

February 15, 2012

**A L E R T**

## Rubeola (Measles) IgG, Mumps IgG and Varicella Zoster Virus (VZV) IgG Antibodies

Improved Testing Method and More Concise Reports Now Available

### BENEFITS

- Improved turnaround time for Rubeola (Measles) IgG, Mumps IgG and VZV IgG
- New streamlined reports allow for quick test interpretation
- Testing performed daily

### WHAT'S NEW?

Effective February 22, 2012, PeaceHealth Laboratories will consolidate Rubeola IgG, Mumps IgG and VZV IgG antibody serologic testing onto one automated platform, the Bio-Rad BioPlex 2200. Currently, antibody testing for these various viruses is accomplished using an enzyme immunoassay (EIA) format. Additionally, the reporting format will be easier to understand with quick test interpretation results clearly identified as shown in Figure 1 on reverse.

### BIOPLEX 2200 MEASLES, MUMPS AND VZV TESTING FOR ANTIBODIES

The BioPlex 2200 is a fully-automated, random access instrument that uses multiplex flow immunoassay to simultaneously measure the IgG antibodies for measles, mumps and VZV. The beads contain varying ratios of fluorescent classification dyes and are coated with a specific antigen allowing the capture and detection of the specific antibodies.

### ASSAY TEST COMPARISON

In a study performed by PeaceHealth Laboratories, the BioPlex 2200 Measles, Mumps and VZV assay were compared with the current EIA formats. The results, outlined in Table 1, below, demonstrate that the BioPlex 2200 Measles, Mumps and VZV IgG multiplex assay show similar agreement with the predicate serology testing.

**Table 1 – Assay Test Comparison**

Test	Positive Predictive Value	Negative Predictive Value	Overall % Agreement
<b>Measles IgG</b>	100.0% (CI 98.3-100%)	97.1% (CI 83.4-99.9%)	99.7% (CI 98.3-98.6%)
<b>Mumps IgG</b>	99.6% (CI 97.4-100%)	96.6% (CI 89.7-99.1%)	98.8% (CI 96.9-99.5%)
<b>VZV IgG</b>	100.0% (CI 98.3-100%)	91.1% (CI 79.6-96.7%)	98.5% (CI 96.5-99.4%)

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# Rubeola, Mumps and VZV (Continued)

## NEW REPORTING FORMAT

The new reporting format for Measles IgG, Mumps IgG, VZV IgG and Rubella IgG,\* as shown in Figure 1, below, is more concise and easier to understand. Antibody results will be reported as IMMUNE (Normal), EQUIVOCAL or NON-IMMUNE (Abnormal).

An antibody level reported as an Antibody Index (AI) for Measles, Mumps and VZV will be reported along with an interpretation based on the level. An antibody level reported in International Units/mL (IU/mL) will be reported for Rubella along with an interpretation based on the level.

**Figure 1 – New Reporting Format Provides Quick Test Interpretation**

		123 International Way (541) 687-2134 Springfield, OR 97477 (800) 826-3616	
<b>TEST, IMMUNITY</b> ID: F SEX: F Age: 25Y DOB: Unknown		<b>TEST CLIENT PEACEHEALTH LABORATORIES</b> Collected: 01/20/2012 12:00 Accession: EE10097808 Received: 01/20/2012 12:00 Printed: 01/20/2012 13:43 FINAL REPORT REPRINT 1 55:1	
<b>TEST PROCEDURE</b>	<b>RESULT</b>	<b>UNITS</b>	<b>LAB NO.</b>
MUMPS, IgG	IMMUNE		100
MUMPS, IgG LEVEL	5.6	AI	
IMMUNE: An antibody index greater than or equal to 1.1 is indicative of immunity (current or previous exposure or immunization).			
RUBEOLA (MEASLES), IgG	IMMUNE		100
RUBEOLA (MEASLES), IgG LEVEL	2.3	AI	
IMMUNE: An antibody index greater than or equal to 1.1 is indicative of immunity (current or previous exposure or immunization).			
RUBEOLA, IgG	IMMUNE		100
RUBEOLA, IgG LEVEL	55.1	IU/mL	
IMMUNE: An antibody level greater than or equal to 15.0 IU/mL is indicative of immunity (current or previous exposure or immunization).			
VARICELLA ZOSTER, IgG	NON-IMMUNE		100
VARICELLA ZOSTER, IgG LEVEL	0.4	AI	
NON-IMMUNE: An antibody index less than or equal to 0.8 is NOT indicative of immunity.			
** END OF PATIENT REPORT **			Page: 1
Copy to: TEST ANATOMIC PATHOLOGY			
Lab No. 100 123 International Way Springfield, OR 97477			

## TESTS IMPACTED BY THESE CHANGES

- Rubeola (Measles) IgG (58560)
- Mumps IgG (58220)
- Varicella Zoster IgG (58950)
- Measles, Mumps, Rubella Profile (12200)
- Rubella IgG (58680)
  - Report format changes only
- Rubella Antibody Screen (58670)
  - will be discontinued
- TORCH Antibodies IgG (58921)
  - Rubella IgG test only
- TORCH Antibodies IgG & IgM (58961)
  - Rubella IgG test only

## SPECIMEN REQUIREMENTS AND ORDERING INFORMATION

Please refer to the online test menu at [www.peacehealthlabs.org](http://www.peacehealthlabs.org)

## QUESTIONS?

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\*Rubella IgG testing will continue to be performed by chemiluminescence using Beckman chemistry and will not be performed on the BioPlex 2200. The reporting format for the Rubella IgG, however, will change along with Measles IgG, Mumps IgG and VZV IgG.