

Mycobacterium culture

Laboratory :

Distribution: 4277

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Dispatch Date: 09-Apr-2018

Intended Result		Your Report	Your Score
Specimen 4368	Mycobacterium tuberculosis	Mycobacterium tuberculosis	2
Specimen 4369	Mycobacterium fortuitum	Mycobacterium fortuitum	2
Specimen 4370	Negative result	Negative result	2
Specimen 4371	Mycobacterium tuberculosis	Mycobacterium tuberculosis	2

## **Cumulative score information**

Total number of specimens sent to you for **UK NEQAS** for **Mycobacterium culture** over the last 3 distributions is 12 For these distributions specimen numbers 3972 3973 3974 3975 4107 4108 4109 4110 4368 4369 4370 4371 have been analysed and scored.

Number of reports returned and scored 12

Number of specimens reported as not examined (not scored) 0

Number of specimens received too late for analysis (not scored) 0

Number of specimens for which no report was received (not scored) 0

Your cumulative score for these specimens was 24 out of a possible total of 24

The mean score calculated from the reports returned by UK laboratories was 23.07 with a standard error of 1.89

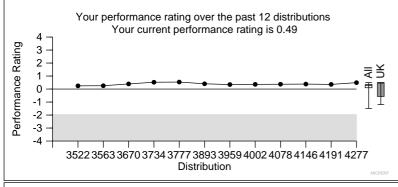
Performance rating

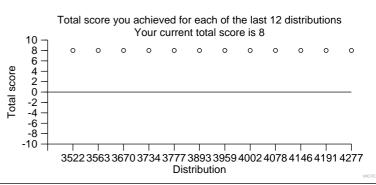
Your performance rating for **UK NEQAS for Mycobacterium culture** (i.e. the number of standard errors by which your cumulative score lies above or below the mean for **UK** laboratories) is **0.49** 

A performance rating of more than 1.96 standard errors below the mean indicates possible poor performance.

Your performance rating may change if other participants' results are amended.

No score penalty is incurred for non return of reports. However non return of results may be used as a measure of poor performance.





Turn around time: The time taken to report your results was 9 days. This information is provided for your own use and does not form part of your performance assessment.

## REPORT FORMAT

Participants results are analysed and presented by method. Data for each specimen is displayed in a series of histograms where the first one is a summary of the most popular methods reported by participants. Methods used by your laboratory are marked with an arrow. Participants are scored on their overall report for each specimen and this information is presented in a table adjacent to the first histogram in each series of results. Subsequent histograms in each series present information by method type. Participants are encouraged to record all their methods and be specific with method information in particular for solid culture media as we feel that the data could be combined further to reduce duplication.

## COMMENT

[Key: MOTT = mycobacterium other than tuberculosis, MTBC = M. tuberculosis complex]

Specimen 4368 and 4371: These specimens contained MTBC. An excellent performance with 99.6% (254/255) and 98.0% (250/255) of participants achieving a fully correct score respectively.

**Specimen 4369:** This specimen contained *Mycobacterium fortuitum* group. A good performance with 90.0% (226/251) of participants achieving a fully correct score.

Specimen 4370: This specimen was negative for mycobacteria. A very good performance with 97.2% (245/252) of participants achieving a fully correct score.

Enquiries: For repeat specimens please order using the web form or e-mail organiser@ukneqasmicro.org.uk stating your laboratory identification number, the distribution name and number, and specimen numbers.

Any technical enquiries related to this distribution, please contact Shila Seaton using the email address above. In-house test results are available should you

experience a technical failure and wish to discuss the results.

**Acknowledgements:** We thank colleagues from Public Health Wales Mycobacterium Reference Unit, Cardiff and the National Mycobacterium Reference Service-South (NMRS-South), National Infection Service (NIS), Public Health England (PHE) for their kind assistance with provision of mycobacterial isolates, pre-distribution characterisations and confirmatory testing.

London NW9 1GH

Report authorised by: Dr Sanjiv Rughooputh, Director





Acid media

Unspecified

NaOH+NALC

Phosphate buffer

NaOH

Unexpected pathogen

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30

60

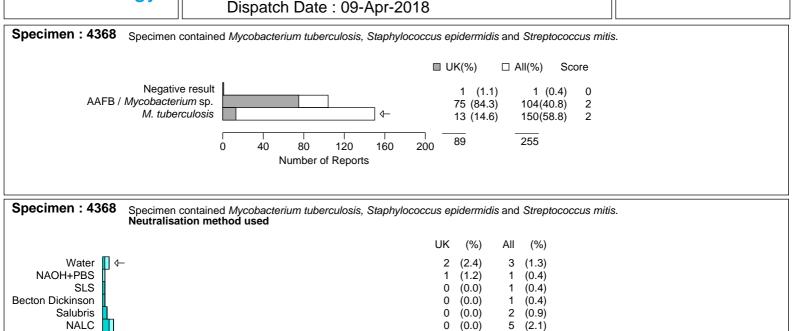
Number of Reports

Negative result AAFB / Mycobacterium sp.

90

120

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2 (2.4)

4 (4.7)

150

(1.2)1

M. tuberculosis Incorrect Mycobacterium

15 (17.6)

60 (70.6)

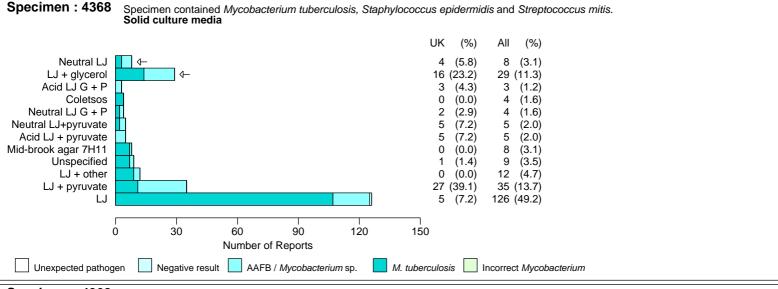
8 (3.4)

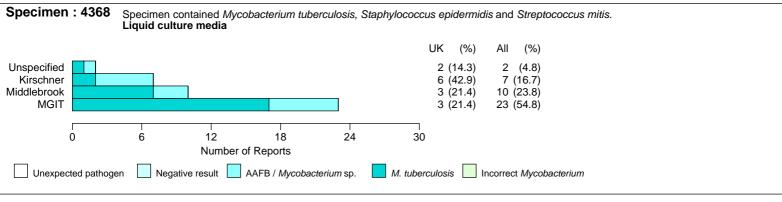
10 (4.3)

20 (8.6)

69 (29.6)

113 (48.5)





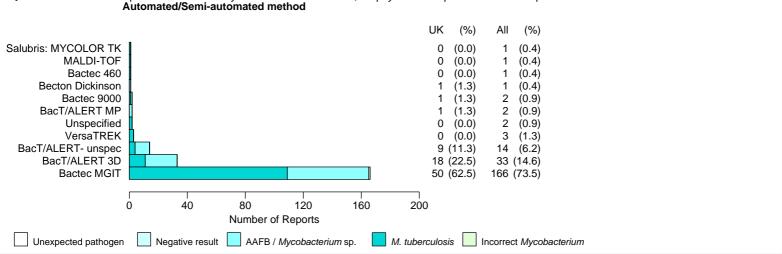


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Dispatch Date: 09-Apr-2018 Specimen contained Mycobacterium tuberculosis, Staphylococcus epidermidis and Streptococcus mitis. Liquid culture media - automated Specimen: 4368 UK (%) ΑII (%) Myco/F-Sputa (1.7)(0.6)1 Bactec unspecified 0 (0.0)(0.6)Middlebrook (3.1)(1.7)5 1 Unspecified (1.7)6 (3.7)BacT/ALERT MP 17 (28.8) 31 (19.0) MGIT 39 (66.1) 119 (73.0) 0 30 60 90 120 150 Number of Reports Negative result AAFB / Mycobacterium sp. Unexpected pathogen M. tuberculosis Incorrect Mycobacterium Specimen: 4368 Specimen contained Mycobacterium tuberculosis, Staphylococcus epidermidis and Streptococcus mitis. Automated/Semi-automated method UK (%) ΑII (%) Salubris: MYCOLOR TK 0 (0.0)(0.4)n

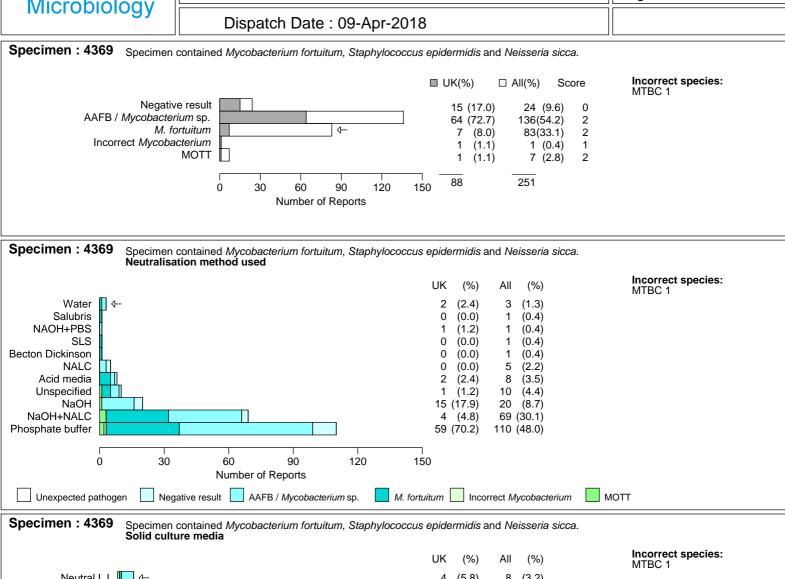


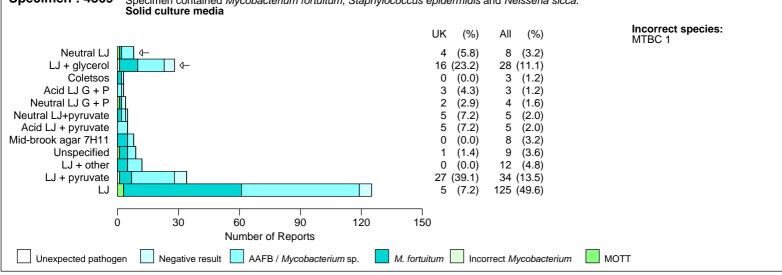


Mycobacterium culture

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London NW9 1GH



Mycobacterium culture Laboratory :

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Dispatch Date: 09-Apr-2018 Specimen: 4369 Specimen contained Mycobacterium fortuitum, Staphylococcus epidermidis and Neisseria sicca. Liquid culture media Incorrect species: UK (%) ΑII (%) MTBC 1 Unspecified 2 (14.3) 2 (4.8)Kirschner 6 (42.9) 7 (16.7) Middlebrook 3 (21.4) 10 (23.8) MGIT 3 (21.4) 23 (54.8) 0 6 12 18 24 30 Number of Reports M. fortuitum Incorrect Mycobacterium Negative result AAFB / Mycobacterium sp. Specimen: 4369 Specimen contained Mycobacterium fortuitum, Staphylococcus epidermidis and Neisseria sicca. Liquid culture media - automated Incorrect species: UK (%) ΑII (%) MTBC 1 0 (0.0)(0.6)Bactec unspecified 1 Middlebrook (1.7)5 (3.1)Unspecified (3.8)(1.7)6 BacT/ALERT MP 17 (29.3) 30 (18.9) **MGIT** 39 (67.2) 117 (73.6) 30 60 90 120 150 Number of Reports M. fortuitum Incorrect Mycobacterium Unexpected pathogen Negative result AAFB / Mycobacterium sp. Specimen: 4369 Specimen contained Mycobacterium fortuitum, Staphylococcus epidermidis and Neisseria sicca. Automated/Semi-automated method Incorrect species: UK (%) ΑII (%)MTBC 1 Salubris: MYCOLOR TK (0.0)(0.4)**MALDI-TOF** 0 (0.0)(0.4)Bactec 460 0 (0.0)(0.4)Becton Dickinson (1.3)(0.4)Bactec 9000 (1.3)2 (0.9)BacT/ALERT MP (1.3)2 (0.9)Unspecified 0 (0.0)2 (0.9)VersaTREK 0 3 (1.3)(0.0)BacT/ALERT- unspec 9 (11.4) 14 (6.3)BacT/ALERT 3D 18 (22.8) 33 (14.8) Bactec MGIT 49 (62.0) 163 (73.1)



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Unexpected pathogen

40

80

Negative result AAFB / Mycobacterium sp.

Number of Reports

120

160

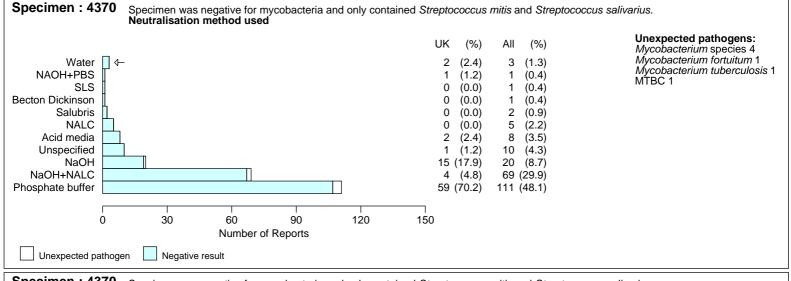
200

M. fortuitum Incorrect Mycobacterium



Mycobacterium culture Laboratory: Distribution: 4277 Page 6 of 10 Dispatch Date: 09-Apr-2018

Specimen: 4370 Specimen was negative for mycobacteria and only contained Streptococcus mitis and Streptococcus salivarius. Unexpected pathogens: ■ UK(%) □ AII(%) Score Mycobacterium species 4 Mycobacterium fortuitum 1 Unexpected pathogen (4.6)7 (2.8) Mycobacterium tuberculosis 1 Negative result 83 (95.4) 245(97.2) MTBC 1 87 252 200 0 50 100 150 250 Number of Reports



Specimen: 4370 Specimen was negative for mycobacteria and only contained Streptococcus mitis and Streptococcus salivarius. Solid culture media Unexpected pathogens: UK (%) ΑII (%) Mycobacterium species 4 Mycobacterium fortuitum 1 Neutral LJ 4 (5.8)8 (3.1)Mycobacterium tuberculosis 1 16 (23.2) LJ + glycerol 29 (11.4) Acid LJ G + P 3 (4.3)3 (1.2)Coletsos (0.0)(1.6)Neutral LJ G + P 2 (2.9)4 (1.6)5 Neutral LJ+pyruvate (7.2)5 (2.0)Acid LJ + pyruvate 5 (7.2)(2.0)Mid-brook agar 7H11 0 (0.0)8 (3.1)Unspecified 1 (1.4)8 (3.1)LJ + other 0 (0.0)12 (4.7)LJ + pyruvate 27 (39.1) 35 (13.7) IJ5 (7.2)126 (49.4) 0 30 60 90 120 150 Number of Reports Unexpected pathogen Negative result

Specimen: 4370 Specimen was negative for mycobacteria and only contained Streptococcus mitis and Streptococcus salivarius. Liquid culture media Unexpected pathogens: UK ΑII (%) (%) Mycobacterium species 4 Mycobacterium fortuitum 1 Unspecified 2 (14.3) (4.8)Mycobacterium tuberculosis 1 Kirschner 6 (42.9) 7 (16.7) MTBC 1 Middlebrook 3 (21.4) 10 (23.8) MGIT 3 (21.4) 23 (54.8) 12 24 30 18 Number of Reports \_\_\_ Unexpected pathogen Negative result





\_\_\_ Unexpected pathogen

Negative result

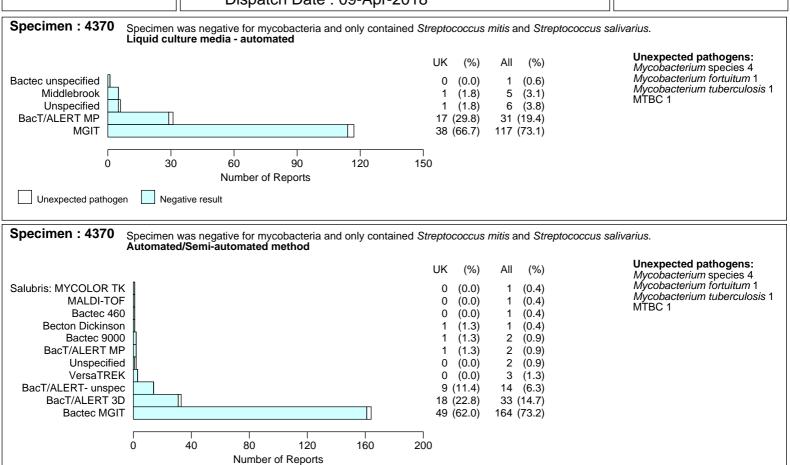
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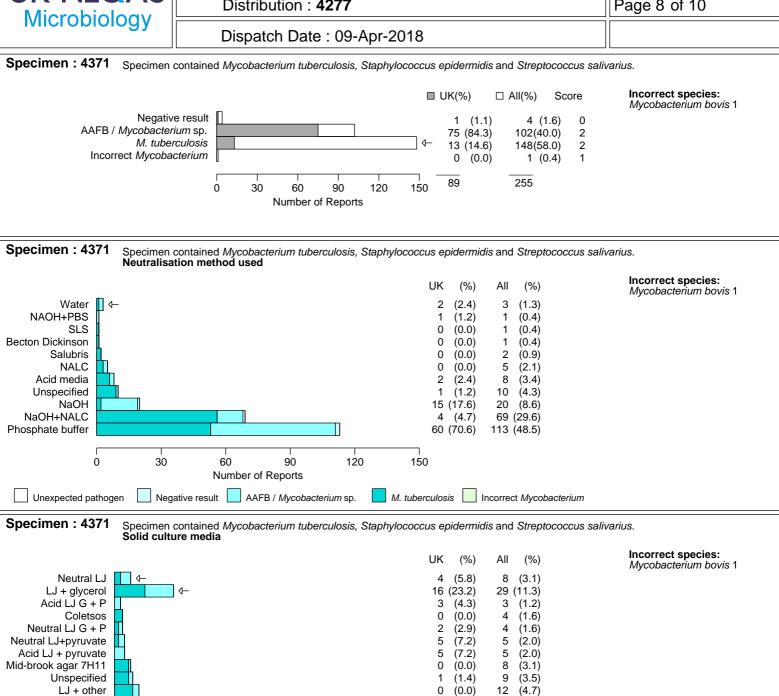




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27 (39.1)

M. tuberculosis Incorrect Mycobacterium

5 (7.2)

150

35 (13.7)

126 (49.2)



LJ + pyruvate

Unexpected pathogen

LJ

0

30

60

Negative result AAFB / Mycobacterium sp.

Number of Reports

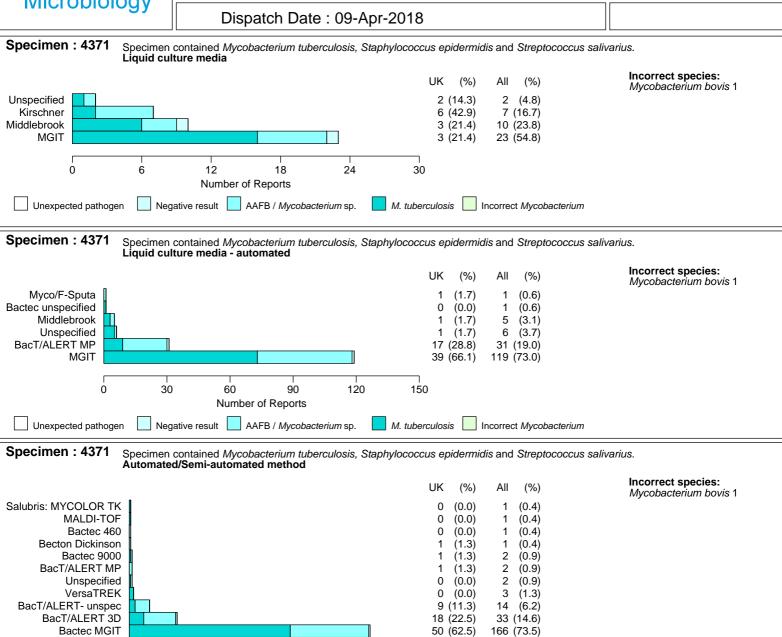
90

120



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40

Unexpected pathogen Negative result AAFB / Mycobacterium sp.

80

120

Number of Reports

160

200

M. tuberculosis Incorrect Mycobacterium

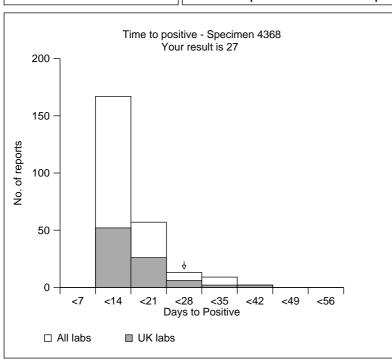


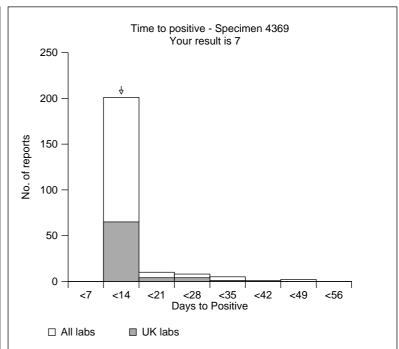
Mycobacterium culture

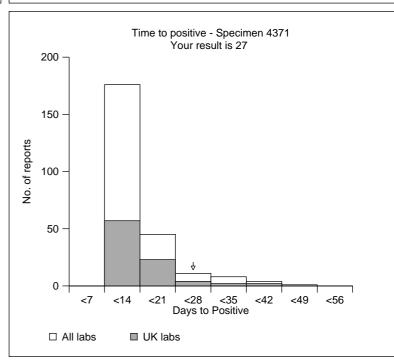
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Cumulative % of positive results at time shown (all participants)				Days to positive			
Days to positive	4368	4369	4371		mean	median	mode
<7	0.0	0.0	0.0	4368	13	12	9
<14	67.3	88.5	71.8	4369	9	7	7
<21	90.3	93.0	90.2				
<28	95.6	96.5	94.7	4371	13	11	11
<35	99.2	98.7	98.0				
<42	100.0	99.1	99.6				
<49	100.0	100.0	100.0				
<56	100.0	100.0	100.0				

