

NEWSLETTER**SCHEME UPDATES*****Bordetella pertussis and Bordetella parapertussis***

Early laboratory diagnosis of infection by *Bordetella pertussis* and *Bordetella parapertussis* is important for control and prevention of whooping cough. Culture is the gold standard and although the method is highly specific the sensitivity low. Developments in PCR have enabled the detection and differentiation of *B. pertussis* from other species of *Bordetella*. However, caution is needed in the choice and testing of the amplification targets and interpretation of the results, and culture is still needed for susceptibility testing. Participants are expected to examine simulated per-nasal swabs from a clinical scenario of whooping cough to exclude both *Bordetella pertussis* and *Bordetella parapertussis*. An updated version of the UK Standards for Microbiological Investigations (SMI): Culture for *Bordetella pertussis* and *Bordetella parapertussis* (reference number: SMI-B6) will be available shortly, *to access the website please click [here](#)*. Dr Norman Fry, Head of the Public Health England (PHE) Microbiology Services Reference Unit for *Bordetella* has contributed to the SMI with guidance on the application and limitations of PCR for the detection of these pathogens.

HTLV pre-pilot

We are in the process of redesigning the blood borne viruses scheme by expanding the range of pathogens included in the scheme. During 2014 we shall be introducing specimens positive for HTLV-I, HTLV-II and *T. pallidum* antibodies. In this 'pilot' phase participants will be asked to test all three samples in the distribution for antibodies to the additional pathogen (s) in addition to testing for HIV antibodies, HCV antibodies and HBsAg.

In June, distribution 3478 included a specimen positive for HTLV-I antibodies. This specimen was not scored and participants did not have to test for HTLVII if this is not their normal practice. We received 32 responses with 100% correct results. The majority of participants are using Abbott Architect and Murex.

Interpretative Comments Scheme

Drs Philip Rice and Matthew Donati have offered to work with Dr Paul Chadwick extend the range of scenarios included as part of the Interpretative Comments Scheme. They will be preparing challenges that will be appropriate for virologists and for microbiologists with a special interest in virology.

Changes to the Molecular detection of Mycobacteria scheme

VNTR profile: Participant feedback suggested that a 24 VNTR profile was commonly used for typing *Mycobacterium tuberculosis*. Currently our reply form enables laboratories to report all 24 of the VNTRs however these are broken down into ETR, MIRU and 12 VNTR loci. We have therefore decided to streamline the entry of typing and presentation of results into the 24 locus VNTR profile. As the presentation of the string order varies between countries the loci will be presented in ascending numerical order. We shall provide the synonyms for the VNTR loci to assist those laboratories that use ETR or MIRU.

Methods used: From August participants will be able to report results for more than one method. This will allow for reporting results for assays that specifically detect Mycobacteria species other than tuberculosis.

NEWS FLASH**Problems accessing the UK NEQAS for Microbiology Website**

We are aware that several of our UK participants have recently been having trouble accessing our website. We believe this is to do with the N3 security at the user (participant) end. Other NHS hospitals with the same issue have made a 'National Gateway Internet Firewall Change request' to their IT department and added our website with port 80 and 443 for TCP/UDP and http/https, which seems to have resolved the issue.

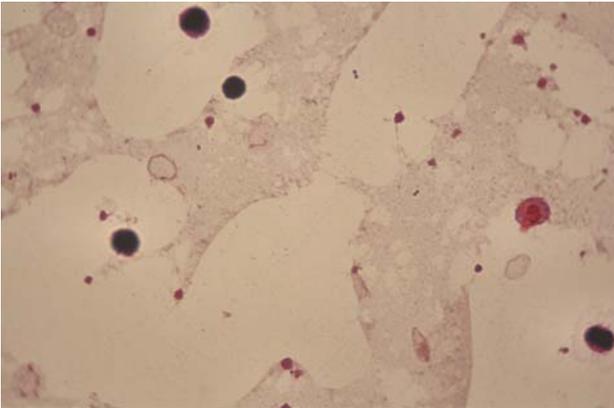
Please note: you can also use the following link to login to the secure participant web area for entering results, viewing reports etc.:

<https://results.ukneqas.org.uk>

OTHER NEWS

Special EQA surveys for infectious bacterial vaccine preventable disease (IB-VPD) surveillance

This year, UK NEQAS Microbiology was delighted to be awarded two new contracts to distribute EQA panels for the two independent infectious bacterial vaccine preventable disease (IB-VPD) surveillance networks organised by the ECDC and WHO respectively. The first contract is in collaboration with the ECDC's EU IB-VPD surveillance network co-ordinated by Dr Gabriele Gerlach, University of Wuerzburg, Germany, and includes 32 national reference laboratories in the EU plus laboratories in Switzerland, Canada and Australia. The WHO organises a global IB-VPD surveillance network and in collaboration with Dr Fatima Serhan and the respective National/Regional WHO co-ordinators, EQA panels will be sent to over 140 laboratories in 64 countries in Eastern Europe and the Middle East, Indian continent, Australasia, Africa and South America. These surveys are additional to the existing portfolio of international survey work undertaken by UK NEQAS Microbiology for EQA in antimicrobial susceptibility, *Neisseria gonorrhoeae*,



gram stain of *Streptococcus pneumoniae*

Changes to notification of apparent poor performance (UK and Ireland only)

Participants failing to return results or reporting an incorrect result will be contacted by the Scheme Organiser immediately following the distribution affected and asked to undertake an incident review. An incident review template will be made available to assist when determining the route cause(s) and laboratories will be asked to submit this or a similar report to the Organisers. This process will replace the twice yearly Organiser letter notification system, as described in the Directory and Participants Manual (see link on www.ukneqasmicro.org.uk). The Panel referral system will remain. Therefore participants' results will be presented to the National Quality Assessment Panel (NQAAP) for review if their performance scores are more than 1.96 standard errors below the mean for two or more performance periods.

We hope this timely alert will encourage implementation of corrective and preventative measures and reduce the number of referrals to the NQAAP.

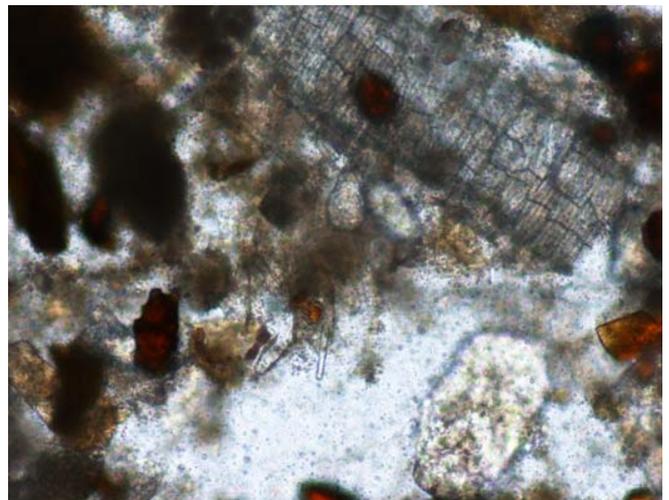
Supporting quality and accreditation in Europe

UK NEQAS are collaborating with the European co-operation for Accreditation (EA) for Interlaboratory Comparisons (ILC) by providing one distribution (distribution 3532, 29 September 2014) of the HIV1 RNA quantification scheme to accredited laboratories in Europe and Asia Pacific (AP) regions to support the EA initiative to demonstrate comparability of the implementation of accreditation standards in the EA and AP member states

In 2011 NEQAS undertook a similar initiative providing HIV1 RNA quantification scheme distribution 2900

Faecal parasitology questionnaire

In 2011, UKNEQAS Parasitology sent a questionnaire to all participants of the Faecal Parasitology Scheme to establish their routine method for concentrating faecal samples for the examination of parasites. An analysis of responses by participants showed that although 96% of respondents used a concentration method based on the Modified Ridley Allen technique to examine faecal samples for parasites, there were variations on whether formalin used as a fixative was diluted in water or saline, pore size of the sieve, the centrifugal speed, centrifugal time and solvent used, depending on the commercial kit employed. These observations prompted UKNEQAS to conduct a study to investigate if variations in the stages of the concentration method affected the recovery of parasites from faecal specimens. The results of this study have now been analysed and are in the process of being written for publication. As well as demonstrating how variations in the concentration process can affect the recovery of parasites from faecal specimens, the manuscript will also make recommendations for best practice in carrying out the concentration method to optimize the recovery of parasites.



Concentration method – badly performed technique. This specimen contained *Ascaris lumbricoides*.

OTHER NEWS

CMV standardisation collaboration

Early results from the UK NEQAS for Microbiology CMV quantification scheme (introduced in 2006) indicated considerable variation in terms of the absolute values reported by participants for each specimen distributed with results varying by at least 2.3 logs and up to 5.4 logs. At this time almost half of the assays in use were commercial; variability was seen with both in-house and commercial assays.

The 1st WHO international CMV DNA standard was introduced in 2010 however the use of the standard and adoption of reporting in IU/mL has been slow. In the most recent distribution 20% (19/93) of participants reported in IU/mL or provided a conversion factor for their assay. Commercial assays accounted for 69% of assays used and variation in terms of the absolute values reported ranged from 2.4 logs up to 3.7 logs.

In 2014 we instigated a collaborative study with EQA providers in Australia and Germany to investigate the impact of the adoption of the use of the International Standard. In May UK NEQAS participants received three additional samples for testing. The five samples distributed included a negative, duplicate samples of viral load ~4log IU/mL, a sample containing ~ 5log IU/mL and a clinical sample ~ 5log IU/mL. The same samples are to be distributed by NRL, Australia in July and by INSTAND, Germany in November. The results of the initial study will be published in 2015.

Compendium of Quality

As you will all be aware the Pathology Quality Assurance Review was published in January 2014. UK NEQAS have recently published their Compendium of Quality that illustrates how the UK NEQAS Consortium continues to be at the forefront in helping laboratories to improve their quality outputs and ensure patient safety. To view the compendium please click [here](#)

2014 posters

Several member of UK NEQAS presented posters at ECCMID 2014 in Barcelona, the posters can be viewed by clicking [here](#)

New starter

We are delighted to welcome Graeme Grindley to the UK NEQAS team. Graeme joined us from Southport Hospital. Graeme is working in our project team.

NEQAS for Microbiology Operations team

Please contact our Operations team if you have any queries regarding requests for repeat samples, website problems or any other customer issues:

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The Operations team members are:

Mrs Rinu Bandopadhyay

Mrs Nazma Kadri

Mrs Joke Olambo

Mr Vipul Sharma

Mr Joshim Uddin

2014 Scientific Meeting

This years Scientific Meeting will be held in Central London on Friday 5th December. The focus of the meeting will be Gastrointestinal infections. The meeting will provide an opportunity to hear experts present, to meet with the UK NEQAS for Microbiology and also meet with manufacturers. To view this year's meeting flyer please click [here](#). For more information on this meeting please email userday@ukneqasmicro.org.uk