Confirmatory Testing of a HIV POCT Reactive Result

Each Health Authority (HA) has a process to follow if a Point of Care Test result is reactive. Please make sure that this specific information is part of your test location documents, and that any forms or links are readily available.

All reactive POC test results are reported to the Health Authority (HA) Medical Health Officer (MHO) or HA designated HIV or CD intake nurse AT THE TIME that the POCT result occurs AND when the confirmatory result comes back to the test location. This enables the MHO to monitor the rate of false positive POCT results.

It is essential to confirm all reactive HIV POC test results with standard laboratory HIV testing to rule out the possibility of a false positive reaction. A confirmatory lab sample should also be drawn and sent for testing if:

- a POC test results in two consecutive invalid results
- acute HIV infection is suspected and POCT is non-reactive
- the test provider is unable to interpret or has doubts about the POC test result

The standard HIV screening test done by the BCCDC Public Health Laboratory (PHL) is by 4th generation testing to detect HIV antigens and/or antibodies. HIV can be detected at least 1-2 weeks before the POC test can detect HIV antibodies.

Clinical Note

If you receive a "not indicative of HIV infection" or "indeterminate" *standard (lab) HIV test result* for a client who you consider to have a high likelihood of having an HIV infection, you may contact a medical or clinical virologist at the BCCDC Public Health Laboratory (PHL) to review the case and to determine if additional tests are indicated.

Individuals at high-risk of HIV (regardless of HIV POC test result) should be advised to get tested for other infections via standard blood testing where appropriate (i.e., syphilis, hepatitis B, hepatitis C).

Testing for TB is also highly recommended.

The BCCDC Public Health Laboratory (PHL) report may recommend a second serology test to confirm the diagnosis if the serology result is positive (indicative of HIV infection) and this is a new positive client.

- This helps to eliminate the low possibility of error that might result from sample handling errors such as mislabeling of submitted samples.
- Repeat testing is particularly recommended when the client's history suggests a low risk for exposure to HIV or the client does not undergo subsequent viral load testing or does not connect with HIV primary care follow-up.

Procedure for Confirmatory Testing done at the BCCDC Public Health Laboratory

Samples can be collected at the test location and transported directly to the BCCDC Public Health Laboratory (PHL) for follow-up testing, or indirectly via another laboratory or blood collection location. Testing may be done by alternate Health Authority approved HIV test locations (eg Island Health Lab System). Samples tested outside of BCCDC PHL will not have access to additional testing if the serology result is non-reactive.

Please send a message to the BC Program Lead that confirmatory samples have been sent to the BCCDC PHL, along with an appropriate time to call you so that client information is captured securely. The BC Program Lead will follow up with the BCCDC PHL and will do additional testing if the lab result is non-reactive to confirm if the sample received in the lab is reactive with the POCT kit.

Reminders related to Confirmatory Sample Collections:

- 1. A laboratory requisition must be completed according to established procedure (BCCDC PHL serology requisition or other), indicating whether HIV testing is to be reported nominally or non-nominally. Ask the client before including POC test results on the requisition.
- 2. If samples are **collected off-site**, then samples will be drawn and sent for testing, based on the Health Authority HIV testing practices. It is preferred if samples can be sent to the BCCDC PHL, but this may not occur.
- 3. If samples are collected at the test location, then
 - Refer to the <u>e-lab Handbook</u> for BCCDC PHL Services for current information.
 - The BCCDC PHL requires a single gold top tube to do STI/BBI serology (syphilis, Hepatitis B and C, HIV). This is only true if all testing will be done by the BCCDC PHL.
 - A purple top tube is useful for a HIV NAAT test if you suspect early infection.
 - All blood samples drawn and sent for testing must have 2 unique identifiers.
 - Information used on the sample and requisition must match.

Arrange for the sample to be transported to BCCDC PHL (or alternate) for testing, per established process.

4. Record the result of standard laboratory HIV testing in the client chart and on the Daily Log of Client POC Test Results. Recording the result on the Daily Client Log assists the person who completes the Monthly Inventory Log.

For clients with an initial reactive HIV POC test result, record one of the following onto the Client Test Log so that the information is reported to the BC Program:

Recording Confirmatory HIV POC Test Result

If standard lab test (confirmatory) result is	Then record the following in client history and on Client Test Log:
Indicative of HIV infection (positive) REACTIVE	True Positive (TP)
Not indicative of HIV infection (negative) NON REACTIVE	False Positive (FP)

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 If standard lab test (confirmatory) result is
 Then record the following in client history and on

 Client Test Log:
 Not done

 Not done
 Preliminary Positive (PP)

Include an explanation/investigation in the client record and on the client test log for the reason for discordant/differing results, and as applicable – provide the reason for why follow-up testing was not done.

- 5. Notify the client of their confirmatory test result per test location policy.
 - The Guidelines for Testing, Follow up and Prevention of HIV (<u>Oct 2016</u>) and the HIV Testing Guidelines for the Province of British Columbia <u>2014</u> offer valuable advice in managing these results with clients.

Remember to contact your MHO or *HA designated HIV or CD intake nurse* with the HIV serology result, as they will link it to your original HIV POCT report.