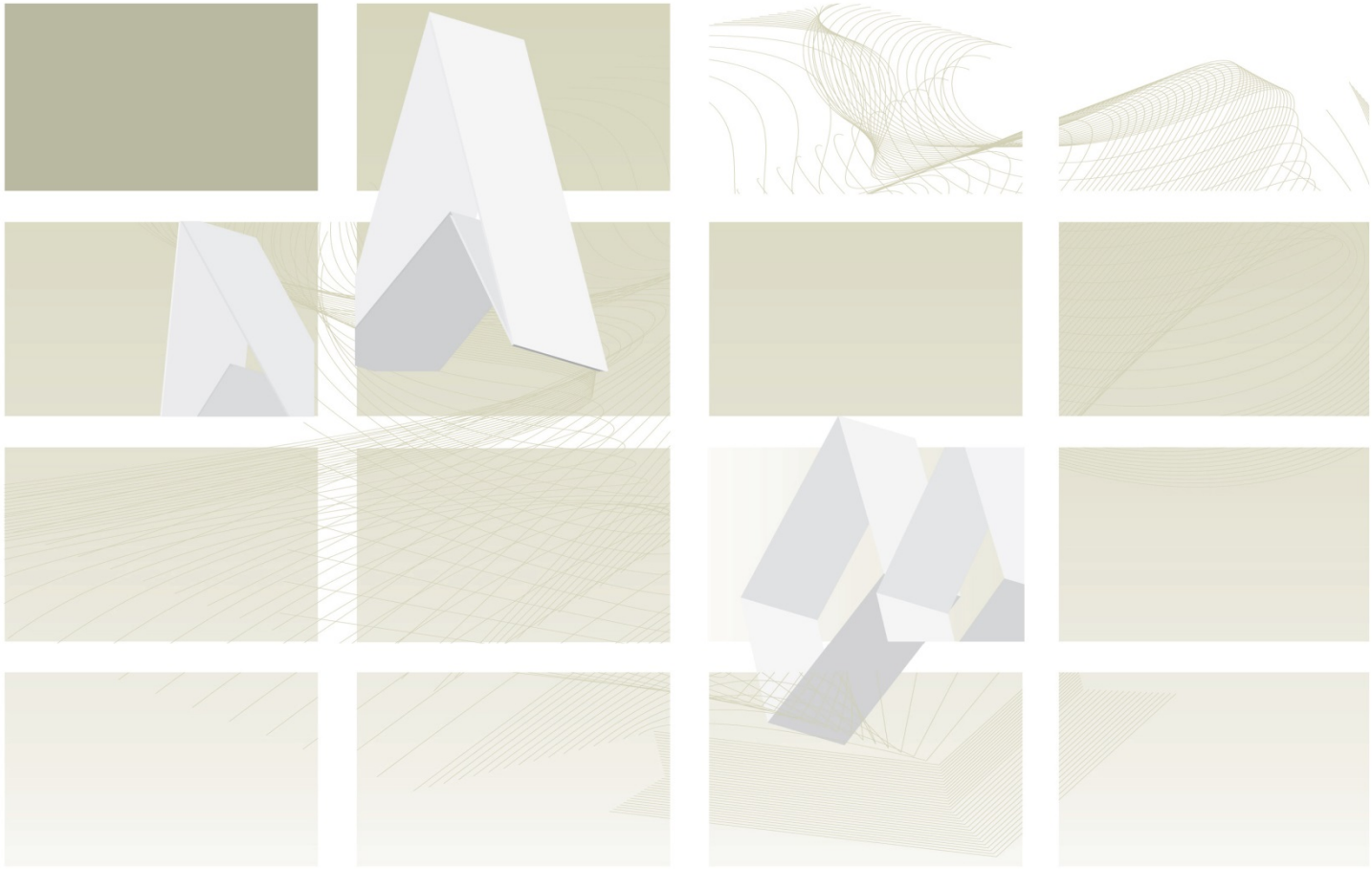
Public Health England

NHS

UK Standards for Microbiology Investigations

Review of users' comments received by Working group for microbiology standards in clinical bacteriology

B 31 Investigation of specimens other than blood for parasites



NICE accredited www.nice.org.uk/accreditation

"NICE has renewed accreditation of the process used by **Public Health England (PHE)** to produce **UK Standards for Microbiology Investigations**. The renewed accreditation is valid until **30 June 2021** and applies to guidance produced using the processes described in **UK standards for microbiology investigations (UKSMIs) Development process, S9365', 2016**. The original accreditation term began in **July 2011.**"

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

Consultation: 21/09/2016 – 03/10/2016

Version of document consulted on: B 31dzm+

Proposal for changes

Comment number	1		
Date received	29/09/2016	**Lab name**	Scottish Parasite Diagnostic and Reference Laboratory
Section	a. page 10, Heading Protozoa , subheading Intestinal amoeba b. Page 10, Heading Protozoa subheading Free-living amoebae c. page 11 Flagellates d. page 12 *Trichomonas vaginalis* e. Page 12 *Cyclospora* f. page 19 *Schistosoma*		
Comment			
a. Reporting cysts as *E. histolytica* / *E. dispar* causes confusion for users resulting in a number of queries asking for the results to be explained. Instead, as many laboratories detect these organisms using microscopy, they should perform antigen or molecular detection locally, or be advised to forward to appropriate specialist centres for these tests if these cysts are present by microscopy to distinguish between them. b. (i) A national molecular service is now used for amoebic detection in most Scottish health boards. (ii) No mention of corneal tissue (scrapings) being used for *Acanthamoeba* detection. c. After a recent audit in Scotland, most laboratories use microscopy, not EIA for Giardia. Where possible, perform microscopy using both a concentrated and an unconcentrated sample as the number of cysts can be significantly reduced in certain samples post-concentration. d. Molecular testing also available for TV. e. Worth stating that recent outbreaks in UK travellers have been associated with travel to Mexico - this will ensure laboratory staff know to search for this pathogen in samples stating a Mexico travel history. f. In Scotland, laboratory diagnosis is made by first testing sera for the presence of antibodies taken 8 weeks after last exposure to fresh water. Only if positive are faeces, urine or semen requested.		
Evidence			
https://www.gov.uk/government/news/cyclospora-outbreak-linked-to-mexico			

Health benefits	
Treatment would be prevented if laboratories reported *E. dispar* instead of *E. histolytica* / *E.dispar* using appropriate tests to distinguish between the two.	
Recommended action	a. **ACCEPT** This has been updated accordingly. b. (i) **NONE** This has already been added in the document. (ii) **NONE** The information on corneal tissue (scrapings) being used for *Acanthamoeba* detection has been moved into the SMI B 2: Investigation of bacterial eye infections document. c. **ACCEPT** This has been updated accordingly. d. **ACCEPT** This has been updated accordingly. e. **ACCEPT** This section will be redrafted and updated accordingly. f. **NONE** Not relevant to all samples.

Comment number	2		
Date received	03/10/2016	**Lab name**	Cryptosporidium Reference Unit
Section	a. P12 b. P12 c. P13 d. P13 e. P22 f. Section 4.1 g. Appendix 2 h. Appendix 3		
Comment			
a. Following extensive review of molecular and biological data, *Cryptosporidium* has been formally transferred from the Coccidia, to a new subclass with gregarine parasites, Cryptogregaria. b. The slash needs to be removed between microscopy and stains in the following			

sentence. Primary laboratory diagnosis is based on antigen detection by enzyme immunoassay followed by confirmation using microscopy/stains or DNA detection by PCR. c. This is not an accurate picture and needs to be re-written: *Cyclospora* infection occurs in many countries and may be associated with drinking or bathing in contaminated water. Large outbreaks affecting travellers and foreign residents have being known to occur during the rainy season in South Asia and North America[15,16]. Please contact me if you want me to help re-write it! d. This gives the impression it is routine. It is not and there are difficulties. Whole genome sequencing has been used to detect and subtype *Cyclospora cayetanensis* especially in outbreak investigations[20]. There are multi-locus schemes too but not formal ones. e. Outdated wording in this sentence - use in humans or people not man! Cysticercosis (this is tissue infection with cysticerci of *T. solium*) can develop in man by autoinfection from the adult worm. Involvement of the central nervous system is called neurocysticercosis[54]. f. All faecal samples from symptomatic individuals should be stained for *Cryptosporidium* oocysts[81]. Replace stained with tested. g. Columns are out of alignment. When it says worldwide why is United States also mentioned? Isn't this included in worldwide? h. Appendix 6: Oocysts of coccidian, not coccidian.	
Evidence	
a. Cavalier-Smith, T., 2014. Gregarine site-heterogeneous 18S rDNA trees, revision of gregarine higher classification, and the evolutionary diversification of Sporozoa. Eur. J. Protistol. 50 (5), 472e495. b. Chalmers RM, Atchison C, Barlow K, Young Y, Roche A, Manuel R. An audit of the laboratory diagnosis of cryptosporidiosis in England and Wales. Journal of Medical Microbiology 2015 64: 688-693 c. Nichols GL, Freedman J, Pollock KG, Rumble C, Chalmers RM, Chiodini P, Hawkins G, Alexander CL, Godbole G, Williams C, Kirkbride HA, Hamel M, Hawker JI. Cyclospora infection linked to travel to Mexico, June to September 2015. Euro Surveill. 2015;20(43):pii=30048. DOI: http://dx.doi.org/10.2807/1560-7917.ES.2015.20.43.30048	
Recommended action	a. **ACCEPT** This has been updated accordingly. b. **ACCEPT** The slash has been removed and a comma added instead. c. **ACCEPT** This section will be redrafted and updated accordingly. d. **ACCEPT** This has been rephrased to acknowledge that routine laboratories do not currently use this cutting edge

	technique. e. **ACCEPT** This has been updated accordingly. f. **ACCEPT** This has been updated accordingly. g. **ACCEPT** The columns have been realigned and updated accordingly. United States have also been removed. h. **ACCEPT** This has been updated accordingly. This reference (by *Chalmers RM, Atchison C, Barlow K, Young Y, Roche A, Manuel R. An audit of the laboratory diagnosis of cryptosporidiosis in England and Wales. Journal of medical microbiology 2015; 64:688-93*) is already in the document. The other two references mentioned above (a and c) have been accepted and added within the document where appropriate.

Comments received outside of consultation

Comment number	1		
Date received	07/10/2016	**Lab name**	Royal Cornwall Hospitals Trust
Section	All		
Comment			
We have no formal comments, apart from formatting and grammatical comments, which I assume you will pick up (for example, pp13 the *Sarcocystis* paragraph mentions eating undercooked meat or infected cats).			
Recommended action	**ACCEPT** This has been amended and updated accordingly.		

Comment number	2		
Date received	13/10/2016	**Lab name**	Reference Microbiology Services
Section	All		
Comment			

Reference Microbiology Services have sent track changes for this document.	
Recommended action	**ACCEPT** The changes have been accepted and updated accordingly where necessary.

Comment number	3		
Date received	13/10/2016	**Lab name**	Hospital for Tropical Diseases and PHE National Parasitology Reference Laboratory
Section	All		
Comment			
HTD and PHE National Parasitology Reference Laboratory have sent track changes for this document.			
Recommended action	**ACCEPT** The changes have been accepted and updated accordingly where necessary.		

Respondents indicating they were happy with the contents of the document

Overall number of comments: 4			
Date received	03/10/2016	**Lab name**	Member of the public
Date received	03/10/2016	**Lab name**	Member of the public
Date received	03/10/2016	**Lab name**	Member of the public
Date received	03/10/2016	**Professional body**	Healthcare Infection Society