



Dueling Rapids: An Introduction to HIV Rapid Testing

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Disclosures

None of the presenters have declared a relevant financial relationship with an ineligible company.

Agenda

HIV Overview

Debate

Dual Rapid

Device Demonstration

Q & A

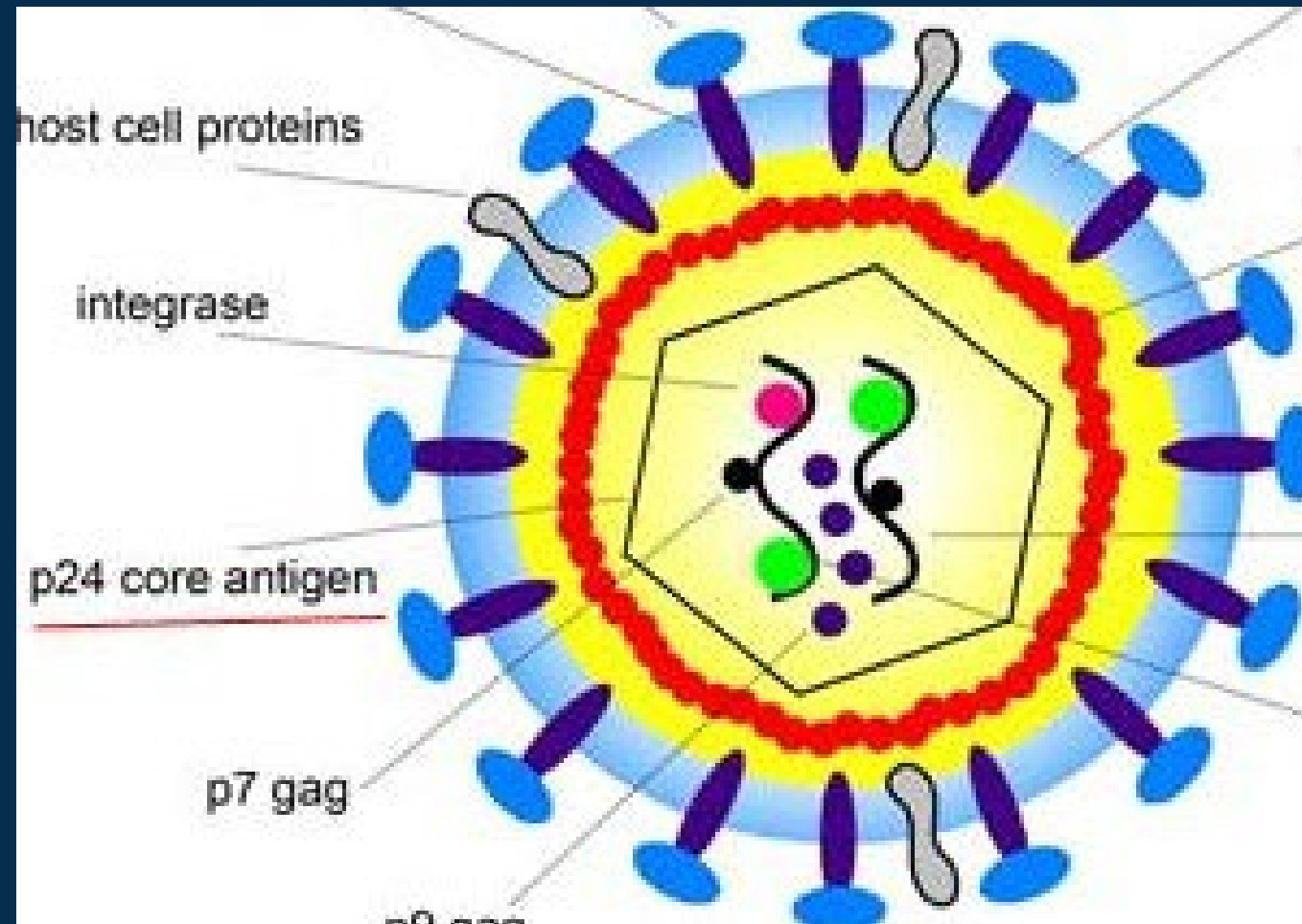
Participant Skill Building

Disclaimer

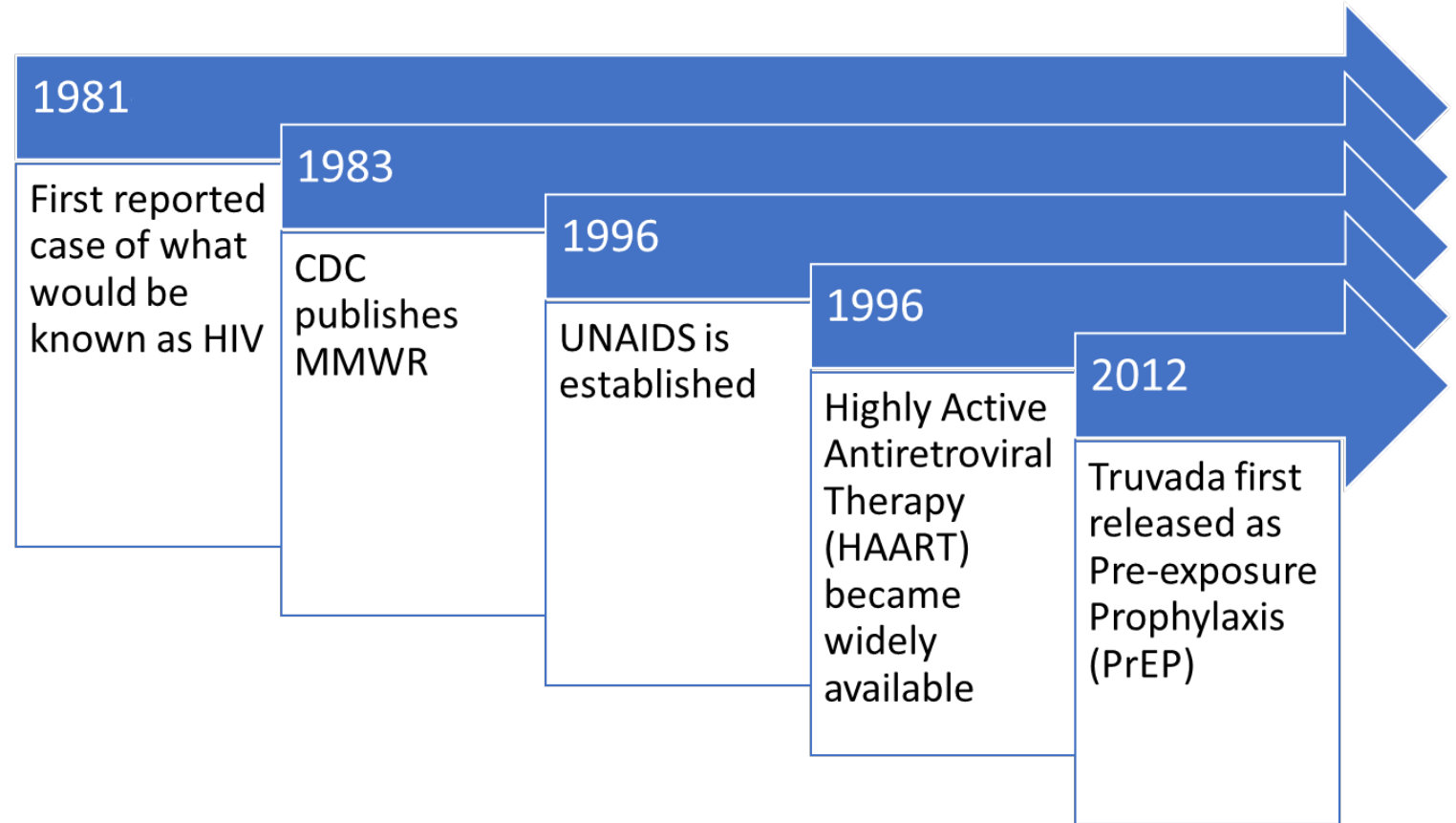
Please hydrate and warm your hands

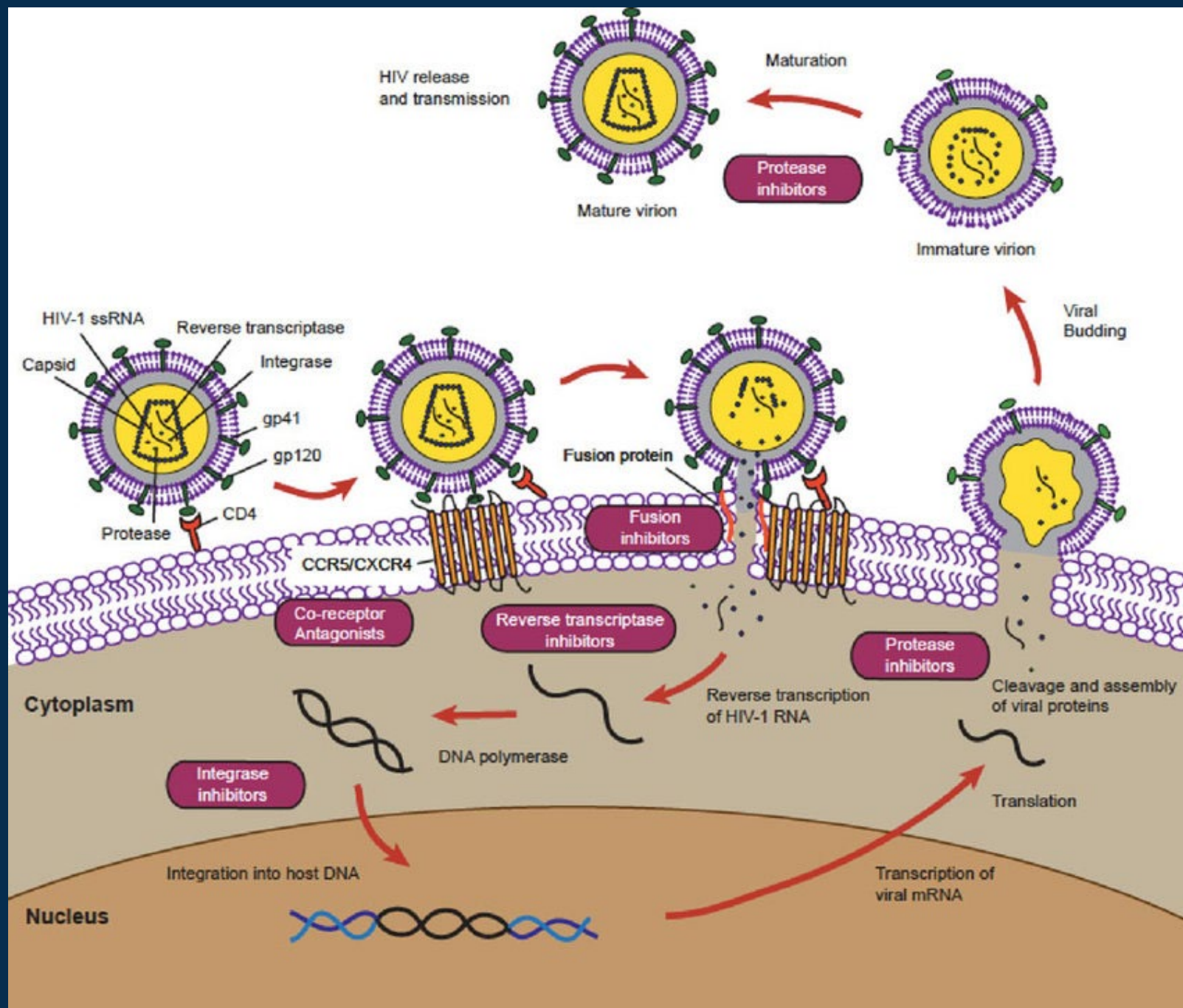
Reminder: Results will **NOT** be read

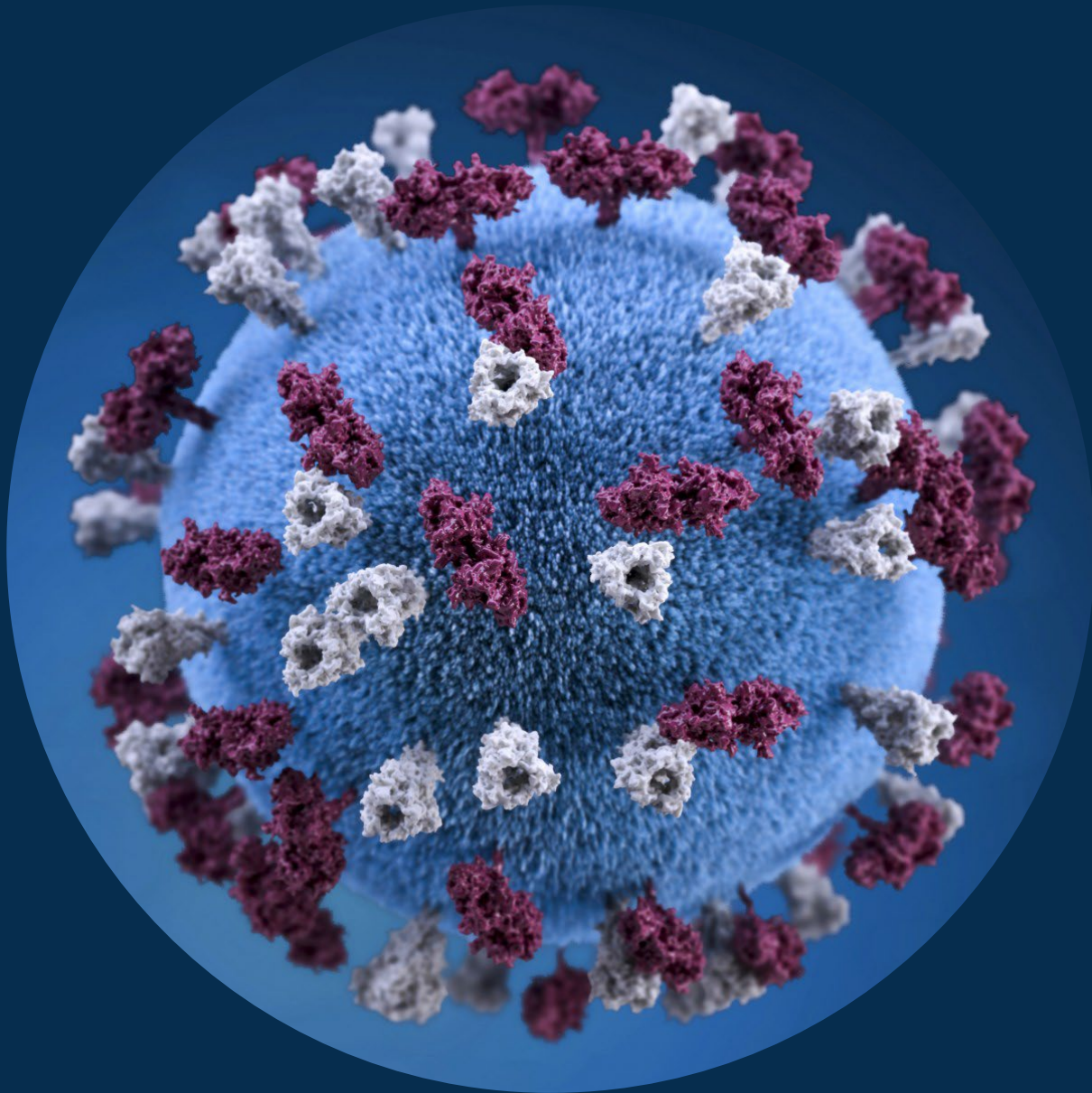
HIV Overview



Timeline of HIV in the United States







Staging of HIV

HIV can be formally staged into 3 stages:

- Acute HIV Infection
- Chronic HIV Infection
- Acquired Immunodeficiency Syndrome (AIDS)

Ways HIV is Transmitted

HIV is transmitted



**THROUGH
SEXUAL CONTACT**

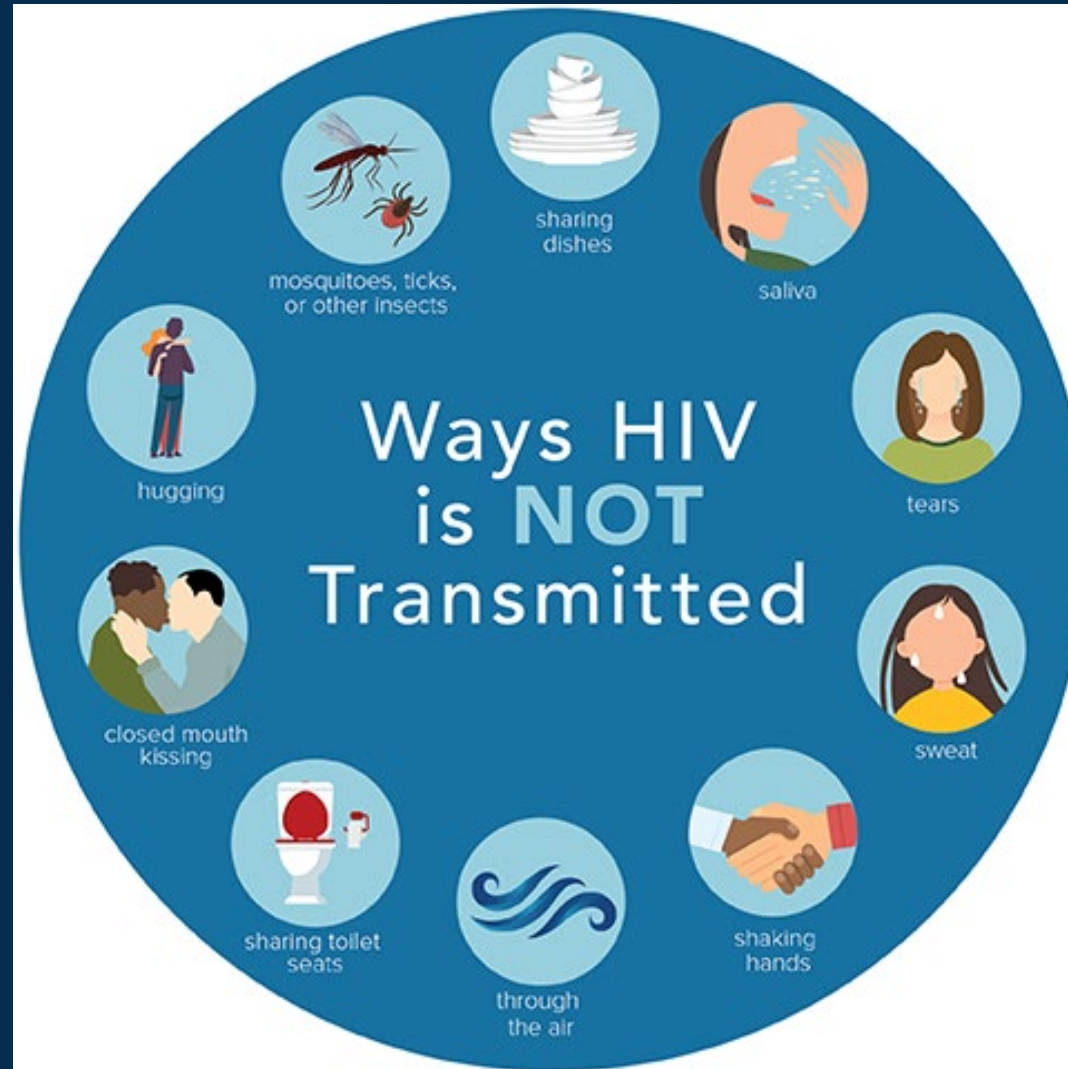


**THROUGH EXPOSURE
TO BLOOD**

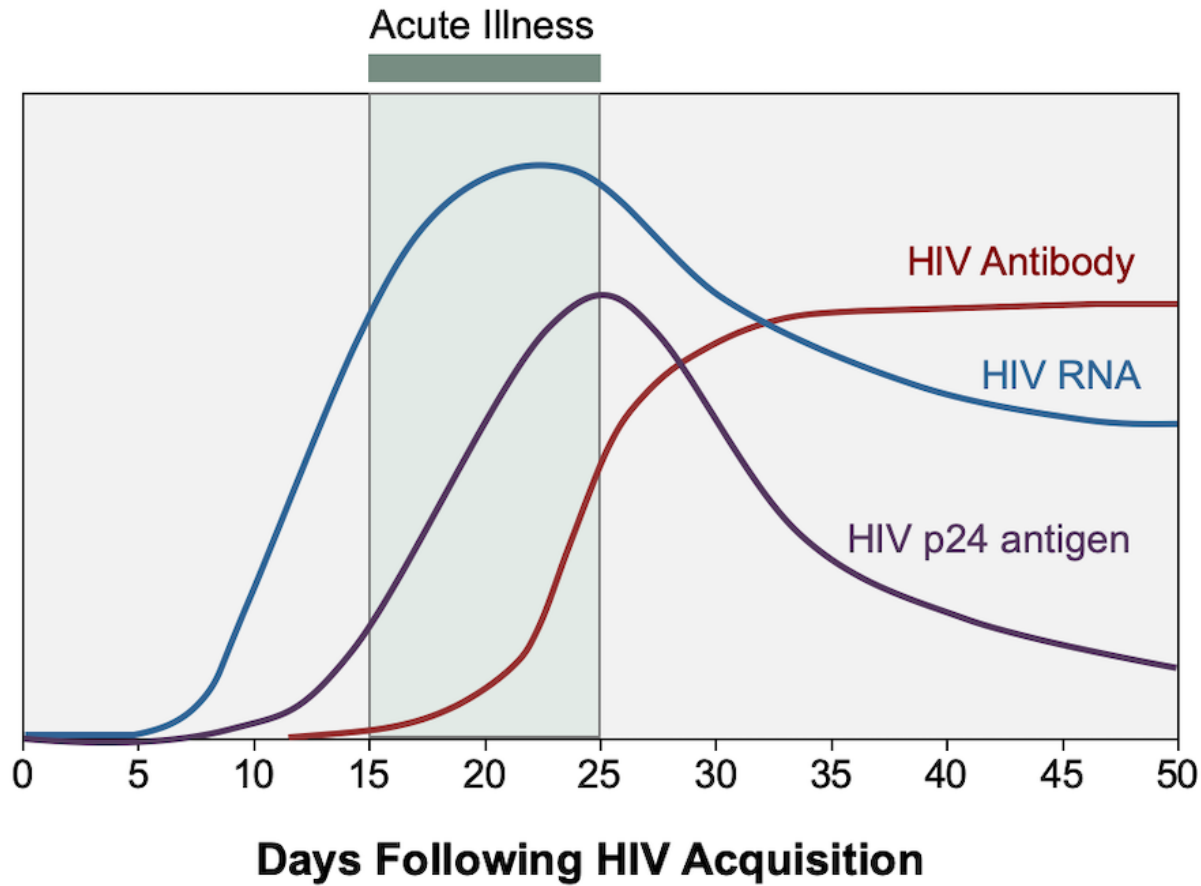


**FROM MOTHER
TO CHILD.**

Ways HIV is NOT Transmitted



HIV Detection



- Day 0** → Actual infection.
- Day 7–14** → Viral load (Average 7–14 days, 95% people within 3 days – 6 weeks).
- Day 16** → p24 antigen (Average 16 days, 95% people develop p24 within 1–8 weeks).
- Seroconversion** → 70% people get symptoms (Average 7–21 days; 95% people within 4 weeks).
- Day 28** → 95% of people will be antibody positive by day 28 using a 4th generation test.
- Day 90** → More than 99.97% of people develop HIV antibodies and test positive by 3 months.

The Importance of Window Periods

- A Window Period refers to the period of time between when an individual is exposed to HIV and when the test detects HIV. This window period will depend on the type of test used.

Injection Drug Use and HIV Risk

Using and sharing drug injection equipment increases risk for exposure to HIV.



About 1 in 10 new HIV diagnoses in the United States are attributed to injection drug use or male-to-male sexual contact *and* injection drug use (men who reported both risk factors).

More on Injection Drug Use and HIV

1/160

An HIV-negative person has a 1 in 160 chance of getting HIV every time they use a needle that has been used by someone with HIV.

#2

Sharing syringes is the second-riskiest behavior for getting HIV. Receptive anal sex is the riskiest.

DID YOU KNOW?

Survival of HIV-1 from syringes that have been maintained at room temperature can exceed 4 weeks.

HIV Testing

- Laboratory testing: non-waived testing that is moderate to high in complexity performed in CLIA certified laboratory
 - HIV-1/2 Ag/Ab Immunoassay
 - HIV-1/2 Ab Differentiation Immunoassay
 - HIV Nucleic Acid (RNA) Testing
- Point-of-care testing: CLIA- waived testing that produces rapid, reliable results to aid in the identification of disease in clinical and non-clinical settings
 - Abbott Determine: 4th generation **Ag/Ab** HIV Test
 - Chembio SURE CHECK: 3rd generation **Ab** HIV Test

HIV Stigma and Discrimination

Stigma- refers to an attitude or belief:

Examples:

- Believing that only certain groups of people can get HIV
- Making moral judgments about people who take steps to prevent HIV transmission
- Feeling that people deserve to get HIV because of their choices

Discrimination- behavior that results from attitudes/beliefs:

Examples:

- A health care professional refusing to provide care or services to a person living with HIV
- Refusing casual contact with someone living with HIV
- Socially isolating a member of a community because they are HIV positive

What can we do about it?



Help combat stigma and discrimination with the three T's!

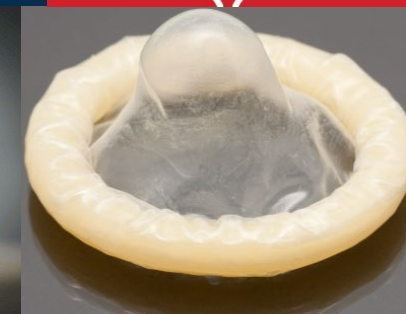
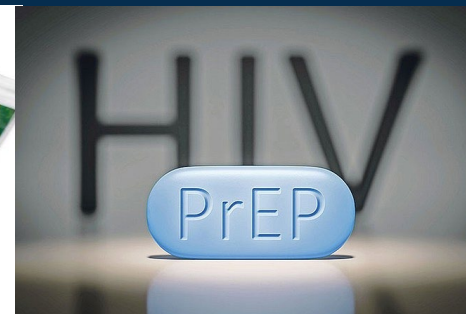
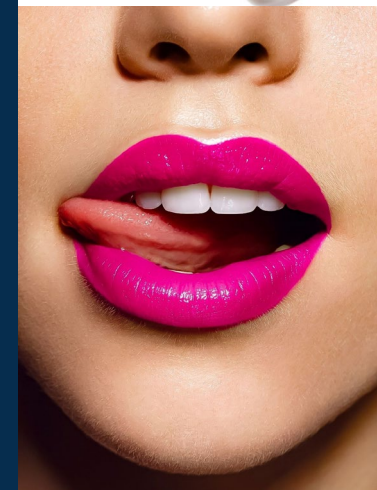
Teach- Educating others on HIV basics can help reduce misunderstandings and fear

Talk- Open conversations assist in normalizing HIV, including preventative measures and medication adherence

Take action- Lead by example with your words and actions. A lot of HIV-related stigma is rooted in incorrect information

There's Something for Everyone!

- Switch it up and lube it up!
- Condoms
 - Internal and external
- Dental dams
- Routine testing- don't forget about STIs
- SSPs ❤️
- PrEP
- PEP
- Evidence-Based Interventions
- Communication



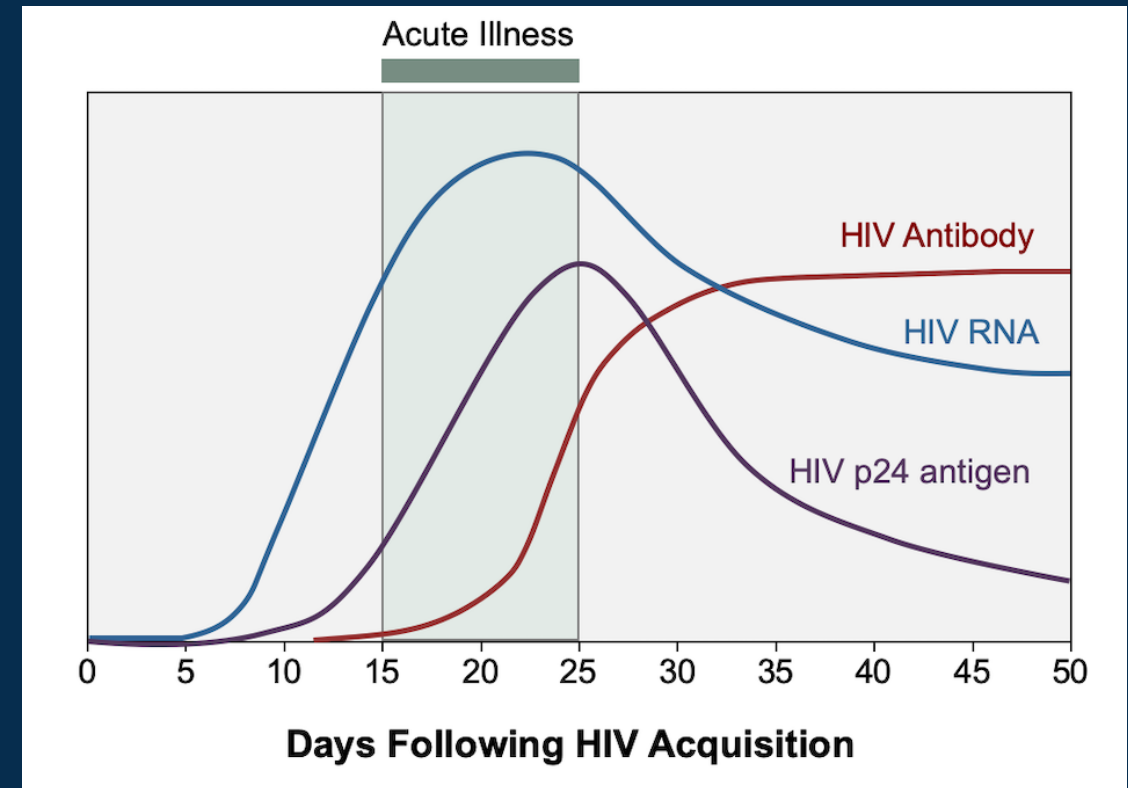
A Friendly Dual Rapid “Duel” – Debate Time!

- Vishal will be representing the Chembio SURE CHECK HIV ½ Ab Test
- Bry will be representing the Abbott Determine HIV ½ Ag/Ab Combo Test

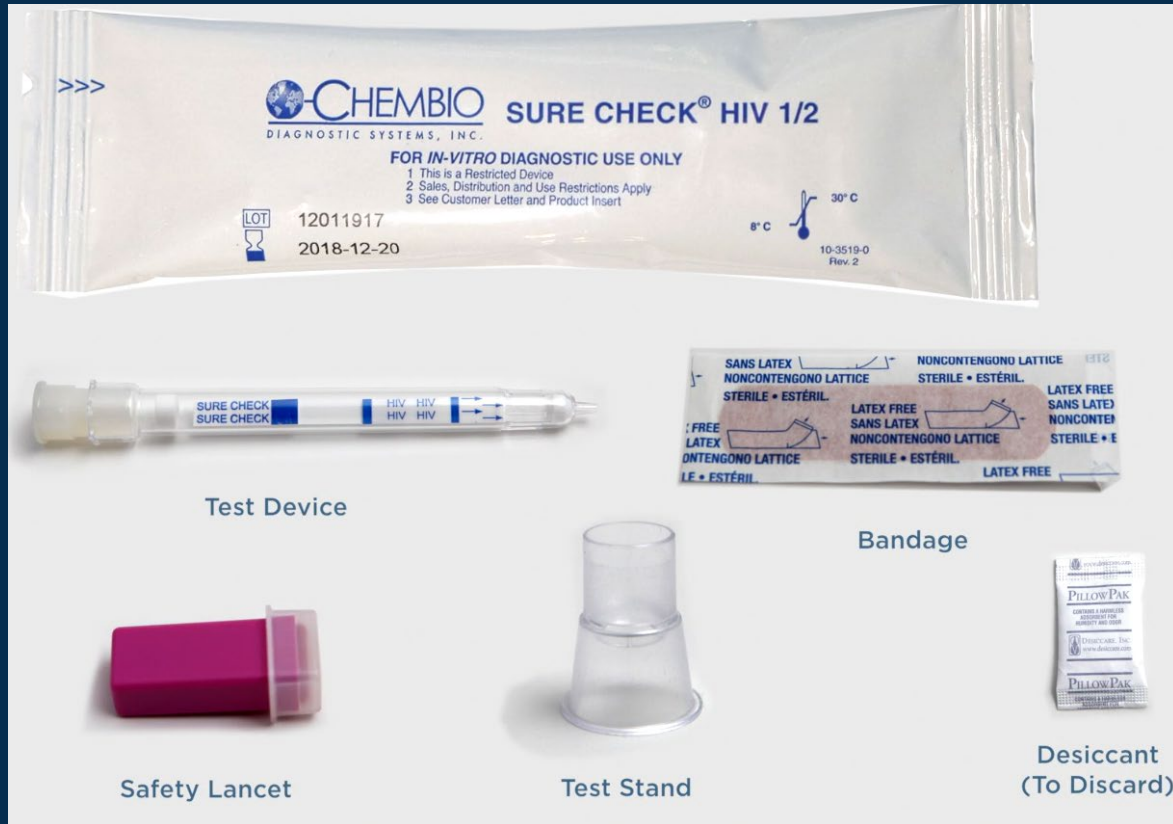
Chembio SURE CHECK HIV-1/2

- KEY FEATURES:

- 3rd generation Ab-only HIV Test
- Requires the smallest amount of blood (2.5uL)
- CLIA-waived point-of-care test
- Will not detect infection as early as Ag/Ab combo assay



Chembio SURE CHECK HIV-1/2



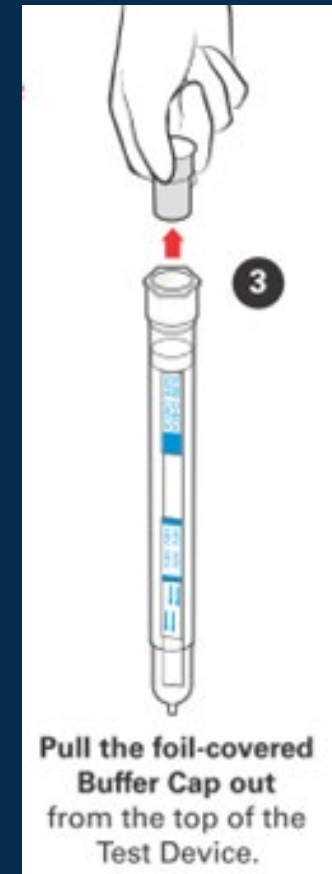
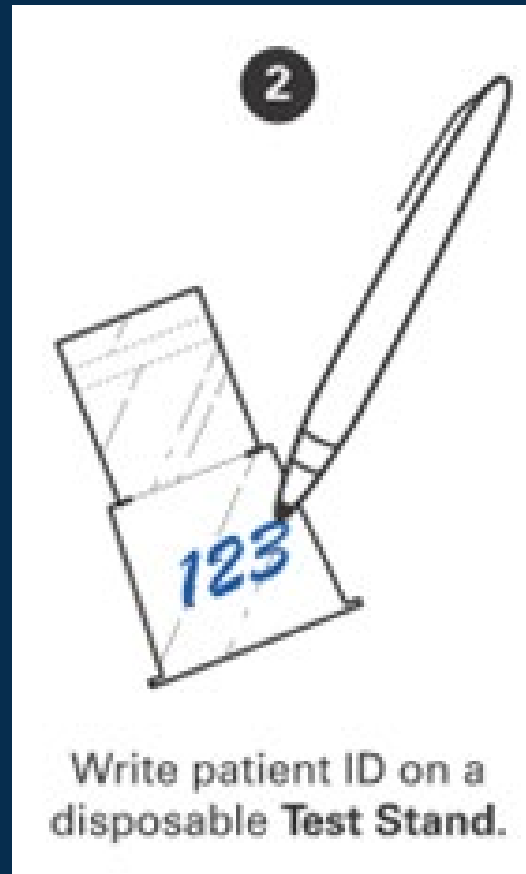
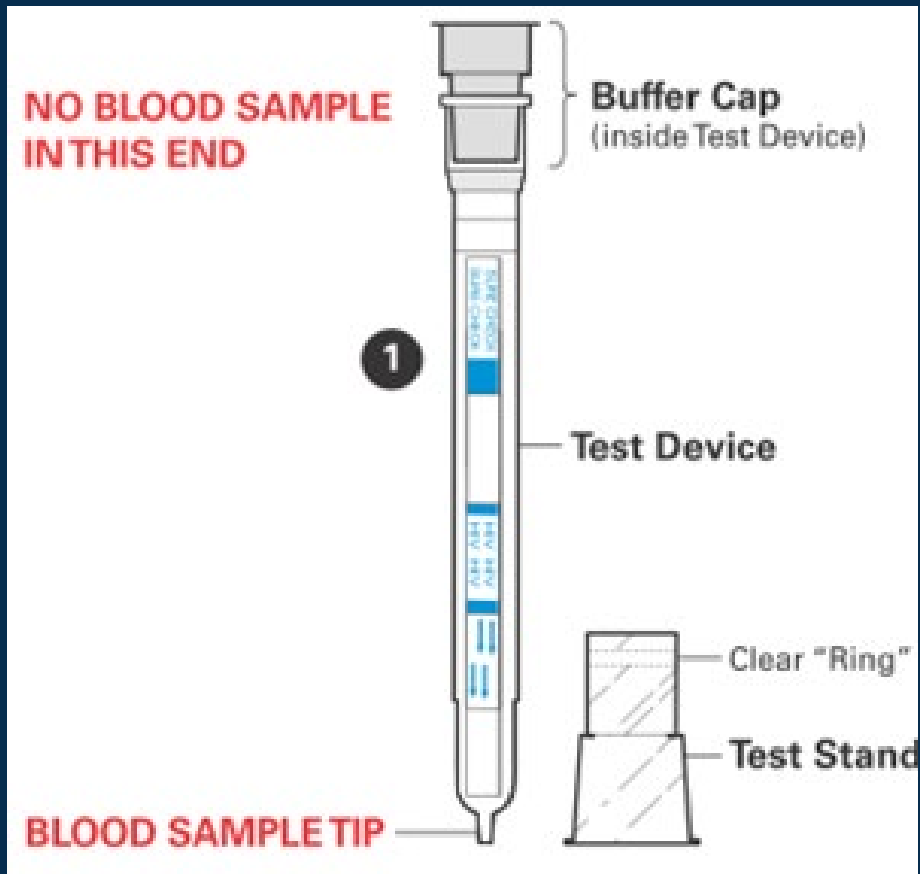
- Kit contains:

- 1 Product Insert, 1 Quick Reference Card
- 25 Subject Information Notices
- 25 Disposable Test Stands
- 25 Pouches

- Pouch contains:

- Test device (with buffer cap)
- Sterile lancet
- Bandage
- Desiccant packet

Chembio SURE CHECK HIV-1/2

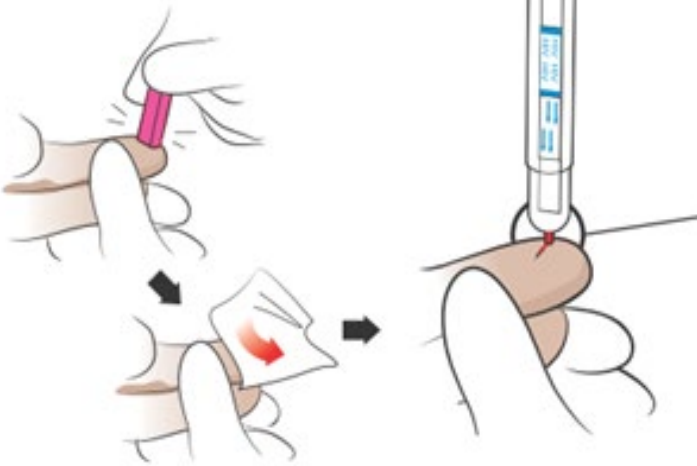


Chembio SURE CHECK HIV-1/2

5 FINGERSTICK SAMPLE

Draw fingerstick blood sample using the lancet provided. Wipe away first drop of blood.

Collect second drop of blood, filling the narrow sampling tip of the Device as shown.



6

PUSH HARD



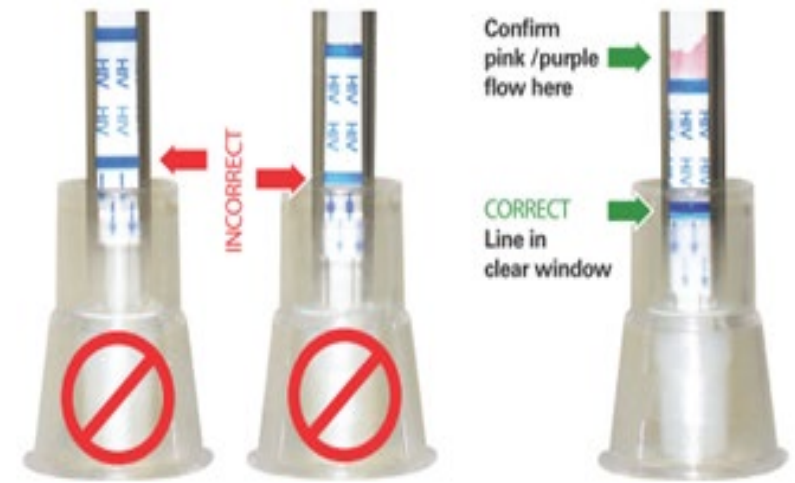
On a firm surface, **push Device HARD** through the foil until fully seated in the Buffer Cap.

You should feel 3 "snaps:"

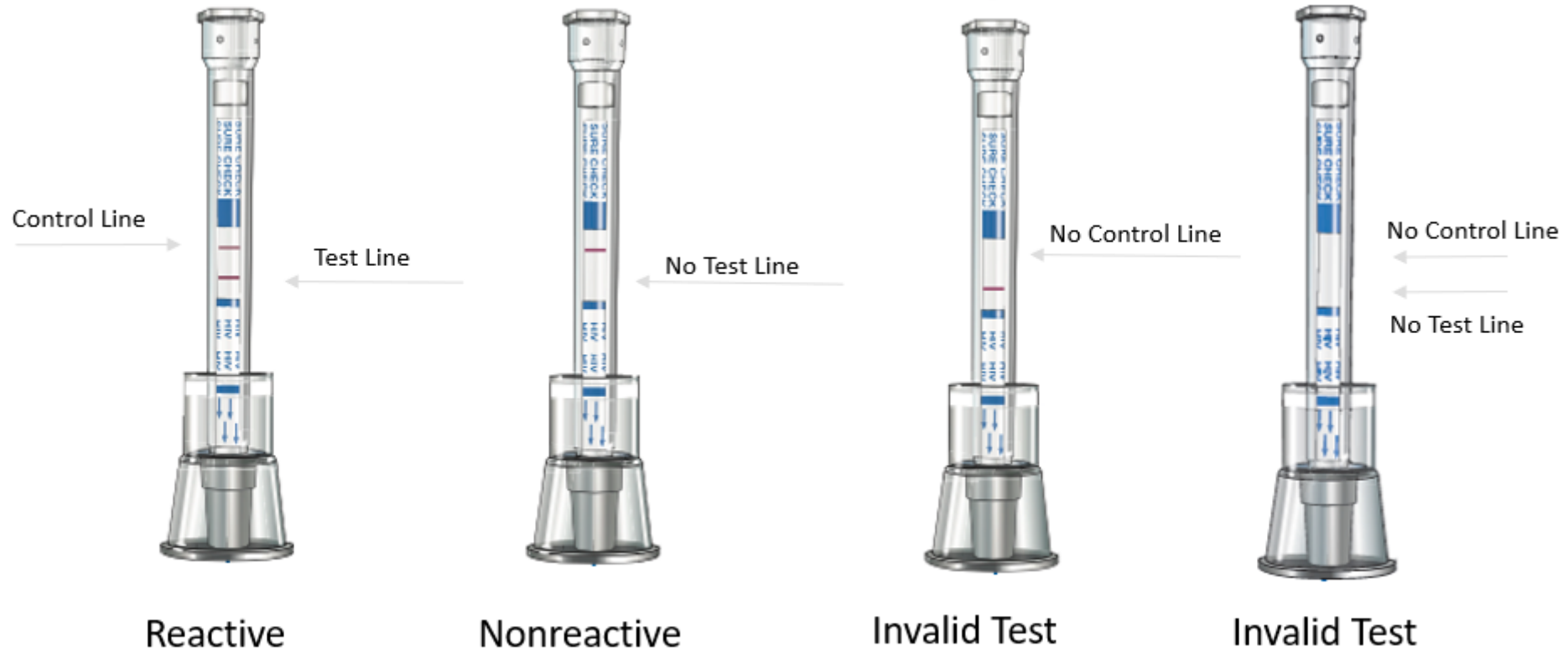
- ↓ break foil
- ↓ into cap
- ↓ fully seated



7



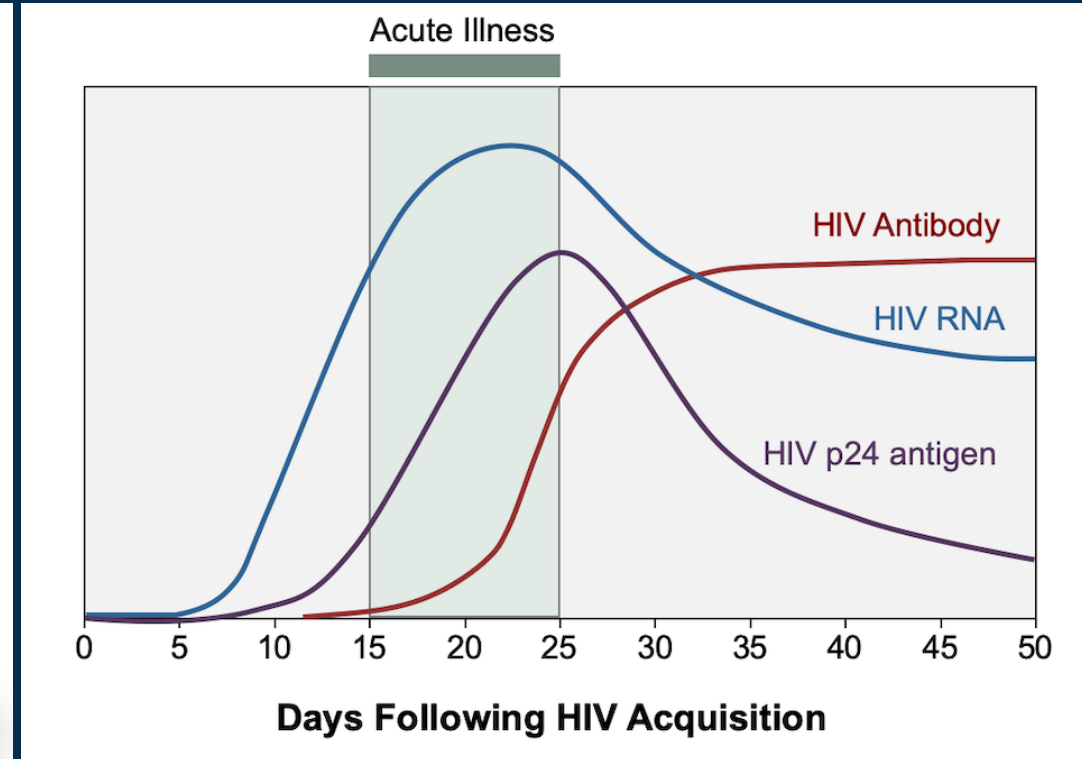
Chembio SURE CHECK HIV-1/2



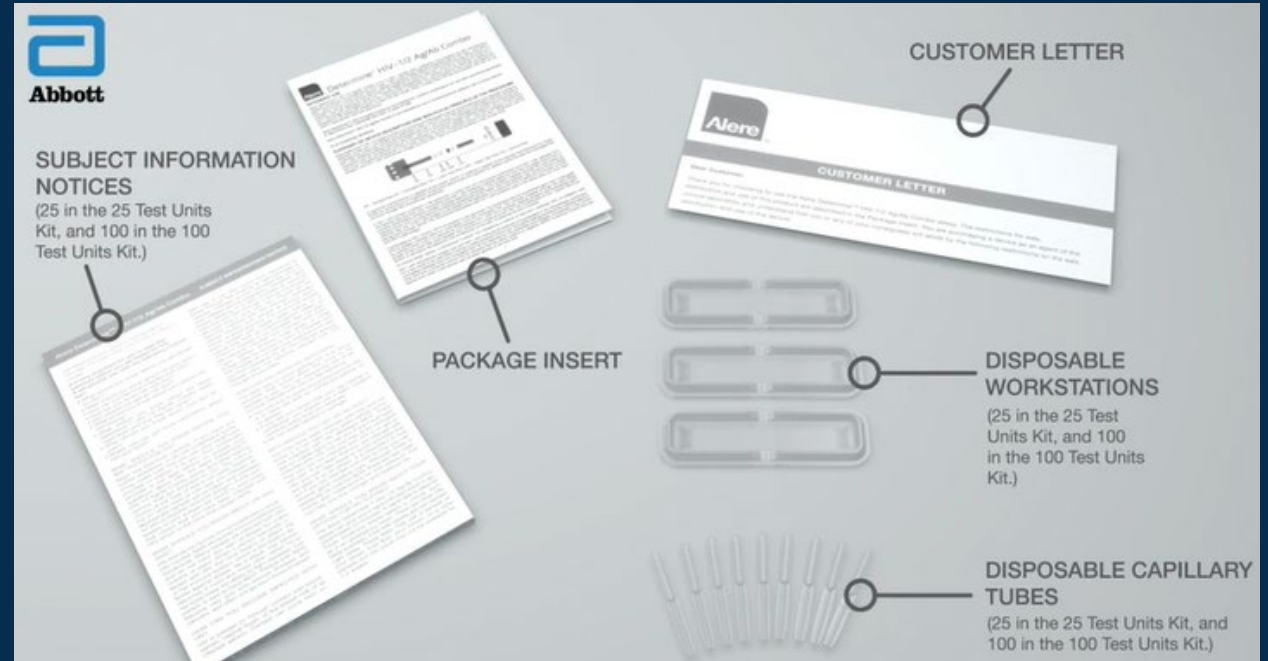
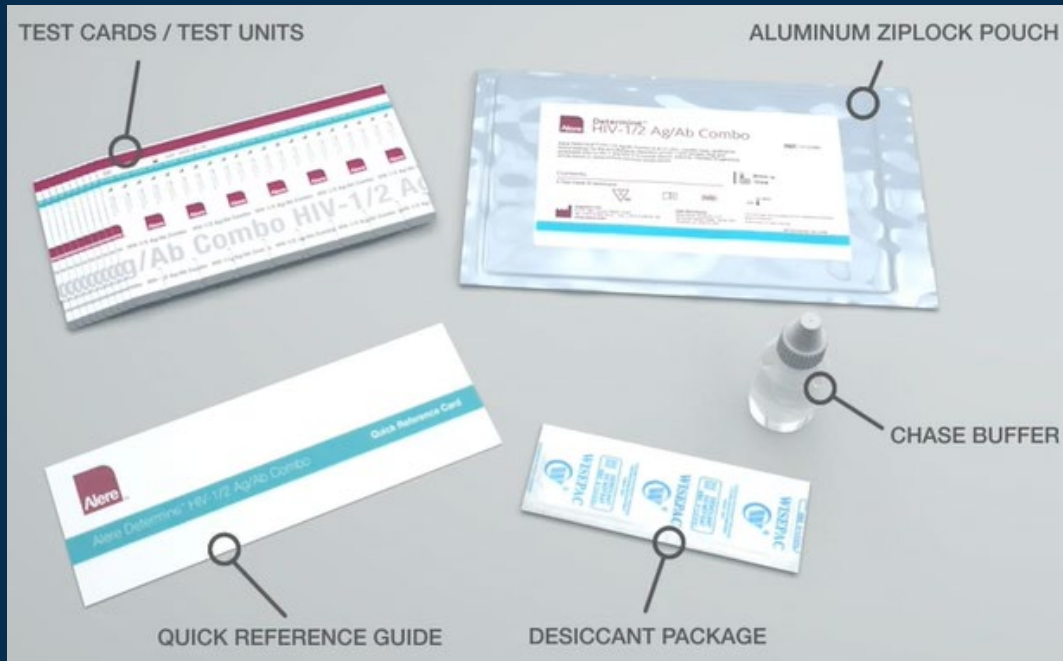
Abbott Determine

- KEY FEATURES:

- 4th generation Ag/Ab HIV Test
- Requires 50uL of sample from fingerstick
- CLIA-waived point-of-care test
- Should use first for PrEP patients and recent exposures



Abbott Determine



Kit Contains:

- Package Insert
- Subject Information Notices
- Customer Letter
- Disposable Workstations
- Disposable Capillary Tubes

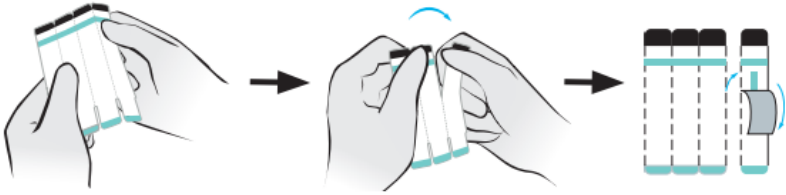
- Aluminum Ziplock Pouch (contains Test Cards)
- Quick Reference Guide
- Chase Buffer
- Desiccant Package

Abbott Determine

1 Prepare Test

Bend along the perforation then tear one strip from the right and remove cover.

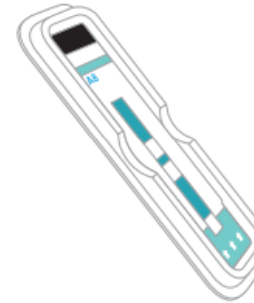
Assay should be initiated within 2 hours after removing the protective foil cover from each test.



2 Place Test

Place one strip inside the workstation. Do NOT touch the sample pad with your fingers.

NOTE: Use of the workstation is optional. If workstation is not used, place test strip on a clean flat surface.



Optimize Bloodflow Prior to Collection:

- Warm the hand by washing in warm water (or holding it in a heating pad or hand warmer).
- Lower the hand below the heart level before collecting a drop of blood.
- Massage the finger with a downward motion several times before performing the fingerstick.

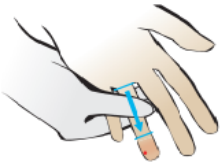
3 Collect Fingerstick Sample

CAUTION: The capillary tube must be used to collect the fingerstick sample.

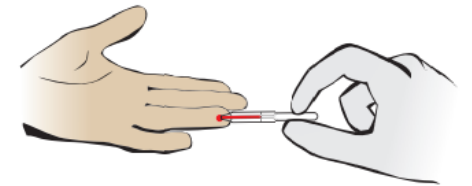
Clean the finger of the person being tested with an antiseptic wipe. Allow the finger to dry thoroughly or wipe dry with a sterile gauze pad. Using a sterile lancet capable of producing 50µL of blood, puncture the skin just off the center of the finger pad and wipe away the first drop with sterile gauze.

To Collect an Adequate Sample Volume:

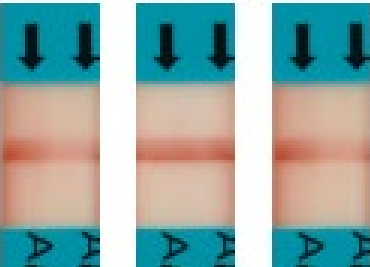
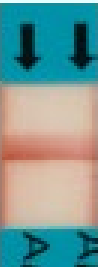
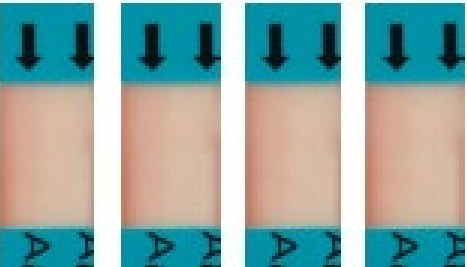
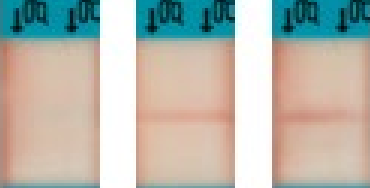
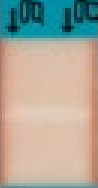
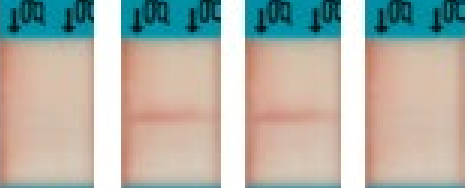
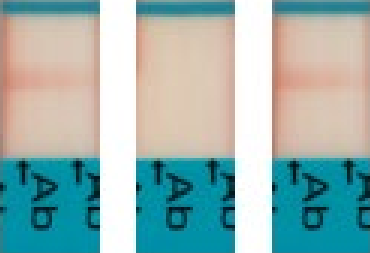

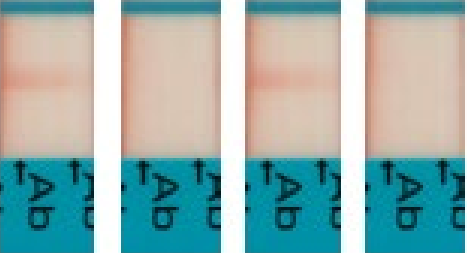
- Quickly express blood down the fingertip by gently squeezing across the entire finger, to the last joint (not to the end of the fingertip).
- Do not squeeze or “milk” the fingertip to accelerate bleeding.



Collect the second drop of blood by holding the capillary tube **HORIZONTALLY**, and touch the tip of the capillary tube to the blood sample.



Abbott Determine

Result Key			
Line	Reactive	Nonreactive	Invalid
Control			
Ag			
Ab			

Let's Sum It Up!

Chembio SURE CHECK

- Requires smallest amount of blood
- Efficient packaging
- Quickest read time

Abbott Determine

- Only 4th generation CLIA waived HIV test currently available
- Earliest detection of HIV
- Allows rapid test option for PrEP clients

Feedback

What resonated
the most with
you?

What additional
points would
you make?

Which device do
you prefer?

We're ALL winners!!

- Both devices are integral components of the MDHHS Dual Rapid HIV Testing Algorithm – can't have one without the other!
- Both work together in tandem → by using 2 separate devices from different manufacturers, we are able to diagnose and link clients to care more efficiently while avoiding loss to follow-up!
- Both devices are rapid, efficient, portable, easy, and accurate!
- We all win when we know our status!

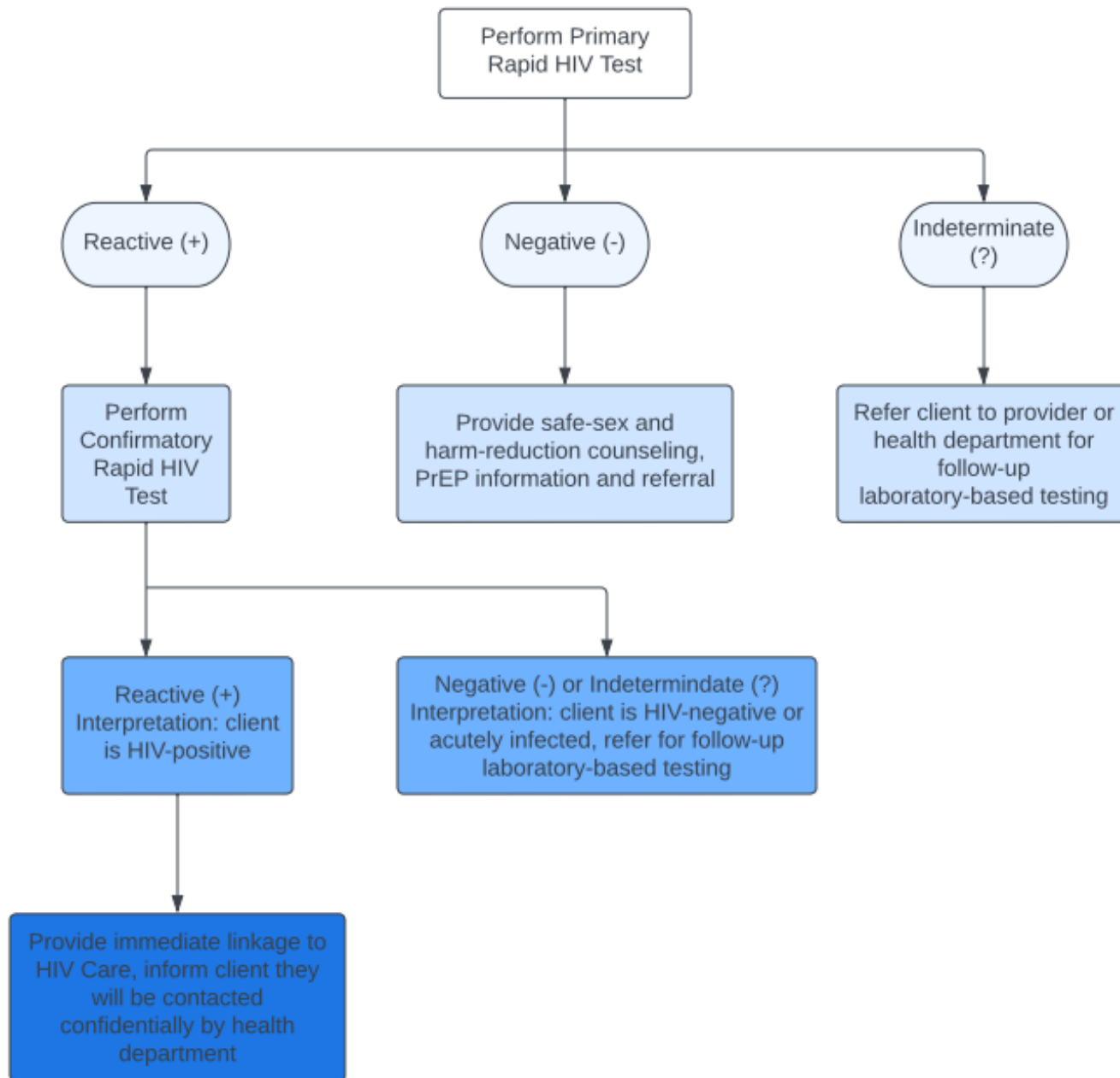
Dual Rapid Testing Algorithm

**Abbott Determine HIV-1/2
Ag/Ab Combo**



**Chembio SURE CHECK HIV-1/2
Ab Assay**





- **Abbott Determine and Chembio SURE CHECK** can be used interchangeably as primary or confirmatory rapid HIV test
- **Abbott Determine** always primary rapid HIV test for PrEP clients OR recent exposures

Benefits of Dual Rapid Testing

Ability to diagnose HIV
earlier than ever

Faster, client-centered,
efficient testing process
helps build trust with
our communities

Ability to link clients to
care more quickly and in
a broader range of
settings

Avoid loss to follow-up

Mandatory Reporting

- Adult HIV Case Report Form
- Inventory Management
- Quality Control
- Proficiency and Competency Testing
- Maintain HIV Test Counselor Certification



Device Demonstration

Questions?

Participant Demonstration

After buffer flows, dispose of the test appropriately

Reminder: Results will NOT be read

Reach Out to Us!

- Bry Fryczynski
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- Vishal Kinkhabwala MD, MPH
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