WHO Measles IgM and Rubella IgM Proficiency Panel

- General Information

The Victorian Infectious Diseases Reference Laboratory (VIDRL) prepares annually, the WHO Measles and Rubella IgM Proficiency Test Panel for participating laboratories of the WHO Measles and Rubella Laboratory Network as part of their annual laboratory accreditation assessment. The aim of the proficiency test is to assess the competency of laboratories in the WHO Laboratory Network, identify any issues with assays used routinely in the laboratory and ensure accurate interpretation and reporting of test results as well as reporting in a timely manner.

Since the first Measles/Rubella IgM Proficiency Test Panel prepared in 2001, the panel consisted of 20 samples. However, due to a worldwide shortage of IgM positive serum samples to measles and rubella, the panel has now been reduced to 10 serum samples. The samples contain no preservatives and should be refrigerated (4-8°C) on receipt. Since small volumes of samples are provided, it is recommended that samples be centrifuged prior to testing. Participating laboratories are requested to test the panel samples using the measles IgM and rubella IgM assays and protocol used routinely in their laboratory and not be given special treatment. Results must be submitted to VIDRL within 14 days of receipt of the panel.

Scoring of submitted results is based on correct optical density values and assay values (if applicable), result interpretation and reporting of the test results obtained by testing all 10 samples. In addition, kit data, use of a positive in-house control, validity of test and timeliness of reporting are all considered when calculating the final score. The minimum overall final score for achieving a pass is 90%.

For the first panel, participants submitted test results to VIDRL by completing a template in Excel file format. In 2015, a website was developed at VIDRL enabling participants to submit the measles IgM and rubella IgM proficiency test results via an online portal. Results are analysed upon receipt at VIDRL and a final score and associated feedback are provided to the WHO global measles and rubella laboratory co-ordinator, the WHO regional laboratory co-ordinator as well as the reporting laboratory.

Since 2017, the panel has been prepared in tubes with a unique barcode. In addition, participants can also download a results reporting template (.csv), scan the barcodes onto the template (or enter the codes manually), complete the data and upload results to the website. Detailed instructions for submitting results can be found under GENERAL INSTRUCTIONS.