



Summary of Results

External Quality Assessment of Food Microbiology Standard Scheme

Distribution Number: 312

Sample Numbers: 20641-20662

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Results Due:	15 February 2019
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For further information on the scheme please refer to:

Scheme Guide: <https://www.gov.uk/government/publications/food-and-water-proficiency-testing-schemes-scheme-guide>

Guide to Scoring and Statistics:

<https://www.gov.uk/government/publications/food-and-water-proficiency-testing-schemes-scoring-systems-and-statistics>

General guidance for z-scores:

Participants' enumeration results are converted into z-scores using the following formula:

$$Z = \frac{(X_i - X_{pt})}{\sigma_{pt}}$$

X_i = participants' result (expressed as a log₁₀ value)
 X_{pt} = assigned value (participants' consensus median (expressed as a log₁₀ value))
 σ_{pt} = the fixed standard deviation for the examination (calculated by FEPTU)

The σ_{pt} -value expresses the acceptable difference between the individual participant's result and the participants' consensus median. The σ_{pt} -value used for calculating z-scores for all parameters in the Standard Scheme is 0.35. A guide to interpreting z-scores follows, although laboratories must interpret their scores in the context of their own laboratory situation:

z = -1.99 to +1.99 **satisfactory**
z = -2 to -2.99 or +2 to +2.99 **questionable**
z = < -3.00 or > + 3.00 **unsatisfactory**

It is usually recommended that z-scores exceeding +/-2 are investigated to establish the possible cause. As a general rule, PHE recommends that all questionable and unsatisfactory results are investigated.

FEPTU Quality control: To demonstrate homogeneity of the sample, a minimum of 10 freeze dried vials, selected randomly from a batch, are tested in duplicate for parameters requiring enumeration and 10 freeze dried vials are examined for pathogen detection.

To demonstrate stability of the sample, a minimum of six vials, selected randomly from a batch, are examined throughout the distribution period, either for enumeration or pathogen detection.

FEPTU results are determined using methods based on ISO methods and are included in the 'intended results' letters which provide guidance for participants regarding the assigned values.

The FEPTU results are used for guidance in the preliminary intended results notification, letters are posted on the website immediately after every distribution; electronic notification of their availability is sent to all participants

Refer to section 17.0 of the Scheme Guide if you have experienced difficulties with any of the examinations .

<https://www.gov.uk/government/publications/food-and-water-proficiency-testing-schemes-scheme-guide>

All participants are reminded that reporting an incorrect or incomplete identification of pathogens from food samples could have serious public health implications. Similarly, the levels of micro-organisms reported in the sample may affect the subsequent outcome for the product.

Participants are reminded that the purpose of scoring is to draw attention to incorrect or outlying results. The results, as summarised in the performance assessment sheet included in this report, provide a more effective indication of on-going problems with food microbiology examinations.

The bar charts in this report are compiled using the processes outlined in the Guide to Scoring Systems and Statistics for the allocation of PHE scores. Z-scores are included on the sample-specific pages only; the relevant sections will be left blank if a z-score does not apply.

Please contact FEPTU staff for advice and information:

Repeat samples	Carmen Gomes or Kermin Daruwalla	Tel: +44 (0)20 8327 7119
Data Analysis	Nita Patel or Manchari Rajkumar	Fax: +44 (0)20 8200 8264
Microbiological advice	Nita Patel or Zak Prior	Email: foodeqa@phe.gov.uk
General comments and complaints	Nita Patel or Zak Prior	FEPTU's website
Scheme consultants	Melody Greenwood and Julie E. Russell	
Scheme Co-ordinator	Nita Patel	

Accreditation: PHE Food EQA Scheme for Standard is accredited by the United Kingdom Accreditation Service (UKAS) to ISO/IEC 17043:2010.



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Sample: S0661

Contents: *Escherichia coli* O157 3.5x10² (wild strain), *Salmonella* Derby 1,4,[5],12:f.g:[1,2] 6 (wild strain), *Hafnia alvei* 3.1x10⁴ (wild strain), *Aerococcus viridans* 1.0x10⁵ (NCTC 8251), *Staphylococcus saprophyticus* 4.4x10⁵ (wild strain)

All levels are presented as colony forming units (cfu) per ml reconstituted sample

All levels are presented as colony forming units (cfu) per ml reconstituted sample

Expected Results:

Examination	Expected Result	Your Result	Score	Z-score
<i>Campylobacter</i> spp.	Not Detected in 25g			
<i>Campylobacter</i> spp. enumeration	<10 cfu g ⁻¹			
<i>E. coli</i> O157	Detected in 25g			
<i>Salmonella</i> spp.	Detected in 25g			
Aerobic colony count	1.2x10 ⁵ - 1.2x10 ⁶ cfu g ⁻¹			
<i>Enterobacteriaceae</i>	1.0x10 ⁴ - 1.0x10 ⁵ cfu g ⁻¹			

***Campylobacter* spp.**

Total participants reporting for <i>Campylobacter</i> spp.	71
Participants reporting correctly	70 (99%)

***Campylobacter* spp. enumeration**

Total participants reporting for <i>Campylobacter</i> spp. enumeration	6
Participants reporting correctly	6 (100%)

Example Report

<i>E.coli</i> O157	
Total participants reporting for <i>E.coli</i> O157	60
Participants reporting correctly	57 (95%)

<i>Salmonella</i> spp.	
Total participants reporting for <i>Salmonella</i> spp.	109
Participants reporting correctly	107 (98%)

Aerobic colony count	
Total participants reporting for Aerobic colony count	111
Assigned value (participants' median)	3.7x10 ⁵ cfu g ⁻¹ (5.57 log ₁₀)
Uncertainty of assigned value ($U(X_{pt}) = \log_{10}$ cfu g ⁻¹)	0.02
No. of outlying counts	5 (2 low / 3 high)
Participants mean	3.8x10 ⁵ cfu g ⁻¹ (5.58 log ₁₀)
Standard deviation of participants results *	0.17 log ₁₀ cfu g ⁻¹
FEPTU QC median	5.0x10 ⁵ cfu g ⁻¹ (5.72 log ₁₀)

<i>Enterobacteriaceae</i>	
Total participants reporting for <i>Enterobacteriaceae</i>	13
Participants reporting a high censored value	1
Assigned value (participants' median)	3.2x10 ⁴ cfu g ⁻¹ (4.5 log ₁₀)
Uncertainty of assigned value ($U(X_{pt}) = \log_{10}$ cfu g ⁻¹)	0.02
No. of outlying counts	5 (4 low / 1 high)
Participants mean	3.0x10 ⁴ cfu g ⁻¹ (4.47 log ₁₀)
Standard deviation of participants results *	0.15 log ₁₀ cfu g ⁻¹
FEPTU QC median	3.0x10 ⁴ cfu g ⁻¹ (4.47 log ₁₀)

Total sent samples	124
Non-returns	2
Not examined	3

The fixed standard deviation value (σ_{pt} value) used for calculation of the z-scores is **0.35** for all parameters.

* Robust S^* based on median absolute deviation about the participants' median (MAD_e).

Sample: S0662

Contents: *Campylobacter jejuni* 2.3x10² (wild strain), *E. coli* O157 4.4x10⁵ (wild strain), *Salmonella* Essen 4,12:g.m:- 35 (wild strain),
Escherichia coli 1.1x10⁴ (wild strain), *Klebsiella oxytoca* 1.7x10⁴ (wild strain), *Lactococcus lactis* 8.7x10⁴ (wild strain)

All levels are presented as colony forming units (cfu) per ml reconstituted sample

All levels are presented as colony forming units (cfu) per ml reconstituted sample

Expected Results:

Examination	Expected Result	Your Result	Score	Z-score
<i>Campylobacter</i> spp.	Detected in 25g			
<i>Campylobacter</i> spp. enumeration	1.0x10 ² - 1.5x10 ³ cfu g ⁻¹			
<i>E. coli</i> O157	Detected in 25g			
<i>Salmonella</i> spp.	Detected in 25g			
Aerobic colony count	2.9x10 ⁴ - 2.9x10 ⁵ cfu g ⁻¹			
<i>Enterobacteriaceae</i>	1.3x10 ³ - 1.3x10 ⁴ cfu g ⁻¹			

***Campylobacter* spp.**

Total participants reporting for <i>Campylobacter</i> spp.	70
Participants reporting correctly	68 (97%)

***Campylobacter* spp. enumeration**

Total participants reporting for <i>Campylobacter</i> spp. enumeration	7
Total participants enumerating <i>Campylobacter</i> spp. enumeration	17
Assigned value (participants' median)	4.6x10 ² cfu g ⁻¹ (2.66 log ₁₀)
Uncertainty of assigned value ($U(X_{pt}) = \log_{10}$ cfu g ⁻¹)	0.05
No. of outlying counts	5 (3 low / 2 high)
Participants mean	4.5x10 ² cfu g ⁻¹ (2.65 log ₁₀)
Standard deviation of participants results *	0.31 log ₁₀ cfu g ⁻¹
FEPTU QC medians	
▪ ISO/TS 13136	2.3x10 ² cfu g ⁻¹ (2.36 log ₁₀)

Example Report

<i>E.coli</i> O157	
Total participants reporting for <i>E.coli</i> O157	59
Participants reporting correctly	54 (92%)

<i>Salmonella</i> spp.	
Total participants reporting for <i>Salmonella</i> spp.	109
Participants reporting correctly	107 (98%)

Aerobic colony count	
Total participants reporting for Aerobic colony count	111
Assigned value (participants' median)	9.1x10 ⁴ cfu g ⁻¹ (4.96 log ₁₀)
Uncertainty of assigned value ($U(X_{pt}) = \log_{10}$ cfu g ⁻¹)	0.02
No. of outlying counts	7 (1 low / 6 high)
Participants mean	3x10 ⁴ cfu g ⁻¹ (4.97 log ₁₀)
Standard deviation of participants results *	0.19 log ₁₀ cfu g ⁻¹
FEPTU QC median	1.0x10 ⁵ cfu g ⁻¹ (5 log ₁₀)

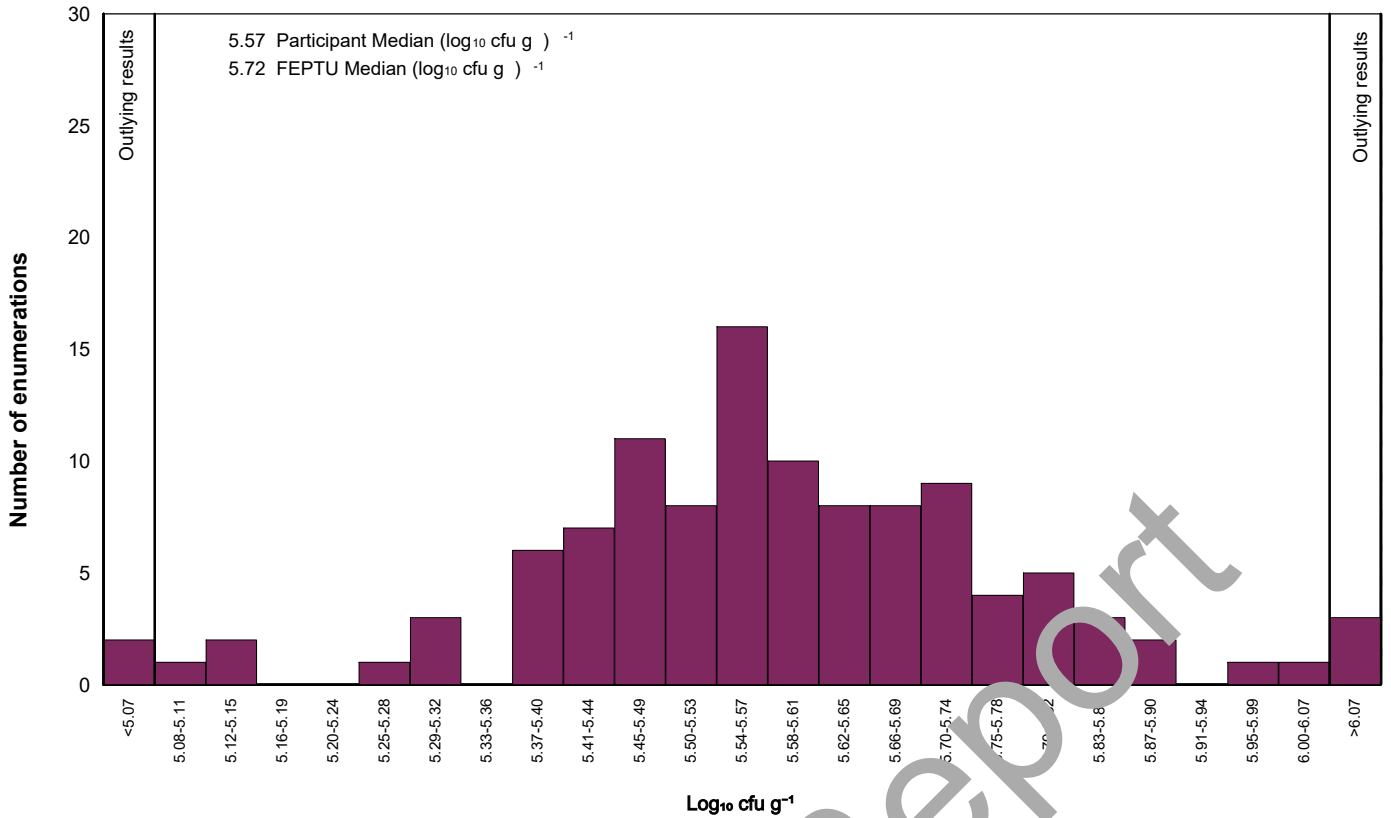
<i>Enterobacteriaceae</i>	
Total participants reporting for <i>Enterobacteriaceae</i>	104
Assigned value (participants' median)	4.1x10 ³ cfu g ⁻¹ (3.61 log ₁₀)
Uncertainty of assigned value ($U(X_{pt}) = \log_{10}$ cfu g ⁻¹)	0.04
No. of outlying counts	13 (8 low / 5 high)
Participants mean	4.0x10 ³ cfu g ⁻¹ (3.6 log ₁₀)
Standard deviation of participants results *	0.32 log ₁₀ cfu g ⁻¹
FEPTU QC median	1.3x10 ⁴ cfu g ⁻¹ (4.1 log ₁₀)

Total sent samples	124
Non-returns	2
Not examined	3

The fixed standard deviation value (σ_{pt} value) used for calculation of the z-scores is **0.35** for all parameters.

* Robust S^* based on median absolute deviation about the participants' median (*MADe*).

Aerobic colony count reported by participants - Sample S0661



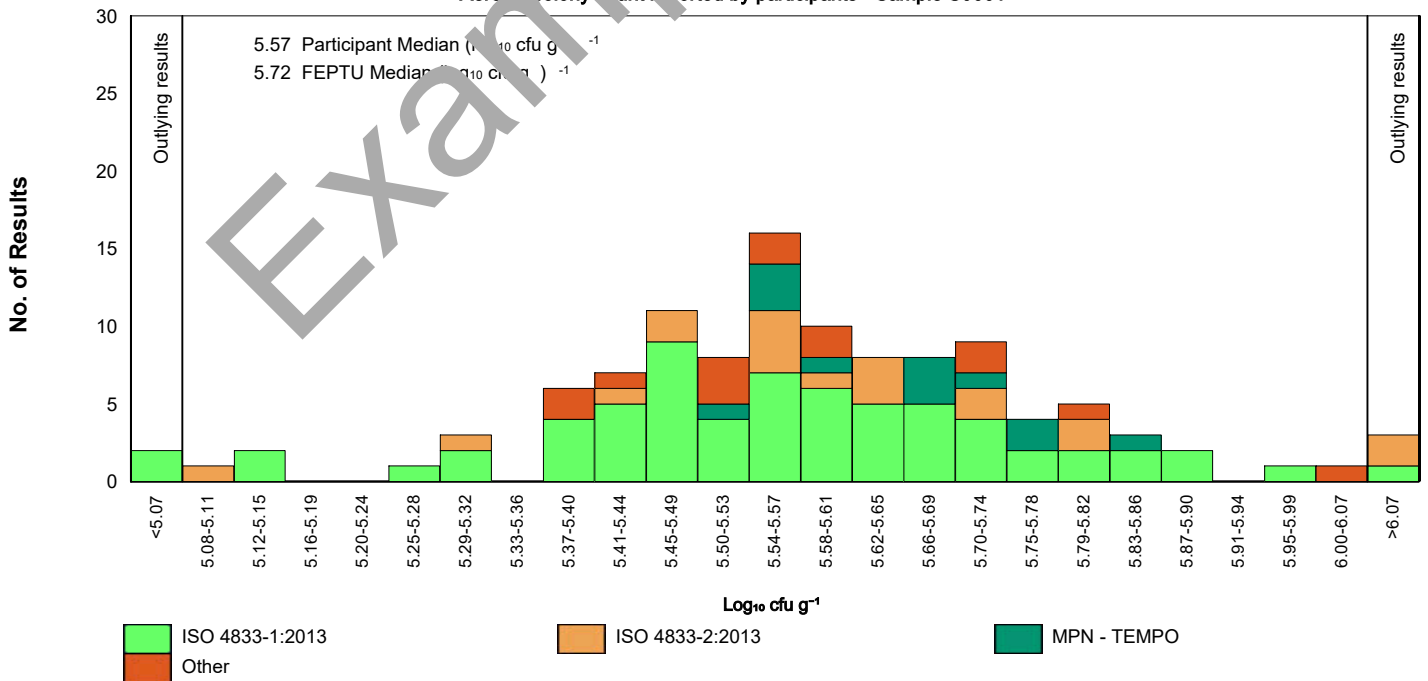
Method based presentation

S0661 : Aerobic colony count

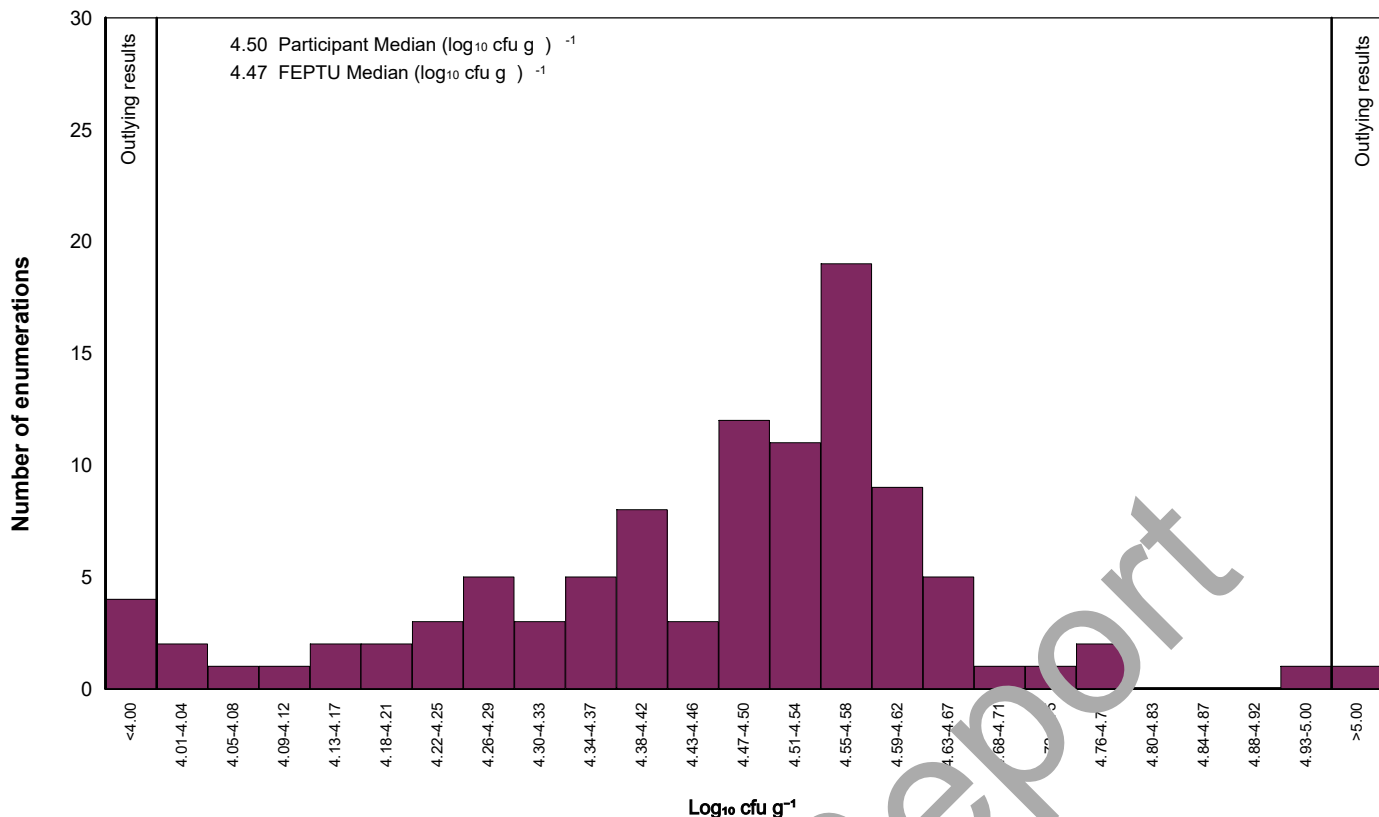
FEPTU median ISO 4833-2:2013

Method	Number of Results	Excluded Results	Percentage of the total	Median (Log ₁₀ cfu g ⁻¹)	Robust S* (Log ₁₀ cfu g ⁻¹)	Range Reported (Log ₁₀ cfu g ⁻¹)
ISO 4833-1:2013	66	0	53	5.55	0.17	4.13 - 6.51
ISO 4833-2:2013	19	0	17	5.59	0.17	5.08 - 6.15
MPN - TEMPO	12	0	10	5.67	0.10	5.52 - 5.83
Other	14	0	12	5.54	0.15	5.38 - 6.04

Aerobic colony count reported by participants - Sample S0661



Enterobacteriaceae reported by participants - Sample S0661



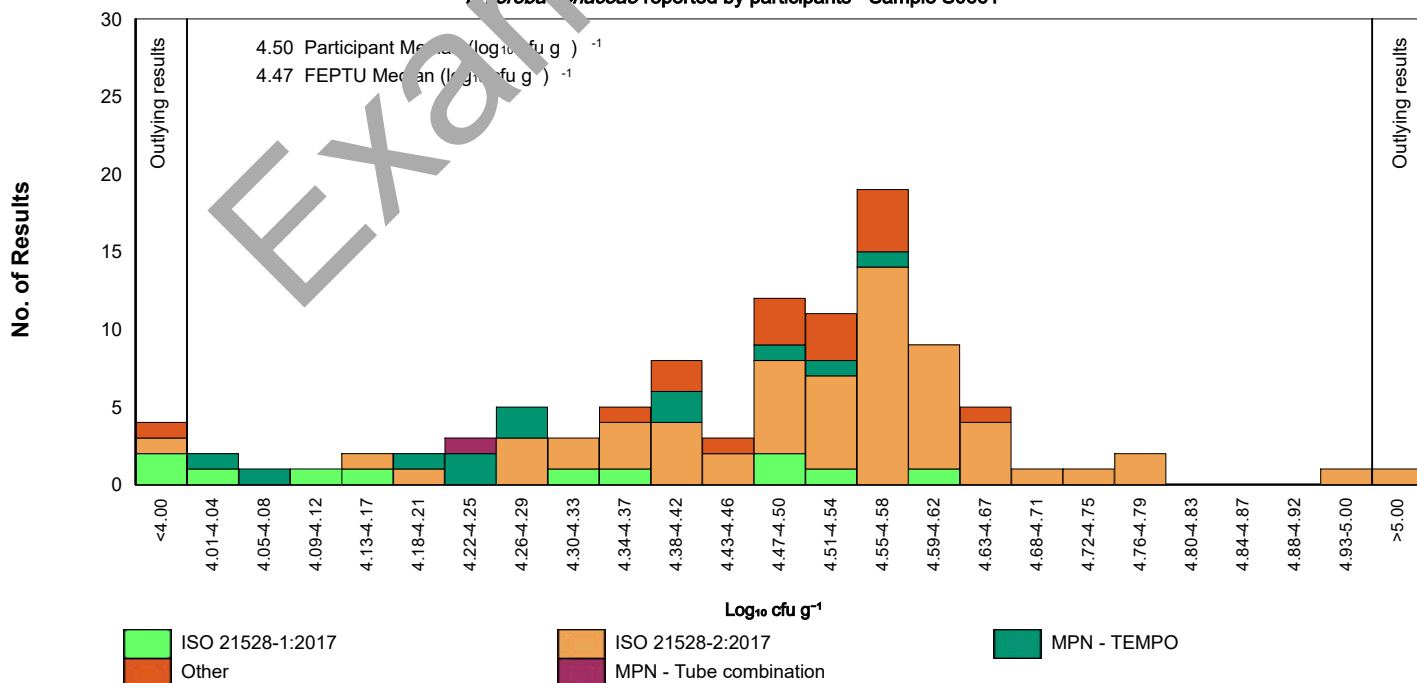
Method based presentation

S0661 : Enterobacteriaceae

FEPTU median ISO 21528-2:2017

Method	Number of Results	Excluded Results	Percentage of the total	Median (\log_{10} cfu g ⁻¹)	Robust S* (\log_{10} cfu g ⁻¹)	Range Reported (\log_{10} cfu g ⁻¹)
ISO 21528-1:2017	11	0	18	4.30	0.30	2.48 - 4.61
ISO 21528-2:2017	61	1	60	4.54	0.12	3.56 - 5.00
MPN - TEMPO	12	0	11	4.26	0.20	4.00 - 4.57
Other	16	0	15	4.50	0.08	3.91 - 4.65
MPN - Tube combination	1	0	0			-

Enterobacteriaceae reported by participants - Sample S0661



Sample S0661

<i>Campylobacter</i> spp. enumeration Method	<i>Campylobacter</i> spp. enumeration Media	<i>Campylobacter</i> spp. enumeration Incubation	Count reported	Count censored values
	Modified charcoal cefoperazone deoxycholate agar (mCCDA/CCDA)		0	0
ISO 10272-2:2017	Chromogenic agar - please state	41.5°C/48h	0	3
ISO 10272-2:2017	Modified charcoal cefoperazone deoxycholate agar (mCCDA/CCDA)		1	1
ISO 10272-2:2017	Modified charcoal cefoperazone deoxycholate agar (mCCDA/CCDA)	41.5°C/48h	1	27
ISO 10272-2:2017	Other	41.5°C/48h	0	2
Other	Chromogenic agar - please state	41.5°C/48h	0	4
Other	Chromogenic agar - please state	Other	1	1
Other	Modified charcoal cefoperazone deoxycholate agar (mCCDA/CCDA)	41.5°C/48h	0	3
Other	Modified charcoal cefoperazone deoxycholate agar (mCCDA/CCDA)	Other	0	1
Other	Other	Other	0	1
Other	Preston agar	41.5°C/48h	0	1

Sample S0661

<i>E.coli</i> O157 Method	<i>E.coli</i> O157 Media	<i>E.coli</i> O157 Enrichment	No. Participants detected	No. Participants not detected
ISO 16654:2001	Cefixime tellurite sorbitol MacConkey agar (CT-SMAC)	Modified tryptone soya	9	0
ISO 16654:2001	Chromogenic agar - please state; Cefixime tellurite sorbitol MacConkey agar (CT-SMAC)	Modified Tryptone soya	6	0

Sample S0661

<i>Salmonella</i> spp. Method	<i>Salmonella</i> spp. Media	<i>Salmonella</i> spp. Enrichment	No. Participants detected	No. Participants not detected
ISO 6579-1:2017	Brilliant green agar (BGA); Xylose lysine deoxycholate agar (XLD)	Muller-Kauffman tetrathionate/novobiocin ; Rappaport-Vassiliadis with soya	5	0
ISO 6579-1:2017	Chromogenic agar - please state; Xylose lysine deoxycholate agar (XLD)	Rappaport-Vassiliadis with soya; Muller-Kauffman tetrathionate/novobiocin	5	1
ISO 6579-1:2017	Xylose lysine deoxycholate agar (XLD); Brilliant green agar (BGA)	Muller-Kauffman tetrathionate/novobiocin ; Rappaport-Vassiliadis with soya	7	0
ISO 6579-1:2017	Xylose lysine deoxycholate agar (XLD); Brilliant green agar (BGA)	Rappaport-Vassiliadis with soya; Muller-Kauffman tetrathionate/novobiocin	6	0
Other	Chromogenic agar - please state	Other	7	0

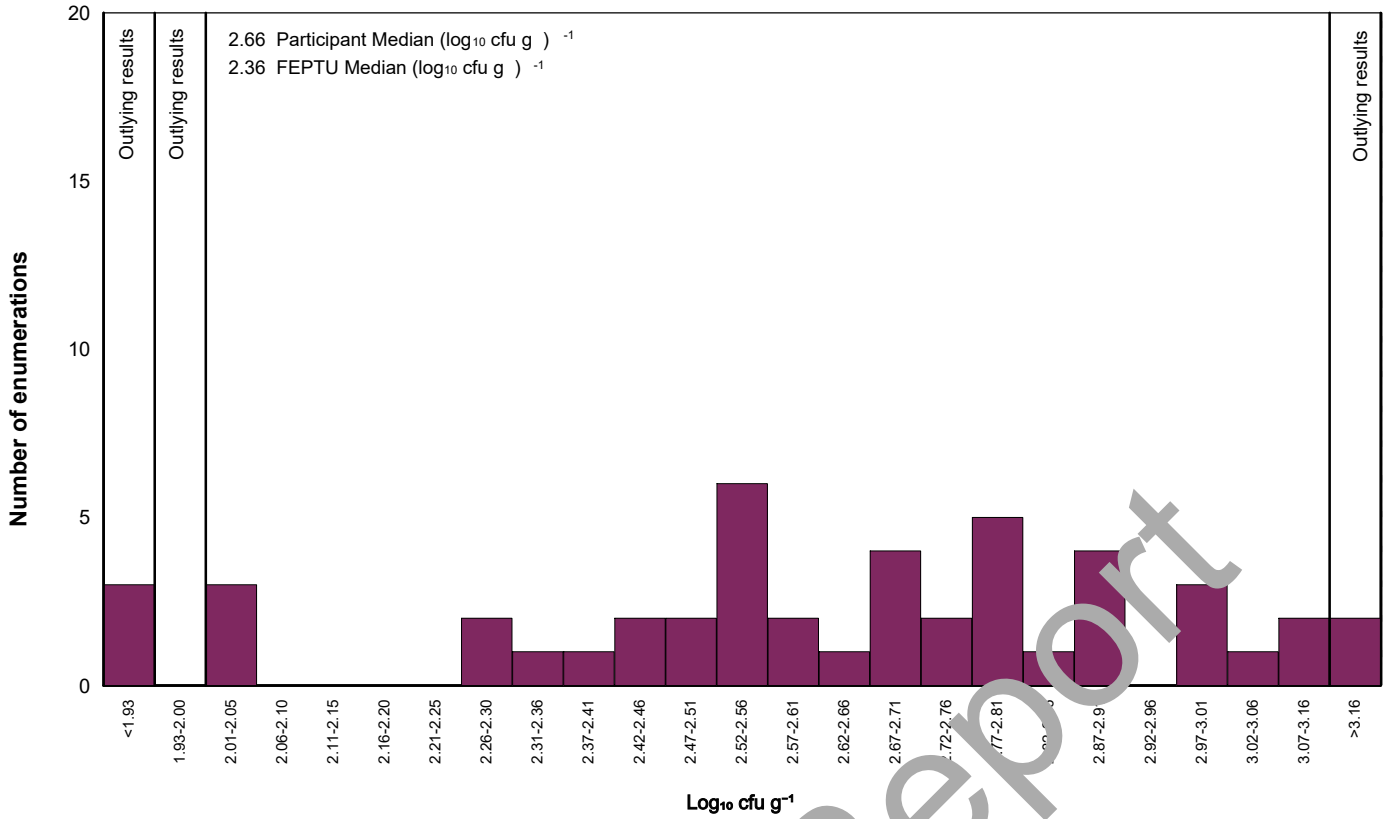
Sample S0661

Aerobic colony count Method	Aerobic colony count Media	Aerobic colony count Incubation	Count reported	Count censored values
	Other		0	0
ISO 4833-1:2013	Other	30°C/72h	1	0
ISO 4833-1:2013	Petrifilm TM	30°C/48h	2	0
ISO 4833-1:2013	Petrifilm TM	30°C/72h	1	0
ISO 4833-1:2013	Plate count agar	22°C/72h; 30°C/48h	0	0
ISO 4833-1:2013	Plate count agar	30°C/48h	10	0
ISO 4833-1:2013	Plate count agar	30°C/72h	52	0
ISO 4833-1:2013; MPN - TEMPO	Plate count agar; Other	30°C/72h	0	1
ISO 4833-1:2013; MPN - TEMPO; Other	Plate count agar; Other	30°C/72h; 30°C/48h	0	1
ISO 4833-2:2013	Petrifilm TM; Plate count agar	30°C/48h	0	0
ISO 4833-2:2013	Plate count agar	30°C/48h	6	0
ISO 4833-2:2013	Plate count agar	30°C/72h	12	0
ISO 4833-2:2013	Plate count agar	37°C/24h		0
MPN - TEMPO	Other	30°C/48h	9	0
MPN - TEMPO	Other	Other	3	0
Other	Other	37°C/24h	1	0
Other	Petrifilm TM	37°C/24h	1	0
Other	Petrifilm TM	Other	2	0
Other	Plate count agar	30°C/48h	2	0
Other	Plate count agar	30°C/72h	2	0
Other	Plate count agar	37°C/24h	1	0
Other	Plate count agar	Other	5	0

Sample S0661

<i>Enterobacteriaceae</i> Method	<i>Enterobacteriaceae</i> Media	<i>Enterobacteriaceae</i> Incubation	Count reported	Count censored values
ISO 21528-1:2017		37°C/24h	0	0
ISO 21528-1:2017	Petrifilm TM	37°C/24h	1	0
ISO 21528-1:2017	VRBGA (Violet red bile glucose agar)	37°C/24h	10	1
ISO 21528-1:2017; ISO 21528-2:2017	VRBGA (Violet red bile glucose agar)	37°C/24h	0	1
ISO 21528-2:2017	Petrifilm TM	37°C/24h	2	0
ISO 21528-2:2017	VRBGA (Violet red bile glucose agar)	30°C/24h	1	0
ISO 21528-2:2017	VRBGA (Violet red bile glucose agar)	37°C/24h	58	1
MPN - TEMPO	Other	37°C/24h	4	0
MPN - TEMPO	Other	Other	8	0
MPN - TEMPO; Other	Other	37°C/24h; Other	0	1
MPN - Tube combination	VRBGA (Violet red bile glucose agar)	37°C/24h	1	0
Other			0	0
Other	Chromogenic agar - please state	37°C/24h	1	0
Other	Other	37°C/24h	2	0
Other	Petrifilm TM	37°C/24h	3	0
Other	VRBGA (Violet red bile glucose agar)	37°C/24h	10	0

Campylobacter spp. enumeration reported by participants - Sample S0662



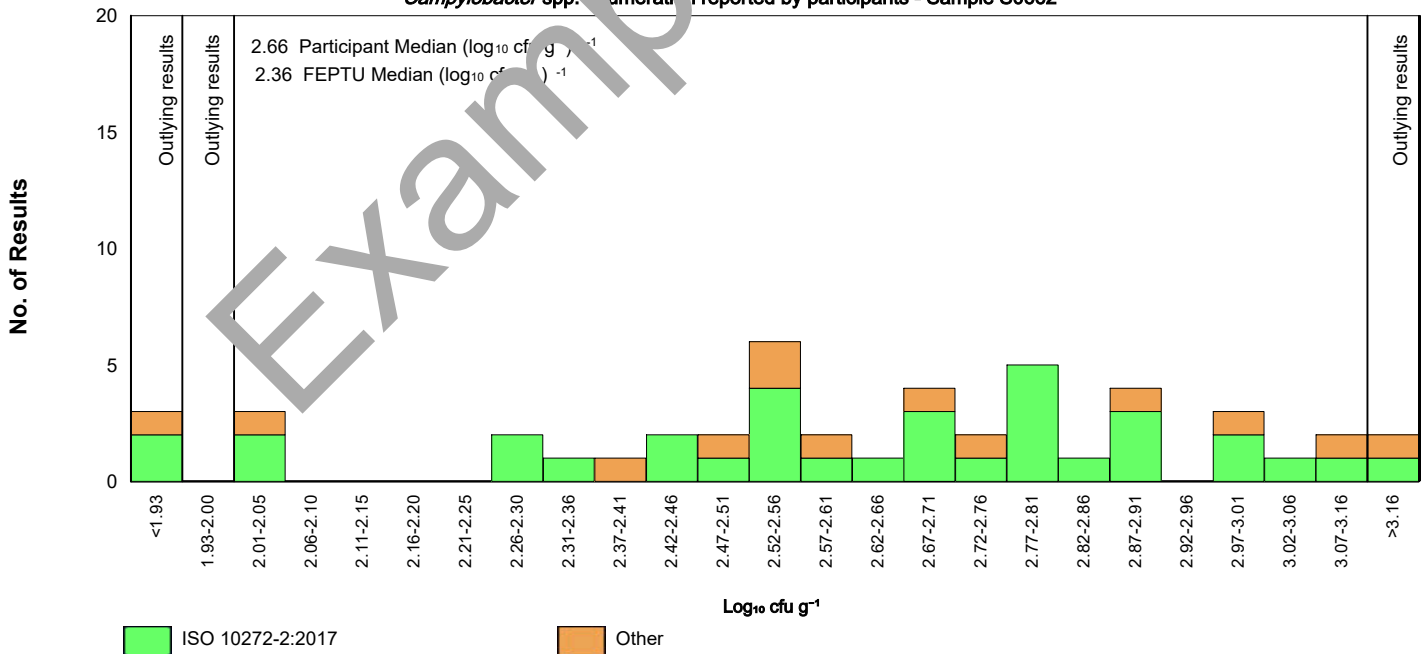
Method based presentation

S0662 : *Campylobacter* spp. enumeration

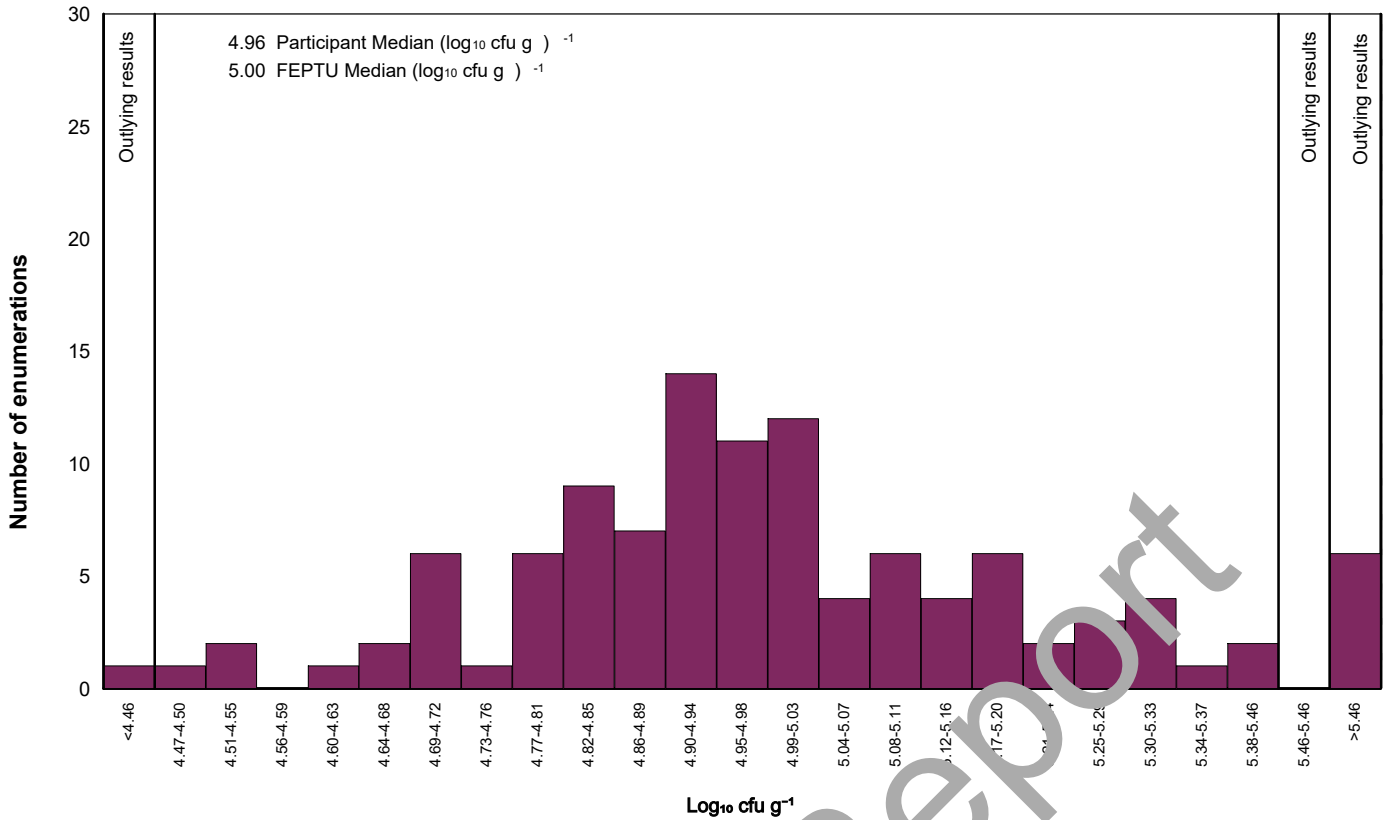
FEPTU Median (ISO 10272-2:2017)

Method	Number of Results	Excluded Results	Percentage of the total	Median (Log ₁₀ cfu g ⁻¹)	Robust S* (Log ₁₀ cfu g ⁻¹)	Range Reported (Log ₁₀ cfu g ⁻¹)
ISO 10272-2:2017	34	0	27	2.68	0.30	1.81 - 3.56
Other	13	0	10	2.59	0.33	1.48 - 4.17

Campylobacter spp. enumeration reported by participants - Sample S0662



Aerobic colony count reported by participants - Sample S0662



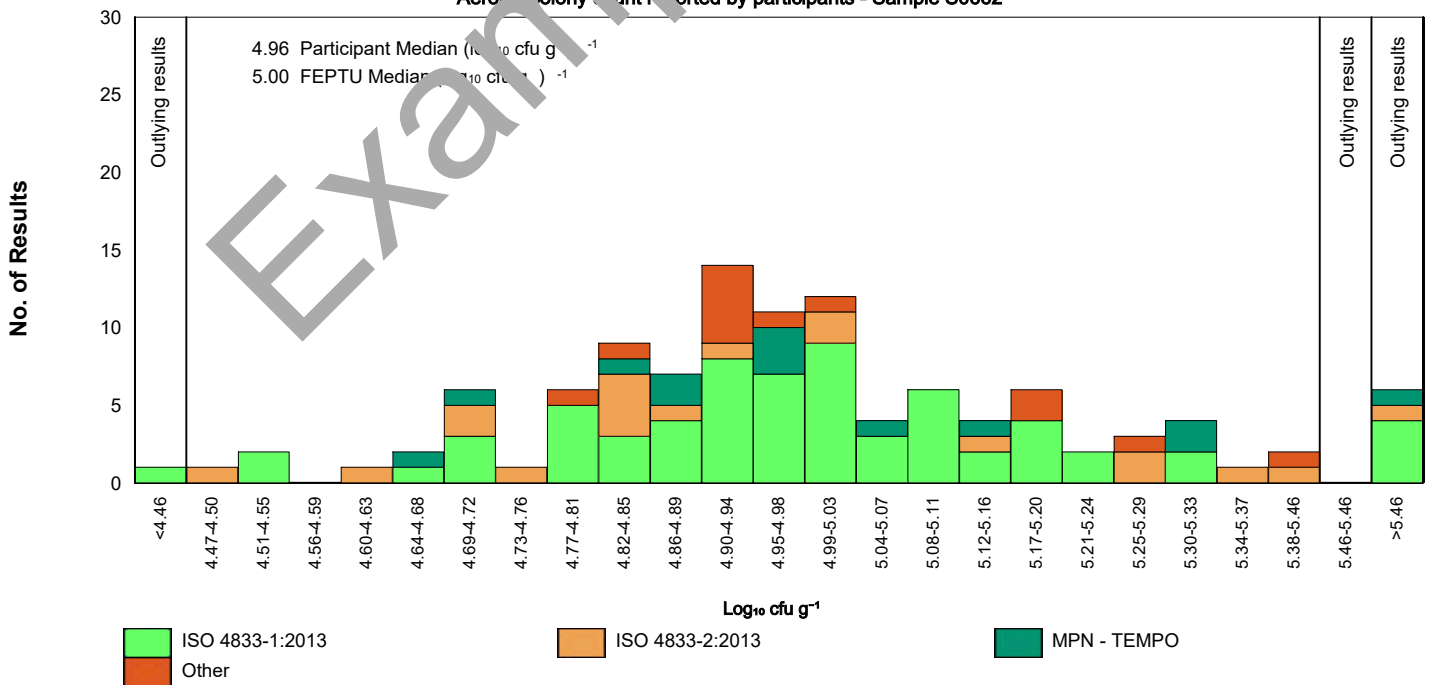
Method based presentation

S0662 : Aerobic colony count

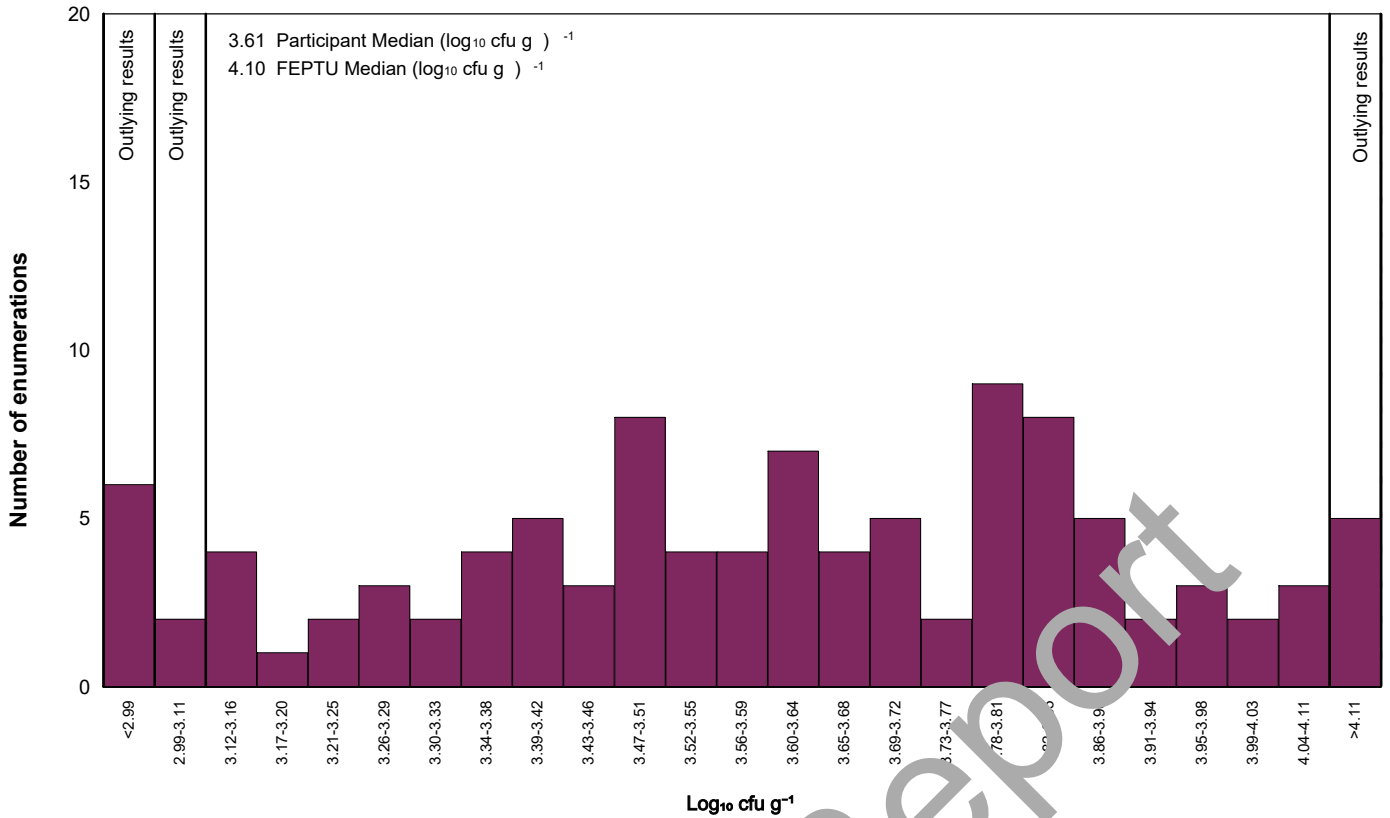
FEPTU Median (Log₁₀ cfu g⁻¹) ISO 4833-2:2013

Method	Number of Results	Excluded Results	Percentage of the total	Median (Log ₁₀ cfu g ⁻¹)	Robust S* (Log ₁₀ cfu g ⁻¹)	Range Reported (Log ₁₀ cfu g ⁻¹)
ISO 4833-1:2013	66	0	53	4.98	0.17	4.04 - 6.77
ISO 4833-2:2013	19	0	17	4.88	0.26	4.46 - 5.63
MPN - TEMPO	13	0	11	4.96	0.21	4.65 - 5.52
Other	13		11	4.92	0.12	4.78 - 5.45

Aerobic colony count reported by participants - Sample S0662



Enterobacteriaceae reported by participants - Sample S0662

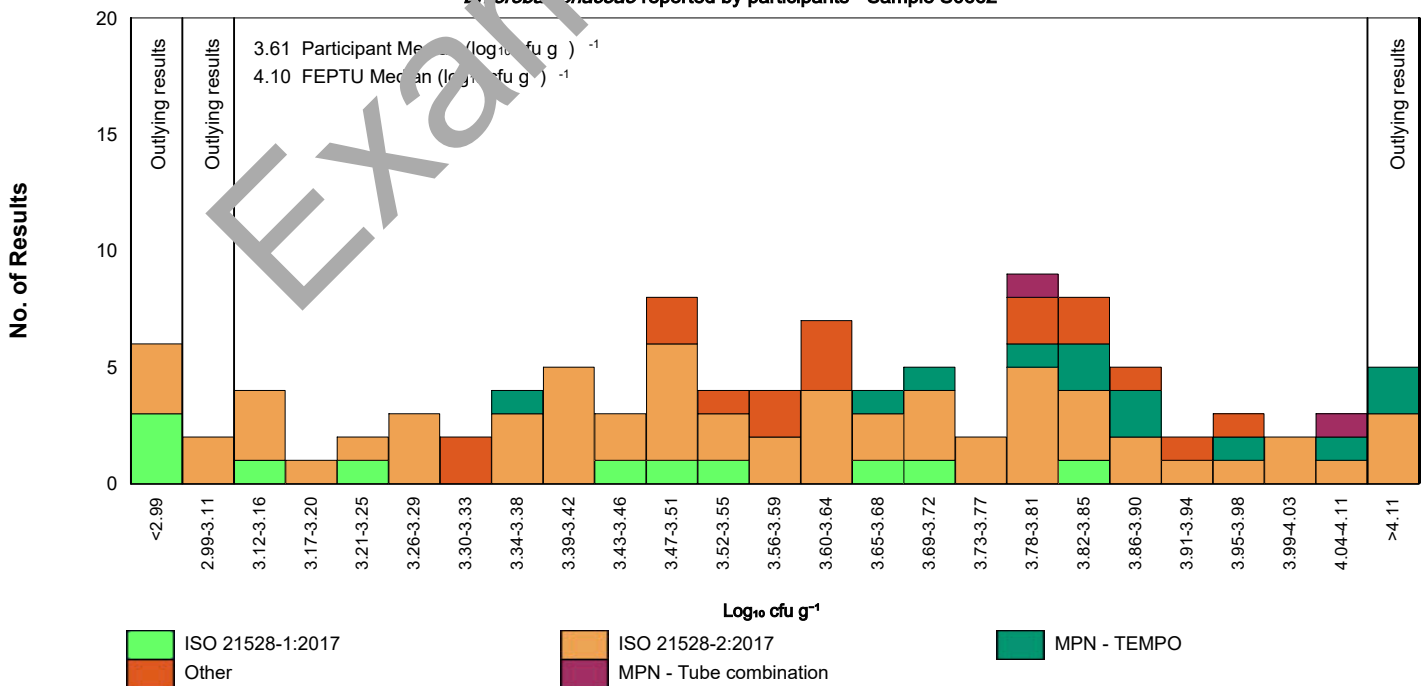


Method based presentation

S0662 : Enterobacteriaceae

Method	Number of Results	Excluded Results	Percentage of the total	Median (\log_{10} cfu g ⁻¹)	Robust S* (\log_{10} cfu g ⁻¹)	Range Reported (\log_{10} cfu g ⁻¹)
ISO 21528-1:2017	11	0	18	3.43	0.41	1.85 - 3.83
ISO 21528-2:2017	61	0	59	3.56	0.33	2.90 - 4.60
MPN - TEMPO	12	0	11	3.85	0.21	3.34 - 4.23
Other	17	0	16	3.60	0.23	3.32 - 3.98
MPN - Tube combination	2	0	1			-

Enterobacteriaceae reported by participants - Sample S0662



Sample S0662

<i>Campylobacter</i> spp. Method	<i>Campylobacter</i> spp. Media	<i>Campylobacter</i> spp. Enrichment	No. Participants detected	No. Participants not detected
ISO 10272-1: 2017	Modified charcoal cefoperazone deoxycholate agar (mCCDA/CCDA)	Bolton Broth	16	2
ISO 10272-1: 2017	Modified charcoal cefoperazone deoxycholate agar (mCCDA/CCDA)	Preston Broth	5	0
ISO 10272-1: 2017	Other; Modified charcoal cefoperazone deoxycholate agar (mCCDA/CCDA)	Bolton Broth	6	0

Sample S0662

<i>Campylobacter</i> spp. enumeration Method	<i>Campylobacter</i> spp. enumeration Media	<i>Campylobacter</i> spp. enumeration Incubation	Count reported	Count censored values
	Modified charcoal cefoperazone deoxycholate agar (mCCDA/CCDA)		0	0
ISO 10272-2:2017	Chromogenic agar - please state	41.5°C/48h	3	0
ISO 10272-2:2017	Modified charcoal cefoperazone deoxycholate agar (mCCDA/CCDA)		1	1
ISO 10272-2:2017	Modified charcoal cefoperazone deoxycholate agar (mCCDA/CCDA)	41.5°C/48h	28	0
ISO 10272-2:2017	Other	41.5°C/48h	2	0
Other	Chromogenic agar - please state	41.5°C/48h	5	0
Other	Chromogenic agar - please state	Other	2	0
Other	Modified charcoal cefoperazone deoxycholate agar (mCCDA/CCDA)	41.5°C/48h	3	0
Other	Modified charcoal cefoperazone deoxycholate agar (mCCDA/CCDA)	Other	1	0
Other	Other	Other	1	0
Other	Preston agar	41.5°C/48h	1	0

Sample S0662

<i>E.coli</i> O157 Method	<i>E.coli</i> O157 Media	<i>E.coli</i> O157 Enrichment	No. Participants detected	No. Participants not detected
ISO 16654:2001	Cefixime tellurite sorbitol MacConkey agar (CT-SMAC)	Modified Tryptone soya	8	1
ISO 16654:2001	Cefixime tellurite sorbitol MacConkey agar (CT-SMAC); Chromogenic agar - please state	Modified Tryptone soya	5	0

Sample S0662

<i>Salmonella</i> spp. Method	<i>Salmonella</i> spp. Media	<i>Salmonella</i> spp. Enrichment	No. Participants detected	No. Participants not detected
ISO 6579-1:2017	Xylose lysine deoxycolate agar (XLD); Brilliant green agar (BGA)	Muller-Kauffman tetrathionate/novobiocin ; Rappaport-Vassiliadis with soya	14	0
ISO 6579-1:2017	Xylose lysine deoxycolate agar (XLD); Chromogenic agar - please state	Muller-Kauffman tetrathionate/novobiocin ; Rappaport-Vassiliadis with soya	7	0
Other	Chromogenic agar - please state	Other	6	0

Sample S0662

Aerobic colony count Method	Aerobic colony count Media	Aerobic colony count Incubation	Count reported	Count censored values
	Other		0	0
ISO 4833-1:2013	Other	30°C/72h	1	0
ISO 4833-1:2013	Petrifilm TM	30°C/48h	3	0
ISO 4833-1:2013	Petrifilm TM	30°C/72h	1	0
ISO 4833-1:2013	Plate count agar	22°C/72h; 30°C/48h	0	0
ISO 4833-1:2013	Plate count agar	30°C/48h	9	0
ISO 4833-1:2013	Plate count agar	30°C/72h	52	0
ISO 4833-2:2013	Petrifilm TM; Plate count agar	30°C/48h	0	0
ISO 4833-2:2013	Plate count agar	30°C/48h	6	0
ISO 4833-2:2013	Plate count agar	30°C/72h	12	0
ISO 4833-2:2013	Plate count agar	37°C/24h	1	0
MPN - TEMPO	Other	30°C/48h	10	0
MPN - TEMPO	Other	Other	3	0
MPN - TEMPO; ISO 4833-1:2013	Plate count agar; Other	30°C/72h	0	1
MPN - TEMPO; ISO 4833-1:2013; Other	Plate count agar; Other	30°C/48h; 30°C/72h	0	1
Other	Other	37°C/24h	1	0
Other	Petrifilm TM	37°C/24h	1	0
Other	Petrifilm TM	Other	2	0
Other	Plate count agar	30°C/48h	2	0
Other	Plate count agar	30°C/72h	1	0
Other	Plate count agar	37°C/24h	1	0
Other	Plate count agar	Other	5	0

Sample S0662

<i>Enterobacteriaceae</i> Method	<i>Enterobacteriaceae</i> Media	<i>Enterobacteriaceae</i> Incubation	Count reported	Count censored values
ISO 21528-1:2017		37°C/24h	0	0
ISO 21528-1:2017	VRBGA (Violet red bile glucose agar)	37°C/24h	10	1
ISO 21528-1:2017	VRBGA (Violet red bile glucose agar)	Other	1	0
ISO 21528-2:2017	Petrifilm TM	37°C/24h	2	0
ISO 21528-2:2017	VRBGA (Violet red bile glucose agar)	30°C/24h	1	0
ISO 21528-2:2017	VRBGA (Violet red bile glucose agar)	37°C/24h	58	0
ISO 21528-2:2017; ISO 21528-1:2017	VRBGA (Violet red bile glucose agar)	37°C/24h	0	1
MPN - TEMPO	Other	37°C/24h	4	0
MPN - TEMPO	Other	Other	8	0
MPN - TEMPO; Other	Other	Other; 37°C/24h	0	1
MPN - Tube combination	Other	Other	1	0
MPN - Tube combination	VRBGA (Violet red bile glucose agar)	37°C/24h	1	0
Other			0	0
Other	Chromogenic agar - please state	37°C/24h	2	0
Other	Other	37°C/24h	2	0
Other	Petrifilm TM	37°C/24h	3	0
Other	VRBGA (Violet red bile glucose agar)	37°C/24h	10	0

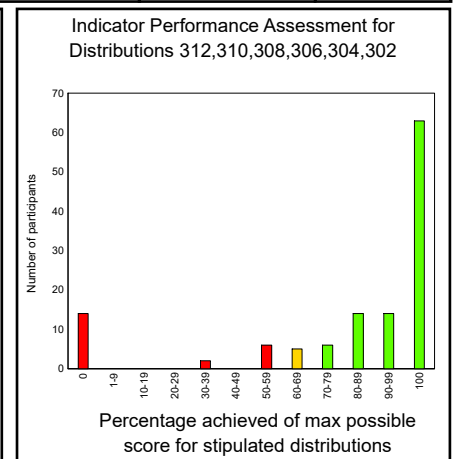
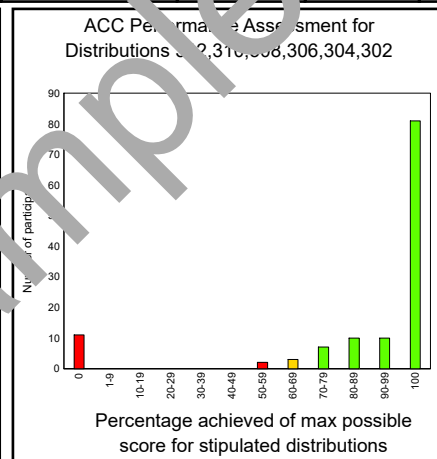
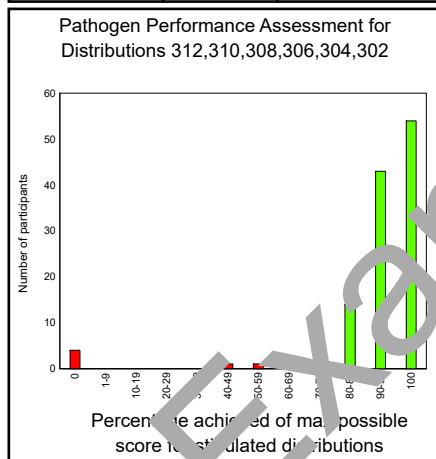
Performance Assessment Sheet

Participants are reminded that to take advantage of the performance assessment overtime tool provided in the reports they need to take part in more than one distribution a year.

Performance assessments are designed to identify laboratories with on-going problems with their examinations and are undertaken after every distribution. Scores are allocated to results reported for every sample to help assess participants' performance.

Cumulative scores are calculated for every participant, for all examination types, for the current and previous five distributions. Participants' cumulative scores for each of the examination types are compared with the maximum possible scores after every distribution.

Distribution	Sample	Examination	Your score	Your %	Sample	Examination	Your score	Your %
312	S0661	Pathogen			S0662	Pathogen		
	S0661	ACC			S0662	ACC		
	S0661	Indicator			S0662	Indicator		
310	S0657	Pathogen			S0658	Pathogen		
	S0657	ACC			S0658	ACC		
	S0657	Indicator			S0658	Indicator		
308	S0653	Pathogen			S0654	Pathogen		
	S0653	ACC			S0654	ACC		
	S0653	Indicator			S0654	Indicator		
306	S0649	Pathogen			S0650	Pathogen		
	S0649	ACC			S0650	ACC		
	S0649	Indicator			S0650	Indicator		
304	S0645	Pathogen			S0646	Pathogen		
	S0645	ACC			S0646	ACC		
	S0645	Indicator			S0646	Indicator		
302	S0641	Pathogen			S0642	Pathogen		
	S0641	ACC			S0642	ACC		
	S0641	Indicator			S0642	Indicator		



Performance Assessment Comment:

Laboratories that achieve less than 70% of the maximum possible score are likely to be experiencing significant problems with their examinations and are advised to

- refer to the relevant sample reports for specific comments
- refer to the website guidance documents: <https://www.gov.uk/government/collections/external-quality-assessment-ega-and-proficiency-testing-pt-for-food-water-and-environmental-microbiology>
- contact the organisers for advice.

General distribution comment:

Participants are reminded if you do not examine a specific parameter you must return your results as 'Not examined' as this impacts the overall scores awarded.

General comments on methods:

Participants that did not provide information on the method and testing conditions, their data is not included in the method graphs and tables. This information is useful; therefore participants are encouraged to complete these details.

Method based presentation tables for enumeration results:

Participants are advised if less than 10 laboratories report an enumeration result for a method, no data is shown for the Median, Robust SD and the Range Reported. Numbers shown in the 'Excluded Results' column are laboratories that reported a censored value.

Method, media and enrichment/incubation tables:

Participants are asked to note:

- that for pathogen detection parameters, the data presented in the tables on the specific method used, is only shown when five or more laboratories have reported a result for that specific method
- that the count shown in the 'Count reported' or 'Count censored values' column includes data from those laboratories that reported:
 - a censored value
 - a result reported as detected or not detected
 - method data with no results reported.

Participants are reminded that the method data presented in this way has some limitations and seeks to identify trends in the results rather than assess specific method details.

Trend analysis:

Plotting your PT results over a period of time can help to identify potential problems. Download the updated trend analysis spreadsheet one week after this report has been issued:
<https://www.gov.uk/government/publications/standard-scheme-trend-analysis>

End of report.

Example Report