



# **UK NEQAS for Microbiology** **([www.ukneqasmicro.org.uk](http://www.ukneqasmicro.org.uk))**

## **Brand New Website!**

**Abi Laja**  
**Mahmood Sadigh**

Updated by Christine Walton April 2014

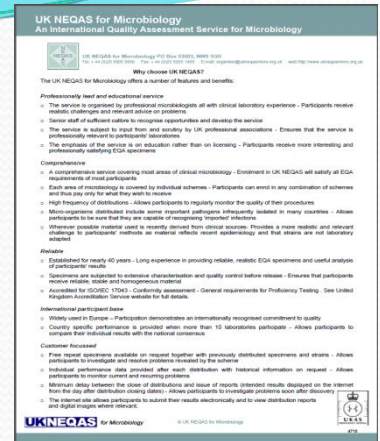
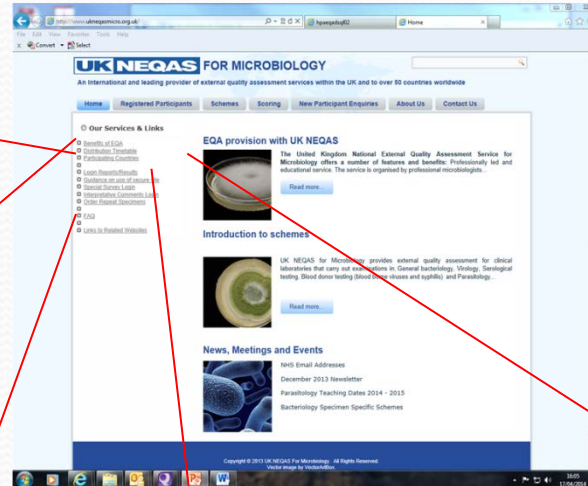
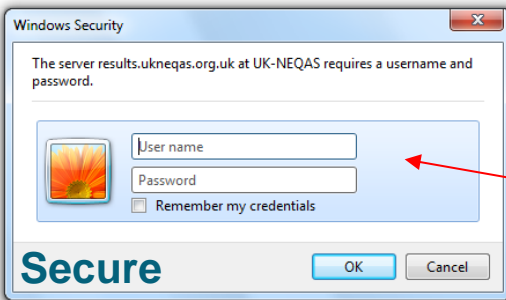
# The New Features



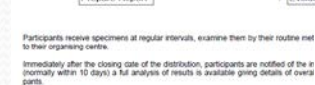
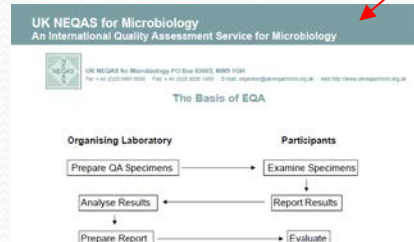
- Visually appealing
- Re-organisation of content
- Easy navigation
- Browser compatibility
- Extra security measures



# The Home Page



## EQA Provision with UK NEQAS



# Benefits & Basis of EQA

The screenshot shows a web form titled 'Repeat Request form'. At the top, there are two links: 'Home' and 'Order Repeat Specimens'. Below these is the form title 'Repeat Request form'. A red arrow points to a dropdown menu labeled 'Reason for request\*', which currently shows 'Broken/leaking sample'. Below this menu is a text input field with the placeholder 'For reasons other than those listed please send an email to [organiser@ukneqspecimens.org.uk](mailto:organiser@ukneqspecimens.org.uk)'. The form then has a section for 'Distribution list\*' with a list of checkboxes and names: 'Specimen 1\*', 'Specimen 2', 'Specimen 3', 'Specimen 4', and 'Specimen 5'. The 'Specimen 1\*' checkbox is checked. The form is partially obscured by a large blue text overlay that reads 'Repeat Request form'.

You are here: [Home](#) » [Order Repeat Specimens](#)

## Repeat Request form

Only laboratories that are currently participating in a particular scheme can request repeat samples for UK participants, or require samples from another scheme please send an email to: [organiser@ukneqspecimens.org.uk](mailto:organiser@ukneqspecimens.org.uk)

Lab Identification No. \*

Request by \*

Email \*

Telephone \*

Reason for request\*  
 Broken/leaking sample

For reasons other than those listed please send an email to [organiser@ukneqspecimens.org.uk](mailto:organiser@ukneqspecimens.org.uk)

Distribution list. \*

Specimen 1 \*

Specimen 2

Specimen 3

Specimen 4

Specimen 5

# Repeat Request form

## Repeat Request form



## Participating countries

[illegible]

## Distribution Timetable





# Schemes



FOR MICROBIOLOGY



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**Our Services & Links**

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-  [Schemes Available](#)
-  [Organisms Distributed](#)
-  [Safety Data Sheets](#)
-  [Interpretative Comments](#)
-  [Parasitology](#)

## SCHEMES

Below are links to PDFs containing information on our schemes

Hover with the mouse over any underlined words and click to access more information

-  [Bacteriology](#)
-  [Parasitology](#)
-  [Serology](#)
-  [Molecular](#)
-  [Mycology](#)
-  [Virus Identification](#)

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## Scheme Leaflets - with hyperlinks to more information

# Schemes

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### Our Services & Links

- Schemes Available
- Organisms Distributed
- Safety Data Sheets
- Interpretative Comments
- Parasitology

You are here: Home > Schemes

### SCHEMES

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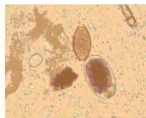
## UK NEQAS FOR PARASITOLOGY

### Main Menu

- Home
- Blood Parasitology
- Faecal Parasitology
- Toxoplasma Serology
- Parasite Serology
- Nematodes
- Plasmodium vivax

UK NEQAS Parasitology was established in 1986 as one of a number of UK NEQAS's which provide quality assessment in most disciplines of pathology.

### Our Mission



- Improve the diagnosis of parasitic infections by examination of clinical material from patients with parasitic infections either by microscopy, serology or antigen detection.
- Encourage participants to take individual action to investigate and remedy any problems revealed.
- To ensure that participants have access to EQA specimens which are relevant to their current laboratory practice.

### Our Solution



The emphasis on UK NEQAS Parasitology is education by:

- Introduction of 'new' or unusual parasites.
- Distribution of teaching sheets for all schemes, particularly when a poor performance has been noted.
- UK NEQAS Blood and Faecal Parasitology Associated Teaching Programme for all Participants.

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## UK NEQAS for Microbiology

An International Quality Assessment Service for Microbiology



UK NEQAS for Microbiology PO Box 63003, NW9 1GH  
Tel: +44 (0)20 8905 9890 Fax: +44 (0)20 8205 1498 E-mail: [organiser@ukneqasmicro.org.uk](mailto:organiser@ukneqasmicro.org.uk) web: <http://www.ukneqasmicro.org>

### Safety Data Sheet for Quality Assessment Specimens

#### 1. Identification of the establishment and the product

##### Establishment:

UK NEQAS for Microbiology  
PO Box 63003  
London NW9 1GH

Telephone (9.00 - 17.30 hours)

++44 (0) 20 8905 9890

Telephone (Out of working hours)

++44 (0) 870 084 2000

##### Product:

Simulated clinical specimens for detection of various microbiological agents as described in the scheme type or in the instruction sheet with individual distributions.

##### Exceptions:

AAFB Microscopy and blood parasites where ready prepared glass slides are sent.

##### Emergency telephone:

In the event of an accident involving exposure of staff to the material contained in the specimens, contact UK NEQAS (++44 (0)20 8905 9890) during normal working hours (or the Colindale Duty Safety Office (++44 (0)870 084 2000) out of hours) who will reveal the identity of the agent(s) in the specimen.

For further safety information concerning this product, participants are advised to read the instruction sheet accompanying the specimens.

#### 2. Composition

##### 2.1 Glass slides

Scheme name	Information on components
AAFB microscopy	Glass slides of smears prepared from human sputum that may contain <i>Mycobacterium tuberculosis</i> .
Blood parasitology	Human blood from patients, some of which were infected with parasites pathogenic to man, fixed by methanol or acetone on glass slides (1" thick films). The material is designed for use in external quality assessment and the parasite content is that which might be found in equivalent patient specimens.

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### List of Organisms Distributed in UK NEQAS Schemes

The organisms listed on the following pages have all been distributed one or more times specimen.

The choice and frequency of organisms distributed depends on a number of factors incl epidemiology, clinical importance and educational value. Obviously, some are c frequently than others depending on these factors.

#### Bacteria distributed for antimicrobial susceptibility testing

Organisms for susceptibility testing are distributed as pure, freeze dried cultures with a re the organism and test susceptibility to a named range of commonly used antimicrobial ag

#### Antimicrobial susceptibility

*Acinetobacter* spp.  
*Citrobacter* spp.  
*Enterobacter cloacae*  
*Enterococcus faecalis*  
*Enterococcus faecium*  
*Escherichia coli*  
*Haemophilus influenzae*  
*Neisseria* spp.  
*Korarella catarrhalis*  
*Morganella morganii*

*Neisseria gonorrhoeae*  
*Proteus* spp.  
*Pseudomonas aeruginosa*  
*Serratia marcescens*  
*Staphylococcus aureus*  
*Staphylococcus (coagulase -ve spp.)*  
*Stenotrophomonas maltophilia*  
*Streptococcus group A & B*  
*Streptococcus mutans*  
*Streptococcus pneumoniae*  
*Streptococcus sanguis*

#### Viruses recently distributed in specimens for virus identification

Specimens are generally distributed in liquid transport medium or as cell suspensions in transport medium. Various serotypes are distributed for identification to levels appropriate to the needs of participants.

#### Viruses

Adenovirus  
Joxsackievirus group A  
Joxsackievirus group B  
Yotomogalovirus  
Ichovirus  
Herpes simplex virus type 1 and 2

Influenza A virus  
Influenza B virus  
Measles virus  
Parainfluenza viruses  
Respiratory syncytial virus  
Rhinovirus  
Varicella-zoster virus

## Organisms distributed

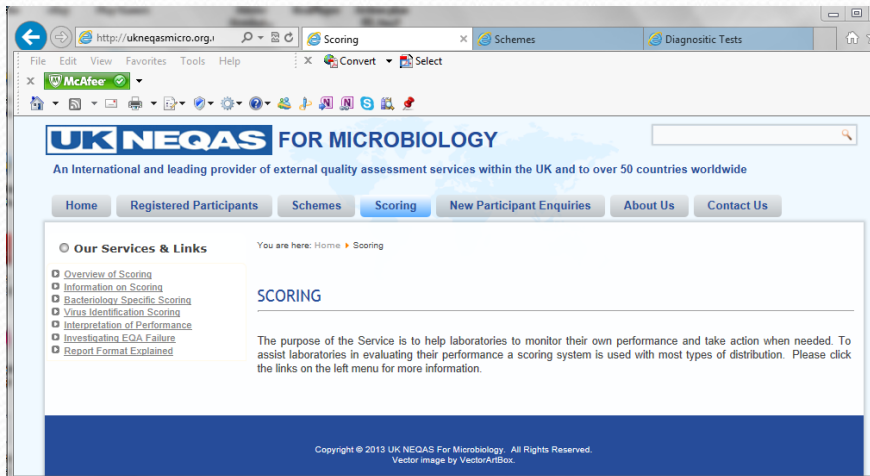
## Safety data sheets

## Parasitology web page

# UK NEQAS for Microbiology



# Scoring



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### Introduction

These notes are intended to provide participants in the UK NEQAS for Microbiology with some guidance on the investigation of failures with EQA specimens. The examples given are mostly from bacteriology, but the basic principles will apply to other areas. The author appreciates that many participants in the schemes have considerable recent experience of clinical microbiology and their laboratories have excellent quality systems. However, the appropriate response to problems revealed by EQA schemes may be outside of the experience of more recent participants, and these notes may be helpful.

External quality assessment is only one component of a quality system. Some definitions may help to define the relationships between the components.

- Quality assurance is the total process whereby the quality of laboratory reports can be guaranteed.
- Internal quality control (IQC) comprises the processes carried out to check that media, reagents and equipment are performing within specifications.
- External quality assessment (EQA) is the challenge of the effectiveness of a laboratory's quality system with specimens of known but undisclosed content.

A comprehensive quality assurance system will cover such areas as provision and control of standard operating procedures, education and training, planned maintenance and calibration of equipment, monitoring of response times. Many laboratories are formally accredited to acknowledge conformance with defined and objective quality standards such as those in ISO 17025 or ISO 15189.

Results of consistently good quality can be expected only when all the components of a quality system are in place. This seems a daunting task to those starting along the quality path, but the process is incremental, and every quality component added will help to improve the situation. However, the following limitations are self-evident:

- EQA is not a substitute for other components of the quality system, and in particular, EQA cannot replace IQC.
- EQA is of limited value without at least some of the other quality components such as adequate documentation, training of staff and IQC.
- Most failures with EQA specimens are a result of inadequacies in the other components of the quality system.
- EQA tells you that you may have a problem, it does not solve the problem.

## Investigation of EQA failure

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### Interpretation of Performance

Performance is monitored over a rolling set number of distributions (the number of distributions included in the cumulative performance analysis is scheme dependant).

In the Cumulative score information box on page one of your report you will see the text:

Your cumulative score for the specimens/test combinations that you reported was X out of a possible Y

The mean score calculated from the reports returned by 'Your Country' laboratories testing the specimen/test combinations you examined was Z with a standard deviation of K.

K is the standard deviation of the mean score for that specimen/test combination and just shows how much variability there is with the scores obtained by the laboratories.

To see how well you are doing you need to look at your cumulative score X and the mean score Z.

If X is greater than Z you are doing better than average for your country for that specimen/test combination.

Performance Rating (PR):

PR enables laboratories to quantify how much better or worse their performance is compared to other laboratories. This is a method of ranking. PR is the number of standard deviations your score lies above or below the mean performance for the laboratories in your country examining the same specimens and is calculated using the formula

$$\text{PR} = \frac{(\text{Cumulative score of lab} - \text{Mean cumulative score of all laboratories for the same specimens})}{\text{Standard deviation of mean cumulative score of all laboratories for the same specimens}}$$

Therefore you could have a record of very good performance and a high PR if the average score for laboratories is low, then in the following distribution if the average performance of laboratories is high and similar to your performance your PR may drop.

A performance rating of more than 1.96 standard deviations below the mean indicates possible poor performance.

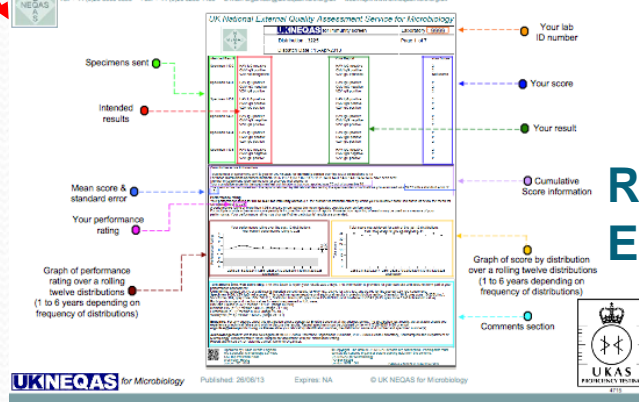
Please see page 2 for an explanation of how the scores are calculated for an individual laboratory

## Interpretation of performance

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## Report format – Explanation

# Scoring information document – index page

## Guide to schemes included in this information sheet

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Table 1	<b>General bacteriology</b> - single pathogen including fungi and yeasts	2
Table 2	<b>General bacteriology</b> - more than one pathogen	2
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Table 12	<b>Mycology</b> - list of fungi categorised as 'core', 'advanced' or 'Genus only'	8



# Scoring categories for bacterial pathogens

**Table 3.** List of bacteria and fungi distributed as pathogens and categorised as 'core' or 'advanced' organisms in accordance with the [General Bacteriology](#) scoring scheme criteria in tables 1 and 2 above.

BACTERIA and FUNGI	
Core	Advanced
<i>Aeromonas hydrophila</i>	<i>Actinomadura madurae</i>
<i>Arcanobacterium haemolyticum</i>	<i>Acinetobacter lwoffii</i>
<i>Bacteroides fragilis</i> group	<i>Acinetobacter baumannii</i>
Beta haemolytic streptococcus group A, B, C, G	<i>Actinomyces israelii</i>
<i>Candida albicans</i>	<i>Actinomyces odontolyticus</i>
<i>Citrobacter koseri</i>	<i>Agrobacter radiobacter</i>
<i>Clostridium bifermentans</i>	<i>Aspergillus flavus</i> species complex
<i>Clostridium difficile</i>	<i>Aspergillus fumigatus</i> species complex
<i>Clostridium histolyticum</i>	<i>Aspergillus niger</i> species complex
<i>Clostridium innocuum</i>	<i>Aspergillus terreus</i> species complex
<i>Clostridium perfringens</i>	<i>Bacillus cereus</i> group
<i>Clostridium septicum</i>	<i>Bacillus subtilis</i>
<i>Clostridium sporogenes</i>	<i>Bergeyella zoohelcum</i> <a href="#">[Educational]</a>
<i>Clostridium tetani</i>	<i>Bordetella parapertussis</i>
<i>Corynebacterium diphtheriae</i>	<i>Bordetella pertussis</i>
<i>Corynebacterium striatum</i>	<i>Burkholderia cepacia</i>
<i>Corynebacterium ulcerans</i>	<i>Campylobacter coli</i>
<i>Cryptococcus neoformans</i>	<i>Campylobacter jejuni</i>
<i>Enterobacter cloacae</i> complex	<i>Candida krusei</i>
<i>Enterococcus faecalis</i>	<i>Candida parapsilosis</i>
<i>Enterococcus faecium</i>	<i>Candida tropicalis</i>
<i>Enterococcus gallinarum</i>	<i>Capnocytophaga canimorsus</i>
<i>Erysipelothrix rhusiopathiae</i>	<i>Cardiobacterium hominis</i>
<i>Escherichia coli</i> O157	<i>Clostridium novyi</i>
<i>Escherichia coli</i>	<i>Corynebacterium pseudodiphtheriticum</i>
<i>Haemophilus influenzae</i>	<i>Eikenella corrodens</i>
<i>Haemophilus parainfluenzae</i>	<i>Fusobacterium necrophorum</i>

# About Us

## UK NEQAS FOR MICROBIOLOGY

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### Presentations

#### User Day 2008

- Molecular Identification of Fungi
- UK Clinical Microbiology Network
- Mycology Identification Scheme Dermatophyte Specimens
- External Quality Assessment in Mycology
- Fungal Update - Antifungal Susceptibility Testing
- A Consensus Method for Molecular Diagnostic Testing

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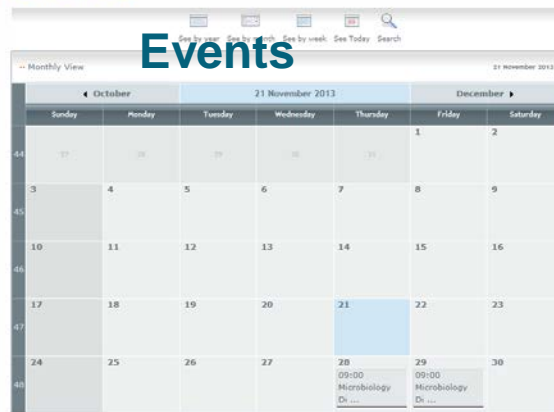
### Posters

Below are links to various poster presentations produced by UK NEQAS for Microbiology staff. Click on the title to view the poster as a PDF

- ECCMID 2013
- 2012 European Congress of Clinical Microbiology and Infection
- 2012 European Congress of Clinical Microbiology and Infection
- 2012 University of Greenwich-UK, Mumps IgG
- 2011 European Congress of Clinical Microbiology and Infection
- 2011 European Congress of Clinical Microbiology and Infection
- 2011 European Congress of Clinical Microbiology and Infection
- 2011 University of Surrey-UK, Norovirus
- 2010 Health Protection conference, HIV Point of Care Testing
- 2010 European Society for Clinical Virology, HPV
- 2010 Health Protection conference, MRSA
- 2010 Health Protection conference, Clostridium difficile
- 2010 International Papillomavirus Conference, HPV
- 2006 European Society for Clinical Virology, Rubella IgG low level
- 2006 International Congress on Infectious Diseases, General B

You are here: [Home](#) [About Us](#) [Events](#)

### Events Calendar



### ABOUT US

UK NEQAS for Microbiology is an independent non-profit organisation.

The schemes aim to offer a high quality of service to participants in different countries.

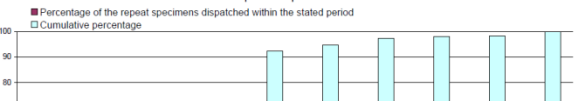
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Days from receipt of request for additional specimens to dispatch  
Performance period April 2012 to March 2013

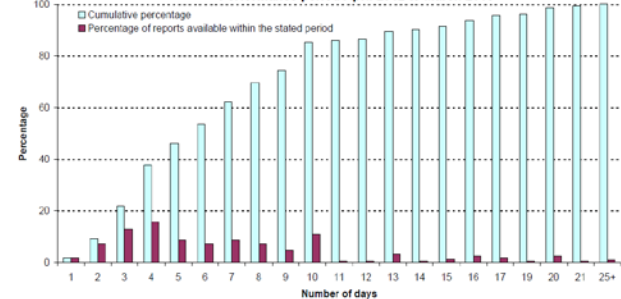


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## Key performance indicators

Days from end of distribution to availability of reports  
Performance period April 2012 to March 2013



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# Thank You