

PD2011_005 OCCUPATIONAL ASSESSMENT, SCREENING AND VACCINATION AGAINST SPECIFIED INFECTIOUS DISEASES

Recommended actions following serology that does not indicate full immunity to measles, mumps and rubella or varicella

To promote consistency of interpretation across all health services, the following table provides advice on actions to be taken when serology indicates incomplete immunity to measles, mumps and rubella. Expert consultation and referral of sera to a reference laboratory are recommended where there is difficulty interpreting any results.

Post vaccination serology is not recommended, but if it has been undertaken and incomplete immunity is indicated, then the following vaccination and serology recommendations should be followed.

Documented doses	Serology result		Vaccination recommended Yes/No	Further serology recommended Yes/No
0 dose	Serology is <u>positive</u> for 1 or 2 but not all 3 of the following diseases: Measles Mumps Rubella	Serology for measles or mumps or rubella or varicella is Negative Equivocal Borderline Low positive Low level immunity	Yes, 2 doses with a minimum 4 week interval between	No*
1 dose		Serology for measles or mumps or rubella or varicella is Negative Equivocal Borderline Low positive Low level immunity	Yes, 1 dose	No*
2 doses		Serology for measles or mumps or rubella or varicella is Negative Equivocal Borderline	Yes, 1 dose	No*
		Serology for measles or mumps or rubella or varicella is Low positive Low level immunity	No	No

(Prepared with the assistance of the National Centre for Immunisation Research and Surveillance)

* Eight weeks after the last dose of MMR vaccine (as per the table either the 2 doses or the single dose) only women of child bearing age should have their rubella titres checked. A number of commercial assays for testing immunity to rubella are available. These vary according to the method used to determine the positive cut-off value (the WHO cut-off is 10 IU/mL but, at present, there is no recommended Australian minimal level). Available data support the presumption that an antibody level found by use of a licensed assay to be above the standard positive cut-off for that assay can be considered evidence of past exposure to rubella virus. Antibody levels below the cut-off are likely not to be protective, particularly if the antibodies have been generated by vaccination rather than by natural infection. Expert consultation and referral of sera to a reference laboratory are recommended if there is a difficulty interpreting these results.