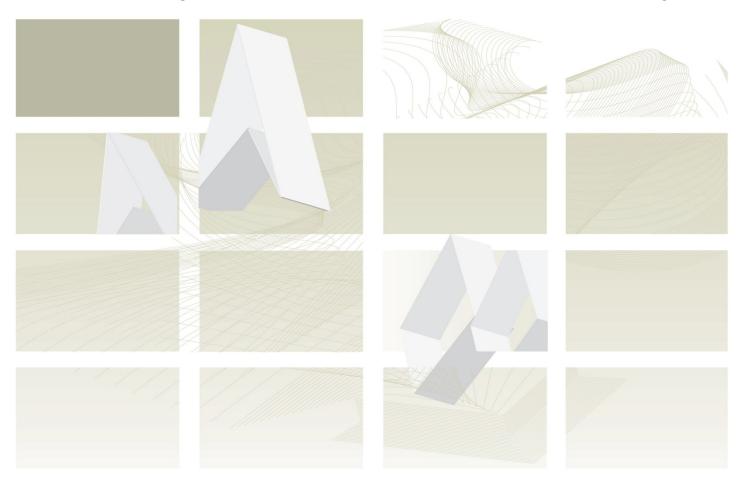




# **UK Standards for Microbiology Investigations**

Review of Users' Comments received by Working Group for Microbiology Standards in Clinical Bacteriology

B 30 Investigation of Faecal Specimens for Enteric Pathogens





Recommendations are listed as ACCEPT/ PARTIAL ACCEPT/DEFER/ NONE or PENDING

Issued by the Standards Unit, Microbiology Services, PHE

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### PROPOSAL FOR CHANGES

Comment Number	1			
Date Received	01/08/2012	Lab Name	Cornwall	
Section	Page 15	Page 15		
Comment				
Final paragraph regar	rding enteritis necrot	icans, text in brackets	s does not make sense.	
Recommended	ACCEPT			
Action	Text removed a	Text removed and updated with:		
	'associated with eating undercooked pork'.			

Comment Number	2		
Date Received	30/07/2012	Lab Name	Microbiology
Section	Introduction		

### Comment

- a. *C. difficile*, PCR only mentioned in relation to typing, should it also be mentioned as a primary test eg Cephaid.
- b. Use of mannitol selenite broth -subcultured onto XLD I thought using a second isolation plate eg salmonella chromogenic medium.

# Recommended Action

# a. PARTIAL ACCEPT

The investigation of faeces for *C. difficile* is covered in detail in B 10 this is cross referenced within the document. This document is currently under review; Department of Health (or devolved nation equivalent) guidelines should be followed for *C. difficile* testing.

Text and references added for clarity:

'A two stage testing approach is recommended by the Department of Health. Refer to current guidelines (or devolved nation equivalent).'

#### b. **NONE**

Document includes the following text under the media key:

'Chromogenic identification plates are commercially available and have been evaluated for certain clinical samples. The use of chromogenic agar may be of value in the isolation and confirmation of pathogens (Salmonella species, Shigella species, E. coli (EPEC, EHEC (VETEC/STEC) etc) from faeces by reducing false positive growth. Chromogenic agar should be

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validated prior to use.'

Comment Number	3		
Date Received	30/07/2012	Lab Name	Microbiology Department, Southwest Pathology Services, Musgrove Park Hospital
Section	Amendments Table		•

# Comment

I note in the amendments table, that the proposed SMI states that it has been updated to include 9 EIA tests for the investigation of *C. difficile*. However, there is no other reference in the SMI, beyond a link to the C. difficile isolation SMI.

Recommended Action	PARTIAL ACCEPT
	The amendment table referred to in this comment is from the previous issue (2010).
	For information regarding the testing of faeces for <i>C. difficile</i> , refer to B 10 Investigation of faeces for <i>C. difficile</i> (cross referenced within the document).
	This document is currently under review; Department of Health (or devolved nation equivalent) guidelines should be followed for <i>C. difficile</i> testing.
	Text added for clarity:
	'A two stage testing approach is recommended by the Department of Health. Refer to current guidelines (or devolved nation equivalent).'

Comment Number	4		
Date Received	01/08/2012	Lab Name	Scottish Salmonella, Shigella & C.difficile Reference Laboratory
Section	Section 2.8 Referral to reference laboratories		
Comment	1		

The link to user manuals and request forms are only for PHE (formerly HPA). If this is intended to be a UK standard method, there should be a link to the Scottish Reference laboratories. The relevant link is: - http://www.hps.scot.nhs.uk/reflab/index.aspx.

Recommended	ACCEPT
Action	

Text and links updated:

Contact appropriate reference laboratory for information on the tests available, turn around times, transport procedure and any other requirements for sample submission. Information regarding specialist and reference laboratories is available via the following websites:

HPA - Specialist and Reference Microbiology Tests and Services

Health Protection Scotland – Reference Laboratories

Health Protection Scotland – Reference Laboratories

Belfast Health and Social Care Trust – Laboratory and Mortuary Services

Comment Number	5		
Date Received	10/09/2012	Lab Name	Public Health Wales Microbiology Aberystwyth
Section	Processing: Vibrio		

# Comment

The incubation parameters for alkaline peptone water & vibrios are 35-37°C, air, and 5-8hr.

There are no references that specifically apply in the SMI.

In practice fitting this incubation into routine lab procedures is difficult, and some labs choose to incubate at ambient temp overnight, and then subculture. There are a few papers I have found alluding to the acceptability of this practice.

However, I was wondering if you looked at this when the initial SOP was written, and if you used any references which suggested that 35-37°C, air, 5-8hr was the preferred option.

Recommended	PARTIAL ACCEPT	
Action	There is one reference in the document which specifies incubation conditions for <i>Vibrio cholerae</i> :	
	Sack, D. A., et al. "Cholera." Lancet 363.9404 (2004): 223-33.	
	This states that specimens should be inoculated into alkaline peptone water and subcultured after 6-12hr.	
	Incubation temperature, conditions and time in the SMI were agreed by the Bacteriology Working group as 'best laboratory practice'.	
	Table updated for clarity (inline with previous issued version). Vibrio enrichment only to be carried out in outbreak situation or when advised be a senior microbiologist.	
	WHO recommends 6-8hr incubation; if the broth cannot be sub cultured after 6-8hr, sub the broth at 18hr to fresh APW and	

then subculture to TCBS after 6-8hr.

WHO. Manual for the laboratory identification and antimicrobial susceptibility testing of bacterial pathogens of public health concern in the developing world. 2003

Comment Number	6		
Date Received	23/07/2012	Lab Name	Public Health Wales Microbiology ABM, Singleton Hospital, Swansea
Section	Campylobacter		

## Comment

Regarding incubation of Campylobacter plates (CCDA): E&Os recommended incubation is at 37°C not 42°C.

This is backed up by the Oxoid literature, and PHE (formerly HPA) LGP also said that they would use CCDA at 37°C.

Therefore the SMI should be amended as it states "Campylobacter Selective Agar at 39-42°C.

# Recommended Action

### NONE

The SMI recommends incubation at 39-42°C for 40-48hrs. The rate of isolation of *Campylobacter* species is higher and the growth of competing flora is less when an incubation temperature of 42°C is used in preference to 37°C.

PHE (formerly HPA) LGP does not have an incubator at 42°C and they are not accredited to test stool samples. The laboratory does not do primary isolation, and isolates are usually received directly from diagnostic labs. LGP are able to grow these isolates at 37°C, however, for primary isolation 42°C is recommended.

Gee B, Nye KJ, Fallon D, Messer S, Howe S, Warren RE, et al. Effect of incubation temperature on the isolation of thermophilic species of Campylobacter from faeces. Commun Dis Public Health 2002;5:282-4.

Nye KJ, Turner T, Coleman DJ, Fallon D, Gee B, Messer S, et al. A comparison of the isolation rates of Salmonella and thermophilic Campylobacter species after direct inoculation of media with a dilute faecal suspension and undiluted faecal material. J Med Microbiol 2001;50:659-62.

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