

# Summary of Results

## External Quality Assessment of Food Microbiology

### *Staphylococcus aureus* Enterotoxin Scheme

Distribution Number: STA053

Sample Numbers: ST0105, ST0106

Distribution Date:	May 2025
Results Due:	13 June 2025
Report Date:	19 June 2025
Samples prepared and quality control tested by:	Divya George Afifa Halim Nafeesa Hussain Cansev Katar Sabine Naujokat Zak Prior Jake Videlefsky
Data analysed by:	Joanna Donn Nita Patel
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For general information about the scheme please refer to:

**Scheme Guide:** <https://www.feptu.org.uk/schemes/scheme-guide/>

For more specific information about results assessments, scoring systems, statistics, and guidance on analysing your results for the proficiency testing samples please refer to:

**Guide to Scoring Systems and Statistics:** <https://www.feptu.org.uk/schemes/scoring/>

This Scheme provides external quality assessment (EQA) samples for laboratories that examine for *Staphylococcus aureus* enterotoxin in food samples. Staphylococcal food poisoning is an intoxication due to consumption of food or beverages containing pre-formed enterotoxins (SE). *S.aureus* is known to produce at least 14 different SEs (Leloir, Y., Baron, F. and Gautier, M. (2003) *Staphylococcus aureus* and food poisoning. *Genet. Mol Res.* 2, 63 - 76)

Strains included in these samples are tested using a modification of a PCR-based technique. (McLauchlin, J., Narayanan G.L., Mithani, V. and O'Neill, G. (2000) The detection of enterotoxins and toxic shock syndrome genes in *Staphylococcus aureus* by polymerase chain reaction. *J. Food Protect.* 63, 479 - 488). Copies of this publication are available to participants on request. Quality control testing and determination of the assigned value (expected results) is undertaken using passive latex agglutination (RPLA).

Refer to section 19.0 of the Scheme Guide if you have experienced difficulties with any of the examinations .

<https://www.feptu.org.uk/schemes/scheme-guide/>

All participants are reminded that reporting incorrect results for detection of *S.aureus* enterotoxin isolated from food samples could have serious public health implications.

Scores are not allocated for results reported for the *S.aureus* enterotoxin Scheme. Comments relating to performance are included in Table 1.

Please contact FEPTU staff for advice and information:

<b>Repeat samples</b>	Carmen Gomes or Kermin Daruwalla	<b>Tel:</b> +44 (0)20 8327 7119
<b>Data Analysis</b>	Nita Patel	<b>Fax:</b>
<b>Microbiological advice</b>	Nita Patel or Zak Prior	<b>Email:</b> <a href="mailto:foodeqa@ukhsa.gov.uk">foodeqa@ukhsa.gov.uk</a>
<b>General comments and complaints</b>	Nita Patel or Zak Prior	<a href="https://www.feptu.org.uk/schemes/scheme-guide/">FEPTU's website</a>
<b>Scheme consultants</b>	Melody Greenwood	
<b>Scheme Co-ordinator</b>	Nita Patel	

**Accreditation:** UKHSA *Staphylococcus aureus* enterotoxin EQA Scheme is accredited by the United Kingdom Accreditation Service (UKAS) to ISO/IEC 17043:2010.



0006

## Sample: ST0105

### Contents:

*Staphylococcus aureus* (1.0x10<sup>6</sup>) (wild strain)

The level is presented as colony forming units (cfu) per ml reconstituted sample

### Expected Results:

Examination	Expected Result	Your Result	Your Method Reported	Comments
<i>S.aureus</i> enterotoxin	Detected (Toxin group D)			

Total participants reporting for <i>S.aureus</i> enterotoxin	30
Participants reporting correctly	29

Participants correctly reporting detected for SET Group D	5
Participants correctly reporting detected for <i>S.aureus</i> enterotoxin (Toxin group not specified)	4
Participants reporting 'Not Detected' for Toxin Group D	0
Participants correctly reporting detected for <i>S. aureus</i> and 'not applicable' for toxin group	4
Participants correctly reporting detected for <i>S. aureus</i> and 'not examined' for toxin group	17

Total sent sample	33
Non-returns	1
Not examined	2

**Sample: ST0106****Contents:**

*Staphylococcus aureus* (1.9x10<sup>6</sup>) (NCTC 10655)

The level is presented as colony forming units (cfu) per ml reconstituted sample

**Expected Results:**

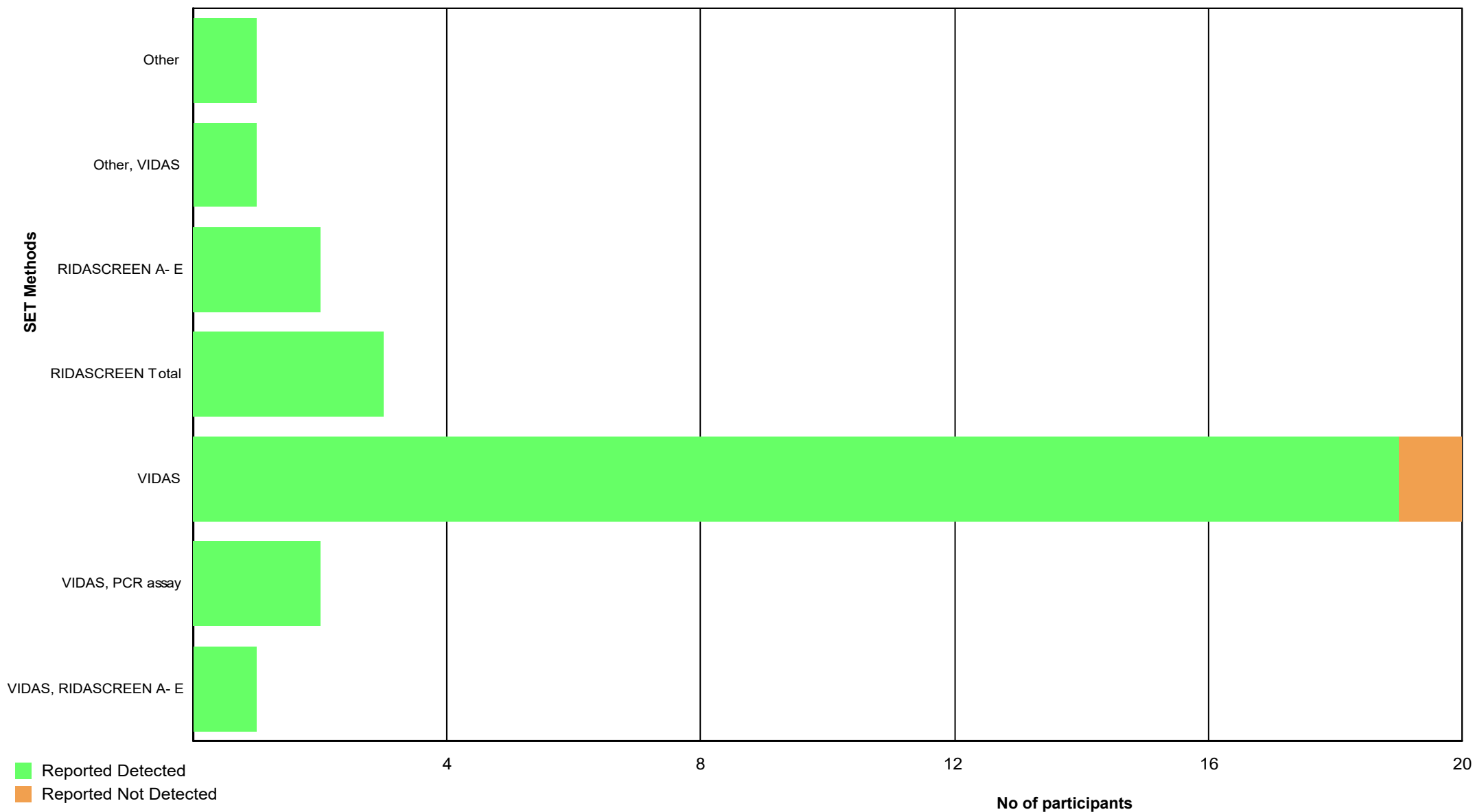
Examination	Expected Result	Your Result	Your Method Reported	Comments
<i>S.aureus</i> enterotoxin	Detected (Toxin group C)			

Total participants reporting for <i>S.aureus</i> enterotoxin	30
Participants reporting correctly	29

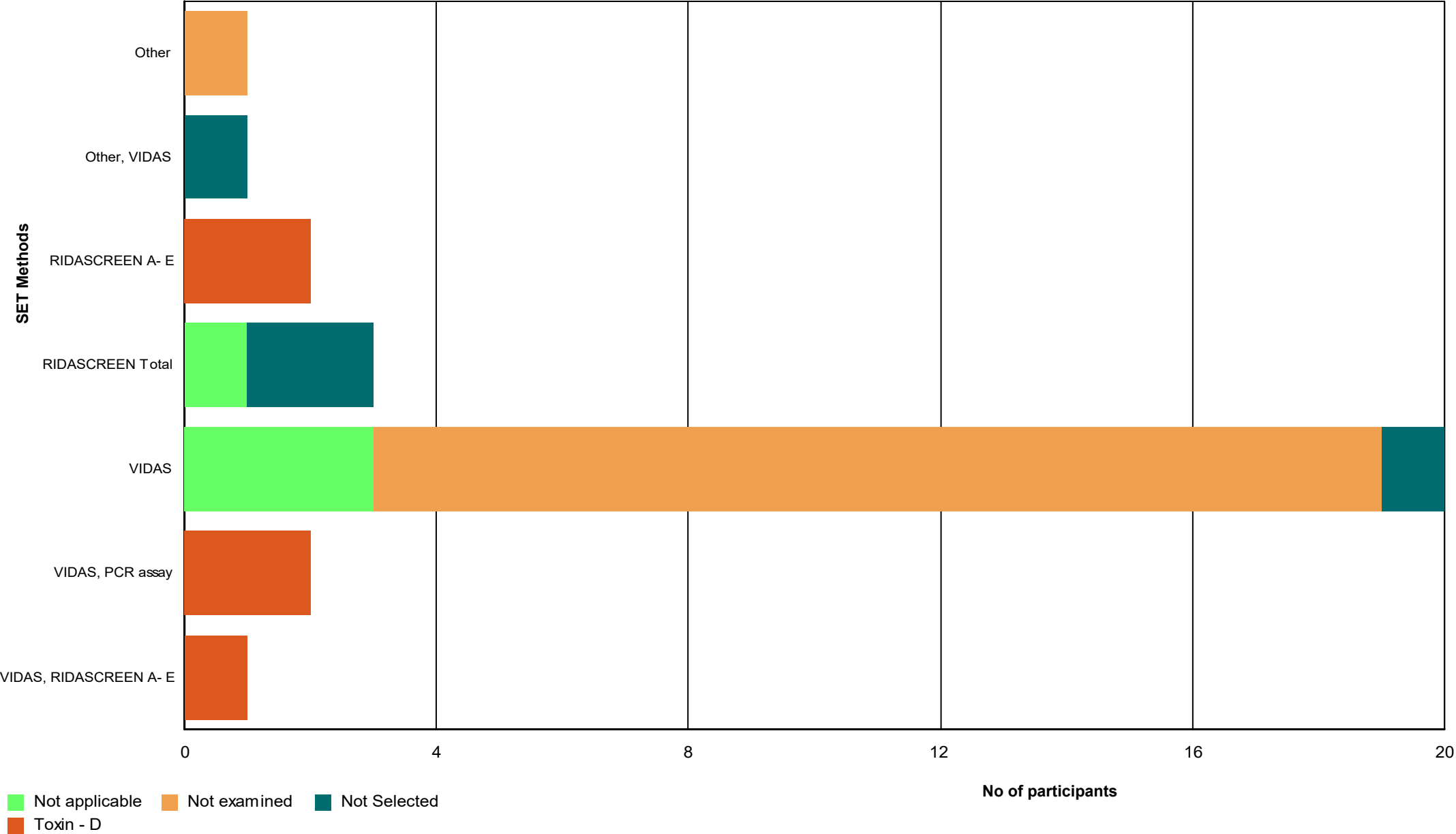
Participants correctly reporting detected for SET Group C	4
Participants correctly reporting detected for <i>S.aureus</i> enterotoxin (Toxin group not specified)	4
Participants reporting 'Not Detected' for Toxin Group C	0
Participants correctly reporting detected for SET Group B, C	1
Participants correctly reporting detected for <i>S. aureus</i> and 'not applicable' for toxin group	4
Participants correctly reporting detected for <i>S. aureus</i> and 'not examined' for toxin group	17

Total sent sample	33
Non-returns	1
Not examined	2

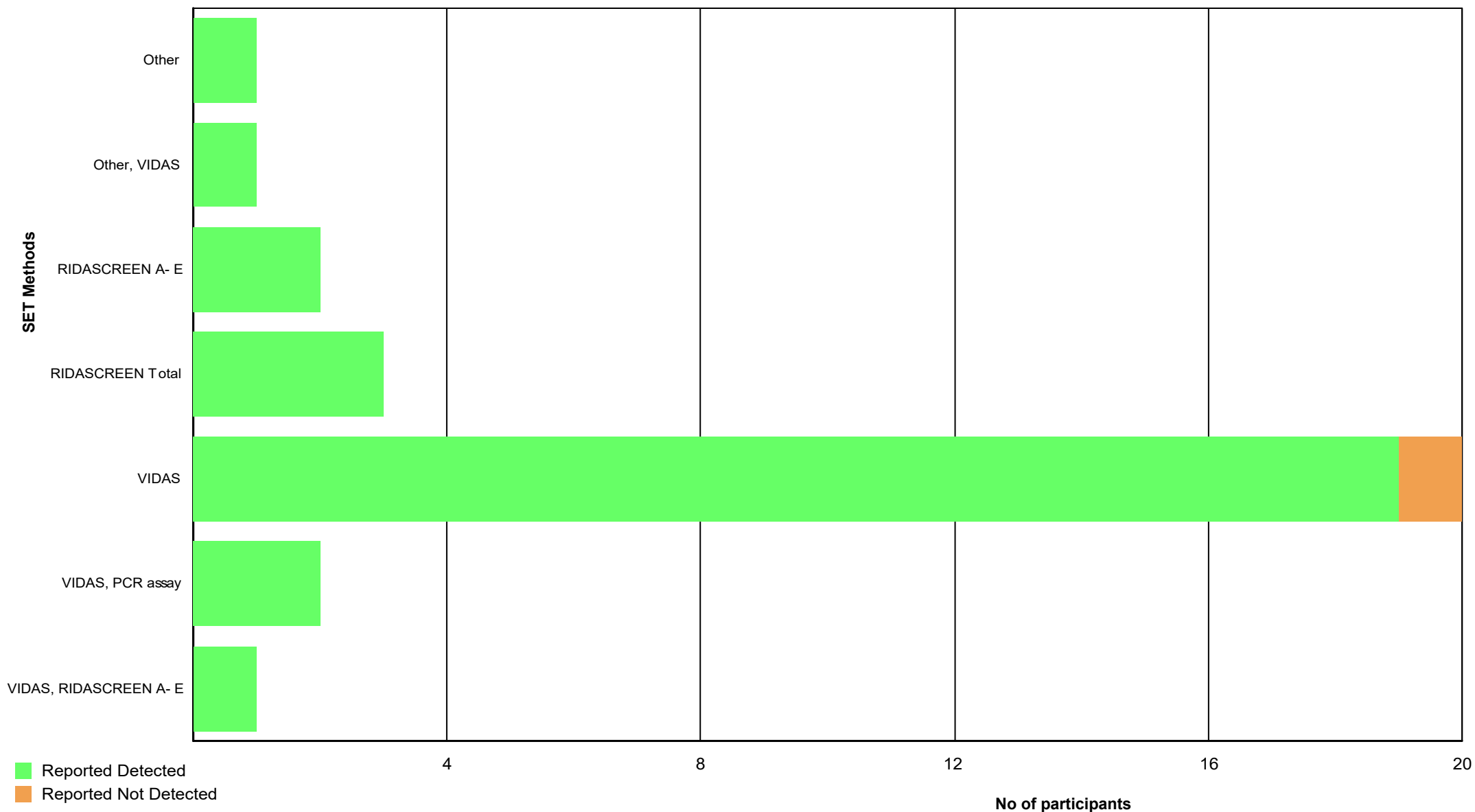
# Sample ST0105 :*Staphylococcus aureus* enterotoxin results reported by participants



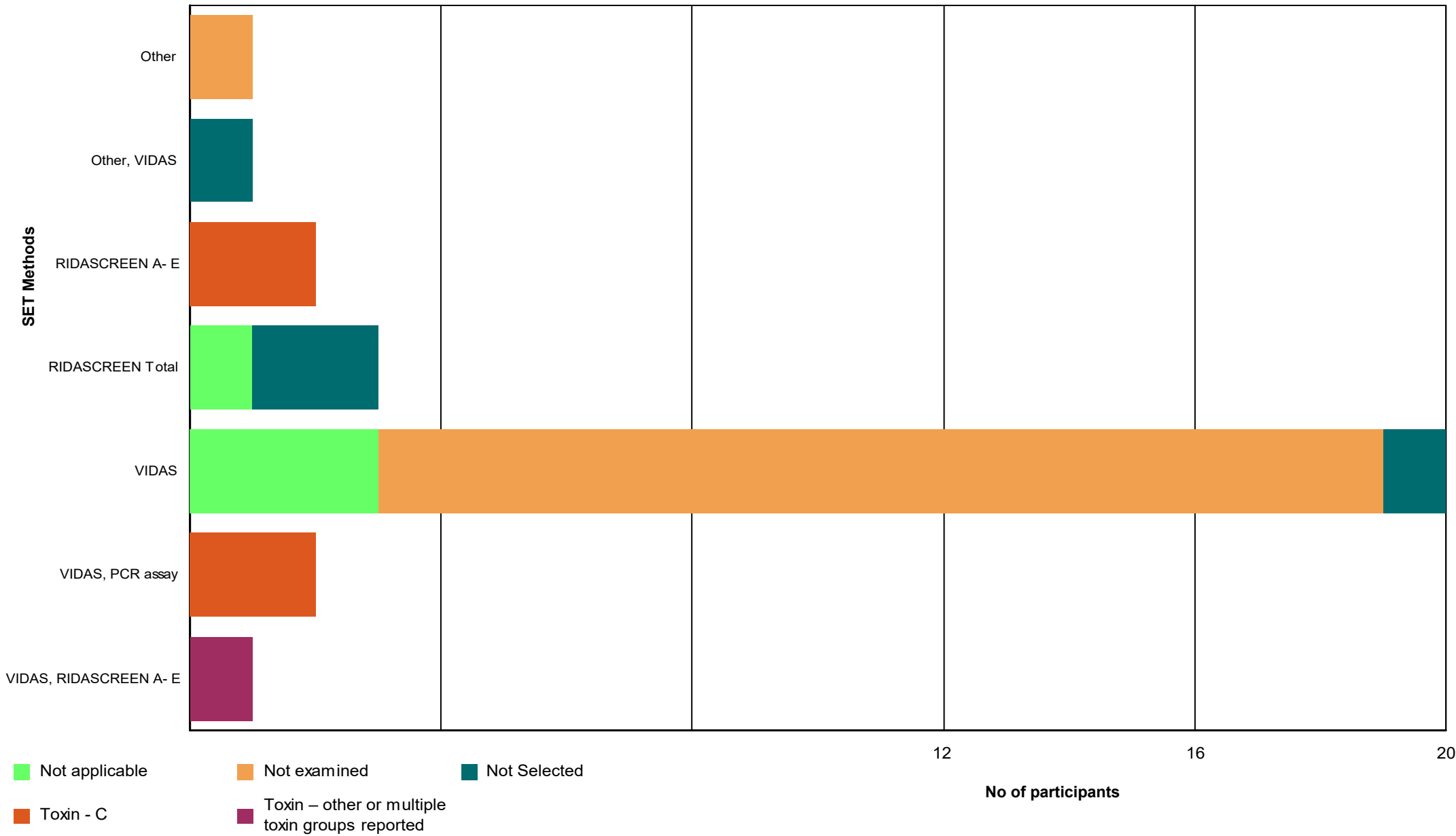
Sample ST0105 :*Staphylococcus aureus* enterotoxin group reported by method(s)



### Sample ST0106: *Staphylococcus aureus* enterotoxin results reported by participants



Sample ST0106: *Staphylococcus aureus* enterotoxin group reported by method(s)





**Table 1** - Participants results for samples ST0105 and ST0106

(NE - not examined, NR - not returned)

Lab Number	ST0105	ST0106	Comment
0	Not Examined	Not Examined	ST0105 - Not Examined ST0106 - Not Examined
121	Not Examined	Not Examined	ST0105 - Not Examined ST0106 - Not Examined
233	Present (Toxin group Not examined)	Present (Toxin group Not examined)	ST0105 - Satisfactory ST0106 - Satisfactory
255	Present	Present	ST0105 - Satisfactory ST0106 - Satisfactory
264	Present (Toxin group Not examined)	Present (Toxin group Not examined)	ST0105 - Satisfactory ST0106 - Satisfactory
336	Present	Present	ST0105 - Satisfactory ST0106 - Satisfactory
340	Present (Toxin group Not examined)	Present (Toxin group Not examined)	ST0105 - Satisfactory ST0106 - Satisfactory
378	Absent (Toxin group Not examined)	Absent (Toxin group Not examined)	ST0105 - Unsatisfactory ST0106 - Unsatisfactory
385	Present (Toxin group Not examined)	Present (Toxin group Not examined)	ST0105 - Satisfactory ST0106 - Satisfactory
419	Present (Toxin group Not examined)	Present (Toxin group Not examined)	ST0105 - Satisfactory ST0106 - Satisfactory
422	Present (Toxin group D)	Present (Toxin group C)	ST0105 - Satisfactory ST0106 - Satisfactory
443	Present (Toxin group Not examined)	Present (Toxin group Not examined)	ST0105 - Satisfactory ST0106 - Satisfactory

**Table 1 (cont'd)** - Participants results for samples ST0105 and ST0106

(NE - not examined, NR - not returned)

Lab Number	ST0105	ST0106	Comment
459	Present (Toxin group Not examined)	Present (Toxin group Not examined)	ST0105 - Satisfactory ST0106 - Satisfactory
566	Present	Present	ST0105 - Satisfactory ST0106 - Satisfactory
576	Present (Toxin group D)	Present (Toxin group C)	ST0105 - Satisfactory ST0106 - Satisfactory
959	Present (Toxin group D)	Present (Toxin group B, C)	ST0105 - Satisfactory ST0106 - Unsatisfactory
1306	Present	Present	ST0105 - Satisfactory ST0106 - Satisfactory
1636	Present (Toxin group D)	Present (Toxin group C)	ST0105 - Satisfactory ST0106 - Satisfactory
1647			ST0105 - Results not returned ST0106 - Results not returned
1860	Present (Toxin group Not applicable )	Present (Toxin group Not applicable )	ST0105 - Unsatisfactory ST0106 - Unsatisfactory
1861	Present (Toxin group Not examined)	Present (Toxin group Not examined)	ST0105 - Satisfactory ST0106 - Satisfactory
1961	Present (Toxin group Not examined)	Present (Toxin group Not examined)	ST0105 - Satisfactory ST0106 - Satisfactory
1987	Present (Toxin group Not examined)	Present (Toxin group Not examined)	ST0105 - Satisfactory ST0106 - Satisfactory
2005	Present (Toxin group Not examined)	Present (Toxin group Not examined)	ST0105 - Satisfactory ST0106 - Satisfactory

**Table 1 (cont'd)** - Participants results for samples ST0105 and ST0106

(NE - not examined, NR - not returned)

Lab Number	ST0105	ST0106	Comment
2172	Present (Toxin group Not examined)	Present (Toxin group Not examined)	ST0105 - Satisfactory ST0106 - Satisfactory
2184	Present (Toxin group Not examined)	Present (Toxin group Not examined)	ST0105 - Satisfactory ST0106 - Satisfactory
2192	Present (Toxin group Not examined)	Present (Toxin group Not examined)	ST0105 - Satisfactory ST0106 - Satisfactory
2320	Present (Toxin group Not applicable )	Present (Toxin group Not applicable )	ST0105 - Unsatisfactory ST0106 - Unsatisfactory
2396	Present (Toxin group Not examined)	Present (Toxin group Not examined)	ST0105 - Satisfactory ST0106 - Satisfactory
2482	Present (Toxin group D)	Present (Toxin group C)	ST0105 - Satisfactory ST0106 - Satisfactory
2578	Present (Toxin group Not applicable )	Present (Toxin group Not applicable )	ST0105 - Unsatisfactory ST0106 - Unsatisfactory
2637	Present (Toxin group Not examined)	Present (Toxin group Not examined)	ST0105 - Satisfactory ST0106 - Satisfactory
2733	Present (Toxin group Not applicable )	Present (Toxin group Not applicable )	ST0105 - Unsatisfactory ST0106 - Unsatisfactory

## **Comments**

Participants are advised that if a toxin test is not carried on the sample or on the *Staphylococcus aureus* grown from the sample to return their results as 'Not examined'. Participants should only use 'Not applicable' if this has been identified as a limitation of the kits assay used.

If you do not return a result for a distribution, you will not be able to view all the participants' results data in your individualised report. To access this missing data contact us on [foodeqa@ukhsa.gov.uk](mailto:foodeqa@ukhsa.gov.uk)

## **New website**

We are pleased to announce the launch of our new website: <https://www.feptu.org.uk/>. Please refer to this website to obtain the latest information for your proficiency testing.

## **Information of importance**

To understand more about the proficiency testing schemes, please use the following links for information on:

1. Report format explained: [Annotated report](#)
2. Performance rating: [Performance-over-time](#) and [Scheme guide](#) (section 16.0)
3. Scoring and statistics used: [Scoring information and stats](#)
4. Homogeneity and stability: [Scheme guide](#) (section 9.0)
5. Complaints and appeal process: [Scheme guide](#) (section 20.0 and 21.0)

For further information about the operation of the service including confidentiality and terms of participation, please refer to the Scheme Guide: [Scheme guide](#)

End of report.



