The ICT card test has been shown to be a useful and sensitive tool for the detection of *Wuchereria bancrofti* antigen and is being used widely by lymphatic filariasis elimination programs. Although the test is relatively simple to use, adequate training is necessary to reduce inter-observer variability and to reduce the misreading of cards which can lead to false positive results.

**Basic Guidelines**

i. Cards are currently known to have a limited shelf life at ambient temperatures (3 months at 30°C) but longer shelf life when stored at 4°C (approximately 9 months). Cards should NOT be frozen.

ii. One hundred microliters of blood should be collected by finger prick into a calibrated capillary tube coated with an anticoagulant (EDTA or heparin). Alternatively, finger prick blood can be collected into a microcentrifuge blood collection tube coated with either EDTA or heparin.

iii. Before beginning field surveys, two cards from each lot of cards should be tested using a weak positive control that can be obtained from the Filariasis Research Reagent Repository Center (www.filariasiscenter.org). When using this control, the test line can be very faint. DO NOT use cards that are negative when tested with the control.

iv. When transporting cards for use in the field, a cool box is not required. However, care should be taken not to expose cards to extreme heat for prolonged periods of time.

v. Cards must be read using adequate lighting. Faint lines can be difficult to see when lighting is not adequate. This is especially important when reading cards at night.

**Test Procedure**

1. **Remove card from pouch just prior to use**

2. **Collect 100µL blood by finger prick using a calibrated capillary tube OR measure 100µL of blood from a microcentrifuge tube using a micropipettor. DO NOT add blood directly from the finger to the card.**

3. **Add blood sample slowly to the white portion of the sample pad**

**DO NOT**
- add blood directly to the pink portion of the sample pad
- close the card before the sample migrates to the pink portion of the sample pad (takes approximately 30 seconds after adding blood)
Remove adhesive liner and close card. Start timing.

Read test results 10 minutes after closing card

NOTE: It is helpful to record the starting time on the front of the card

NOTE: Do not read cards if the plasma has not flowed all the way down the strip.

NOTE: If plasma fails to migrate completely past the bottom of the window, a false positive result can occur

DO NOT read cards at any time other than 10 minutes as false positive readings may occur.

NOTE: Circle the appropriate result on the front of the card to create a permanent record

Test Interpretation

T = test
C = control

POSITIVE
(+) (+)

POSITIVE (weak)
(+) (+)

NEGATIVE
(+) (+)

INVALID
No lines appear

INVALID
No control line

NEGATIVE

NOTE: The test line should appear pink in color—sometimes a gray line or shadow will appear in the test line position and this should not be misinterpreted as a positive test.

An electronic version of this bench aid can be found at: www.ntdsupport.org/resources