Intended Result		Your Report	Your Score
Specimen 8594	*P. falciparum:* Parasitaemia 0.6 to 1.4%	*P. falciparum:* Parasitaemia 0.6 to 1.4%	4

Cumulative score information

Total number of specimens sent to you for **UK NEQAS for Blood parasitology** over the last 8 distributions is 8.
For these distributions specimen numbers 8035 8071 8119 8322 8367 8549 8594 have been analysed and scored.

Number of reports analysed 7
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 18 out of a possible total of 18

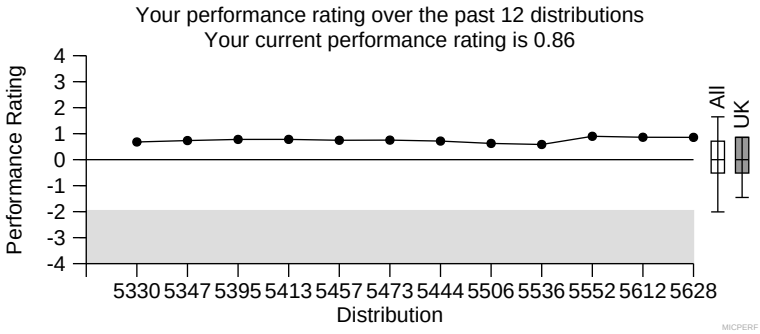
The mean score calculated from the reports returned by **UK** laboratories was 15.50 with a standard error of 2.91.
No score penalty is incurred for non-return of reports. However non- return of results may be used as a measure of poor performance.

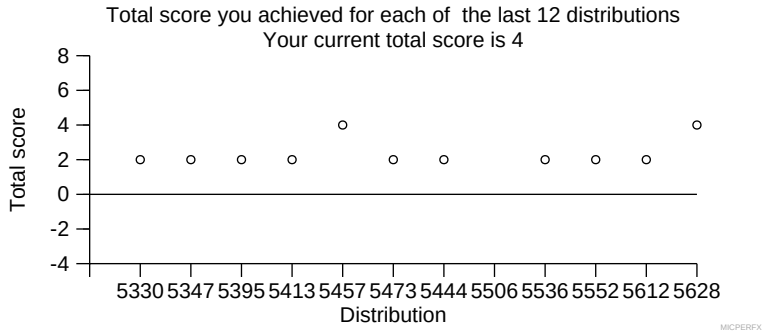
Performance rating

Your performance rating for **UK NEQAS for Blood parasitology** (i.e. the number of standard errors by which your cumulative score lies above or below the mean for **UK** laboratories) is 0.86.

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 day(s). This information is provided for your own use and does not form part of your performance assessment.

Comment
The performance for this specimen was disappointing with only 57.1% of participants reporting a fully correct result. This was due mainly to failure to estimate the parasitaemia or to calculate it accurately.
The definitive diagnosis of malaria infection is still based on finding malaria parasites in blood films. However, malaria parasites can be missed in a thin blood film when there is a low parasitaemia. A thick film confirms the presence or absence of parasites, but the parasite can be identified to species level on the thin film.

This specimen contained trophozoites of *Plasmodium falciparum* and it was noted that 9.71% of participants failed to calculate the percentage parasitaemia. These numbers continue to be worrying since the counting of red blood cells infected with *P. falciparum* should **always** be reported as this has implications for prognosis and the pattern of treatment employed. The trophozoites present in this specimen were characteristic mature trophozoites of *P. falciparum* with large, fleshy, vacuolated rings and the parasitised red cells exhibited Maurer's clefts. Participants who reported a *Plasmodium* species other than *P. falciparum* may have confused Maurer's clefts with Schuffner's dots of *P. vivax* , or James's dots of *P. ovale* and are advised to re-examine their blood slides.

The British Society for Haematology has published a new edition of its guidelines for the laboratory diagnosis of malaria which are available on free access. See: Rogers CL, Bain BJ, Garg M, et al. British Society for Haematology guidelines for the laboratory diagnosis of malaria. British Journal of Haematology. 2022 May;197(3):271-282. DOI: 10.1111/bjh.18092. PMID: 35262915.

Associated digital images of the intended results are available on our secure website; click on the DIST button to access intended results and images.

Further teaching information regarding blood parasites can be found on http://ukneqasmicro.org.uk/parasitology/.

Repeat specimens
Repeat specimens can be supplied on request and participants are asked to contact organiser@ukneqasmicro.org.uk, quoting their laboratory number and specimen number, as soon as the intended results are displayed on the web or on receipt of their report.

Participants are advised to take a photograph of their findings to use in case of queries relating to a particular distribution. Participants are reminded to quote their LABORATORY ID number in all correspondence.

Enquiries
Telephone and written enquiries can be made to Mrs Agatha Christie Saez : +44(0)20 39081371
E-mail address: organiser@ukneqasmicro.org.uk

This report was authorized by Professor P L Chiodini, Parasitology Scheme Organizer and Mrs Agatha Christie Saez, Parasitology Team Manager and Quality Lead.
Participants are reminded to quote their Laboratory ID number in all correspondence.

Operated by UK Health Security Agency
National Infection Service
61 Colindale Avenue
Colindale
London NW9 5EQ

UK NEQAS for Parasitology
The Halo Building, 1 Mabledon Place
London WC1H 9AZ

Published at 11:42 on Monday 22 July 2024

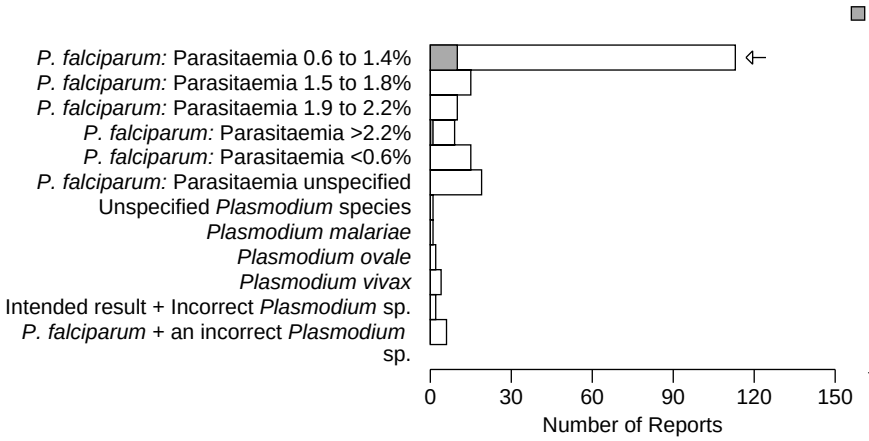
As part of routine pre-distribution quality checks, 10 random samples were examined in the UK NEQAS Parasitology lab. The following results were obtained:

Plasmodium falciparum seen

The result of this specimen was also confirmed by the polymerase chain reaction (PCR) technique.

4 specimens returned to the Halo building showed the intended results.

Specimen : 8594 Giemsa stained thin blood film. Fever and jaundice after visit to Gambia. Examine for parasites. *Plasmodium falciparum* with an estimated parasitaemia of 0.6-1.4%



Incorrect *Plasmodium* seen with or without the *Plasmodium falciparum*
Plasmodium vivax 9
Plasmodium ovale 5
Plasmodium malariae 1
Plasmodium species 1

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