TRAINING UPDATE

Lab Location:	GEC	**Date Distributed:**	8/4/2020
Department:	Core	**Due Date:**	8/31/2020
		Implementation:	**8/11/2020**

DESCRIPTION OF REVISION

Name of procedure:

Malaria Smear Collection – GEC Only GEC.M221 v1

Description of change(s):

Section 3: removed annual SOP review

Section 5: added use of applicator sticks; updated SOP references; changed SGAH to SGMC

Section 6: updated to standard wording

Section 7: updated SOP titles

This revised SOP will be implemented August 11, 2020

Document your compliance with this training update by taking the quiz in the MTS system.

Non-Technical SOP

Title	**Malaria Smear Collection – GEC Only**	
Prepared by	Ron Master	Date: 6/24/2014
Owner	Ron Master	Date: 6/24/2014

Laboratory Approval		
Print Name and Title	**Signature**	**Date**
Refer to the electronic signature page for approval and approval dates.		
Local Issue Date:	Local Effective Date:	

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1. PURPOSE

To describe slide preparation for malaria testing using blood collected in EDTA.

2. SCOPE

This procedure applies to technologists working at Germantown Emergency Center (GEC).

3. RESPONSIBILITY

It is the responsibility of trained technologists to prepare slides for malaria smears and comply with this procedure.

The Microbiology Director and Technical Supervisor are responsible for the content and review of the procedure.

4. DEFINITIONS

None

5. PROCEDURE

Equipment and Supplies:

- Latex free gloves
- Frosted slides
- Applicator sticks
- Slide holder
- Pencil
- Biohazard sharps container

Slide Preparation Procedure for the Germantown Emergency Department ONLY:

Because of limitations at Germantown precluding finger stick collection, malaria specimens may be collected in an EDTA lavender tube. Smears must be made at GEC within 30 minutes of collection in order to reduce distortion of the parasites and RBCs.

The thin and thick smears (4 of each) will be prepared at the Germantown ED and all of the smears and the EDTA tube will be sent to Shady Grove via STAT courier. The smears will be stained and examined at Shady Grove.

1. **Prepare four thin smears first** - Mix the blood thoroughly prior to making slides**.** Place one drop of blood near one end of a slide, and then spread the blood over the surface with a second slide. (See Addendum A, Illustration 2).
    - Strive for a thin smear that is rounded, feathered and progressively thinner toward the center of the slide.
    - The thin, feathered end should be at least 2 cm long, and the film should occupy the central area of the slide, with free margins on each side.

2. **Prepare four thick smears** - Mix the blood thoroughly prior to making slides**.** Place a small drop of blood in the center of a slide. Using an applicator stick, spread the drop in a circular pattern until it is about the size of a dime. Allow for complete air-drying of smears.
    - Care should be taken not to make the thick smear too thick, as the blood will flake off when dried.
    - A good test to determine that the blood is thick enough is to hold printed material under the film. If the print is readable the smear has the correct thickness.

3. Label the frosted end of the slides using a pencil. Label all slides with patient's name, accession number, medical record number, your tech code and date of draw.

4. Allow all slides to air-dry in a flat position in a cardboard slide holder.

5. The ED staff is responsible for completing the Malaria History Form by asking the patient what countries he/she has visited.

6. Receive the order in LIS. Refer to SOP *Specimen Receipt and Processing* for details.
7. Use LIS function TR to track the sample to SGMC using template GLAB. Refer to SOP *Tracking Specimens Between AHC Lab Sites* for details.
8. Deliver the EDTA tube, all smears, and the history form to SGMC Microbiology immediately via a STAT courier and notify a SGMC Microbiology tech.

6. SAFETY

Refer to your local and corporate safety manuals and Safety Data Sheet (SDS) for detailed information on safety practices and procedures and a complete description of hazards.
Although lab work typically focuses on the hazards of working with specimens and chemicals, we must also control other important hazards.

- All specimens must be presumed infectious. Use of gloves, lab coats, careful handling and hand washing should be employed when the specimen is obtained and manipulated.
- Use universal precautions at all times when handling specimens for microbiological culture or analysis.
- Appropriate Personal Protective Equipment (PPE) must be used at all times.
- Class II Biological safety cabinets or face shields must be used whenever there is a chance of a splash. Routine infectious spill procedures should be followed.

7. RELATED DOCUMENTS

Specimen Receipt and Processing, Specimen Processing SOP
Tracking Specimens Between AHC Lab Sites, Specimen Processing SOP
Malaria, SGMC Microbiology procedure
Malaria History Form, AG.F289

8. REFERENCES

Giemsa Stain for Malaria, Babesia, and other Blood Parasites, Parasitology Subteam of the Microbiology Best Practice Team, QDMI709a, ver 3.0

Garcia, L.S. Chair, NCCLS Subcommittee on Parasitology. 2000. M15-A. *Laboratory Diagnosis of Blood-Borne Parasitic Diseases*: *Approved Guideline.* NCCLS. Wayne, PA.

9. REVISION HISTORY

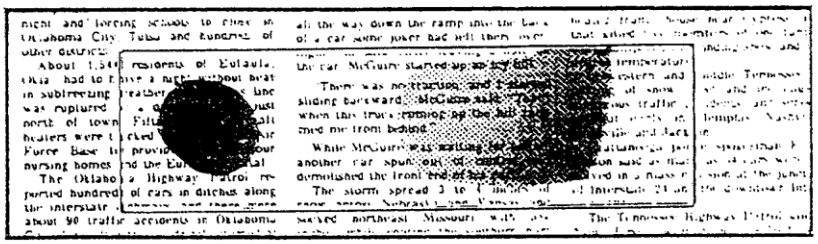
Version	Date	Reason for Revision	Revised By	Approved By
0	7/23/20	Section 3: removed annual SOP review Section 5: added use of applicator sticks; updated SOP references; changed SGAH to SGMC Section 6: updated to standard wording Section 7: updated SOP titles	R Bridges L Barrett	R Master

10. ADDENDA AND APPENDICES

A. Preparing Blood Films

Addendum A

PREPARING BLOOD FILMS



1 Properly prepared thick and thin film