon arrival and remain outside until escorted in.
- Provide a mask immediately
- Escort the patient directly to an airborne infection isolation room (AIIR). If unavailable, place them in a private room with the door closed.
- Only HCP with documented measles immunity should enter the room.
- Implementation of airborne precautions* including appropriate PPE and environmental controls.
- Instruct the patient on self-isolation, respiratory etiquette, and hand hygiene before discharge

* For information on airborne precautions, airborne infection isolation rooms (AIIR), and environmental infection see airborne precautions. Airborne precautions should be maintained for 4 days after rash onset. Immunocompromised patients may remain infectious for longer and should remain in isolation for the duration of illness.[8]

Control Strategies

When a suspected measles case occurs in a healthcare facility—whether inpatient, outpatient, or long-term care—the following actions should be taken during and in the post-exposure period:

- Implement environmental infection control
- Immediate review presumptive evidence of immunity for all exposed staff, patients, and visitors
- Notify local public health to report the exposure within 24 hours
- Administer post-exposure prophylaxis (PEP) as recommended by public health
- Exclude HCP without presumptive evidence of immunity from work between days 5 and day 21 after exposure; offer MMR vaccine
- Exclude HCP with active measles illness from patient contact until 4 days after rash onset

A centralized, accessible vaccination record system for 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, may help inform whether a second MMR vaccine dose is needed. However, routine serologic screening of HCP during outbreaks is not recommended, as it may delay vaccination. Rapid immunization of HCP without presumptive immunity is essential to prevent transmission, and timeliness is critical.

Facilities should ensure MMR vaccine is:

- Provided at no cost to HCP without documented immunity
- Not a basis for work restriction after recent vaccination
- Administered promptly as a second dose for HCP with only one documented dose

All HCP and patients potentially exposed should self-monitor for measles symptoms for 21 days after their last known exposure.

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.

Hospital contacts of a case-patient, who lack presumptive evidence of measles immunity, should be vaccinated or offered immunoglobulin (IG). If IG is administered to an exposed person, continue monitoring for signs and symptoms of measles for 28 days after exposure, as immunoglobulin may prolong the incubation period.

Post-Exposure Prophylaxis[1,7]

HCP, patients, and visitors who are exposed to measles and cannot provide presumptive evidence of immunity should be offered post-exposure prophylaxis (PEP). PEP may prevent illness or reduce severity if administered within the appropriate time frame.

There are two forms of PEP that can be given following exposure:

- The MMR vaccine should be administered within **72 hours** of initial exposure to healthy individuals
- Immunoglobulin (IG) should be administered **within 6 days** of initial exposure for individuals at higher risk of severe illness or complications.

  Note: MMR vaccine and IG should not be given simultaneously, as IG can interfere with the immune response to the vaccine.

If the MMR vaccine is not administered within 72 hours, it can still be offered afterward to help protect against future exposures.

Anyone who receives either form of PEP should still be monitored for symptoms throughout at least one full incubation period.

HCP without presumptive evidence of immunity, regardless if given PEP, must be excluded from duty **starting on day 5 through day 21** following their last known exposure.

Special considerations should be given during outbreak situations and for individuals at high risk of complications, including pregnant individuals, immunocompromised patients, and children under 12 months of age.

Accelerated MMR Schedule in Children

During a measles outbreak, the local health department may recommend an accelerated vaccination schedule for children to reduce transmission risk.

Children 6-11 months of age may receive an early dose of MMR vaccine. This does not count as part of the routine series but may provide short-term protection. These children must still receive two additional doses of MMR after turning 12 months old.

- The first valid dose must be administered at 12 months or older
- The second valid dose is typically scheduled at 4-6 years of age, but it may be administered earlier if at least 28 days have passed since the first valid dose.

  Note: There must be a minimum interval of 4 weeks between the early dose (administered before 12 months) and the first valid MMR dose.

Providers should ensure parents understand that the early dose is not a substitute for the standard 2-dose series. Documentation of valid doses is essential to avoid unnecessary revaccination later in childhood.

Children <12 Months of Age

PEP for infants depends on age and timing of exposure:

- Ages 6-11 months
    - ➢ Administer MMR vaccine within 72 hours of exposure if eligible. If more than 72 hours have passed, administer 0.5 mL/kg of body weight (max dose 15mL) immunoglobulin (IMIG) within 6 days of exposure.
- Under 6 months
    - ➢ MMR vaccine is not authorized. Administer IMIG at 0.5 mL/kg (max 15 mL) within 6 days of exposure.

Note: Infants who receive immunoglobulin should delay MMR and varicella vaccination for at least 6 months, as IG may interfere with vaccine effectiveness.

Immunocompromised Individuals

Immunocompromised patients should not receive the MMR vaccine and should be given intravenous immunoglobulin (IVIG) at a dose of 400 mg/kg, ideally within 6 days of exposure.

Severely immunocompromised individuals include:

- Those with primary immunodeficiency
- Bone marrow transplant recipients until at least 12 months after completing all immunosuppressive treatment (and longer in those who have developed graft vs host disease)
- Solid organ transplant recipients
- Patients on active leukemia treatment or within 6 months after completing chemotherapy
- Individuals receiving high-dose corticosteroids (≥14 days)
- Persons with AIDS or advanced HIV with severe immunosuppression with CD4 percentages below 15% for at least 6 months (children ≤ 5 years), or CD4 counts under 200 cells/mm^3 for at least 6 months (persons > 5 years)

Pregnant Women

Pregnant women who lack presumptive evidence of immunity should be treated as susceptible. The MMR vaccine is contraindicated during pregnancy.

- Administer IVIG at 400 mg/kg within 6 days of exposure
- If a pregnant woman has documentation of two valid MMR doses (given at least 28 days apart, starting at ≥12 months of age) and a positive IgG result, IG is not necessary.

Household members of a pregnant woman should be up to date on their MMR vaccination. It is safe to vaccinate them during the exposure window, as MMR recipients do not shed the live virus and pose little to no risk to others in the household.

Note: Pregnant women who receive IVIG should delay MMR vaccination for at least 8 months following administration, provided the vaccine is not otherwise contraindicated.

County Resources & Contact List

Contact your local county health department for assistance with:

- Evaluation and classification of a suspected measles case
- Reporting guidance for communicable diseases
- Specimen collection and submission details
- Public health subject matter expertise

Arizona County Contact Information

County	Day Time Hours	After Hours
Apache	928-333-2415	928-551-7181
Cochise	520-432-9400	800-423-7271
Coconino	928-679-7272	928-679-8574
Gila	**Globe**: 928-402-8811 **Payson**: 928-474-1210	928-701-1610
Graham	928-428-1962	928-965-8921
Greenlee	928-865-2601	928-701-7000
La Paz	928-669-9364	(Dispatch) 928-669-2281
Maricopa	602-506-6767 602-506-3747	(Banner Poison Control) 602-747-7111
Mohave	928-753-0714	928-718-4927
Navajo	**Holbrook**: 928-524-4750 **Show Low**: 928-532-6050	928-241-0593
Pima	520-724-7797	520-724-7797
Pinal	520-866-7281	520-866-6239
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

If you are unable to reach your local health department, contact the **Arizona Department of Health Services** at 602-364-3676 or after hours at 480-303-1191.

FAQs

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 coughs or sneezes. Approximately 90% of susceptible individuals exposed to the virus will become infected. A person with measles is contagious from 4 days before to 4 days after rash onset. Immunocompromised individuals may have prolonged viral shedding and can remain contagious longer.

Who is considered high risk for exposure to measles?

Individuals can be categorized as high risk or low risk for exposure:

- High risk individuals are more likely to be exposed or to transmit measles. This group includes healthcare personnel, college students, and international travelers. They should receive two doses of MMR, separated by at least 4 weeks.
- Low risk are any individuals are not included in the high-risk groups. Recommendations include:
    - ➢ Children: Two doses - first at 12-15 months, second at 4-6 years
    - ➢ Adults at low risk: One dose of MMR
    - ➢ Other low-risk individuals: One dose of MMR

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, while two doses can be up to 97% effective in providing protection against the virus. More than 99% of individuals who receive two valid doses (with the first given no earlier than the first birthday) develop serologic evidence of immunity.

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

Children 6–11 months of age may receive one dose of MMR before travel. However, this dose is not valid for routine immunization and must be followed by two additional doses after 12 months of age. There should be a minimum 4-week interval between the early dose (under 12 months) and the first valid dose. Children under 6 months should not receive MMR.

All unimmunized or underimmunized travelers should complete their MMR series at least 2 weeks before travel.

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

Detectable antibodies typically appear within a few days after vaccination. Most people are considered fully protected after 2-3 weeks.

Although 2-5% of people may not respond to the first dose, most of these individuals respond to the second dose.

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

Measles IgM serology testing can be ordered through commercial laboratories.

Before collecting specimens:

- Contact your local health department to determine if additional testing is warranted.
- If approved for submission to the Arizona State Public Health LAboratory (ASPHL) , collect:
    - Throat or nasopharyngeal (NP) swabs, and
    - Urine specimens

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

HCP, patients, and visitors exposed to measles who lacks presumptive immunity should receive post-exposure prophylaxis (PEP) to reduce illness severity or prevent disease.

- Health individuals: MMR vaccine with 72 hours of exposure
- High-risk individuals (e.g., pregnant or immunocompromised): IG within 6 days

For special populations including pregnant women and immunocompromised individuals, see section on PEP.

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

Yes. In addition to the classic presentation of fever, rash, and the “3 Cs” (cough, coryza, conjunctivitis), atypical or modified measles may occur.

Atypical measles:

- Occurs primarily in individuals vaccinated with the killed measles vaccine (1963-1967)
- Symptoms include fever, pneumonia, pleural effusion, and a petechial or maculopapular rash on the extremities.

Modified measles:

- Occurs in individuals previously vaccinated, recently given IG, or infants with residual maternal antibodies
- May involve longer incubation and a milder, nonspecific prodrome with a short-duration rash.

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:
  - ➢ 1st dose of MMR given between 12–15 months
  - ➢ 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

This chart summarizes acceptable forms of measles immunity for healthcare personnel and the general public.

Evidence of Immunity	Healthcare Workers	General Public
Written documentation of one or more age appropriate MMR vaccinations (acceptable for low risk individuals)		✓
Written documentation of two MMR doses administered 28 days apart (required for high-risk individuals)	✓	✓
Laboratory evidence of disease	✓	✓
Laboratory evidence of immunity	✓	✓
Birth before 1957		✓

Measles Suspect Checklist for Providers

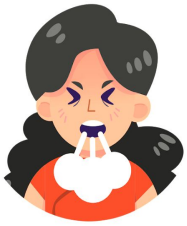
- ☐ Provide suspect patient with mask and implement airborne precautions.
- ☐ Is the patient displaying measles like symptoms?
- ☐ Gathered information on travel, exposure, vaccination status.
- ☐ Contact local public health department to report case, asses risk, and coordinate lab testing.
- ☐ Collect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

Resources

- Arizona Department of Health Measles Toolkit
- ADHS Measles FAQs
- Communicable Disease Report Form
- CDC for Providers
- CDC Pink Book
- Measles Multimedia
- Local County Health Department Contact List

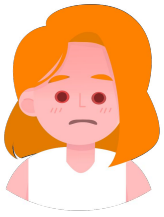
ARIZONA DEPARTMENT OF HEALTH SERVICES

Measles symptoms include a FEVER and the following:



Cough

Runny Nose



Red Eyes

Rash

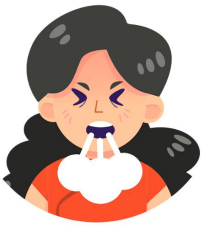
If so, please remain outside and call us at:

Thank you for helping us prevent the spread of measles!

STOP

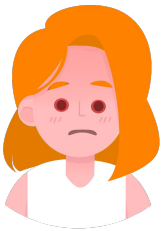
Do you think you have symptoms of measles?

Measles symptoms include a FEVER and the following:



Cough

Runny Nose



Red Eyes

Rash

If so, please remain outside and call us at:

Thank you for helping us prevent the spread of measles!

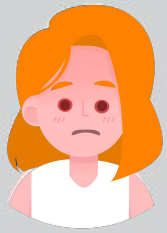
STOP

Do you think you have symptoms of measles?

Measles symptoms include a FEVER and the following:

Cough

Runny Nose



Red Eyes

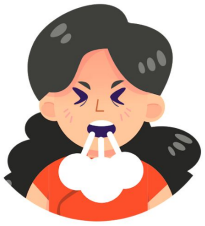
Rash

If so, please remain outside and call us at:

Thank you for helping us prevent the spread of measles!

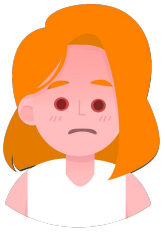
Do you think you have symptoms of measles?

Measles symptoms include a FEVER and the following:



Cough

Runny Nose



Red Eyes

Rash

If so, please remain outside and call us at:

Thank you for helping us prevent the spread of measles!

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 to 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-XXX 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 to 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,

Algorithm for Suspect Measles Cases

If patient received an MMR vaccine 6–45 days before rash onset, consult your local health department to determine appropriate testing.

***Risk factors include:**

- ☐ **Recent travel to an area with a measles outbreak**
- ☐ **Recent International travel**
- ☐ **Exposure to an individual with measles**

Does the patient have a febrile rash illness (fever present on any day of rash or within 4 days prior to onset)?

YES

Did the rash start on the face and move down the body?

YES

Place the individual in airborne isolation and notify public health immediately. If airborne isolation room not available, use a private room with the door closed.

In addition, collect information on travel, vaccine history, and any recent measles exposure.

NO

Does the patient have any risk factors*?

YES

Is the patient immunocompromised?

YES

Place the individual in airborne isolation and notify public health immediately. If airborne isolation room not available, use a private room with the door closed.

In addition, collect information on travel, vaccine history, and any recent measles exposure.

NO

No further action. Discontinue isolation.

If there is still a clinical suspicion, consider commercial testing.

NO

Does the patient have risk factors*?

YES

Did the patient have fever, cough, conjunctivitis, or coryza?

YES

Is the patient immunocompromised?

YES

Place the individual in airborne isolation and notify public health immediately. If airborne isolation room not available, use a private room with the door closed.

In addition, collect information on travel, vaccine history, and any recent measles exposure.

NO

No further action. Discontinue isolation.

If there is still a clinical suspicion, consider commercial testing.

NO

No further action. Discontinue isolation.

If there is still a clinical suspicion, consider commercial testing.

If measles is suspected, collect specimens for testing:

- Urine and Nasopharyngeal or throat swab (PCR)
- Serum (IgM)

Coordinate specimen handling and shipping with your local health department

References & Resources

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