



Measles Contact Tracing for Healthcare Organizations

Purpose: Provide guidance for healthcare organizations to contact trace individuals exposed to a lab-confirmed measles case.

Identify:

Exposure criteria:

Anyone not wearing a fit tested N95 respirator in the same airspace as a positive measles case including 2 hours after the case has left the facility.

Who to trace:

Trace all patients and staff exposed

Report any exposed visitors not receiving care at your facility to the SWNURSE Line (1-833-796-8773) using the approved line list template for contact tracing follow up.

Collect exposed contacts, their demographics, and vaccine records to trace

(see Table 2 & Appendix B)

Inform:

Call each contact (see Appendix A)

- ☐ Make a minimum of 2 attempts to call each exposed patient.
- ☐ Ask the caller if anyone else was present with them at the time of exposure. If yes, add their name, date of birth, and contact number to the bottom of the contact tracing list and notify the SWNURSE Line (1-833-796-8773) as soon as possible.
- ☐ Document all call details in the CT sheet including relevant details in the notes section.

Manage exposed contacts: (see tables 1, 1.1, 3)

Asymptomatic exposed contacts do not need testing. If an exposed contact develops febrile rash illness, treat them as a suspect case and call the SWNURSE Line (1-833-796-8773).

Measles vaccine should be considered in all exposed individuals who are vaccine-eligible and have not been vaccinated or only received one dose.

Measles vaccine administered to susceptible individuals within 72 hours of exposure can provide protection or disease modification. Even if not in time for PEP, the vaccine can provide protection against future exposures.

Quarantine should be considered for exposed individuals not eligible for post-exposure prophylaxis (PEP) according to criteria in tables 1, 1.1, and 3.

Additional information and resources on measles is available on the [NMDOH Measles webpage](#).

Table 1: Management of exposed contacts

AGE RANGE	MEASLES IMMUNE STATUS	PEP TYPE DEPENDING ON TIME AFTER INITIAL EXPOSURE		
		≤3 DAYS	4-6 DAYS	>6 DAYS
All ages	Immune (2MMR doses, born before 1957, IgG positive)	PEP not indicated and no quarantine needed.		
<6 months	Non-immune due to age.	Give IMIG. Home quarantine for 28 days after last exposure.		PEP not indicated (too late). Home quarantine for 21 days after last exposure, self-monitor for symptoms.
6-11 months	Non-immune due to age	Give MMR (preferred over IG). No quarantine needed.	Give IMIG. Home quarantine for 28 days after last exposure.	PEP not indicated (too late). Home quarantine for 21 days after last exposure, self monitor for symptoms.
	1 early dose of MMR vaccine	PEP not indicated and no quarantine needed.		
≥12 months	Non-immune (zero doses of MMR or IgG negative)	Give MMR. No quarantine needed.	PEP not indicated (too late). Home quarantine for 21 days after last exposure, self monitor for symptoms. Two doses of MMR vaccine, given at least 28 days apart, recommended to protect against <u>future</u> exposures.	
≥12 months	1 dose of MMR vaccine	Give 2 nd MMR dose if ≥28 days from last dose of live vaccine. No quarantine needed.	Give 2 nd MMR if not up-to-date. No quarantine needed, but self-monitor for symptoms for 21 days after last exposure.	
Adults	Unknown measles immunity status	Give MMR vaccine. No quarantine needed if MMR PEP given.	Obtain IgG titers to determine immunity, home quarantine while awaiting results. If IgG titer is negative, quarantine for 21 days after last exposure. Two doses of MMR, given at least 28 days apart, recommended to protect against <u>future</u> exposures.	

Table 1.1: Management of immunocompromised contacts

Category	MEASLES IMMUNE STATUS	PEP TYPE DEPENDING ON TIME AFTER INITIAL EXPOSURE		
		≤3 DAYS	4-6 DAYS	>6 DAYS
Severely immunocompromised*	Need IG regardless of measles immune status**	Give intramuscular immunoglobulin (IMIG) if < 12 months old, or intravenous immunoglobulin (IVIG) if ≥12 months old. Home quarantine for 28 days after last exposure.		PEP not indicated (too late). Home quarantine for 21 days after last exposure, self-monitor for symptoms.
Pregnant	Immune (IgG positive or 2 MMR doses)	PEP not indicated, exposed person has documented immunity.		
	Non-immune (IgG negative)	Give intravenous immunoglobulin (IVIG) and home quarantine for 28 days after last exposure.		PEP not indicated (too late). Home quarantine for 21 days after last exposure, self-monitor for symptoms.
	Unknown measles immunity status	Obtain IgG titers to determine immunity, home quarantine while awaiting results. Proceed using Table 1 based on titer results.		PEP not indicated (too late). Obtain IgG titers to determine risk of infection/risk to infant, home quarantine while awaiting results. Proceed using Table 1 based on titer results.

Tables 1 and 1.1 Adapted from Red Book 2024-2027 Report of the Committee on Infectious Diseases, 33rd edition

* Management of immunocompromised persons can be challenging and may require individualized decisions with provider based on immunocompromising condition or medications. Severely immunocompromising conditions (per ACIP and IDSA)* include:

- Severe primary immunodeficiency;
- Bone marrow transplant until > 12 months after finishing all immunosuppressive treatment, and maybe longer in patients who have developed graft-versus-host disease;
- On treatment for acute lymphoblastic leukemia (ALL) within and until ≥6 months after completion of immunosuppressive chemotherapy;
- On cancer chemotherapy**
- Post solid organ transplantation**
- Receiving daily corticosteroid therapy with a dose ≥20mg (or > 2 mg/kg/day for patients who weigh < 10 kg) of prednisone or equivalent for ≥14 days
- Receiving certain biologic immune modulators, such as tumor necrosis factor-alpha (TNF-α) blockers or rituximab**
- After hematopoietic stem cell transplant, duration of high-level immunosuppression is highly variable and depends on type of transplant (longer for allogeneic than autologous), type of donor and stem cell source, and post-transplant complications such as graft vs. host disease and their treatments**
- AIDS or HIV with severe immunosuppression defined as CD4 <15% (all ages) or CD4 count <200 lymphocytes/mm³ (age > 5 years).

Low-level immunosuppression: In the absence of published guidance on exposed persons with low-level immunosuppression, consider assessing presumptive immunity to measles (measles IgG positive or 2 MMR vaccine doses) to determine if PEP is indicated. If not immune to measles, give PEP as MMR (if not contraindicated^ and within 72 hours of initial exposure). Consider intravenous IG if MMR is contraindicated^ or if it is too late for MMR (day 4-6 after initial exposure) with home quarantine for 28 days after last exposure. If no PEP is given because it is too late, home quarantine for 21 days after last exposure.

** If a severely immunocompromised person has a new positive IgG titer collected on or after the date of exposure, quarantine is not required. The person should still monitor for symptoms for 21 days from the date of exposure, or 28 days if IVIG or IMIG was administered.

Appendix A: Contact Tracing Scripting

Call script

"Hi, I am calling from [organization]. The reason for my call is to notify you that you/your child were exposed to someone who tested positive for measles on [date] at [location]. I would like to ask you some questions to make sure you get the right follow-up to this exposure.

- ☐ Verify demographic information for the caller
- ☐ Verify vaccination history
- ☐ Determine the patient's exposure using table 1
 - Pregnant or immunocompromised contacts may need additional evaluation
- ☐ Determine if they are symptomatic or not
 - Prodrome 3C's (cough, coryza, conjunctivitis)
 - Fever
 - Maculopapular rash starting on the head
- ☐ Give [appropriate follow-up guidance](#) based on exposure level, vaccine history, and symptom status (PEP, quarantine, symptom monitor) (see table 1).
- ☐ If a person in the home of an exposed person is unvaccinated or under vaccinated, they should be vaccinated ASAP.

"We understand that this may be alarming to hear, but [your organization] and the New Mexico Department of Health are committed to working with you to ensure you receive necessary care."

Voicemail script

"Hi, this is [name] with [organization]. I'm calling with urgent health related information for you/your child. Please return our call at [phone number]. Please ask for me by name so you'll be connected back with me."

OR

"Hi, this is [name] with [organization]. I'm calling with urgent health related information for you/your child. Please return our call at [phone number]. Please ask for [CODE NAME] when you call back so you'll be connected to someone who can help."

Important Talking Points

- Patients can check their vaccine status through the [NMDOH VaxView](#).
- The following groups do not need to stay home from work/school, and can be active as normal, BUT if they develop any symptoms of measles (fever, rash, etc.) they need to stay home and call you back immediately:
 - One or more doses of a measles-containing vaccine administered on or after the first birthday for preschool-age children and adults.
 - Laboratory evidence of immunity.
 - History of laboratory confirmation of measles via PCR testing.
 - Birth before 1957.
- If families have babies aged 6-11 months old, they should discuss the NMDOH's early vaccine recommendations and benefits/risks of early vaccination with their pediatrician.
- Measles incubation period is typically 11–12 days from exposure to the first symptoms appear (prodromal symptoms). A rash follows the prodromal symptoms 2–4 days later and usually lasts 5–6 days. Measles is infectious 4 days before and 4 days after rash onset. People should be aware that a rash is NOT the first symptom of measles and that they can be contagious before the rash appears.

- Measles PCR testing of asymptomatic contacts is not helpful. If an exposed contact develops febrile rash illness, treat as a suspect case. Testing of febrile people without a rash is not recommended and may lead to false negative results. The PCR test is unlikely to detect measles virus until the onset of rash.
- Contacts of contacts are not considered exposed and do not need monitoring. Discussion of measles risk from community exposures and getting caught up with vaccines is encouraged.
- If an exposed contact develops symptoms and needs healthcare at an urgent care, emergency room, or primary care provider, they need to call ahead to let the facility know they're an exposed measles contact. They should also wear a procedural mask when in a healthcare facility.

For healthcare workers:

- [The Centers for Disease Control and Prevention](#) recommends all healthcare workers have presumptive evidence of immunity to measles. Those without evidence of immunity should be vaccinated, including those born before 1957 without other proof of immunity.
- Asymptomatic healthcare workers exposed to measles should follow the guidance in table 3 to determine post-exposure prophylaxis and return to work needs.

Table 3: PEP and Return to Work criteria for asymptomatic healthcare workers exposed to measles

HCW Vaccine status	PEP	Work restrictions	Symptom monitoring	Return to work
Immune (2 MMR doses, IgG positive)	None	None	From day 5 after first exposure through day 21 after last exposure.	Immediately
Non-immune (zero doses of MMR or IgG negative)				
≤3 days post-exposure	Give MMR	Exclude from workday 5 after first exposure through day 21 after last exposure.	From day 5 after first exposure through day 21 after last exposure.	Day 22 post-exposure. Two doses of MMR, given at least 28 days apart, recommended to protect against future exposures.
≥4 days post-exposure	Not indicated	Exclude from workday 5 after first exposure through day 21 after last exposure.	From day 5 after first exposure through day 21 after last exposure.	Day 22 post-exposure. Two doses of MMR, given at least 28 days apart, recommended to protect against future exposures.
One dose of MMR				
≤3 days post-exposure	Give 2 nd MMR dose if at least 28 days since last dose of live vaccine.	None	From day 5 after first exposure through day 21 after last exposure.	Immediately
≥4 days post-exposure	Not indicated	Exclude from workday 5 after first exposure through day 21 after last exposure.	From day 5 after first exposure through day 21 after last exposure.	Day 22 post-exposure. Two doses of MMR, given at least 28 days apart, recommended to protect against future exposures.

Adapted from [Measles | Infection Control | CDC](#)

- Exposed healthcare workers with known or suspected measles should be excluded from work through day 4 after the rash appears. They can return to work on day 5 after the rash appears.
 - Immunocompromised healthcare workers with known or suspected measles should be excluded from work for the duration of their illness.
- Healthcare workers adhering to airborne isolation precautions including use of a fit-tested, NIOSH-certified disposable N95 respirator for the duration of exposure to a patient with measles are not considered exposed.

- Healthcare workers without evidence of immunity to measles should not care for patients with measles if workers with evidence of immunity to measles are available.
- Exposed healthcare workers who are fully vaccinated and asymptomatic cannot expose their family members at home. If they do develop prodrome, fever, or rash, they need to stay home, follow organizational policy to report exposure-related illness, AND call the SWNURSE Line (1-833-796-8773) as soon as possible.

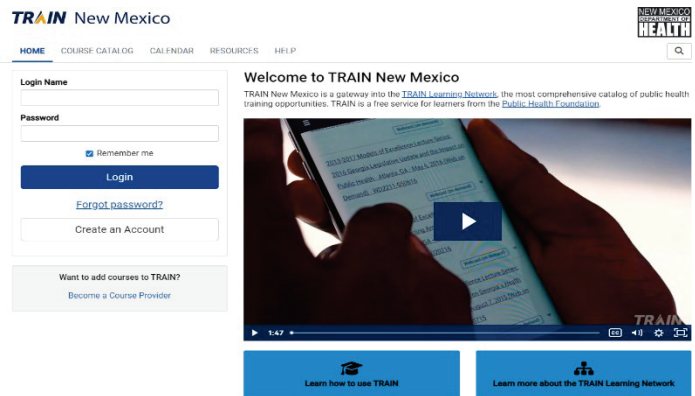
Appendix B: Training and sign up for read-only NMSIIS access

To be granted access to NMSIIS you will need to complete the following steps:

- **Complete the NMSIIS Training Course on the TRAIN NM platform at www.train.org/nm**
- **Complete the NMSIIS exam based on training course.** Only one training module is necessary for completion—Please note which access you will need based on the description below.
 - **NMSIIS Basic/Standard User 90-minute Course** (edit access, report vaccines, run reports, view inventory)
 - **NMSIIS New User (Reports/Read Only) 20-minute Course** (view patient records and demographics, run limited reports)
- **Attain an 80% or better passing score.**
- **Complete and return both via email to NMSIIS.Access@doh.nm.gov.**
 - NMSIIS User Security and Confidentiality Agreement
 - NMSIIS Certificate of Completion

To access the courses, you will need to create an account in TRAIN New Mexico.

1. Go to: www.train.org/nm
2. Create an Account. Start by selecting on the “Create an Account” button highlighted below.
3. Once you have created your account you can access the required courses by searching for “NMSIIS” or by searching for the course ID numbers:
 - Course ID 1109100-Basic/Standard User (edit access, report vaccines, run reports, view inventory)
 - Course ID 1108961-Reports/Read Only (view patient records and demographics, run limited reports)



[NMDOH NMSIIS Basic/Standard User Course](#)

Web-based Training - Self-study

New Mexico Department of H...

[NMDOH NMSIIS New User Course \(Reports/Read Only\)](#)

Web-based Training - Self-study

Click on the course title to access the page where you can launch the training.

NMSIIS login credentials can only be issued once all these steps have been completed.

4. Once you successfully pass (**80%+**) on the NMSIIS exam, your Certificate of Completion will auto-populate along with the NMSIIS User Security and Confidentiality Agreement.

You will also be able to print your NMSIIS Certificate of completion, under the “Certificates” tab on your profile.

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Certificates

Please ensure you have included your VFC ID # or Clinic ID # on your NMSIIS User Agreement form and the level of system access being requested based on the training completed. Send the completed copy of the User Agreement and NMSIIS Certification of Training Completion to: NMDOH/NMSIIS Immunization Program NMSIIS.Access@doh.nm.gov

After the NMSIIS team receives your returned documents, **please allow up to 72 hours** to receive your NMSIIS login credentials.

Contact Katie Cruz, NMSIIS Manager, at Kathryn.Cruz@doh.nm.gov with questions.

Appendix C: Template measles exposure notification letter for patients or staff

Date: [insert date]

Dear [insert name],

This letter is to notify you that a person with measles was present at [facility name] on the following date(s):

- [date 1]
- [date 2, etc.]

Measles is a highly contagious virus that spreads through the air and respiratory droplets. The virus can remain in the air for up to two hours after a person with measles leaves the room. Children and adults who have not had measles or who have not received the MMR vaccine are at high risk of developing measles after being exposed. About 90% of people who are not protected against measles and are exposed to the virus will get infected. Children younger than five years old, adults older than 20 years old, and people who are pregnant or have weakened immune systems are at higher risk of complications.

What should you do?

[Healthcare facility], in collaboration with the New Mexico Department of Health (NMDOH), strongly encourages you to review your vaccination status. Children usually receive the MMR vaccine at 12–15 months and again at 4–6 years of age. Talk to your healthcare provider if you are unsure of your vaccination status, if you have only had one dose of the MMR vaccine, or if you have not received the MMR vaccine.

Protection provided by the measles vaccine is usually permanent. However, about three in 100 people who have received two doses of MMR vaccine will still get measles if exposed to the virus. Therefore, we want to provide you with information about measles, and the signs and symptoms to look for:

- Fever
- Cough
- Runny nose
- Red, watery eyes (conjunctivitis/pink eye)
- Tiny white spots inside the mouth
- Rash (flat, dry spots)
 - o The rash may appear red or pink on fair skin but may have no change in color on darker skin.

If you or anyone in your household currently has symptoms that look like measles, contact your healthcare provider. Notify the health department immediately about any suspected cases of measles by calling the Center for Health Protection NMDOH Helpline, available 24/7 at **1-833-SWNURSE (1-833-796- 8773)**.

Anyone who has the measles should stay home and avoid contact with others through 4 days after their rash began. They should not attend work, parties, and/or other gatherings. They may return to work on day 5 after their rash began.

Those who were exposed to measles and who are unvaccinated should not attend work, parties, and/or other gatherings through 21 days after they were exposed. They may return to work on day 22 after exposure.

If you or anyone else in your household has a weakened immune system or is pregnant and has never had measles or the measles vaccine, talk with your doctor immediately.

If you have questions regarding exposure, symptoms, or measles in general please call [insert employee health representative] at [employee health contact information] or the New Mexico Department of Health Center for Health Protection Helpline at **1-833-SWNURSE (1-833-796-8773)**.

Best Regards,

[healthcare facility]