



After completing this unit you will be able to :

- ❖ Understand the process of rapid testing using the INSTI™ HIV rapid test
- ❖ Organize and label the materials for the test
- ❖ Perform a fingerstick blood collection
- ❖ Conduct an INSTI™ HIV Test and evaluate the result
- ❖ Respond appropriately to any results encountered in the testing process



The INSTI™ HIV rapid test

- ❖ Licensed in Canada and approved in Ontario for rapid screening
- ❖ 4 steps with all of the necessary materials in one package



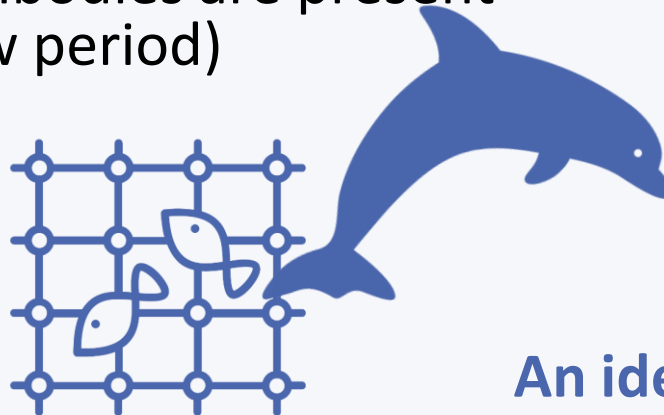
Rapid testing:

- ❖ Provides quick answers for clients, with testing and results in a single appointment
- ❖ Can be done outside medical facilities by non-medical personnel under a directive from medical personnel authorized to conduct testing.



The INSTI™ HIV rapid test

- ❖ Used as a screening test in Ontario; must be confirmed with standard testing
- ❖ Measures both IgM and IgG antibodies produced by the human body in response to HIV infection
- ❖ Highly accurate when antibodies are present (beyond the early window period)



INSTI™ HIV Results when testing whole blood

Sensitivity	99.6
Specificity	99.3

A **sensitive** fishing net catches all of the tuna, but perhaps some dolphins....

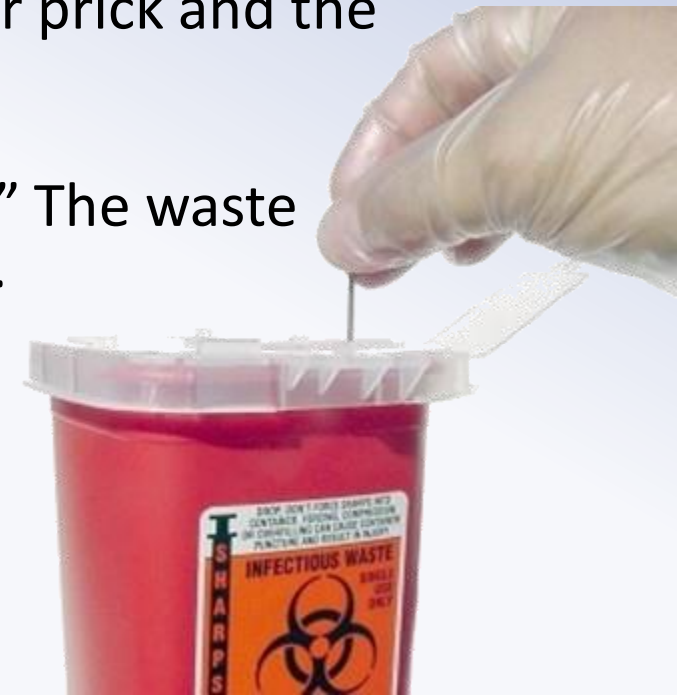
A **specific** fishing net catches only tuna and lets the dolphins swim free

An ideal test is sensitive and specific



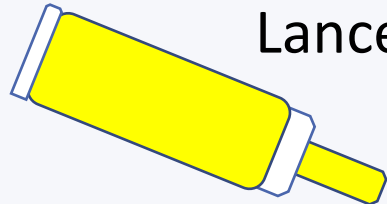
What you need for testing

- ❖ A quiet private place where you can counsel the client, with a level surface where you can do the test (or an adjacent space for you to do the test if that is the practice of your centre)
- ❖ The INSTI™ HIV test kit with all the materials needed for finger prick and the testing
- ❖ One or more receptacles for biohazardous waste and “sharps.” The waste container for sharp items like the lancet must have hard sides.
- ❖ Cotton or gauze and band aids for the client
- ❖ Gloves as well as hand sanitizer or soap





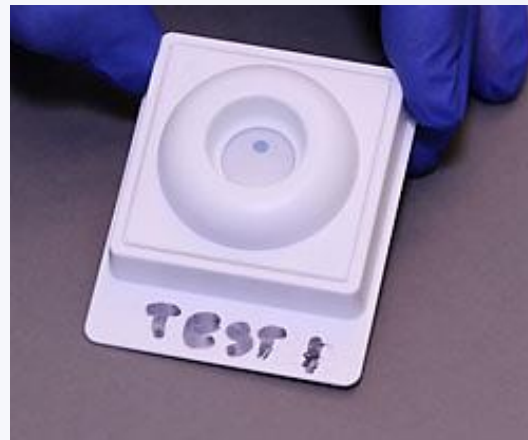
Components of the test kit



Lancet



pipette



Membrane unit



Product Insert



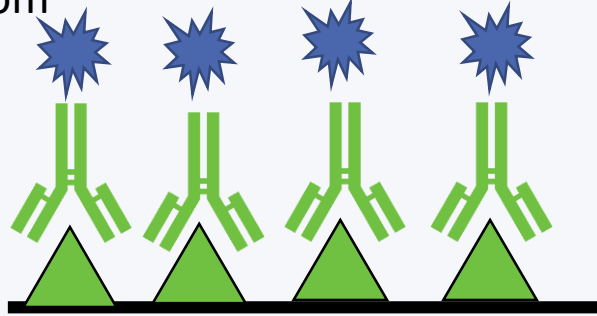
Test Reagents



How it works summary



Blue dye from reagent 2

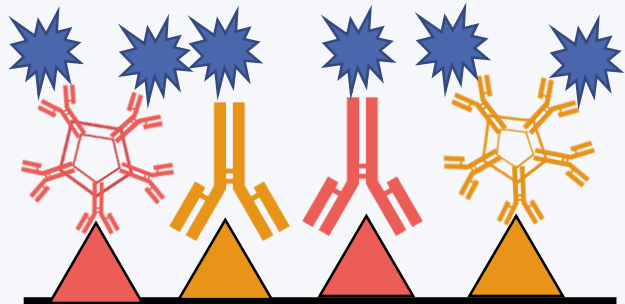


Two spots on the test membrane attract and capture human antibodies (Ab)

● Top control spot captures any human antibody (shows the test is working)

Capture area on membrane surface

Blue dye from reagent 2



● Bottom test spot captures only antibodies (Ab) to HIV-1 or HIV-2

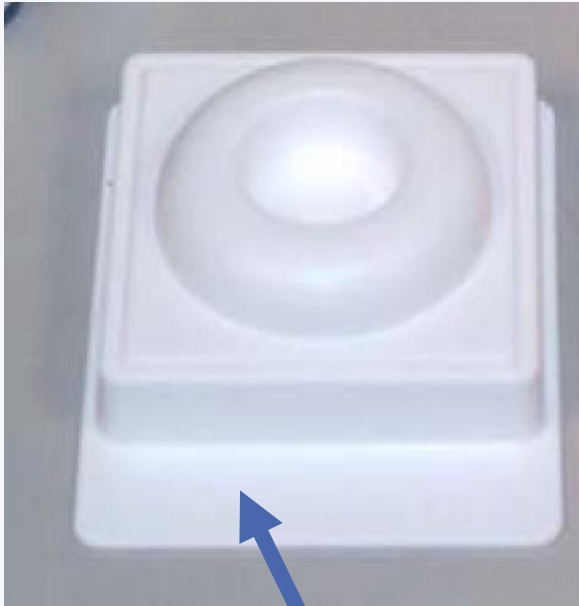
Capture area for HIV-1 and HIV-2 Ab

After capture, the antibodies are stained with a blue dye (blue colour appears where antibodies have been captured)



Watch a video of the testing procedure at <https://biolytical.com/support/education/?country=CA> for more testing tips

Beginning the Test



Can be used to write the client's name (or ID #)

1. After pre-test counseling and gaining the client's consent for testing, let them know it is time to start the test; wash or sanitize your hands
2. Collect the materials needed; write the client's name or ID number on the daily log sheet along with the POC kit lot number and expiry date
3. Orient the test membrane so the name tab is at the bottom; a small letter C indicates the control spot at the top
4. Ask the client which hand they would like to use and begin blood collection



Blood Collection



1. Select the finger for blood collection and massage the finger to warm it and ease blood flow
2. Clean with an alcohol wipe
3. Allow alcohol to dry completely
4. Hold the finger firmly below the top joint
5. Apply lancet along the side of the chosen finger (as shown), not at the very tip
6. Release the finger and discard the lancet in the sharps container



Blood Collection



1. Hold the pipette horizontal, or slightly below; touch it to the blood drop
2. Gently squeeze the finger
3. Allow it to fill to the black line, this will happen automatically by capillary action
4. Don't squeeze the pipette, and don't cover the small hole just above the black line while collecting the sample
5. Give the client a cotton ball or gauze to press to the puncture; make sure they are not feeling faint



Beginning the Test



1. Add all of the blood to vial 1 (red) by squeezing the end of the pipette
2. If all of the blood is not expelled, cover the hole just above the black line and try again

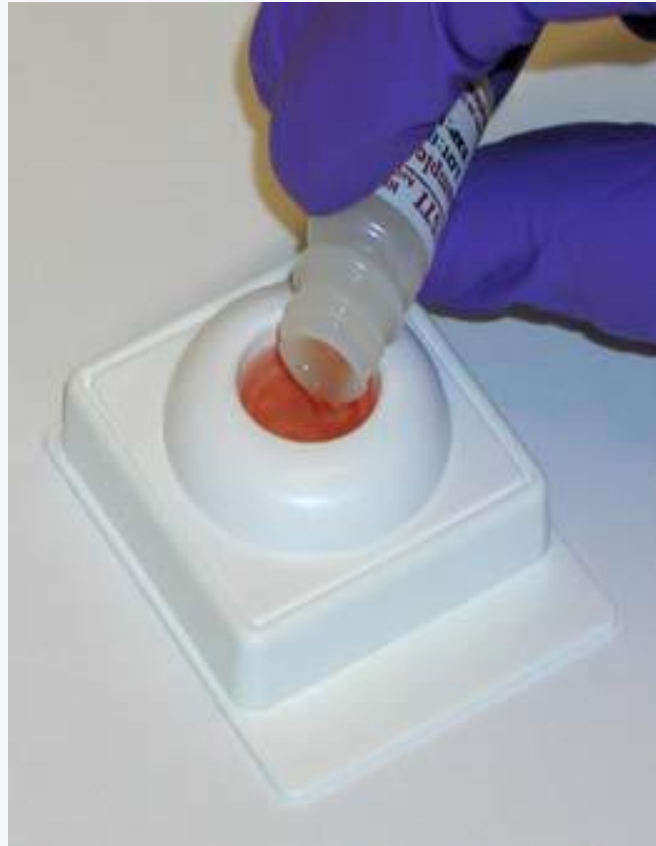


3. Recap the bottle and mix gently by inversion
4. Offer the client a band aid

Practice differs between clinics; if your clinic does the test out of sight of the client, now is when you should move to another room. You have five minutes to add vial one to the membrane unit.



Perform the Test

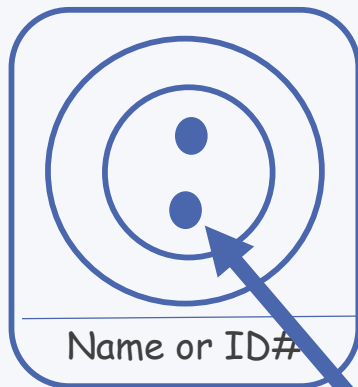


1. Invert vial 1 again, and within 5 minutes, pour the combined contents into the membrane unit
....**Wait** until the fluid has fully soaked in; this gives the antibodies time to attach
2. Add the contents of vial 2 (blue) to the membrane
....**Wait** until the fluid has fully soaked in; this allows the blue dye to attach to the antibodies
3. Add the contents of vial 3 (grey) to the membrane
The clarifying solution makes the test dots easier to see clearly; the membrane can be read when it is still wet, and must be read within 5 minutes of adding the clarifying solution



Read the Test

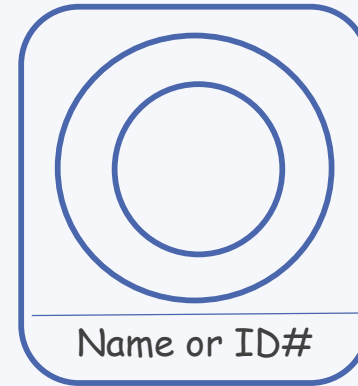
In Ontario, we report three possible outcomes for an INSTI™ HIV rapid test



Reactive



Non-Reactive



Invalid

Any visible test dot, even if it is faint or hollow, should be considered reactive.



Always read with the tab down

Check your take home materials for a chart illustrating some real world examples of how tests may appear