



Welcome to this new style newsletter from the microbiology team at the Public Health Laboratory in Birmingham (formerly Health Protection Agency Microbiology Services Laboratory, Birmingham). We welcome feedback/comments which should be sent to Savita.Gossain@phe.gov.uk

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New Laboratory Facilities at Heartlands

The official opening of our innovative new laboratory medicine facility at Heart of England NHS Foundation Trust (HEFT) took place on Monday 8 July 2013 with Lord Carter of Coles and Trust Chairman, Lord Philip Hunt unveiling a plaque to mark the occasion.



Picture courtesy of HEFT

This world class development has been jointly funded by the Heart of England NHS Foundation Trust (HEFT) and Public Health England and comprises a two storey extension to the current pathology building at the Heartlands Hospital site.

The microbiology services have been relocated to a modern, new laboratory with state of the art technology to enable efficient and rapid specimen processing leading to faster results for service users. The new molecular suite within the development will enable us to expand our molecular microbiology diagnostics and to provide a high quality, up to date service to our users.

Hepatitis E – Changing Epidemiology

Hepatitis E virus (HEV) is a significant public health problem causing large epidemics and sporadic cases in areas of endemicity, i.e. Africa, Asia and Mexico.

Until recently, hepatitis E was primarily tested for in patients who were symptomatic and returning from endemic areas. However, an increasing number of HEV cases in the developed world are now being described as 'autochthonous' (indigenous) and thought to occur as a result of the consumption of undercooked, raw or processed pig and game meat. A 12% rise in laboratory

confirmed cases of non-travel associated HEV infection was noted in England and Wales in 2010/2011. Genotype 3 viruses, similar to those found in pigs are associated with these indigenous cases, while 10% of pork sausages sampled at point of sale from UK retailers were positive for HEV, suggesting a possible route for HEV transmission.

When to consider and request HEV testing:

- hepatitis in travellers returning from endemic areas
- patients with acute hepatitis in whom hepatitis A, B and C have been excluded, irrespective of travel history
- immunocompromised individuals with signs and symptoms of hepatitis and/or with persistent rise in transaminases ($\geq 2 \times$ Upper Limit of Normal)

Laboratory diagnosis:

- Detection of Hepatitis E IgM and IgG antibodies in serum or plasma
- HEV RNA PCR is carried out in cases where serology is inconclusive and in immunocompromised patients who may be unable to mount a detectable antibody response.

Clinical management:

Due to the self-limiting nature of HEV infection, management is mainly supportive.

Hepatitis E infection – key points

Transmission	faecal-oral
Incubation period	15-60 days (average 40 days)
Infectious period	Virus shed in faeces up to 14 days after onset of jaundice
Symptoms	Children – usually asymptomatic Adults – jaundice
Pregnancy	Unusually high (20%) mortality rate in pregnancy
Vaccination	No vaccine available yet but several candidates are under development or at clinical trial stages
Genotypes	4 genotypes: Genotypes 1 & 2 found in humans only and Genotypes 3 & 4 in animals

For further information: www.gov.uk/phe

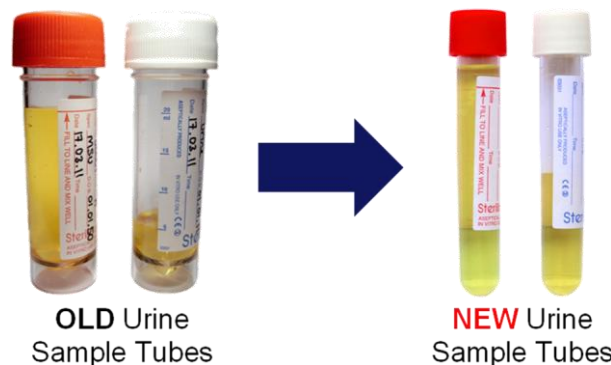
Microbiology Reports

We wish to inform our primary care users that as microbiology reports do not contain numeric data with normal ranges, (as in Biochemistry and Haematology), we are unable, for technical reasons, to highlight abnormal findings by adding an abnormal ‘flag’ to our microbiology reports. Therefore it is important that ALL microbiology results are considered, rather than looking for ‘flagged’ reports only, as would be done for other laboratory specialties

Urines for M,C&S – Change of Sample Tubes

The PHE Public Health Laboratory Birmingham are changing the type of sample tubes required for urines sent for microscopy, culture and sensitivity testing (M,C&S).

The new tubes will fit directly onto the laboratory’s new automated analysers which will speed up the processing of urines. This is part of the quality improvement and technical modernisation strategy of the laboratory. The smaller volume required to fill the new style boric acid containers should also reduce the number of samples we cannot process due to them being under-filled.



The new style of tubes will still be available in both a “red top” boric acid containing version and plain “white top” version. You can use up your stocks of the old tubes until December but from 2nd December 2013 we will stop accepting urine samples for M,C&S in the old style tubes. To order the new type of tubes, new requisition forms for Heartlands Hospital pathology stores can be downloaded from www.heftpathology.com

For urine samples for tests other than M,C&S (e.g. legionella antigen, virology, TB culture, chlamydia and gonorrhoea) please continue to use the sample containers currently required for those tests.

We have also produced a poster to help remind those who collect urine samples to fill the boric acid bottles and avoid other common sample problems and also a leaflet for patients on how to collect a mid-stream urine sample. For copies of either, please contact Hannah Tanner (Clinical Scientist): hannah.tanner@heartofengland.nhs.uk

Clinical enquiries:

Heartlands Hospital: Microbiology Consultant 0121 424 3244 Virology enquiries switchboard, bleep 2821
 Good Hope Hospital: Microbiology Consultant 07917 648 323
 Out of Hours: Switchboard 0121 424 2000

Laboratory results: For all results enquiries contact 0121 424 3256

Laboratory opening hours:

Monday to Friday 7am – 7pm Saturday, Sunday & Bank Holidays 8am – 4pm