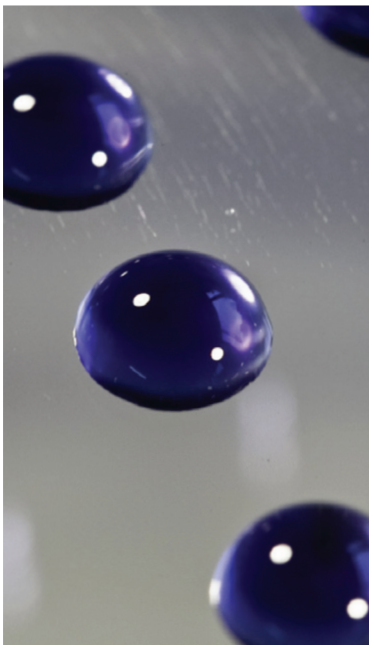
Public Health England

Protecting and improving the nation's health

External Quality Assessment Schemes for 'Hospital Waters'



External Quality Assessment Schemes for 'Hospital Waters'

Does your laboratory examine waters from a hospital environment, such as:

- water used to rinse endoscopes
- water used to prepare dialysis fluid
- hydrotherapy pool water
- tap water taken from augmented care units, such as neonatal and burns units?

If so, participation in Public Health England's (PHE) 'Hospital Waters' external quality assessment (EQA) schemes will allow you to:

- demonstrate competence with the microbiological examination of these samples
- improve understanding of the interpretation of the results obtained.

PHE provides EQA schemes specifically designed for laboratories that examine water samples. The schemes are very similar to those provided by the United Kingdom National External Quality Assessment Service (UK NEQAS). UK NEQAS specialises in schemes for laboratory medicine, whereas the PHE schemes focus on competence in testing water samples from a hospital environment; they are operated to the same rigorous quality standards as UK NEQAS.

PHE PT schemes are accredited by the United Kingdom Accreditation Service (UKAS) to the international standard ISO 17043: 2010 Conformity assessment – General requirement for proficiency testing

UKAS PROFICIENCY TESTING
0006

The PHE Hospital Water Schemes

Endoscope Rinse Water Scheme

Endoscopy is used for diagnostic and therapeutic purposes; lack of effective cleaning of endoscopes has been implicated in post-endoscopy infections, some of which may be caused by contaminated final rinse water coming into contact with the endoscope after the disinfection process.

This EQA scheme is designed for laboratories that examine samples of final rinse water used to clean endoscopes, where laboratory test procedures must demonstrate compliance with the UK government's document '*Choice framework for local policy and procedures 01-06 – decontamination of flexible endoscope: testing methods'* which recommends that total viable counts should be performed on the final rinse water.

Participate in this scheme to demonstrate your competence with

- enumerating microorganisms accurately
- detecting the presence of *Pseudomonas aeruginosa* or other predominant microorganisms including *Mycobacterium* spp.
- interpreting results correctly

Dialysis Water Scheme

Haemodialysis patients are particularly vulnerable to contaminants in the water used to prepare concentrates and dialysates. This scheme is designed for laboratories that examine water used to prepare dialysis fluids in accordance with the testing recommendations stipulated in the European Renal Best Practice Guidelines (http://ndt.oxfordjournals.org/content/17/suppl_7.toc section IV: Dialysis fluid purity).

Participate in this scheme to give you confidence in the results reported for water to be used to prepare dialysis fluids.

Hydrotherapy Pool Water Scheme

Microbiological contamination of any type of pool water can result in pathogenic microorganisms causing infections to bathers. Contaminants can be introduced into the pool by bathers, from pool filters, or occasionally from defects in the pool engineering. Hydrotherapy pools in hospitals require increased sampling frequencies because the people who use them are often immersed for long periods and may be more vulnerable to infection than the general public.

If your laboratory examines hydrotherapy pool water then you can demonstrate your competence by participating in the **PHE's Recreational and Surface Water Scheme** and selecting the **'swimming pool water'** samples.

Hospital Tap Water Scheme

Contamination of hospital tap water can pose a serious threat to patient health, particularly for those patients who are immunocompromised. We designed the Hospital Tap Water Scheme for laboratories testing water samples from augmented care units. The scheme will help to provide reassurance that results and their interpretation are robust.

We will assess the EQA results in accordance with the UK Department of Health document: Water systems; HTM 04-01: '*Addendum. P. aeruginosa - advice for augmented care units (2013)'.*

Participation in PHE EQA schemes gives confidence in test results

Scheme Features

All these specially designed schemes, unique to PHE, share the following common features:

- flexible participation – choose as many or as few of the distributions as you require to meet your own laboratory needs
- informative, educational and timely reports with dedicated technical support to help you troubleshoot any problems you encounter with the tests
- individualised performance assessment reports help you to review your own performance not only with single samples but also with multiple samples over time
- easy-to-follow statistics and scoring systems to help you to assess your own performance
- total confidentiality regarding your performance and any additional technical support or advice we provide for you

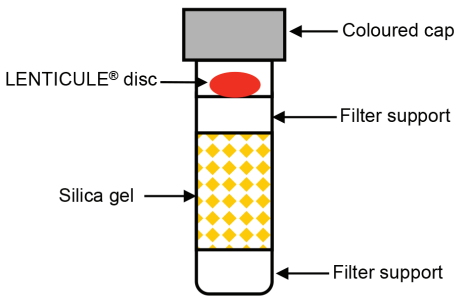
Visit our website to register to participate in these schemes:
www.gov.uk/government/collections/external-quality-assessment-eqa-and-proficiency-testing-pt-for-food-water-and-environmental-microbiology

Why choose PHE schemes?

- unique, thoughtfully designed schemes that reflect both typical and less commonly encountered situations to help microbiologists develop their knowledge and experience
- samples made with wild type strains isolated from routine water samples to reflect naturally-occurring flora
- samples in LENTICULE® disc format are simple to use, requiring minimal sample preparation
- schemes are organised by experts in water microbiology who help participating laboratories solve difficulties with their test procedures
- free of charge sample to allow laboratories to investigate anomalous results or determine the root-cause if incorrect EQA results are reported

EQA Sample Format

The EQA test samples are provided in LENTICULE® disc format. The discs consist of a certified quantity of microorganisms in a water soluble matrix. They are easy to use and ideally suited for tests where accurate enumeration is paramount. On receipt of your EQA samples you can test immediately or store the discs at -20°C.



Recommendation

Participants will gain most benefit from the EQA samples if they participate in more than one distribution of samples per year so they can assess their test performance over time, rather than on a single occasion. PHE distribution reports provide performance data that spans several distributions, helps to provide reassurance that laboratory performance is stable or improving over time. This approach helps to identify changes in performance that may result from changes in staff, training procedures, methods or equipment.

Additional Information

Find out more about other types of schemes available from PHE, why EQA is important for water microbiology, and how to gain the maximum benefits from participating in the schemes. Visit our website to download the latest brochure.
www.gov.uk/government/publications/proficiency-testing-pt-for-food-and-water-microbiology-brochure

Contact details:

Food and Environmental
Proficiency Testing Unit (FEPTU)
Public Health England
61 Colindale Avenue,
London, NW9 5EQ, UK.
Tel: +44 (0)208 327 7119
Fax: +44 (0)208 200 8264
Email: foodeqa@phe.gov.uk

Vial images provided by Zak Prior

Public Health England
Wellington House
133-155 Waterloo Road
London SE1 8UG
Tel: 020 7654 8000
www.gov.uk/phe
Twitter: @PHE_uk
Facebook: www.facebook.com/PublicHealthEngland

For queries relating to this document please contact
foodeqa@phe.gov.uk
PHE publications gateway number: 2014440
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