



STATEMENT FOR SCHOOLS AND EMPLOYERS REQUESTING POST-VACCINATION ANTIBODY TESTING (AKA “TITERS”) FOR MEASLES, MUMPS, RUBELLA AND VARICELLA

Vanderbilt University and Medical Center follows the recommendations of the CDC regarding vaccination and testing of healthcare personnel (HCP.) Following are the current verbatim recommendations of the Advisory Committee on Immunization Practices (ACIP) regarding post-vaccination testing for measles, mumps, rubella and varicella.

Measles: For HCP who have 2 documented doses of MMR vaccine or other acceptable evidence of immunity to measles, serologic testing for immunity is not recommended. In the event that a HCP who has 2 documented doses of MMR vaccine is tested serologically and determined to have negative or equivocal measles titer results, it is not recommended that the person receive an additional dose of MMR vaccine. Such persons should be considered to have presumptive evidence of measles immunity. Documented age-appropriate vaccination supersedes the results of subsequent serologic testing.

Mumps: For HCP who have 2 documented doses of MMR vaccine or other acceptable evidence of immunity to mumps, serologic testing for immunity is not recommended. In the event that a health-care provider who has 2 documented doses of MMR vaccine is tested serologically and determined to have negative or equivocal mumps titer results, it is not recommended that the person receive an additional dose of MMR vaccine. Such persons should be considered immune to mumps. Documented age-appropriate vaccination supersedes the results of subsequent serologic testing.

Rubella: For HCP who have 1 documented dose of MMR vaccine or other acceptable evidence of immunity to rubella, serologic testing for immunity is not recommended. In the event that a health-care provider who has at least 1 documented dose of rubella-containing vaccine is tested serologically and determined to have negative or equivocal rubella titer results, receipt of an additional dose of MMR vaccine for prevention of rubella is not recommended.

Varicella: Routine testing for varicella immunity after 2 doses of vaccine is not recommended. Available commercial assays are not sensitive enough to detect antibody after vaccination in all instances. Sensitive tests that are not generally available have indicated that 92%--99% of adults develop antibodies after the second dose. Seroconversion does not always result in full protection against disease and, given the role of cell-mediated immunity for providing long-term protection, absence of antibodies does not necessarily mean susceptibility. Documented receipt of 2 doses of varicella vaccine supersedes results of subsequent serologic testing.

Reference: [Immunization of health-care workers: recommendations of the Advisory Committee on Immunization Practices \(ACIP\) and the Hospital Infection Control Practices Advisory Committee \(HICPAC\). MMWR 2011;60\(RR07\);1-45.](#)