Public Health England

NHS

UK Standards for Microbiology Investigations

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

B 29 Investigation of Specimens for Screening for MRSA

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

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1st Consultation 21.09.12 – 14.12.12

PROPOSAL FOR CHANGES

Comment Number	1		
Date Received	17/10/2012	**Lab Name**	Newcastle upon Tyne Hospitals NHS Foundation Trust
Section	Guidelines for control of MRSA		
Comment			
Page 9 Guidelines for the control of MRSA 'guidelines recommend a risk assessed approach and advise Infection Control Committees to adapt them locally when designing infection control policies' " this particular statement is referenced to publication from 2006. Surely the Saving Lives summary of best practice has moved on the last 6 years. Shouldn't this at least be using the Department of Health MRSA screening operational guidance published in 2008? Or would it not be more appropriate to wait for the results of the 'National One Week MRSA audit before issuing new testing guidance? Has an evidence based decision been made as to whether targeted screening is more appropriate than a universal approach? The audit results are nearly a year over due; it would seem sensible to urgently review the outcomes to allow inclusion in the new UK standards.			
Recommended Action	**NONE** We are consistent with the savings lives document and a timeline for the release of the audit results is not known.		

Comment Number	2		
Date Received	09/10/2012	**Lab Name**	Freeman Hospital Microbiology Department
Section	a. Page 9 b. Page 10 c. Page 13		
Comment			
a. On page 9 it is stated that Enrichment broth (nutrient broth or cooked meat medium) containing 7% sodium chloride (NaCl) was recommended by a HIS/BSAC/ICNA working party (38). Enrichment broth containing 7% NaCl may inhibit the growth of some isolates of MRSA if present in small numbers (39)'. I am surprised that the new recommendations advocate the use of 7% salt as I believe this is much too high. The broth is to be cultured on chromogenic media most of which have excellent selective properties and negate the requirement for such a high salt concentration. The authors have noted the publication of Jones et al. (39) that reports clear inhibition of EMRSA 16 by 7 % salt. By its nature, enrichment culture is relied upon for recovery of small numbers of MRSA -I can find no evidence to support the use of 7% salt when subculture on chromogenic			

media is used, but evidence to the contrary is documented (39). 2.5% salt would be a suitable concentration. b. The recommendations state that 'Molecular techniques for the detection of mecA are viewed as the ''gold standard'' for determining resistance but the methods are still expensive when compared to culture but the clinical benefits for knowing the result sooner may outweigh this cost' By comparing to culture, this statement may be interpreted as inferring that molecular techniques serve as a 'gold standard' for processing specimens " which would be highly contentious. It is also stated that: 'Variations in the conserved regions of the SCCmec elements need to be monitored as some commercial kits fail to detect MRSA when there are polymorphism in this area'. It would be interesting for readers to know how such tests perform with mecC. Moreover, although potential problems with sensitivity are mentioned, the potential for false positive results is not discussed (e.g. due to deletion of mecA from the SCCmec cassette). Such false positives are not uncommon (e.g. J Clin Microbiol. 2010 Oct;48(10):3525-31). c. On page 13 it is stated that 'MRSA should not be reported as susceptible to any currently available Î²-lactams (65)' with an accompanying reference from 1961. Both ceftobiprole and ceftaroline have activity against MRSA and are licensed for use in some countries.	
Recommended Action	a. **AGREE** The document will be amended to recommend 2.5%. b. **PARTIALLY ACCEPT** The word gold standard will be taken out. We are not in a position to comment on false positives as this should be core knowledge. c. **ACCEPT** Sentence will be amended and supported with a more recent reference.

2nd Consultation 18.03.13 – 07.06.13

PROPOSAL FOR CHANGES

Comment Number	1		
Date Received	05/04/2013	**Lab Name**	Microbiology Dept, Freeman Hospital, Newcastle Hosp Trust
Section	2.7 and 4		
The recommended enrichment broth for this document has been changed from 7% to 2.5% when sub culturing to chromogenic agar, do you have any views on this?			
a) No specific comments regarding the use of reduced salt content apart from that the table in 2.5.3 does not match the information given in Appendix 2 (flowchart). 2.5.2 states use 2.5%. Appendix 2 states use 7% but reduce depending on local			

strains.
A sentence has been inserted to advise that MRSA should not be reported as susceptible to any currently available B-lactams. Have you any thoughts on this?
b) What about ceftaroline?
Comment
c) 2.7 Many microbiology laboratories are now using EUCAST; surely there should be a reference to these guidelines as well as BSAC d) 4 Specimens that are being investigated for the presence of MRSA colonisation will not need to be notified to the HPA hence this whole section is irrevelent in this particular SMI
Evidence
Financial barriers
No

Recommended Action	a) **ACCEPT** The Visio diagram has been amended. b) **NONE** The section is generic. c) **NONE** At the current time UK SMIs refer to BSAC. d) **NONE** This is a generic section that is present in all SMIs.

Comment Number	2		
Date Received	16/04/2013	**Lab Name**	Glasgow Royal Infirmary
Section	1.3		
The recommended enrichment broth for this document has been changed from 7% to 2.5% when sub culturing to chromogenic agar, do you have any views on this?			
A sentence has been inserted to advise that MRSA should not be reported as susceptible to any currently available B-lactams. Have you any thoughts on this?			
Comment			

I haven't read the reference to dry swab use but it does seem to fly in the face of current practices about specimen transport. Furthermore the advent of elution type swabs is well documented.
Evidence
Comparison of the Copan ESwab System with Two Amies Agar Swab Transport Systems for Maintenance of Microorganism Viability Kenneth G. Van Horn, Carol D. Audette, Denise Sebeck, and Kelly A. Tucker Evaluation of the Copan E Swab transport system for the detection of methicillin-resistant Staphylococcus aureusias laboratory and clinical study Annick Smismansa, Jan Verhaegenb, Annette Schuermansc, Johan Fransa.
Financial barriers
Perhaps, however arguable with improved sample quality.

Recommended Action	**ACCEPT** The section will be amended to state just swabs; this will cover all new swabs that become available. Current suitable swabs will be referenced.

Comment Number	3		
Date Received	29/04/2013	**Lab Name**	North Middlesex Hospital University Trust
Section	Pages 12 and 19		
The recommended enrichment broth for this document has been changed from 7% to 2.5% when sub culturing to chromogenic agar, do you have any views on this?			
No thoughts, as we do not enrich our cultures but it would be taken into consideration should we start to enrich.			
A sentence has been inserted to advise that MRSA should not be reported as susceptible to any currently available B-lactams. Have you any thoughts on this?			
Comment			
On page 12, para 4, it is stated ....for this reason 2.5% Nacl is recommended in this document which has been shown to work well..... However, on page 19, the flow diagram gives the Concentration of Nacl as 7%			
Evidence			
see pages 12 and 19			
Financial barriers			

Not for culture. PCR is currently too expensive for the Trust.	
Recommended Action	**ACCEPT** The flowchart has been amended.

Comment Number	4		
Date Received	29/05/2013	**Lab Name**	Medical Microbiology Aberdeen Royal Infirmary
Section	Page 10		
The recommended enrichment broth for this document has been changed from 7% to 2.5% when sub culturing to chromogenic agar, do you have any views on this?			
A sentence has been inserted to advise that MRSA should not be reported as susceptible to any currently available B-lactams. Have you any thoughts on this?			
Comment			
a) Several short versions used which are not expanded anywhere I can see .e.g. MSA HIS BSAC ICNA - These may not be obvious to everyone. b) Also the sentence beginning Molecular techniques on page 10 doesn't make sense.			
Evidence			
Financial barriers			
Recommended Action	a) **ACCEPT** This has been clarified within the document. b) **ACCEPT** This sentence has been amended.		

RESPONDENTS INDICATING THEY WERE HAPPY WITH THE CONTENTS OF THE DOCUMENT

Overall number of comments: 3			
Date Received	21/05/2013	**Lab Name**	Dept of Clinical Microbiology, Royal Cornwall Hospital
Date Received	21/05/2013	**Lab Name**	Sunderland
Date Received	29/05/2013	**Lab Name**	Golden Jubilee National Hospital