East African Regional External Quality Assessment Scheme
(EA-REQAS)
Amref Health Africa in Kenya, Lang'ata Road, P.O. Box 27691-00506 Nairobi
Tel: +254 20 699 4000, Email: info@eareqas.org

EA-REQAS DISTRIBUTION NO: S033-2024

SURVEY CLOSE DATE: 15 July 2024

GENERAL INFORMATION SHEET

Please enter **ALL** the information required below, which is vital for us to identify your health facility, analyse your performance, and suggest remedial measures**.**

Name of health facility:	
EA-REQAS health facility code	
Country	
Health facility address	
Health facility telephone	
Health facility e-mail address	
District/Sub-County	
Region/Province/County/State	
Name of contact person	
Telephone of contact person	
E-mail address of contact person	
Date materials received at the health facility	
Date answers submitted to Amref	
Date answer sheet received at Amref (if hard copy)	*Do not fill*
Staff information	**How many? (count)**
Laboratory personnel (total)	
Master's degree and above	
Bachelor's degree	
Higher national/advanced diploma	
Ordinary diploma	
Certificate	
Others	
Clinical personnel (total)	
Medical officers	
Assistant medical officers	
Clinical officers/medical assistants	
Registered nurses /midwives	
Enrolled nurses	
Others	
Public health personnel (total)	
Public health officers	
Public health technicians	
Other technical staff (total)	

INFORMATION FOR COMPLETING THE QUESTIONS

Before completing the questions in the QUESTION AND ANSWER SHEET, read the following information and instructions carefully.

SURVEY INFORMATION

1. EA-REQAS surveys are intended to identify areas that may need support in your health facility. Supervisors are expected to use the results to support appropriate corrective actions. There are no negative consequences from participating in EA-REQAS.
2. All samples are linked to clinical scenarios (4 scenarios per survey). The questions address laboratory (7 laboratory examinations; 3 theory questions), clinical (4 theory questions) and public health (2 theory questions) issues. Please complete the answers together with the clinicians and public health staff in your health facility; this exercise is intended to promote discussion and communication between all cadres.
3. All laboratory examinations must be performed ONLY by the laboratory staff in your health facility. The laboratory must not send any PT samples or portions of PT samples to any other laboratory for analysis, or discuss or share the results with other facilities, before the date of survey closure.
4. The survey closing date is 45 days from despatch of samples, i.e. results must be received at the Coordinating Centre by the closing date. The Coordinating Centre will acknowledge receipt of hard copy results within 7 days; results submitted online receive an immediate acknowledgement of receipt.
5. The laboratory in charge will be contacted by SMS two weeks before materials despatch, on the despatch day, and one week before the date of survey closure.
6. Answers may be submitted using paper copies OR online, using the internet. **We strongly recommend you return answers online for reasons of speed and accuracy of data entry.**
7. Immediate Feedback Reports will be sent to health facilities within 30 days of the survey closing date, with suggestions to address common errors and advice on improving performance in weak areas. Educational materials addressing areas of weak performance are available on the EA-REQAS website.
8. Composite Reports will be sent to national health authorities, participating health facilities and sponsors within 45 days of the survey closing date.
9. The laboratory in charges and laboratory supervisors should keep records of all results and corrective actions taken to remedy the problems identified by your responses.
10. If you have any questions or concerns, please feel free to contact the Amref Coordinating Centre in your country, or the Regional Coordinating Centre (Amref Health Africa in Kenya) at the contacts below:

Country	Contact person	Address	Email	Telephone
Kenya; Burundi; South Sudan; Somalia; Nigeria; Ethiopia; Sierra Leone; Democratic Republic of Congo; Central African Republic	-Dennis Mwiti -Reuben Ongwae	Amref Health Africa in Kenya Langata Road P.O. Box 27691 - 00506, Nairobi	Dennis.Mwiti@amref.org Reuben.Ongwae@amref.org	+254 702 034 799 +254 704 441 848
Tanzania and Zanzibar	-Sagamo Mattaro -Meshack Levi	Amref Health Africa in Tanzania 1019 Ali Hassan Mwinyi Road, Upanga, P.O. Box 2773, Dar es Salaam	Sagamo.Mattaro@amref.org Meshack.Levi@amref.org	+255 754 290 139 +255 754 803 878

Health facilities that respond to both surveys in each calendar year will receive a Certificate of Participation!!

Thank you for participating in EA-REQAS!

SUBMITTING YOUR ANSWERS USING PAPER COPIES

1. Return the completed **QUESTION AND ANSWER SHEET** to arrive at the relevant Amref Coordinating Centre by the **SURVEY CLOSING DATE** written on the first page of this document.
2. Ensure the **QUESTION AND ANSWER SHEET** is signed off by both the **Laboratory in-charge** and the **Clinician in-charge** of your health facility, before submission.
3. Place the completed **QUESTION AND ANSWER SHEET** in an envelope, seal it and address it. Your results must be kept confidential and known only to your own health facility.
4. Send the envelope to the Amref Coordinating Centre by post, through EMS, or by other means, e.g. hand carried or through your hub system. Laboratory supervisors may arrange to collect **sealed** envelopes from all participating health facilities and send them as a single package to the Amref Coordinating Centre but supervisors must not view individual health facility results at this stage. Use of EMS is free of charge, but requires approval from your Amref Coordinating Centre.
5. You can also send results by scanning or taking photographs of each page of the questionnaire, and emailing them to Dennis.Mwiti@amref.org

SUBMITTING YOUR ANSWERS ONLINE

1. Visit www.eareqas.org and carefully follow the instructions.
2. We recommend you complete the QUESTION AND ANSWER SHEET in hard copy before completing the online version.
3. Use your **Health Facility Code** as your User Name, and your assigned **Password** to log in.
4. The online QUESTION AND ANSWER SHEET must be submitted by the **SURVEY CLOSING DATE** indicated on the home page; the online system will not accept entries after this date.
5. The completed QUESTION AND ANSWER SHEET must be approved by both the **Laboratory in-charge** and the **Clinician in-charge** of your health facility, before submission. The online questionnaire will ask you this question before allowing you to submit.

SAMPLES

1. **Lysate:** Haemoglobin lysate is prepared by extracting haemoglobin from whole human blood. Mix well using a mixer or gently by hand for at least 10 minutes before processing. Process lysate samples in the same way as a patient sample, using your usual method. Store at 2–8°C. **Do not freeze.**
2. **Blood films:** Blood films (both thick and thin films) are stained with 5% Giemsa stain. Thin films are fixed before staining.
3. **Preserved stool and urine**: Stool and urine are preserved in 10% formal saline.
4. **Serum:** Serum is plasma that has been converted to serum in the laboratory.
5. **Sputum smears:** Smears are prepared from homogenised sputum, fixed, then stained or left unstained.
   - **Safety of Proficiency Testing materials:** all materials have been treated and preserved to render them non-infectious. Serum is heat inactivated. However, remember that all biological materials are potentially infectious and universal safety precautions should always be observed during processing and examination.
   - **Labelling of Proficiency Testing materials:** Proficiency Testing materials are coded using seven digits written on the labels of each sample in the following order:

1.	PT materials identification (2 digits)	B1 = Blood Film 1 F1 = Stool sample 1 Z1 = Sputum smear 1 S1 = Serum sample 1	L1 = Lysate sample 1 B2 = Blood film 2 G1= Gram stained smear 1
2.	Year (2 digits)	24	
3.	Distribution number (3 digits)	033	

- **Quality of Proficiency Testing Materials:** enter the quality of each proficiency testing specimen in the answer sheet as follows: **1 = Satisfactory; 2 = Unsatisfactory**. If "Unsatisfactory" state the reason in the box provided at the end of the answer sheet, or in the text box when responding online. Examination of unsatisfactory materials may affect your results, so your reason will help in awarding the correct score.
- **Stability of Proficiency Testing materials:** All PT samples are stabilised and may be stored after processing and used for rechecking your results after receiving the answers. The samples are also valuable teaching materials; please share them with your colleagues when you receive the results. These surveys are intended to improve the knowledge and practice of all staff in your laboratory through hands-on experience.

HOW TO ANSWER THE QUESTIONS

1. For **quantitative results** (haemoglobin measurement) and **semi-quantitative results** (malaria parasite count; AFB count) enter the value you obtain in the box provided, or select the value from the drop down list when responding online. A detailed guidance sheet for counting is available at www.eareqas.org
   - Malaria parasite count: count the number of parasites against 200 or 500 WBCs in the thick blood film, using World Health Organization (WHO) criteria, and calculate the parasite count per microlitre of blood.
   - AFB count: count and grade the AFB on the smear using WHO criteria for Ziehl Neelsen staining or fluorescent microscopy
2. For **qualitative results** select response(s) from the answers provided in the **Coded Answer Sheet**, and enter the codes in the boxes provided; or select codes from the drop down list (when responding online). Every survey may have a different Coded Answer Sheet; do not use Coded Answer Sheets from previous surveys.
3. If you select either CLP000 or CLP001, give your answer or state your reason in the box provided at the end of the answer sheet, or in the text box (when responding online).
4. Only write one code per box. Answers entered outside the boxes will not be considered.
5. Note the following:
   - Some questions may have more than one answer
   - Irrelevant answers will not score any marks
   - Answers with dangerous clinical implications will be penalised with one negative mark

NOW PROCEED TO ANSWER THESE QUESTIONS

Testing methods / techniques: Select the instruments and techniques used, as indicated below. This is important for analysis of your results.

i Equipment used for microscopy

Description	Key	Enter the relevant key here:
Type of microscope	1 = Monocular 2 = Binocular	
Source of light for the microscope	E = Electricity B = Battery N = Natural light	

ii Equipment and method used for haemoglobin measurement

Method of haemoglobin measurement	1 = Autoanalyser 2 = Manual colorimetric 3 = Comparator	**Enter the relevant key here:**
Name of equipment		

iii Method and test kit	**For HIV**
Method(s)	
Name of Test Kit 1	
Name of Test Kit 2	

iii Staining method used for sputum smear

Method	Enter the relevant key here:
1 = Ziehl Neelsen staining method 2 = Fluorescent microscopy method	

QUESTION AND ANSWER SHEET

Clinical scenario 1

A 38-year-old female living along the shores of a freshwater lake, presents to your facility with a history of fever, chills and fatigue for the past week. She reports intermittent fevers, occurring every 48 hours, and denies any recent travel outside the region. On examination, she is febrile with a temperature of 39°C.

Question 1

A) Examine the Giemsa stained blood slide labelled **B124033** and report your findings.

B) What is the likely vector of the disease?

C) In consultation with the clinician, how should this patient be managed?

D) What advice would you give the patient to prevent this infection in the future?

Quality of EQAS materials for Question 1

Sample	**Slide (B124033)**
Sample quality 1 = satisfactory 2 = unsatisfactory	
If unsatisfactory, state the problem(s)	

Clinical scenario 2

A 35-year-old male soldier presents to the barracks' medical centre with complaints of persistent cough, fatigue and weight loss over the past few months. He also reports night sweats and occasional fevers. On examination, he appears pale and wasted.

Question 2

A) The smear labelled **Z124033** was prepared from the patient's sputum. Stain the smear and report your findings.

B) State two (2) additional laboratory tests that can be used to confirm the sputum results.

C) Perform an HIV test on the serum labelled **S124033** and report your findings.

D) State three (3) safety measures that can be taken while processing sputum specimens in a health facility laboratory.

Quality of EQAS materials for Question 2

Sample	Slide (Z124033)	Serum (S124033)
Sample quality: 1 = satisfactory 2 = unsatisfactory		
If unsatisfactory state the problem(s)		

Clinical scenario 3

A 42-year-old woman from a rural village presents to a district hospital with complaints of fatigue, weakness and dizziness for the past few months. She reports a history of heavy menstrual bleeding and a diet of mainly vegetables and grains. On examination, her conjunctivae are pale. Her heart rate is 110 beats per minute, and there are no other significant findings from the physical examination.

Question 3

A) Measure the haemoglobin level in the sample labelled **L124033** and report your results in g/dL**. (NB: Hemocue HB 301 is unable to process haemoglobin lysate; therefore, please use alternative equipment when measuring HB for sample (L124033).**

		.		g/dL

B) Examine the blood film labelled **B224033**. List three (3) findings regarding the red blood cell morphology.

C) Give your interpretation which you would report to the clinician.

D) In consultation with your clinician, how should this patient be immediately managed.

Quality of EQAS materials for Question 3

Sample	**Lysate (L124033)**	**Slide (B224033)**
Sample quality 1 = satisfactory, 2 = unsatisfactory		
If unsatisfactory state the problem(s)		

Clinical scenario 4

A 28-year-old female presents to your health clinic complaining of vaginal itching and a thick, white vaginal discharge for the past week. She also reports having mild diarrhoea and abdominal cramps for the past three days. She has recently completed a course of broad-spectrum antibiotics for a skin infection which has resolved. There is no evidence of fever, urinary symptoms or other significant medical history.

Question 4

A) The slide labelled **G124033** is a fixed preparation of the patient's high vaginal swab. Perform a Gram stain and report your findings.

B) In consultation with the clinician, state the presumptive diagnosis.

C) Examine the stool sample labelled **F124033** and report your findings.

D) How will the clinician treat this patient?

Quality of EQA materials for Question 4

Sample	**Gram smear (G124033)**	**Stool (F124033)**
Sample quality 1 = satisfactory, 2 = unsatisfactory		
If unsatisfactory state the problem(s)		

Complete this sheet by signing off by both the Laboratory and Clinician in charge

Name of Clinician in-charge……

Signature ……..**Date** ……**Cell phone number**……..

Name of Laboratory in-charge……..

Signature……..**Date**……**Cell phone number**……