Specimen Requirements for *Angiostrongylus cantonensis* Detection by Real-Time (RTi) Polymerase Chain Reaction (PCR) on clinical specimens.

Methodology: *Angiostrongylus cantonensis* (Angio) RTi-PCR

Performed: *Angiostrongylus cantonensis* RTi-PCR is performed only on specimens approved by the Disease Investigation Branch (DIB) of the Disease Outbreak and Control Division (DOCD), Department of Health.

Criteria for testing: Clinical signs and symptoms compatible with *Angiostrongylus cantonensis* infection and/or specimens meeting the case definition set by the DIB.

Turn-Around-Time: Results are reported 2-3 business days after approval and receipt of specimen(s).

Specimen type required: For Human samples: CSF
For Animal samples: CSF, Blood, or Tissue
A minimum of 200uL sample is required, 500uL is the ideal sample quantity.

Specimen storage/transport: Newly collected CSF stored at 4°C should be sent on cold packs (i.e. 4°C) within 24 hours. Ship on dry ice if CSF has been frozen at -20°C or lower. Blood and Tissue samples can be sent at room temperature. Samples will be stored at the temperature it was received.

Follow packing and shipping instructions of the U.S. Department of Transportation (U.S. DOT), and the International Air Transport Association (IATA) for Biological Substance, Category B.

Specimen submission: Specimens are submitted from requesting laboratories with 81.3 submission form(s). Test is subject to CLIA regulation which require two patient identifiers on the specimen container and the test requisition(s).

The Epidemiology Specialist of the DIB must notify the Biological Response Section at 453-5993 or 453-5984 prior to the submission of specimens.

Criteria for rejection: Specimen without prior approval from the State Epidemiologist or DIB Epidemiologist Investigator.
1. Specimen leaked in transit. Specimen will not be processed if the safety of the laboratory worker is compromised. Testing of leaking specimens requires the Laboratory Director’s approval.

2. Specimen is not collected in a proper container or special handling instructions are not followed. Submitter will be asked to submit another specimen.

3. Specimen is received at temperature not appropriate for specimen type.

4. Specimen quantity is insufficient to perform the test.

5. Unlabeled or incomplete specimen labeling and documentation. Submitter(s) will be notified to provide correct information and corrected State Laboratory Division (SLD) Form 81.3 in person or submit a written documentation by fax or e-mail.

6. Incomplete requisition form (e.g., travel history, medical history, previous lab results, if appropriate, etc.). Submitter must complete requisition form.

7. Specimen label does not match the requisition. Submitters must correct the discrepancy.

**Stability:**
If specimen cannot be transported to the SLD within 24 hours after collection, CSF specimens should be frozen at -20°C or lower. Frozen samples should be shipped in dry ice.

**Requisition Form:**
Each specimen submitted must have a completed SLD Form 81.3. Submitter is responsible for completing SLD Form 81.3 including but not limited to the following information: at least two patient unique identifiers, specimen site/specimen type, date of onset, date of collection, date shipped/sent to the SLD, test(s) requested, name and address of submitter and other pertinent information.

Requisition forms shall be placed in a separate bag and shall not be packed with the specimen(s).

**Normal Value:**
No *Angiostrongylus cantonensis* nucleic acid detected.

**Result Notification:**
Laboratory reports are electronically relayed to the submitters via the SLD dashboard. An automatic notification will be relayed when a report is available on the SLD dashboard. Laboratories who do not receive automatic notification will be notified by e-mail on the availability of results on the SLD Dashboard.

Submitters who do not have access to electronic reports will be notified via fax or by encrypted e-mail.
Test performed at:
Biological Response Section (BRS)
Laboratory Preparedness and Response Branch (LPRB)
State Laboratories Division
Department of Health
2725 Waimano Home Road
Pearl City, Hawaii 96782

Contact:
Remedios Gose at (808) 453-5993 or (808) 554-9992 or
Cheryl Daquip at (808) 453-5984 or (808) 453-6641

Reviewed By:

[Signature]
Remedios B. Gose, MSPH, RM (NRCM)
Laboratory Preparedness and Response Branch Chief

12/4/19
Date

Approved By:

[Signature]
Edward Desmond, Ph.D.
Administrator, State Laboratories Division

12/11/2019
Date