

HIV INSTI™ Test Procedure

Prior to doing the POC HIV test, check the date on the back of the INSTI™ kit packet to check the expiry date of the contents of this test kit packet. **DO NOT USE EXPIRED KITS** for client tests. Report on your client log (or other document) that the packet was expired and discarded, and tell the HIV POCT site contact that this happened, so that action can be taken to remove other expired kits.

Often testers take an additional kit and blood collection supplies in case they are needed.

BCCDC Public Health Laboratory can use a single blood sample for syphilis, Hep B, Hep C and HIV testing. If you've taken blood for any of these tests and find that you need a serologic HIV test when you've done the POC one, then add HIV to the BCCDC requisition and another sample is NOT needed. Often testers will take serologic samples before doing POC testing.

Prepare for testing.

1. Wash or sanitize hands.
Remove food and/or drinks from the test area.
2. Prepare a testing area by disinfecting a non-porous level surface with an approved disinfectant.

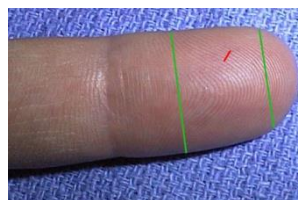
Note: Or, use a new, clean, blue pad or paper towel (in case of spills)



3. Gather the following materials:
 - INSTI™ HIV Test kit, which contains:
 - HIV test membrane
 - each of reagent solutions 1, 2 and 3
 - alcohol swab
 - single-use lancet
 - single-use pipette capable of dispensing 50 uL
 - gloves
 - gauze or cotton ball for post-puncture wound coverage
 - biohazard sharps/waste container

4. Select the finger to use for obtaining the blood sample.

Note: Avoid using the index finger or thumb because these two fingers are usually more calloused than the other three fingers. Similarly, avoid the tip of the finger.



5. Massage and/or warm the selected finger to allow blood to flow to the surface.



6. Put on gloves, if you haven't already.
7. Open the alcohol swab, and the Solution 1 bottle (Retain the lid.).
8. Wipe selected warmed finger thoroughly with alcohol swab and position hand at waist level or lower.
Allow alcohol to dry (do not blow on the finger)..



9. Open the pouch containing the membrane unit.
10. Remove the test membrane from the pouch without touching the centre well. Position the test membrane on the level surface with the tab down (facing you).

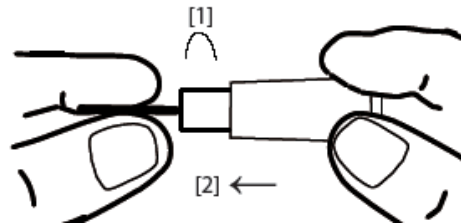
Note: If the centre well is touched, the HIV antigen molecules will be torn from the membrane and the test will not perform correctly.

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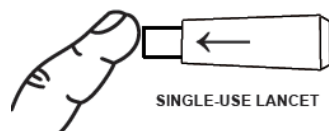
Collect 50 uL finger prick blood



11. Twist off the protective cap from the lancet and then pull the cap straight off.



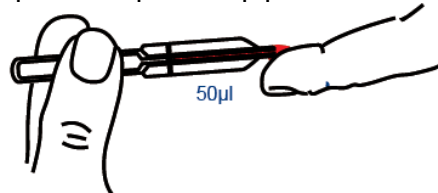
12. Position the lancet device against the finger.
Hold the lancet body and press the lancet firmly against the finger until you hear a click.



13. Release the finger to allow blood to flow back.
Dispose the lancet directly into a sharps container.

14. Press the finger again to bring blood back to the top. Wipe off the first drop.
 - Apply more or less pressure to form a bubble of blood from which you draw the sample.

Hold the pipette horizontally to the blood drop and touch the tip of the blood drop to the tip of the pipette.



Note: The pipette will fill by capillary action; **do not squeeze** the pipette during filling.

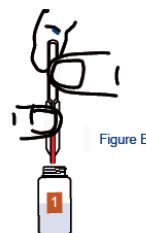
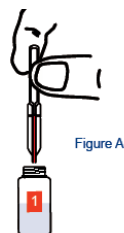
15. Release and press the finger to form a bubble and continue to fill the pipette to the fill line to obtain the required amount.

Note: It is very important to draw the correct amount of blood.

If the puncture site does not yield a sufficient amount, try running the test to see if the control spot is blue (valid). If the control spot is not blue, then a separate second puncture using a new lancet and pipette is required if testing is to be done by POCT.

*If the control spot is **very weak**, then the test is valid, BUT antibodies to early infection may not be sufficient in the sample for your eye to detect a reaction. Consider this when you interpret the result.*

16. Place gauze/cotton ball over the puncture site and ask the client to hold it and to elevate the hand.
17. Transfer the blood from the pipette into the sample diluent (Solution 1) bottle by squeezing the bulb of the pipette to dispense the blood into the bottle (figure A).



Note: If the blood does not expel from the pipette, hold the pipette vertically and slide a finger over the vent holes at the black line, then squeeze the pipette bulb (figure B).

**Testing –
Using
solutions 1,
2, 3**



18. Dispose of the pipette in a biohazard/sharps waste container.
19. Recap the bottle (Solution 1 + sample), mix by turning upside down at least 5-10 times.

Note: Do not shake vigorously as the solution will foam up.

Complete each of the following steps immediately.

20. Carefully pour the entire contents of the Solution 1 bottle into the membrane well.

Note: If most of the solution has gone into the well but some has dripped on the side of the membrane, continue the test. If the control dot appears the test can be interpreted. The test is built to ensure sufficient sample has been added when the control dot appears.



21. Wait until the solution is absorbed by the membrane (takes only a few seconds).

22. Mix the Colour Developer (Solution 2 bottle) by slowly turning the bottle upside down several times.

Note: Look at the bottom of this bottle as there should be nothing sticking to the bottom if mixed correctly.

23. Open and add the entire contents of the colour developer (Solution 2) to the centre of the membrane unit. Wait until the solution is absorbed by the membrane (takes approximately 20 seconds).



24. Open and add the clarifying reagent (Solution 3 bottle) to the centre of the membrane unit.

**Interpret
the results**

25. Read the result immediately and record it on the Client Log (or other site document).

Reminder: If more than 5 minutes have passed since adding the clarifying solution (solution 3) the result is invalid and CANNOT BE REPORTED.

Clean up.

26. Immediately discard the test membrane in a biohazard waste container.
27. Decontaminate the work area with an approved disinfectant.
28. Remove and discard gloves.

Discuss next steps with the client.

* A pictorial guide to fingerstick blood collection is available on the BC HIV POCT Webpage.