

---

**Reporting Title:** Malaria/Babesia Smear**Performing Location:** Rochester**Ordering Guidance:**

Malaria is a potentially life-threatening disease and testing for this infection should be performed as rapidly as possible. Therefore, this test should not be used as a primary screening test for malaria, except for clients in the immediate Rochester, Minnesota area when the specimen can be delivered within several hours of collection. Laboratories that are unable to deliver a specimen within this time frame should provide an initial screen for malaria and other blood parasites in their laboratory prior to sending a specimen to Mayo Clinic Laboratories. This test is used for confirmation of a presumptive malaria diagnosis and determination of infecting Plasmodium species and percent parasitemia.

If filarial infection is suspected, FIL / Filaria, Blood is recommended since it is more sensitive than the traditional blood smear examination.

**Specimen Requirements:**

Both blood and slides are required.

Specimen Type: Whole blood

Container/Tube: Lavender top (EDTA)

Specimen Volume: 1 mL

Collection Instructions:

1. Invert several times to mix blood.
2. Send whole blood specimen in original tube. Do not aliquot.

Specimen Type: Blood films

Slides: 2 Thin blood films and 2 thick blood films

Container/Tube: Plastic slide container

Collection Instructions:

1. Slides must be clean and grease-free.
2. Blood films should be made from fresh blood using fingerstick or drops of blood from needle following venipuncture. However, EDTA anticoagulated blood is also acceptable.
3. Prepare thin blood films as follows:
  - a. Prepare 2 thin smears with a slide prep machine. OR
  - b. Prepare a thin film with a "feathered edge" that is no more than a single cell thick.
  - c. Allow the film to thoroughly air dry and then fix by briefly immersing in either absolute or 95% methyl alcohol.
  - d. Allow to air dry after fixation.
4. Prepare thick blood films as follows:
  - a. Place a large drop of blood (approximately the size of a dime and preferably from a fingerstick) on a slide.
  - b. Using a corner of a second slide spread the drop in a circular motion while applying firm pressure to literally scratch the blood onto the carrier slide. This technique allows the blood to dry quickly and adhere well to the slide. Use approximately 20 circular sweeps with the second slide. The drop of blood should be about the size of a quarter when finished.
  - c. Do not fix. Air dry thoroughly (approximately 45 minutes) before placing in transport container.

**Specimen Minimum Volume:**

Blood: 0.5 mL

Slides: See Specimen Required.

**Forms:**

If not ordering electronically, complete, print, and send a Microbiology Test Request (T244) with the specimen.

| Specimen Type | Temperature              | Time | Special Container |
|---------------|--------------------------|------|-------------------|
| Varies        | Refrigerated (preferred) |      |                   |
|               | Ambient                  |      |                   |

**Ask at Order Entry (AOE) Questions:**

| Test ID | Question ID | Description     | Type       | Reportable |
|---------|-------------|-----------------|------------|------------|
| MAL     | Q00M0036    | Specimen Source | Plain Text | No         |

**Result Codes:**

| Result ID | Reporting Name        | Type         | Unit | LOINC®  |
|-----------|-----------------------|--------------|------|---------|
| MAL       | Malaria/Babesia Smear | Alphanumeric |      | 51714-4 |

LOINC and CPT codes are provided by the performing laboratory.

**Supplemental Report:**

No

**CPT Code Information:**

87207

**Reference Values:**

Negative

If positive, organism identified and percent parasitemia calculated, if applicable.