

Measles Webinar 4/10/2025 - Questions

- 1) Can IgM be detected after MMR vaccination?
Yes, measles IgM can become positive 1-2 weeks after MMR vaccination and remain positive from a few weeks to a few months. This, along with the false positives on serologic testing, is why PCR is important to diagnose measles (and so state can do additional testing to determine if due to vaccine vs wild type)
- 2) Which specimens need to be submitted to the NC State lab?
NC SLPH offers measles PCR testing on-site and send-out testing, including serology and vaccine RNA testing for situations involving recent vaccination. PCR is offered on nasopharyngeal, oropharyngeal and urine. If PCR negative or not done, a serum specimen for serology collected 3-10 days after symptom onset is recommended. More guidance here: [NC Measles Specimen Collection and Shipment](#)
- 3) What do IPs do with teammates who might have been exposed?
IPs should work closely with Occupational Health and unit/facility staff to determine
1) who was exposed – specifically, who shared the same air space with the measles patient or entered the space within two hours after the patient left without wearing a fit-tested N95 (or equivalent). 2) Check the immunity status of all exposed healthcare personnel (ie. do they have documentation of 2 doses of MMR or prior positive measles serology or lab confirmed measles disease). 3) If nonimmune or unknown immune status the healthcare personnel should be excluded from work from day 5 after exposure to day 21*. If serologic testing is obtained and positive, the individual can return to work. 4) Offer post-exposure prophylaxis to non-immune and high-risk individuals (For nonimmune/non-pregnant/immunocompetent- Offer MMR (within 72 hours from exposure; For non-immune pregnant or any highly immunocompromised, offer IVIG within 6 days of exposure)
***Note: If an individual receives IVIG, their quarantine period gets extended to 28 days**
- 4) Are we going to lose our measles eradication status?
Answer given during the webinar: If we have 12 months with endemic transmission, we will lose our measles eradication status.
- 5) If we are travelling within the next month, any recommendations?
Adults traveling internationally or travelling to an area with an active outbreak should check to ensure they have received 2 doses of MMR vaccine/live measles vaccine – if you have not received 2 doses of a live measles vaccine previously, talk to your doctor about getting an addition dose of MMR.
There are also additional vaccination recommendations for infants and young children traveling internationally or to an area with an active outbreak.
- 6) What is the recommendation for international travel especially if you were vaccinated as a child and then got a booster over 20 years ago? **Same answer as 5. How long ago you were vaccinated does not matter if you have received 2 doses of live vaccine**

- 7) Recommendation for booster? Vs titer? I have future grandparents asking for boosters.

Additional doses/boosters: Most individuals do not need a booster or titers. The only individuals who need to consider an addition dose are Individuals with Uncertain or Incomplete Immunity such as:

- a. Adults who only received one MMR dose and are at risk of exposure (outbreak setting, healthcare worker, international travel, etc)
- b. Those with unknown or missing vaccination records
- c. Small number of individuals vaccinated 1963-1967 with an inactivated measles vaccine that was not as effective as the live vaccine
 - i. Check vaccine records if available to see type of vaccine received
 - ii. If received inactivated or vaccinated during that time with unknown vaccine status d/w your MD checking titers or getting an additional dose of MMR

Titers – are not indicated for most individuals. If you are fully vaccinated. You are considered fully vaccinated if you received at least 1 dose of live measles vaccine if you are normal risk, 2 doses if high risk

Individuals considered high risk where 2 doses of live measles vaccine are recommended are international travelers born after 1957, healthcare personnel, students at college/etc, school age children, individuals with known exposure or high risk of exposure

Individuals born before 1957 are presumed to have had measles and have immunity due to infection in most circumstances.

- 8) If possible, can you share any specific suggestions/guidance for school nurses?

CDC has a checklist that is intended for health departments but does have a small section for schools and childcares

https://www.cdc.gov/measles/media/pdfs/2025/02/CDC-Public-Health-Checklist_Sept18_FINAL-updatedlinks-508.pdf

NC DPH is also developing some school guidance that will be posted on our measles website when completed.

This document is intended for practices, but has information also relevant to school nurses: ThinkMeasles-final.pdf.

- 9) Some diseases have specific exposure criteria such as “being within 3 feet for x hours”.

Does measles have specific criteria or is it just being in the same room even if was only for (as an example) 15 mins?

Just being in the same room at the same time as an infectious individual, or entering the room within 2 hours after they left, is considered an exposure – regardless of the amount of time spent in the space

- 10) How is the supply of immune globulin? Will access to IG PEP be limited?

There are currently no reported national shortages, however local availability may vary. State health departments may have limited or no supply. Individuals should assess local supply and accessibility

- 11) We have many calls about boosters saying that since theirs was so long ago they were recommended to get a booster. **See response to question 7**
- 12) Our HD has seen lots of worried older adults (who have likely been fully vaccinated in the past) requesting MMRs. Unfortunately we haven't seen as many previously unvaccinated children come in for MMRs.
Agree! Definitely a challenge!
- 13) Should post-transplant patients receive an MMR?
Highly immunocompromised patients should not receive live vaccines.
- **For solid organ transplants - ideally, MMR is given before transplant if the patient is susceptible. Live vaccines including MMR are generally not recommended after solid organ transplant.**
 - **For hematopoietic stem cell transplant recipients – MMR can be administered starting at 24 months post-transplant IF 1) no active GVHD, 2) off immunosuppressive therapy and 3) evidence of immunologic recovery**
- 14) Should we give the MMR vaccine to those who received the measles vaccine offered around the mid-1960s? **See response to question 7**
- 15) For HIV (mmrv only), isn't it MMRV is only licensed for 12 months to 12 years of age. Can we give this to HIV positive adult client who has been exposed to measles with no prior documented vaccinated?
MMRV is only approved to age 12. For adults with HIV who can get live vaccines (i.e. if CD4 \geq 200 maintained for at least six months), MMR and varicella vaccines should be given separately.
- 16) Do 2 documented MMR doses supersede the results of titers –
Yes if the individual received 2 doses of live measles vaccine they are considered fully protected regardless of titer results
- 17) If someone has a titer done and shows no immunity but had at least 1 dose to they get a booster?
One dose of live measles vaccine is considered sufficient regardless of titer results unless the individual is considered high risk : [high risk includes: international travelers born after 1957, healthcare personnel, students at college/etc, school age children, individuals with known exposure or high risk of exposure]
- 18) To confirm, the recommendation is to offer vaccines to those 6-12 months in the context of an outbreak. Does that mean that once there is a single case in our county (which is more than what our typical baseline is), the full county would be eligible for early/additional vaccination for those 6-12 month infants?
The state and local health department will provide guidance when vaccination is recommended for infants 6-11mo locally with no planned travel. It would likely require

more than one case, or other evidence of local transmission (one case does not necessarily mean there is an increased risk for local transmission).

19) Is there any data on the true incidence because there are probably many more cases than are being diagnosed?

No current data on the true incidence but we agree/know there are likely more cases than reflected in the official case counts. What is beneficial with measles, however, is that virtually all infections are symptomatically recognizable so we don't have "silent" cases...But when persons don't come to medical attention, they will go uncounted.

20) I work at a small physician practice (less than 50 employees) in Charlotte. Should we check titers for all of our staff if we do not have vaccine records?

For healthcare workers, it's strongly recommended all healthcare staff have documented evidence of immunity. If an employee doesn't have reliable vaccine records (or other proof of immunity), you have two options 1) check titers or 2) give two doses of MMR 4 weeks apart (may be more cost effective than testing)