

IMMUNIZATION AND IMMUNITY TESTING RECOMMENDATIONS FOR NEW MEXICO HEALTHCARE PERSONNEL

All health care personnel (HCP) who work in health-care facilities should have presumptive evidence of immunity to measles. This information should be documented and readily available at the work location.

HCP include not only physicians, nurses, and emergency department personnel, but also other personnel (including contractors) who work within a health care facility and who have contact with patients or materials used by patients, such as housekeeping, security guards, ambulance staff and clerical workers. *According to New Mexico regulations, health care facilities are responsible for ensuring immunity among all HCP?*

Definition of immunity: ACIP considers **one** of the following criteria to provide presumptive evidence of immunity to measles for persons who work in health-care facilities:

- written documentation of vaccination with 2 doses of live MMR vaccine administered at least 28 days apart with the first dose given at ≥ 1 yr; or
- laboratory evidence of immunity as indicated by positive measles IgG titer[§]; or
- laboratory confirmation of prior measles virus infection; or
- birth before January 1, 1957.

Healthcare personnel born before 1957

Although persons born in the U.S. before 1957 are generally presumed to be immune to measles, mumps, and rubella because most will have had natural disease, not all people born before 1957 will be immune. Therefore, healthcare facilities and educational institutions may wish to consider testing HCP who do not have documentation of 2 doses of MMR vaccine for immunity or recommending that they receive 2 doses of MMR vaccine. **During an outbreak,** for unvaccinated personnel born before 1957 who lack laboratory evidence of measles immunity or laboratory confirmation of disease, health-care facilities should recommend 2 doses of MMR vaccine of measles.

Serologic testing is *not* required or recommended to routinely confirm immunity for HCP who have documentation of having received two doses of live virus measles- containing vaccine. HCP with one documented live virus measles vaccine should receive a second dose.

[§] Measles, mumps, and rubella IgG in serum; equivocal results should be considered negative.



Post-exposure prophylaxis and exclusion from work. HCP with a known exposure to a patient with measles and *unknown* immunity or *negative serology*, should be evaluated immediately. If the HCP has unknown measles immunity, obtain a stat IgG. HCP with one dose of a measlescontaining vaccine should receive a second MMR vaccine. Post- exposure prophylaxis (PEP) with immune globulin should be administered if indicated according to this guidance. All nonimmune HCP exposed to measles should be excluded regardless of whether they receive appropriate post-exposure MMR prophylaxis, through 21 days post-exposure, in accordance with Advisory Committee on Immunization Practices (ACIP) recommendations. While the ACIP and the *New Mexico Department of Health* consider HCP with two documented doses of live virus measles vaccine yet a negative titer to be immune, in the setting of a known measles virus exposure, the DOHMH recommends that such HCP be considered non-immune and excluded from work. This is because 3% of persons receiving two doses of live virus measles containing vaccine do not develop protective levels of antibodies. Following the 21-day home quarantine period, non-immune HCPs should receive MMR vaccine and no further IgG titers should be checked.

Measles education. In addition, HCP should be educated about the symptoms of measles and immediately notify their employer if they develop symptoms suggestive of measles. Measles is characterized by a prodrome of fever and malaise, cough, coryza, and conjunctivitis followed by a maculopapular rash. Patients are considered to be contagious from 4 days before to 4 days after the rash appears (with date of onset as day zero). Of note, sometimes immunocompromised patients do not develop the rash.

Reporting. HCPs with signs and symptoms of measles and travel or any potential exposures should advise their supervisor *immediately* and be evaluated for measles and excluded from work until the measles diagnosis is either confirmed or ruled out. If measles is confirmed, they should be excluded from work through 4 days after rash onset. Additionally, *all* suspected cases of measles in any person, including HCP, should be reported immediately to the NMDOH (505) 827-0006. Reports should be made at time of initial clinical suspicion. Do not wait for laboratory confirmation to report.

Ensuring measles immunity is essential to protecting all HCP, to preventing nosocomial transmission of measles to patients, and to controlling this current outbreak. We thank you in advance for your continued commitment to protecting the health of all New Mexicans through the promotion of measles immunity and education for all health care personnel.