**[YEAR COUNTRY] MALARIA INDICATOR SURVEY MICROSCOPY DATA COLLECTION FORM**

First reader

Second reader

Third reader

**Check appropriate box**

Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Lab name**

**Lab scientist’s name**

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| **Lab ID** | **Asexual parasites**  **PRESENT = 1**  **NOT PRESENT = 0** | **Asexual (N)** | | | | **WBC (N)** | | | **Gameto-cytes**1  **PRESENT= 1**  **NOT**  **PRESENT = 0** | **Species**1  PLACE TICK IN BOX CORRESPONDING TO SPECIES OBSERVED | | | | **Remarks** | |
| *Pf* | *Pv* | *Po* | *Pm* |
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Asexual: Trophozoites/schizonts, WBC: white blood cell count against asexual form, *Pf*: P falciparum, *Pv*: P vivax, *Po*: P ovale, *Pm*: P malariae

1 Optional marker. Not required by The DHS Program.

**[YEAR COUNTRY] MALARIA INDICATOR SURVEY MICROSCOPY DATA COLLECTION FORM - INSTRUCTIONS**

**A. Examining the thick film to confirm the presence of malaria parasites and recording results**

1. Place the Giemsa-stained blood film to be examined on the microscope stage, with the barcode label to the left. Position the thick film in line with the 10x objective lens.
2. Switch on the microscope, adjust the light source, and focus by looking through the ocular and adjusting the position of the stage.
3. Scan the blood film for parasites and white blood cells. Select part of the film that is well stained and has evenly distributed white blood cells.
4. Place a small drop of immersion oil on the thick film. To avoid cross-contamination, ensure that the immersion oil applicator never touches the slide. Do not allow the 40x objective to touch the oil as you switch objectives.
5. Switch the 100x oil immersion objective over the selected portion of the thick film. Use the fine focus adjustment to see the image clearly. Raise the mechanical stage to avoid damaging the slide.
6. Using the fine focus adjustment, focus on the cell elements, and confirm that the film is acceptable for routine examination: 15–20 white blood cells (WBCs) per thick film field is satisfactory. Films with fewer WBCs per field will require more extensive examination.
7. Examine the slide in a systematic manner. Start at the top left of the film and begin at the periphery of the field, then move horizontally to the right, field by field.
8. When the right end of the film is reached, move the slide slightly downwards, then to the left, field by field, and so forth. Use the fine focus adjustment as needed.
9. A minimum of 100 high-power fields (HPFs) must be examined before a thick film can be declared as having no asexual malaria parasites present. Enter ‘0’ in column 2 of the paper form if no asexual malaria parasites are present. Note: 100 HPFs typically corresponds to ~1500-2000 WBCs.
10. If parasites are seen during initial scan, enter ‘1’ in column 2 of the paper form.
11. Next, start counting both the number of asexual parasites and WBCs until you reach a minimum of 500 WBCs, being sure to count all of the parasites and WBCs in the final field.
12. Enter the number of parasites and the number of WBCs in the form.
13. The parasite density will be automatically calculated by the malaria data entry and tracking system (MADETS) based on the standard WHO formula:

*parasites/µL blood = number of parasites counted x 8000/number of WBCs counted*

1. [OPTIONAL: Note in the form whether any gametocytes were observed.]

**B. [OPTIONAL: Examining the thin film to confirm species and mixed infections**

1. Place a drop of immersion oil on the feathered edge of the thin film.
2. Move from the 10x lens to the 100x oil immersion lens.
3. Examine the feathery end or edge of the thin film where the red cells lay side by side and there is minimal overlap.
4. Move along the edge of the film, then move the slide outwards by one field, inwards by one field, returning in a lateral movement and so on.
5. Continue examining the thin film until the species of malaria parasites have been confirmed.
6. Record all species observed in the form.]