

Recommendations for Catch-Up and Early MMR Vaccination in the Context of Measles Outbreak Activity

Media Disclaimer: *The Pennsylvania Health Alert Network (PA-HAN) provides timely information on emerging public health issues to state and local public health agencies, hospitals, emergency management officials, and other health care providers.*

These messages are intended to inform and support clinical work and should not be treated as news releases. If members of the media have questions about a PA-HAN, contact the DOH Office of Communications at ra-dhpressoffice@pa.gov.

DATE:	6/24/2026
TO:	Health Alert Network
FROM:	Debra L. Bogen, MD, FAAP, Secretary of Health
SUBJECT:	Recommendations for Catch-Up and Early MMR Vaccination in the Context of Measles Outbreak Activity
DISTRIBUTION:	Statewide
LOCATION:	Statewide
STREET ADDRESS:	n/a
COUNTY:	n/a
MUNICIPALITY:	n/a
ZIP CODE:	n/a

This transmission is a “Health Alert”: it conveys the highest level of importance; warrants immediate action or attention.

HOSPITALS: PLEASE SHARE WITH ALL MEDICAL, PEDIATRIC, NURSING AND LABORATORY STAFF IN YOUR HOSPITAL; **EMS COUNCILS:** PLEASE DISTRIBUTE AS APPROPRIATE; **FQHCs:** PLEASE DISTRIBUTE AS APPROPRIATE; **LOCAL HEALTH JURISDICTIONS:** PLEASE DISTRIBUTE AS APPROPRIATE; **PROFESSIONAL ORGANIZATIONS:** PLEASE DISTRIBUTE TO YOUR MEMBERSHIP; **LONG-TERM CARE FACILITIES:** PLEASE SHARE WITH ALL MEDICAL, INFECTION CONTROL AND NURSING STAFF IN YOUR FACILITY.

Summary

- Between April and June 22, 2026, the Pennsylvania Health Department (DOH) confirmed 61 measles cases across Berks, Dauphin, Lancaster, Lebanon and York counties. For an up-to-date list of affected counties, visit: <https://www.pa.gov/measles>
- During outbreaks, early, accelerated and catch-up vaccination is encouraged for people who live or plan to visit areas where measles is detected:
 - Infants 6 through 11 months should get one early dose of measles, mumps, and rubella (MMR) vaccine. They should still receive their routine doses at 12–15 months and 4–6 years.
 - Children older than 1 year who have not yet received any measles vaccine should get two doses at least 28 days apart. Children who already received one dose should get their second dose now if it has been at least 28 days since their first dose.
 - Adults with no evidence of immunity should get two MMR doses at least 28 days apart. Adults and teens who already received one dose should get a second dose at least 28 days after their first dose.
- Maintain a high index of suspicion for measles in patients presenting with fever and rash, especially in those who are unvaccinated.
- Immediately report suspected measles cases to local public health authorities or to DOH at 877-PA-HEALTH (877-724-3258). Providers should not wait for lab confirmation to notify public health if measles is suspected.

Background

Measles is a highly contagious, vaccine-preventable respiratory illness. The virus can remain airborne for up to two hours in an enclosed space and infects more than 90% of exposed susceptible individuals. Complications include pneumonia, encephalitis, and death. Infants and young children are at highest risk for severe outcomes.

The routine childhood MMR schedule in the United States consists of two doses: the first at 12-15 months of age and the second at 4-6 years of age. During outbreaks or before international travel, modifications to this schedule are recommended by the Advisory Committee on Immunization Practices.¹

Between April and June 22, 2026, the Pennsylvania Health Department confirmed 61 measles cases across Berks, Dauphin, Lancaster, Lebanon and York counties. For an up-to-date list of affected areas, visit: <https://www.pa.gov/measles>. Early, accelerated and catch-up MMR vaccinations are indicated for people living or visiting these areas.

Recommendations to Health Care Professionals for Persons in, or Planning to Travel to, Areas with Measles

Infants and children should get vaccinated early. The routine vaccine schedule for children 1 to 6 years old should be accelerated. School-aged children and adults without immunity should get caught up. In outbreak settings, the DOH is recommending two MMR doses for adults without immunity.

1. Infants Aged 6 Months Through 11 Months (“Dose Zero”)

- In areas with active measles transmission or for infants traveling internationally, one dose of MMR vaccine should be administered to infants aged 6 through 11 months.^{1,2}
- This early dose is considered supplementary and does not count toward the routine 2-dose series. Infants who receive this early dose must still receive two additional doses per the routine schedule to attain lifelong immunity: one at 12-15 months of age and another at 4-6 years of age, for a total of three doses.¹
- MMR is not licensed for children younger than 6 months of age.
- As compared to doses given at 12 months of age, early doses are less effective at preventing measles and may be associated with somewhat lower antibody titers;³⁻⁵ however, a single dose of MMR at 6-8 months of age provides a pooled vaccine effectiveness estimate of 58% against measles; effectiveness increases to approximately 83% when given between 9-11 months.⁶ T-cell response appears to be equivalent regardless of age at vaccination.^{5,7} No significant differences in adverse events have been observed between infants vaccinated before 9 months and those vaccinated at ≥9 months.⁶ In summary, early MMR vaccination is safe and provides modest protection when measles is spreading.

2. Children Aged 12 Months Through 6 Years (“Accelerated Dosing”)

- Children older than 12 months who have not been vaccinated should receive one dose of MMR immediately and a second dose at least 28 days later.¹
- Children older than 12 months with one prior dose of MMR should receive an early second dose separated by at least 28 days.
- The accelerated second dose counts as the routine second dose; no additional doses are needed.¹

3. School-Aged Children, Adolescents, and Adults (“Catch-Up Dosing”)

- All children in kindergarten through 12th grade should have documentation of two doses of MMR vaccine or other evidence of immunity.^{1,7,8}
- Children and adolescents who have received only one dose should receive a second dose immediately, with a minimum interval of 28 days from the first dose.¹
- Adults born in 1957 or later without evidence of immunity should receive one dose of MMR

immediately, followed by a second dose at least 28 days later. While one dose might suffice for non-high-risk individuals, in areas where measles is spreading, DOH recommends 2 MMR doses for all adults without evidence of immunity.¹

- Adults born before 1957 are generally considered immune. However, health care workers born before 1957 without laboratory evidence of immunity or disease should consider vaccination with a 2-dose series separated by at least 28 days.^{7,9}
- In the context of an outbreak or international travel, adults who received the inactivated (killed) measles vaccine available from 1963-1967 should be considered unvaccinated and revaccinated with a total of 2 post-1967 MMR doses.⁹

MMR Vaccine Contraindications

MMR vaccine is contraindicated in the following populations:⁷

- Pregnant women
- Severely immunocompromised individuals (e.g., HIV with CD4 count ≤ 200 cells/ μ L, recipients of high-dose immunosuppressive therapy, solid organ or recent bone marrow transplant recipients)
- Persons with a history of severe allergic reaction (anaphylaxis) to a vaccine component or a prior dose of MMR

Clinical Recognition and Reporting

Maintain a high index of suspicion for measles in patients presenting with fever and rash, especially in those who are unvaccinated. Consider measles as a diagnosis in anyone:

- With a febrile rash illness lasting three days or more,
- With a temperature of 101°F (38.3°C) or higher, and clinically compatible symptoms (cough, coryza and/or conjunctivitis),
- Potentially exposed to a person with measles-like illness or recently traveled to a domestic area or an international area with an ongoing measles risk and have not been vaccinated for measles.

Please note, people with compromised immune systems may not have a rash or may have an atypical rash. The incubation period for measles from exposure to rash onset is usually 14 days but can be as long as 21 days.

Immediately isolate and report suspected measles cases to local public health authorities or to DOH at 877-PA-HEALTH (877-724-3258). Providers should not wait for lab confirmation to notify public health if measles is suspected. DOH can assist with testing through the State Public Health Laboratory.

Please refer to health alert [2026 – PAHAN –822-05-01 -ALT](#) and <https://www.pa.gov/measles> for additional guidance including testing, treatment, infection control and post-exposure prophylaxis recommendations. See the [American Academy of Pediatrics Red Book](#) and [CDC](#) for additional post-exposure prophylaxis guidance.¹⁰⁻¹³

Insurance Coverage

Pennsylvanians with questions about their insurance coverage or who wish to file a complaint can visit pa.gov/consumer or call 1-866-PA-COMPLAINT (1-866-722-6675).

Pennsylvania's Medical Assistance (MA) and CHIP Programs cover vaccines, to include the MMWR vaccine, recommended and endorsed by nationally recognized medical associations such as, but not limited to, the American Academy of Pediatrics (AAP), the American Academy of Family Physicians (AAFP), and the American College of Obstetricians and Gynecologists (ACOG), in addition to those recommended by the Advisory Committee on Immunization Practices (ACIP).

Please see [Medical Assistance Bulletin 99-25-08](#) for information regarding MA Program immunization coverage.

MA and CHIP beneficiaries who have questions about vaccine coverage for themselves or their family may contact their MA managed care organization (MCO) using the [Medicaid Managed Care Directory](#) for MA or the [CHIP Insurance Companies | Department of Human Services | Commonwealth of Pennsylvania](#) directory for CHIP.

MA beneficiaries who receive their services in the MA Fee-for Service (FFS) Program may contact the Recipient Service Center with questions about vaccine coverage at:

1-800-537-8862, Select option 1, option 2, option 3
Mon – Fri 8 am – 12:00 pm, 12:30 - 4:30 pm

MA and CHIP enrolled providers may contact the applicable MA MCO(s) with any questions regarding vaccine coverage. Contact information is in the [Medicaid Managed Care Directory](#) and CHIP MCO directory at [CHIP Insurance Companies | Department of Human Services | Commonwealth of Pennsylvania](#)

Providers may contact the Provider Service Center with any questions regarding vaccine coverage provided in the MA FFS Program at:

1-800-537-8862, Select option 2, option 2
Mon-Fri 8 am – 4:30pm

REFERENCES

1. Centers for Disease Control and Prevention. Expanding measles outbreak in the United States and guidance for the upcoming travel season [Internet]. Centers for Disease Control and Prevention; 2025 [cited 2026 June 10]. Available from: <https://www.cdc.gov/han/php/notices/han00522.html>
2. Krow-Lucal E, Marin M, Shepersky L, Bahta L, Loehr J, Dooling K. Measles, mumps, rubella vaccine (PRIORIX): Recommendations of the advisory committee on immunization practices - united states, 2022. MMWR Morbidity and mortality weekly report [Internet] 2022;71(46):1465–70. Available from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC9707358>
3. Staak M van der, Ten Hulscher HI, Nicolaie AM, et al. Long-term dynamics of measles virus-specific neutralizing antibodies in children vaccinated before 12 months of age. Clinical infectious diseases : an official publication of the Infectious Diseases Society of America [Internet] 2025;80(4):904–10. Available from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC12043057>
4. AlSaihati A, Chaudhary M, Olarte L. Early measles vaccination in infants less than 12-months: Global practices, immunity outcomes, and implications for disease prevention. Journal of the Pediatric Infectious Diseases Society [Internet] 2026;15(4). Available from: <http://www.ncbi.nlm.nih.gov/pubmed/41818477>
5. Gans HA, Yasukawa LL, Sung P, et al. Measles humoral and cell-mediated immunity in children aged 5-10 years after primary measles immunization administered at 6 or 9 months of age. The Journal of infectious diseases [Internet] 2013;207(4):574–82. Available from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3549597>
6. Nic Lochlainn LM, Gier B de, Maas N van der, et al. Immunogenicity, effectiveness, and safety of measles vaccination in infants younger than 9 months: A systematic review and meta-analysis. The Lancet Infectious diseases [Internet] 2019;19(11):1235–45. Available from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC6838664>

7. McLean HQ, Fiebelkorn AP, Temte JL, Wallace GS. Prevention of measles, rubella, congenital rubella syndrome, and mumps, 2013: Summary recommendations of the advisory committee on immunization practices (ACIP). MMWR Recommendations and reports : Morbidity and mortality weekly report Recommendations and reports [Internet] 2013;62(RR-04):1–34. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/23760231>
8. Strebel PM, Orenstein WA. Measles. The New England journal of medicine [Internet] 2019;381(4):349–57. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/31184814>
9. Centers for Disease Control and Prevention. Measles vaccine recommendations for non-pregnant adults aged 19 or older, by birth year in the United States [Internet]. Centers for Disease Control and Prevention; N.D. [cited 2026 June 10]. Available from: <https://www.cdc.gov/measles/downloads/adult-mmr-algorithm-508.pdf>
10. Pennsylvania Department of Health. Measles alert: Guidance for local identification of new measles cases [Internet]. Pennsylvania Department of Health; 2026 [cited 2026 June 10]. Available from: https://www.pa.gov/content/dam/copapwp-pagov/en/health/documents/topics/documents/2026%20HAN/2026-822-05-01-ADV-%20Measles_Lebanon.pdf
11. Centers for Disease Control and Prevention. Be ready for measles toolkit [Internet]. 2026 [cited 2026 June 10]; Available from: <https://www.cdc.gov/measles/php/toolkit/index.html>
12. Centers for Disease Control and Prevention. Immune globulin for measles post-exposure prophylaxis [Internet]. Centers for Disease Control and Prevention; N.D. [cited 2026 June 10]. Available from: <https://www.cdc.gov/measles/downloads/measles-immune-globulin-post-exposure-prophylaxis.pdf>
13. Kimberlin DW, Banerjee R, Barnett ED, Lynfield R, Sawyer MH, editors. Measles [Internet]. In: Red book: 2024–2027 report of the committee on infectious diseases. American Academy of Pediatrics; 2024. Available from: https://doi.org/10.1542/9781610027373-S3_012_002

Individuals interested in receiving future PA-HANs can register [here](#).

Categories of Health Alert messages:

Health Alert: conveys the highest level of importance; warrants immediate action or attention.

Health Advisory: provides important information for a specific incident or situation; may not require immediate action.

Health Update: provides updated information regarding an incident or situation; unlikely to require immediate action.

This information is current as of June 24, 2026, but may be modified in the future.
