



Republic of Zambia  
Ministry of Health

**Guidelines**  
*for*  
**Pre & Post-Exposure  
Prophylaxis for HIV Infection**

**Directorate of Public Health  
and Research**

**2025**



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**Ministry of Health**

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## List of Acronyms

3TC	Lamivudine
AAPF	ARV Active Pharmacovigilance Form
ADE	Adverse Drug Event
ADR	Adverse Drug Reaction
AFAB	Assigned Female At Birth
AIDS	Acquired Immuno-Deficiency Syndrome
ALT	Alanine Transaminase
ARV	Antiretroviral
CAB	Cabotegravir
CBV	Community-Based Volunteer
DPP	Dual Prevention Pill
DTG	Dolutegravir
DVR	Dapivirine Vaginal Ring
ED	Event-driven [PrEP]
FTC	Emtricitabine
GBV	Gender-Based Violence
HCD	Human-Centered Design
HCP	Healthcare Provider
HIV	Human Immunodeficiency Virus
HIVST	HIV Self-Test
HTS	HIV Testing Services
IPV	Intimate Partner Violence
ISR	Injection Site Reaction
LA	Long-acting [injectable]
LEN	Lenacapavir
M&E	Monitoring and Evaluation
MNCH	Maternal, Newborn and Child Health
OPD	Out-Patient Department
PEP	Post-Exposure Prophylaxis
PR	Public Relations
PrEP	Pre-Exposure Prophylaxis
SBC	Social and Behaviour Change
SCMS	Supply Chain Management System
STI	Sexually Transmitted Infection
TAF	Tenofovir alafenamide
TDF	Tenofovir Disoproxil Fumarate
TWG	Technical Working Group
VMMC	Voluntary Medical Male Circumcision
YFS	Youth-Friendly Spaces
ZEA	Zambia Ending AIDS



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## Chapter 1: Introduction

Zambia has made great strides in controlling the HIV/AIDS epidemic, reducing the estimated incidence rate from 4.9 per 1,000 population in 2010 to 1.6 per 1,000 in 2024 (UNAIDS AIDSinfo, 2024). This corresponds to a decline in new HIV infections from approximately 63,000 in 2010 to about 30,000 in 2024 among people of all ages. Over the same period, the number of people living with HIV (PLHIV) increased from about 940,000 in 2010 to approximately 1.4 million in 2024, while the HIV prevalence declined from 11.7% to 9.4%, reflecting both population growth and expanded access to antiretroviral therapy (ART). According to UNAIDS AIDSinfo (2024), 95% of people living with HIV in Zambia know their HIV status, 98% are on treatment, and 97% are virally suppressed. Despite this progress, there remains a notable disparity in both prevalence and incidence between women and men, with women being disproportionately affected by HIV.

Despite progress, the rate of new HIV infections remains a serious challenge. With approximately 30,000 new infections per year, we are falling short of the national target of 15,000 by 2026 (NHSP 2022-2026). To close this gap and achieve epidemic control, a sustained focus on reducing new infections through Combination Prevention is essential.

### What is Combination Prevention?

Combination Prevention is a strategic approach that uses a mix of biomedical, behavioural, and structural interventions to maximize the impact of HIV prevention efforts.

### Biomedical Interventions: The Foundation of Prevention

These are medical products and procedures that reduce the risk of HIV acquisition. Key interventions include:

- **HIV Testing Services (HTS):** The essential entry point for prevention and care
- **Condoms and Lubricants:** Consistent and correct use of male and female condoms, with condom-compatible lubricants, provides a physical barrier against HIV
- **Voluntary Medical Male Circumcision (VMMC):** A one-time procedure that significantly reduces the risk of heterosexual HIV transmission in men
- **Antiretroviral (ARV)-Based Prevention:** Highly effective medications that stop HIV from establishing an infection. These are available in several forms:
  - **Pre-Exposure Prophylaxis (PrEP):** Oral pills, vaginal ring or long-acting injectables taken by HIV-negative people to prevent infection
  - **Post-Exposure Prophylaxis (PEP):** A short course of oral pills taken after a potential exposure to HIV
  - Both PrEP and PEP are highly effective when used as prescribed

### Behavioural Interventions: Empowering Individual Choice

Behavioural interventions focus on providing individuals with the knowledge, motivation, and skills necessary to make informed decisions that reduce their personal risk of acquiring or transmitting HIV. These interventions recognize that prevention success relies on empowering people to change and sustain safer sexual and lifestyle practices. Key strategies include:

- **Risk Reduction Education:** Individual or group sessions to assess personal risk and develop customized plans for safer sex, including promoting abstinence, monogamy, or reducing the number of sexual partners
- **Adherence Counselling:** Support for those on ARV-based prevention (PrEP/PEP) and treatment (ART) for infected partners to ensure the drugs are taken consistently to maintain maximum effectiveness
- **Community and Peer Education:** Utilizing trusted community members to promote health literacy and address social norms that contribute to vulnerability

## Structural Interventions: Creating an Enabling Environment

Structural interventions address the underlying social, legal, economic, and political factors that drive the epidemic. These factors, such as inequality, stigma, and punitive laws, can impede access to services and increase vulnerability to HIV. By modifying the environment, these interventions aim to make it easier for people to adopt and sustain safer behaviours and access prevention tools. Key examples include:

- **Addressing Stigma and Discrimination:** Implementing policies and campaigns to reduce the negative attitudes and behaviours that prevent people from seeking HIV testing, prevention, and treatment services
- **Economic Empowerment:** Providing economic support, such as cash transfers or vocational training, especially to young women and key populations, to reduce transactional sex and other economic drivers of risk
- **Legal and Policy Reform:** Working to eliminate laws and policies that criminalize or marginalize key populations, which can drive them underground and away from essential health services

**Pre-Exposure Prophylaxis** of HIV infection is the use of antiretroviral medication by HIV-negative people before exposure, to reduce the risk of HIV acquisition. Post-Exposure Prophylaxis of HIV infection is a short-term (28-day) course of combination antiretroviral medicines taken as soon as possible, within 24 hours, but within 72 hours (about 3 days) of potential exposure to prevent HIV infection.

HIV, viral hepatitis and STIs share common modes of transmission and determinants, and many of the populations affected by these diseases may overlap. Therefore, HIV and STI prevention services should be integrated in Primary Health Care, Sexual and Reproductive Health, Family Planning and Adolescents Health Services.

## Guiding Principles

It is important to adopt an evidence-based public health, human rights, and people- and community-centred approach when offering PrEP and PEP for HIV prevention. Such an approach is aligned with principles of universal health coverage, gender equity, and health-related rights, including accessibility, availability, acceptability, and quality of combination HIV prevention services for people who could benefit from PrEP and PEP.

1. **Evidence-based:** PrEP services must be supported by sound scientific and programmatic proof of safety and effectiveness. This should include evidence from real-world implementation of PrEP programs (Implementation Science)
2. **Integration:** Integration of PrEP and PEP service delivery into various primary care service delivery points such as OPD, STI clinic, antenatal clinic, TB clinics, VMMC, men's clinics, and the community
3. **Combination HIV prevention:** Provision of combination HIV prevention options as opposed to PrEP alone is recommended
4. **Precision-based delivery:** PrEP and PEP should be targeted to specific populations and geographies with high HIV incidences and benefits of the service
5. **Equity and Inclusiveness:** An equitable inclusive and people-centred approach that recognizes different prevention options that individuals may choose at different stages of their lives
6. **Community-led program leadership, service delivery and monitoring:** Communities such as high-risk and vulnerable populations lead, deliver, and monitor HIV prevention services to improve acceptance and retention in HIV prevention, care, and treatment services
7. **High-risk and vulnerable populations responsive approach:** A responsive approach that caters for high-risk and vulnerable populations, such as adolescent girls and young women (AGYW) and adolescent boys and young men (ABYM) is one of the guiding principles of these guidelines

8. **Multi-sectoral approach:** A multisectoral approach and partnership to build on HIV response as being the responsibility of all sectors and constituencies

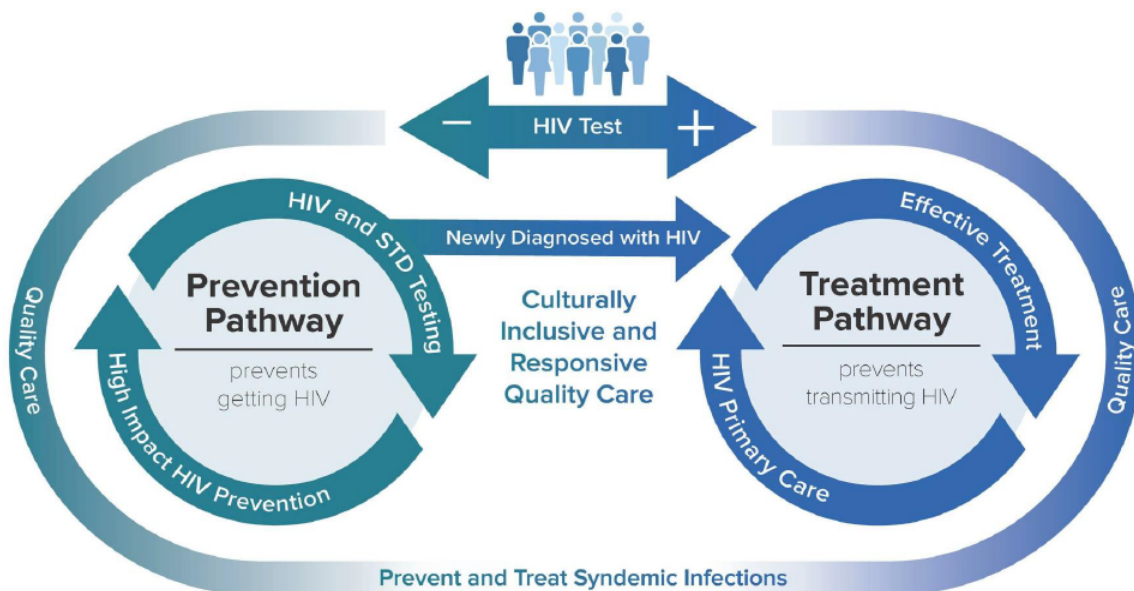
As an additional biomedical HIV prevention option, PrEP should not displace other effective and well-established HIV prevention interventions such as comprehensive condom programming and harm reduction for people who use drugs. Rather, PrEP should be integrated into existing health services. Many people who would benefit from PrEP belong to high-risk and vulnerable populations who often face greater legal, financial, and social barriers to accessing health services overall.

Placing the people and communities who could benefit from PrEP at the centre of programme planning allows services to be adapted to their preferences and sexual and reproductive health needs while maximizing impact and health system efficiency.



## Chapter 2: HIV Testing Services for Prevention

HIV testing services for prevention highlights the dual role of testing in both preventing new infections and linking those already infected to care. Individuals testing HIV negative should be provided appropriate (according to risk perception/assessment) HIV prevention methods depending on their risk profile and choice to ensure they remain negative. Refer to [Figure 2](#).



[www.cdc.gov](http://www.cdc.gov)

CQUIN Differentiated Testing & Linkage Meeting | March 13-16, 2023

Figure 1: HIV Testing for Prevention

### HIV Testing for PrEP

HIV testing for individuals seeking PrEP must follow the standard Ministry of Health HIV testing algorithm. PrEP eligibility is confirmed only after a documented HIV-negative test result. For clients eligible for PrEP, the next step is to screen for potential recent HIV exposure. Individuals who had a risk exposure within the last 72 hours should be offered PEP. Individuals whose exposure is more than 72 hours but within 6 weeks should be assessed for Acute HIV Infection (AHI) (see figure 3.1 for AHI assessment). Note that HIV antibody tests may be non-reactive in individuals who have acquired HIV infection in the last 3 months. Those who do not have evidence of AHI should be initiated on oral, injectable, or Dapivirine Vaginal Ring (DVR) PrEP, depending on their informed choice and availability of the method. Individuals who test positive should be immediately linked to the national HIV treatment and care program in accordance with MoH guidelines.

The recommended HIV testing algorithm for PrEP initiation is having two non-reactive antibody tests performed serially.

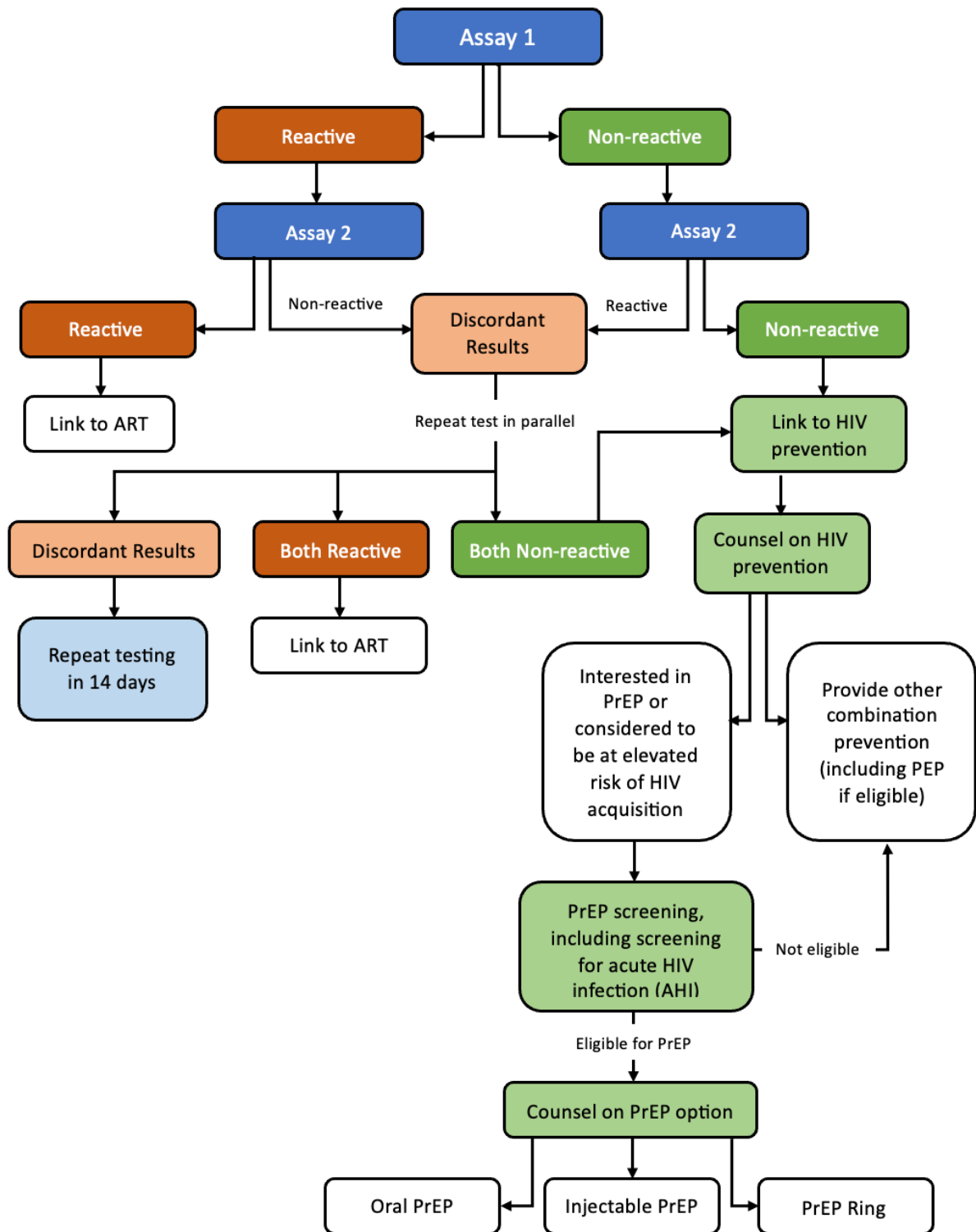


Figure 2: Testing Algorithm for PrEP

**Key Message**  
 The recommended HIV testing algorithm for PrEP initiation and follow-up is two non-reactive antibody tests – performed serially at initiation, and in parallel at follow-up visits.



## HIV Self-Testing for PrEP

HIV self-testing complements existing HIV testing strategies for continuing oral PrEP supporting the differentiated PrEP service delivery approaches. Distribution of HIVST to hard-to-reach populations should be used as an opportunity for increasing PrEP uptake and sensitization. For clients on oral PrEP who are less likely to access facility-based testing, HIVST provides an additional testing option and supports continued PrEP use while reducing clinic follow-up visits.

HIVST can be used for continuation of oral PrEP at follow-up visits within 3 Months. Regular interactions between providers and clients are important to ensure PrEP users have adequate counselling and can raise any issues or concerns with providers. Clear and concise messages are critical, including:

- Following a reactive HIVST, PrEP users should not discontinue PrEP. All individuals with a reactive HIVST should immediately seek a confirmatory test by the trained healthcare provider using a standard testing algorithm
- Regular HIV testing is important while taking PrEP to identify HIV infection as soon as possible

## Screening for Intimate Partner Violence/Gender-Based Violence

**Gender-based Violence (GBV)** is defined as any verbal, physical, sexual, and psychological abuse, as well as threats, coercion, and deprivation against a person because of their gender. **Intimate Partner Violence (IPV)** refers to behaviour by an intimate partner or former partner that causes physical, sexual, or psychological harm, including physical aggression, sexual coercion, psychological abuse, and controlling behaviours.

Both IPV and GBV can increase the risk of HIV acquisition by preventing/restricting survivors' ability to negotiate safer sex practices, such as condom use and access to healthcare. Screening for IPV and GBV should be conducted routinely during PrEP and PEP visits to identify any risk for violence and ensure appropriate support. The minimum requirements for screening for IPV/GBV are:

- A protocol or standard operating procedure (SOP) for asking about violence
- A standard set of questions where providers can document responses
- Providers trained on IPV/GBV identification and provision of first-line support
- A private, confidential, and safe setting for screening
- A clear referral or linkage pathway for psychosocial, legal, and medical services

In addition to training on violence screening and providing first-line support, PrEP and PEP service providers should also complete gender-sensitivity training to strengthen their skills and understanding of:

- the types, consequences, and patterns of gender-based violence
- links between inequitable gender norms, power dynamics, and violence
- relationships between GBV, PEP and PrEP initiation or continuation
- client needs following experiences of violence and barriers to service access
- critical reflection on personal beliefs, biases, and emotional responses that may influence provider-client interactions

If sexual violence occurred within the past 72 hours, the survivor should be provided with the minimum GBV package (clinical and psychological) or referred, where necessary. PrEP should not be given; instead offer post-exposure prophylaxis immediately. On completion of PEP, schedule an appointment to assess PrEP eligibility. If the survivor presents to the health facility 72 hours after the sexual violence, provide other prevention services like condoms and recommend HIV retesting after 6 weeks, 3 and 6 months.

In certain situations, PrEP and PEP use may trigger IPV or GBV if a partner is unsupportive or suspicious of its use, and experience or fear of violence may hinder PrEP/PEP uptake and adherence. However, HIV prevention services should not be denied to clients that do not disclose violence. Survivors of IPV or GBV may be at risk of HIV acquisition and may still benefit from PrEP. Providers should counsel clients on the risks and benefits of PrEP/PEP in the context of IPV/GBV using the following strategies:

- Discuss how to use PrEP/PEP safely in the context of the client's relationship
- Brainstorm potential challenges and solutions to using PrEP/PEP
- Discuss whether, when, and how to disclose PrEP/PEP use to a partner

Refer to National GBV guidelines for further reference and details.



## Chapter 3: Pre-Exposure Prophylaxis of HIV Infection

PrEP is a course of antiretroviral drugs (ARVs) taken by HIV-negative people before exposure to protect themselves from HIV infection. Evidence of PrEP has shown that, when taken consistently and correctly, PrEP is very effective and reduces the chances of HIV infection. When someone is exposed to HIV through sex or injection drug use, these medicines can work to keep the virus from establishing a permanent infection. The effectiveness of PrEP is closely linked to adherence. It is important that PrEP provision is part of a combination package for HIV prevention. In Zambia, PrEP is provided to eligible people who are 16 years and above.

Zambia has adopted the WHO 2025 PrEP guidelines on PrEP products. These include oral PrEP containing Tenofovir (TDF-based oral PrEP), Dapivirine Vaginal Ring (DVR), long-acting injectable Cabotegravir (CAB-LA) and long-acting injectable Lenacapavir (LEN).

### PrEP Initiation Visit

#### HIV PrEP Eligibility

Clients must meet the following criteria before PrEP initiation. They must:

- test HIV-negative on two serial rapid diagnostic tests (RDTs) in accordance with national HIV testing algorithms
- not be eligible for PEP at the time of the assessment
- exhibit no signs or symptoms of acute HIV infection (AHI)
- make a well-informed decision and be willing to be initiated on PrEP
- be free from contraindications for use of their chosen PrEP method

The essential components of PrEP initiation visits are:

- HIV testing and counselling
- Risk assessments
- PrEP counselling
- PrEP prescription
- Other prevention strategies

#### Risk Assessment

A PrEP risk assessment is a clinical process used to identify individuals at substantial risk of acquiring HIV and determine their suitability for pre-exposure prophylaxis. This assessment helps ensure that the prevention method is offered to those who can benefit most and is a standard part of PrEP care.

#### Key Components of a PrEP Risk Assessment

Healthcare providers use a combination of methods, including interviews, questionnaires, and clinical screenings, to assess risk. Key indicators for potential substantial HIV risk include:

- **Sexual Behaviors:**
  - Unprotected sex with partners of unknown or positive HIV status (who are not virally suppressed)
  - Multiple sexual partners
  - A recent history of a sexually transmitted infection (STI) diagnosis (e.g., syphilis, gonorrhoea, chlamydia)
  - Engaging in transactional sex (sex for money, goods, or services)
- **Partner Characteristics:**
  - Having a primary or casual sexual partner with untreated HIV or a detectable viral load
  - Partners who inject drugs or have other high-risk behaviors

- **Substance Use:**
  - Sharing needles or other injection drug use equipment
  - Frequent alcohol or recreational drug use that may impact judgment around sexual activity
- **Other Factors:**
  - Recurrent use of Post-Exposure Prophylaxis (PEP)

**Clinical Assessment**

In addition to behavioral risk, a comprehensive assessment before starting PrEP involves essential clinical screenings:

- **Confirmation of HIV-Negative Status:** A negative HIV test result is mandatory before starting PrEP. This avoids starting a client with a positive test result on PrEP who instead needs to be initiated on treatment. Otherwise, starting PrEP in someone with an HIV positive test result may lead to development of drug-resistant HIV
- **Screening for Acute HIV Infection:** Clients should be assessed for any recent symptoms of viral infection, as acute HIV requires different management
- **STI Screening:** Testing for other STIs (hepatitis B and C, chlamydia, gonorrhoea, syphilis) is standard. Vaccination for Hepatitis A and B is recommended if susceptible
- **Renal Function:** A test of kidney function is required, as PrEP medications can affect the kidneys

Risk assessment is a continuous process. During follow-up visits (typically every three months or six months), healthcare providers reassess the patient's risk, screen for STIs, perform an HIV test, and provide adherence counseling and support for risk-reduction behaviors.

Table 1: Risk Assessment and Client Education Session Checklist for PrEP

Risk Assessment Checklist	PrEP Education Session Checklist
<ul style="list-style-type: none"> <li>• History of incorrect and inconsistent condom use</li> <li>• Number of sexual partners (known and unknown HIV status)</li> <li>• STI history</li> <li>• PrEP/PEP use history</li> <li>• Desire for family planning</li> <li>• Transactional and transgenerational sex history</li> <li>• Substance use and abuse</li> <li>• Intimate partner violence</li> <li>• Client and partner's preferences for HIV prevention strategies</li> <li>• Pregnancy and breastfeeding status</li> <li>• Drug injection history</li> </ul>	<ul style="list-style-type: none"> <li>• Basic PrEP information</li> <li>• Safe-use and risk-reduction counselling</li> <li>• Available PrEP methods</li> <li>• Possible side effects, treatment options</li> <li>• Baseline and regular tests, schedule for monitoring</li> <li>• PrEP follow up visits and continuation</li> <li>• Long-term safety</li> <li>• PrEP switch or discontinuation</li> <li>• Symptoms of possible seroconversion</li> <li>• Benefits/risks in case of pregnancy or breastfeeding</li> </ul>

\*In sero-different sexual partners, if the HIV positive partner is on ART and has achieved sustained undetectable viral load, the risk of sexual transmission to the HIV negative partner is virtually eliminated (U=U), however, PrEP can still be considered as an additional layer of protection especially during conception.



## Assessing for Acute HIV Infection

Acute HIV Infection (AHI) refers to the early phase of HIV infection, typically occurring within two to four weeks after exposure to the virus, characterized by detectable HIV RNA or HIV p24 antigen in the absence of HIV antibodies. This phase is also referred to as primary HIV infection is also characterized by high viral replication and elevated transmission risk. Signs and symptoms of AHI include:

- Fever
- Swollen lymph glands
- Skin rash
- Sore throat
- Aches and pains
- Mouth sores

If a client has signs and symptoms of AHI, delay PrEP initiation and counsel the client on the risks and benefits of delaying initiation. Retest the client according to the national HIV testing algorithm. Clients should be provided with HIV risk reduction counselling, such as use of barrier methods, and STI screening, diagnosis, and management.



Key: SOC – Standard of Care; NAT – Nucleic Acid Test

Figure 3: PrEP Initiation – HIV Exposure and AHI Assessment

## Recommended HIV PrEP Products in Zambia

Zambia has adopted the WHO 2025 PrEP guidelines on PrEP products. These include oral PrEP containing Tenofovir (TDF or TAF-based oral PrEP), Dapivirine Vaginal Ring (DVR), long-acting injectable Cabotegravir (CAB-LA) and long-acting injectable Lenacapavir (LEN).

Table 2: Recommended HIV PrEP Products in Zambia

Product	Product Type	Drug Class	Dose	Frequency	Target Population
Tenofovir Disoproxil Fumarate (TDF) + Emtricitabine (FTC)	Oral	Nucleoside/tide Reverse Transcriptase Inhibitors (NRTIs)	TDF 300mg + FTC 200 mg	Daily	People at risk through sex or injection drug use
Tenofovir alafenamide (TAF) 25mg + Emtricitabine 200mg			TAF 25mg + FTC 200mg	Daily	
Dual Prevention Pill (DPP) TDF/FTC + Levonorgestrel/Ethinyl Estradiol			TDF 300mg FTC 200mg Levonorgestrel (0.15mg) and Ethinyl Estradiol (0.03mg) (LNG/EE)	Daily	
Dapivirine Vaginal Ring (DVR)	Vaginal Ring	Non-Nucleoside Reverse Transcriptase Inhibitor (NNRTI)	DVR 25 mg	Monthly, continuous use for 28 days	Women at substantial risk through vaginal sex
Cabotegravir (CAB)	Long Acting Injectable	Integrase Inhibitor	CAB-LA 600mg	Injections every 2 months	People at substantial risk for HIV acquisition, often as an alternative for those who struggle with pill adherence
Lenacapavir (LEN)	Long Acting Injectable	Capsid Inhibitor	LEN Day 1: 927mg subcutaneously, and 600mg orally Day 2: 600mg orally Maintenance dose	Injections twice a year	People at substantial risk for HIV acquisition, often as an alternative for those who struggle with pill adherence

### Oral Pre-Exposure Prophylaxis Containing Tenofovir

Oral PrEP is offered as a daily regimen for all populations at substantial risk of HIV infection. In Zambia, oral PrEP may use either TDF 300mg + FTC 200mg or TAF 25mg + FTC 200mg fixed-dose combinations.

The Dual Prevention Pill (DPP) is a combined oral PrEP and contraceptive option for women of childbearing potential. It provides simultaneous protection against HIV infection and unintended pregnancy. It contains Tenofovir Disoproxil Fumarate (300mg), Emtricitabine (200mg) (TDF/FTC), and Levonorgestrel (0.15mg) and Ethinyl Estradiol (0.03mg) (LNG/EE). However, it does not prevent against STIs.

Daily oral PrEP becomes effective after 7 days of consecutive use. Therefore, clients should be counselled on using other effective prevention methods such as abstinence or use of condoms during the first 7 days. See [figure 4](#).

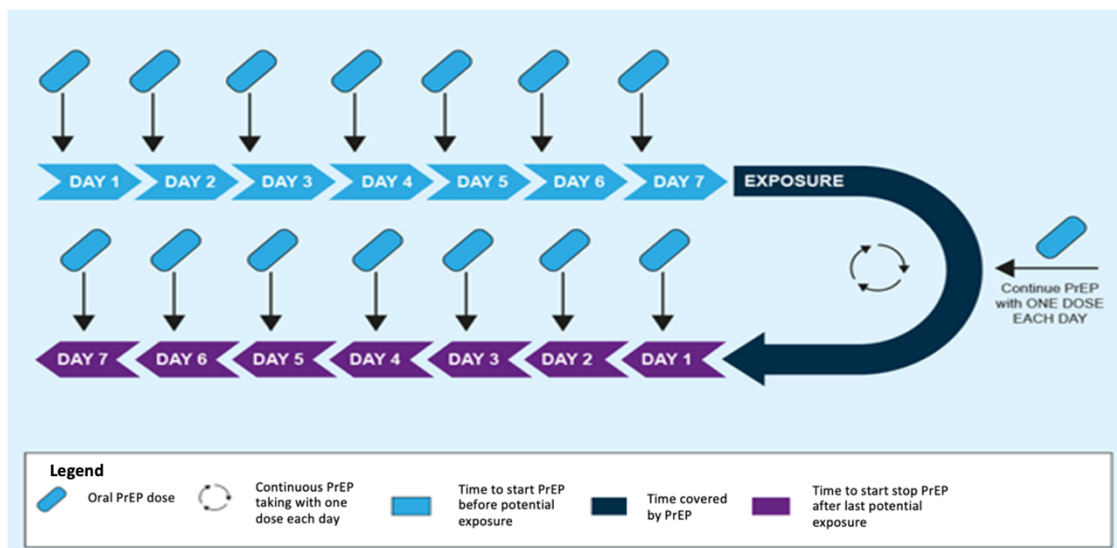


Figure 4: Oral PrEP Dosing Regimen for Everyone at Risk of HIV Acquisition

### Discontinuing Daily Oral PrEP

Clients may choose to discontinue PrEP for a variety of reasons. For example, they may choose to use an alternative HIV prevention method or no longer perceive themselves at risk of HIV. Clients should be informed about how to safely discontinue oral PrEP, emphasizing the need to continue PrEP for the recommended time (7 days) after their last potential HIV exposure. Women discontinuing the DPP should receive counselling on alternative contraceptive methods. Refer to [table 3](#) below for details.

Table 3: Starting and Discontinuing Oral PrEP for all Populations

Population(s)	Using Oral PrEP	Discontinuing Oral PrEP
Oral PrEP dosing regimen for all population	Take one dose per day	PrEP can be discontinued after taking a single dose daily for 7 days after the last potential exposure.
DPP for women of childbearing age	Take one dose per day	DPP can be discontinued after a single dose is taken daily for 7 days after the last potential exposure. However, it is recommended to finish the current pack or wait until the end of the menstrual cycle to minimize hormonal imbalances.

### Dual Prevention Pill

The Dual Prevention Pill (DPP) is a daily pill that combines two approved products, co-formulating Tenofovir Disoproxil Fumarate and Emtricitabine (TDF/FTC), the only currently approved formulation of oral PrEP for cisgender women, and Levonorgestrel and ethinyl estradiol (LNG/EE), a Combined Oral Contraceptive (COC), for the prevention of HIV and pregnancy.

## A. Formulations of DPP

The DPP is a bilayer tablet containing Tenofovir Disoproxil Fumarate (300mg) and Emtricitabine (200mg) (TDF/ FTC), and Levonorgestrel (0.15mg) and Ethinyl Estradiol (0.03mg) (LNG/EE). The DPP is packaged in a blister pack, similar to COC packaging. The packs contain a total of 28 tablets – 21 combination PrEP/COC tablets and 7 PrEP-only tablets (corresponding to the placebo/iron pill days of a COC regimen, which will need to be taken to maintain protection against HIV during the last week of the cycle). The 21 PrEP/COC tablets are pink, and the 7 PrEP-only tablets are yellow to differentiate the two pill formulations in the pack (see figure 5).

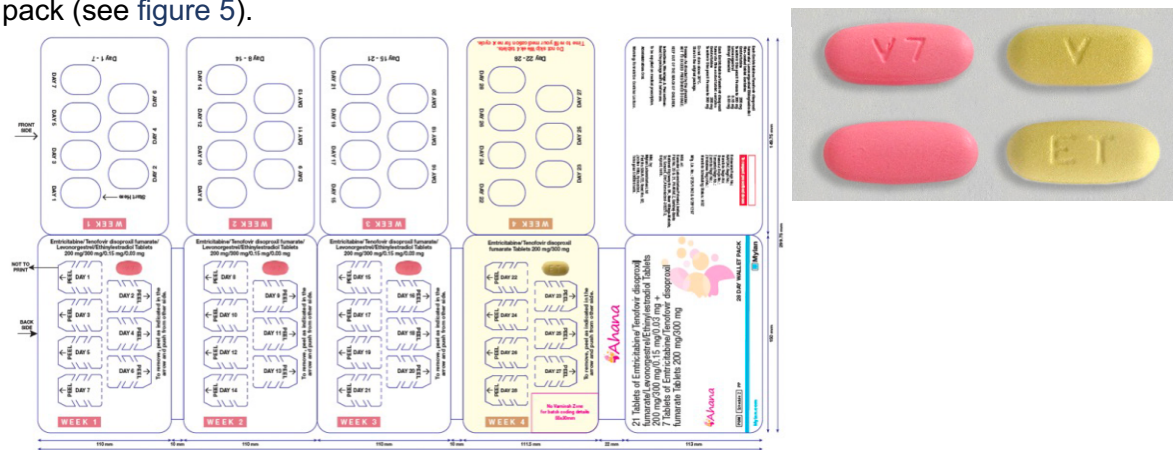


Figure 5: DPP Packaging and Tablet Colours

## B. Effectiveness of DPP

The DPP product is considered to have the same efficacy and safety as separate oral PrEP and COC products. The DPP should be taken for 7 consecutive days to reach protective levels against pregnancy and HIV. Dual prevention with barrier methods is necessary during this time period.

## C. Potential Side Effects

Possible side effects of the DPP are like those experienced with oral PrEP and COCs. They are typically mild and resolve on their own without treatment

- Common side effects of COCs may include headache, breast tenderness, weight changes, and other mild symptoms. These usually improve or disappear within the first few months of use
- Common side effects of oral PrEP may include nausea, headache, abdominal cramping, and vomiting. These symptoms generally ease or stop within the first few weeks of use

## D. DPP and other Drug Interactions

There are no drug-drug interactions from combining oral PrEP and COC in the DPP. Certain medications are not recommended due to their contraindication with oral PrEP or COC.

## E. Use of DPP in Pregnant and Breastfeeding Women

The DPP is a contraceptive and is not intended for use in pregnant women and should be discontinued for women who fall pregnant while on it. The PBFW should be offered another PrEP method. The DPP contains both Estrogen and Progesterone and therefore, is not recommended for women who are breastfeeding.

## Long-Acting Injectable PrEP

Long-acting injectable antiretrovirals form part of multiple PrEP products currently available for HIV prevention. These include long-acting injectable Cabotegravir (CAB) and long-acting injectable Lenacapavir (LEN). Long-acting injectable PrEP offers additional options for clients that may have challenges adhering to daily oral PrEP.

### Long Acting Injectable Cabotegravir for PrEP

Long-acting injectable Cabotegravir (CAB-LA) is an Integrase Strand-transfer Inhibitor (INSTI) which reduces the ability of the HIV to replicate itself inside a healthy cell. It is an extended-release injectable suspension given at a dose of 600mg, intramuscularly into the gluteal muscle. The initiation involves dose one and dose two, given 30 days apart. The follow-up reinjection is every 60 days. It takes seven days for CAB-LA to be effective after the first initial dose. Therefore, clients should use condoms or other prevention methods for seven days after the first injection to allow protective drug levels to build up.

#### Effectiveness

While oral PrEP has an effectiveness of over 90% when taken correctly and consistently, CAB-LA's effectiveness is 80% more than oral PrEP. If a client is using CAB-LA for HIV prevention, it is important they keep up with regular appointments for injections to make sure that there is enough Cabotegravir in their body to continue to prevent HIV infection. When a client misses a scheduled injection or discontinues CAB-LA, concentrations of the medication in the body slowly decline. During this pharmacokinetic "tail," CAB-LA becomes gradually less protective against HIV acquisition, and seroconversion may occur if the client continues to be exposed to HIV. For more information on the pharmacokinetic tail, refer to the *Stopping CAB-LA* section.

#### Storage

Cabotegravir suspension does not require special storage conditions. The recommended storage range for long acting injectable Cabotegravir is 1° to 30°C. Once drawn into the syringe Cabotegravir should be administered as soon as possible but may remain at room temperature for up to 2 hours. Once drawn into the syringe the medicine must be administered or discarded.<sup>1</sup>

#### Dosing

The recommended CAB-LA regimen begins with two initiation injections of 600mg/3mL administered intramuscularly, with second dose given 30 days after the first dose, allowing a ±7-day window. After these initiation doses, clients transition to continuation injections of 600mg/3 mL every two months (60 days), also with a ±7-day window allowance, for as long as they choose to remain on CAB-LA. All injections must be administered by trained healthcare providers in nationally approved health facilities.

#### Method of Administration

The injection must be given into the gluteus medius muscle. The preferred sites are the ventrogluteal or the upper-outer quadrant of the dorsogluteal muscle. It must not be administered intravenously, subcutaneously, or into any other muscle. The healthcare provider should use a sterile needle of appropriate length (considering the patient's build/BMI) and often employs the Z-track injection technique to minimize medication leakage from the site. The injection is administered at a 90° angle. See [figure 6](#)

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<sup>1</sup> ViiV Healthcare. Global Data Sheet for Cabotegravir (PrEP). Version 06. July 16, 2024.

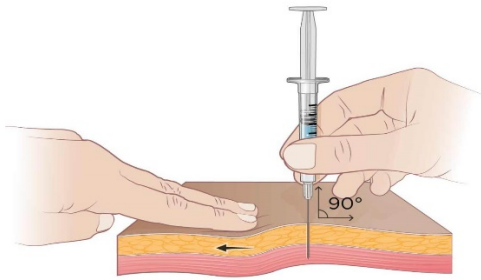


Figure 6: The Z-track injection technique

### Missing Scheduled Injections

Adherence to the injection schedule is critical for effective use of CAB-LA. A client who misses an injection should contact their healthcare provider immediately to get advice about how to continue using CAB-LA for PrEP or to talk about switching to a different HIV prevention strategy, which may include using another PrEP method or PEP depending on the time since last exposure.

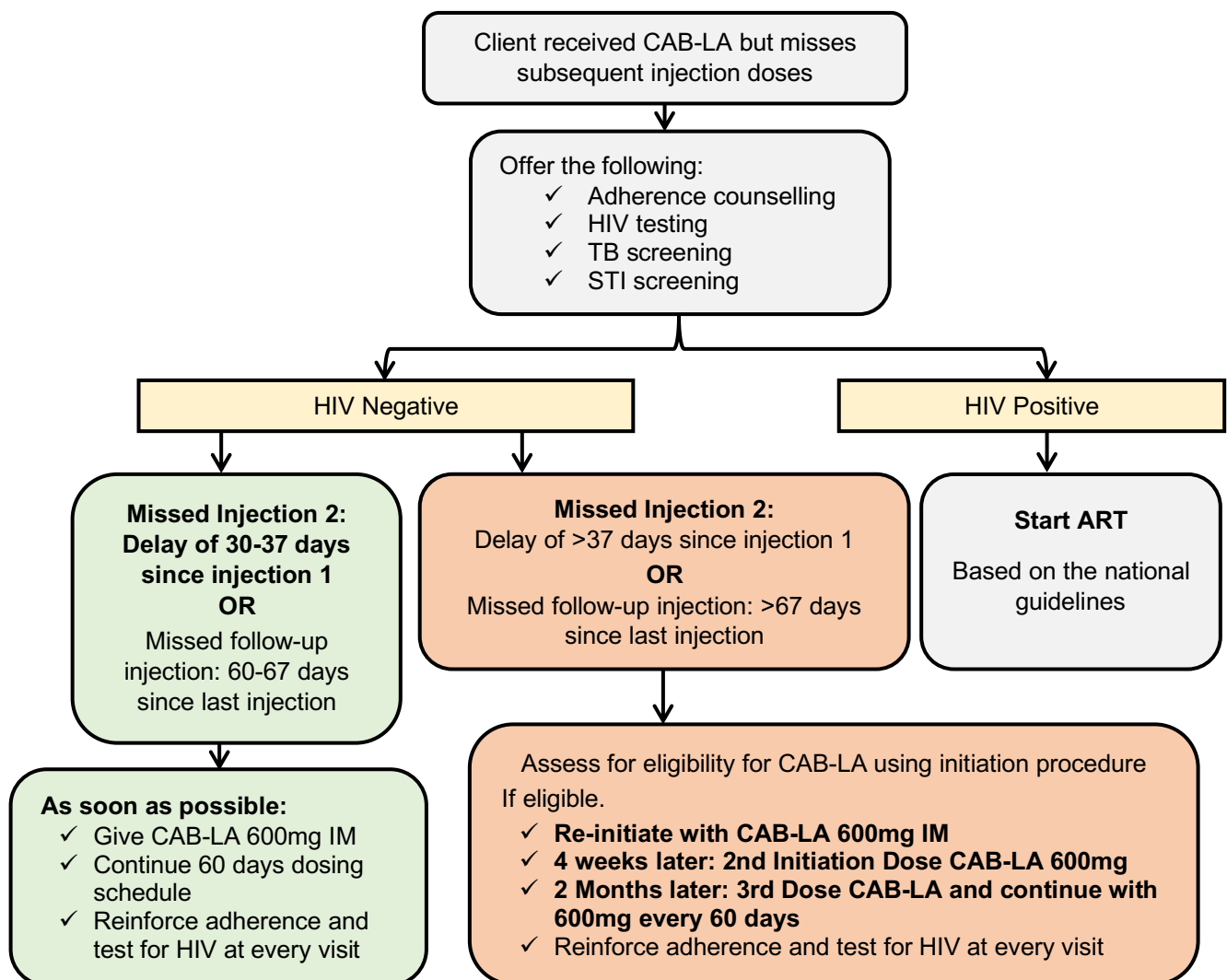


Figure: 7 Algorithm for managing missed CAB-LA doses

## Safety and Potential Side Effects

While CAB-LA is generally safe, side effects may be observed among people receiving it. The most common side effects include:

- Headache
- Nausea
- Diarrhoea
- Tiredness
- Injection Site Reactions (ISRs), particularly redness, pain, tenderness and swelling

Note: Clients should be counselled on the occurrence of possible side effects and informed and assured that these do not indicate a more serious underlying condition.

## Drug Interactions

The concomitant use of CAB-LA and other drugs may result in reduced drug concentration of CAB-LA which may reduce efficacy. Information regarding potential drug interactions with CAB-LA is provided in [table 4](#) below:

Table 4: Drug Interactions with CAB-LA

Concomitant Drug Class: Drug Name	Effect on Concentration	Clinical Comment
Anticonvulsants: Carbamazepine, Oxcarbazepine, Phenobarbital, Phenytoin	↓Cabotegravir	Contraindicated
Antimycobacterials: Rifampin, Rifapentine	↓Cabotegravir	
Antimycobacterial: Rifabutin	↓Cabotegravir	When rifabutin is started before or concomitantly with the first initiation injection of Cabotegravir, the recommended dosing of Cabotegravir is one 600mg (3mL) injection, followed 2 weeks later by a second 600mg (3mL) initiation injection and monthly thereafter while on Rifabutin. When Rifabutin is started at the time of the second initiation injection or later, the recommended dosing schedule of Cabotegravir is 600mg (3mL) monthly while on Rifabutin. After stopping Rifabutin, the recommended dosing schedule of Cabotegravir is 600mg (3mL) every 2 months.
Narcotic analgesic: Methadone	↔ Cabotegravir ↓Methadone	No dose adjustment of methadone is required. No dose adjustment of methadone is required when starting co-administration of Methadone with Cabotegravir. However, clinical monitoring is recommended as methadone maintenance therapy may need to be adjusted in some individuals.

↑ = Increase ↓ = Decrease, ↔ = No change

There are no known interactions between CAB-LA and contraceptive hormones or other forms of contraception. Available evidence suggests that use of gender-affirming hormones by transgender women does not affect drug levels of Cabotegravir.<sup>2</sup>

<sup>2</sup> Grinsztejn B, Hanscom B, Wang Z, Donnell D, Richardson P, Sullivan P, et al. Transgender women (TGW) in HPTN 083: an evaluation of safety, efficacy, and gender affirming hormonal therapy (GAHT) interactions with long-acting cabotegravir (CAB-LA) [abstract]. 24<sup>th</sup> International AIDS Conference; 2022 Jul 29 – Aug 2; Montreal, Canada. Available from: <https://programme.aids2022.org/Abstract/Abstract/?abstractid=12707>.

There are also no known interactions between CAB-LA and recreational drugs or alcohol, but alcohol and drug use could affect the ability to attend necessary health appointments, potentially resulting in missed injections. If a client or potential client thinks that their use of alcohol or other substances is interfering or may interfere with effective use of CAB-LA, the provider should engage the client to understand what support or referrals might be valuable to support effective use while also discussing additional prevention options, including other PrEP methods and the use of condoms and condom-compatible lubricant.

Residual concentrations of Cabotegravir may remain in the systemic circulation of individuals for prolonged periods (up to 12 months or longer). These residual concentrations are not expected to affect the exposures of antiretroviral drugs that are initiated after discontinuation of CAB-LA.

#### Box 1: Recommendations for Drug Interactions with CAB-LA

**For consideration:** Clients using non-steroidal anti-inflammatory drugs (NSAIDs) for pain, anticoagulants, or other antiplatelets such as high-dose Aspirin within the past week may have a higher likelihood of bruising or bleeding at the injection site. They should be made aware and counselled on mitigation strategies, if relevant.

If a client is using CAB-LA and is diagnosed with tuberculosis (TB), they will need to temporarily discontinue CAB-LA and receive treatment with a standard Rifampin-based regimen. In the interim, the client may use oral PrEP or other HIV prevention strategies. If the client completes TB therapy and wishes to continue with CAB-LA, they should be assessed for CAB-LA use and can restart CAB-LA with initiation injection. CAB-LA can be started two weeks after a client completes TB therapy. For information on concurrent use of CAB-LA with other PrEP products, see Switching Between PrEP Methods and Simultaneous Use section below.

Clients who receive TB preventative treatment with once-weekly Rifapentine-Isoniazid for 12 weeks (also known as 3HP) should temporarily discontinue CAB-LA for the duration of their Rifapentine use. Clients can restart CAB-LA two weeks after completing 3HP.

#### Contraindications for Use

CAB-LA should **not** be provided to people with:

- Unknown HIV status
- An HIV-positive test result according to the national HIV testing algorithm
- Potential exposure to HIV in the past 72 hours (these clients should be offered PEP)
- Signs of AHI
- Some co-administered anticonvulsants or antimycobacterials (see the CAB-LA and other Drug Interactions section above)
- Unwillingness or inability to commit to effectively using CAB-LA
- Allergic or hypersensitivity reaction(s) with previous use of CAB-LA or other integrase inhibitor medications
- Signs of hepatotoxicity and depressive disorders

#### Considerations for Pregnant and Breastfeeding Women

Someone who is pregnant can be initiated on CAB-LA. Those who become pregnant during CAB-LA use can continue while pregnant. The health provider should ensure the beneficiary is given adequate information on the current recommendation on the use of CAB-LA in pregnancy.

#### Hepatitis and other STIs

Long-acting injectable Cabotegravir PrEP should be offered as part of a comprehensive approach to HIV prevention, which includes counselling on safer sex practices, condom use, regular STI screening and treatment, and vaccination against hepatitis A and B. Cabotegravir does not prevent the acquisition of hepatitis B virus (HBV) or hepatitis C virus (HCV). These viruses are transmitted in similar ways to HIV, meaning that individuals at risk for HIV may also be at risk for viral hepatitis.

## Effects on liver and Kidney Function

Hepatotoxicity has been reported in a small number of people receiving CAB-LA, although similar levels were found among those receiving placebo injections in CAB-LA trials. Liver function testing (such as measuring alanine transaminase) can be considered before and during CAB-LA use. CAB-LA should not be initiated in people with advanced liver disease or acute viral hepatitis and should be discontinued if hepatotoxicity is confirmed. CAB-LA injections should not be delayed while waiting for results of liver function tests. As no kidney toxicity is anticipated during use of CAB-LA, kidney function testing and monitoring are not required for CAB-LA use.

If a hepatitis B surface antigen (HBsAg) test is reactive, which indicates HBV infection, needs for HIV prevention and HBV treatment should be evaluated on a case-by-case basis, and PrEP and HBV treatment providers should (where possible) jointly manage these cases. CAB-LA is not active against HBV. For people eligible for HBV treatment, TDF-based oral PrEP should be offered as the preferred PrEP option.

## Drug Resistance

Cabotegravir long-acting (CAB-LA) drug resistance testing focuses on detecting mutations in the HIV integrase gene that may reduce the effectiveness of integrase strand transfer inhibitors (INSTIs), including Cabotegravir. Because CAB-LA remains in the body for an extended period even after injections stop, acquiring HIV during this “pharmacologic tail” poses a higher risk of the virus developing resistance. Testing typically involves genotypic resistance assays that look for key integrase mutations associated with decreased susceptibility to Cabotegravir and related drugs such as Dolutegravir. Early detection of resistance is essential for guiding appropriate antiretroviral therapy (ART) selection, particularly ensuring transition to treatment regimens that remain fully effective. Routine surveillance and resistance testing in breakthrough infections also help national programs understand emerging patterns of INSTI resistance and inform policy.

## N. Discontinuation

CAB-LA may be discontinued if a client is no longer at risk and should be offered other HIV prevention strategies. The amount of Cabotegravir in the blood remains at effective levels for at least 60 days after the final injection.<sup>3</sup> The “tail period,” (see figure 8) refers to the time period beginning 60 days after the final injection and continuing for approximately 12 months, when plasma drug concentrations are in terminal decline. As with all PrEP methods, if a client discontinues CAB-LA, they should use another PrEP method or PEP.

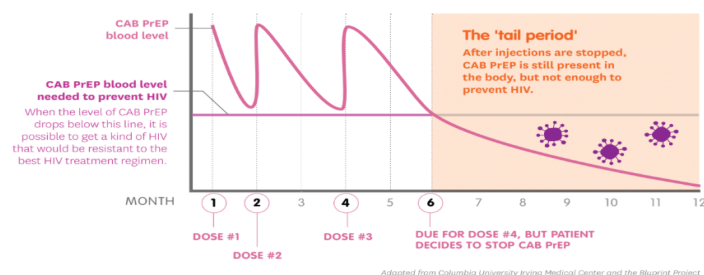


Figure 8: CAB-LA “Tail Period”

<sup>3</sup> Landovitz RJ, Li S, Grinsztejn B, Dawood H, Liu AY, Magnus M, et al. Safety, tolerability, and pharmacokinetics of long acting injectable cabotegravir in low-risk HIV uninfected individuals: HPTN 077, a phase 2a randomized controlled trial. PLoS Med. 2018 Nov 8;15(11):e10026900.

The “tail period” can last for up to 12 months, but this time frame varies for people based on gender. Data on HIV acquisition during the tail period is limited. However, it is important to note that as CAB-LA concentrations continue to decrease after a final injection, protection against HIV acquisition eventually wanes, even though non-protective concentrations of drug may persist for some interval. It is during this period that there is risk for HIV acquisition in the presence of persistent CAB-LA concentrations, which may be suboptimal to suppress replication. HIV acquisition during the tail period can thus lead to the HIV virus developing resistance to Cabotegravir, and thus cross-resistance to other INSTI ARVs as well.

As with all PrEP methods, if a client discontinues CAB-LA, they should use another PrEP method or HIV prevention strategy during the tail period if exposure to HIV is possible. If a client has a potential exposure to HIV during the tail period while not using an HIV prevention strategy, they should speak to a healthcare provider as soon as possible because PEP may be appropriate and ideally should be started as soon as possible within 72 hours of potential exposure.

#### O. Restarting

Clients who may have stopped CAB-LA and wish to restart should be initiated on CAB-LA as per guidelines. Elicit reasons why the client had discontinued CAB-LA, and if no contraindications, readminister initiation injection 1 and schedule initiation injection 2 in 30 days. Thereafter, schedule as outlined under “CAB-LA” section.

#### P. Transitioning to other PrEP Products

When transitioning a client from CAB-LA to another form of PrEP (such as oral PrEP), a structured approach is required to maintain protection against HIV. See details on clinical guidance and protocols for this transition.

#### Q. Clients who test HIV Positive while on CAB-LA

Individuals who test positive on CAB-LA can either be missed acute HIV infection or new acquisition of HIV infection (seroconversion) while on CAB-LA. New HIV infections on CAB-LA occurs in individuals with a documented negative PCR test at initiation and later test positive. All other individuals who test positive whilst on CAB-LA and had a negative serology test (RDT) at initiation should be considered as missed acute HIV infection. Missed acute HIV infection is common because of the high risk of HIV incidence among clients of PrEP.

If a client tests HIV positive based on the standard algorithm while on PrEP:

- Discontinue PrEP use immediately
- Collect a blood-based sample for PCR HIV test
- Immediately link to care and initiate on Tenofovir/Emtricitabine plus Darunavir/ritonavir (INSTI sparing ART)
- Document seroconversion and possible reason for seroconversion (Obesity, missed appointment, Drug to Drug Interaction, IV drug use and others)
- Collect blood sample for INSTI resistance testing

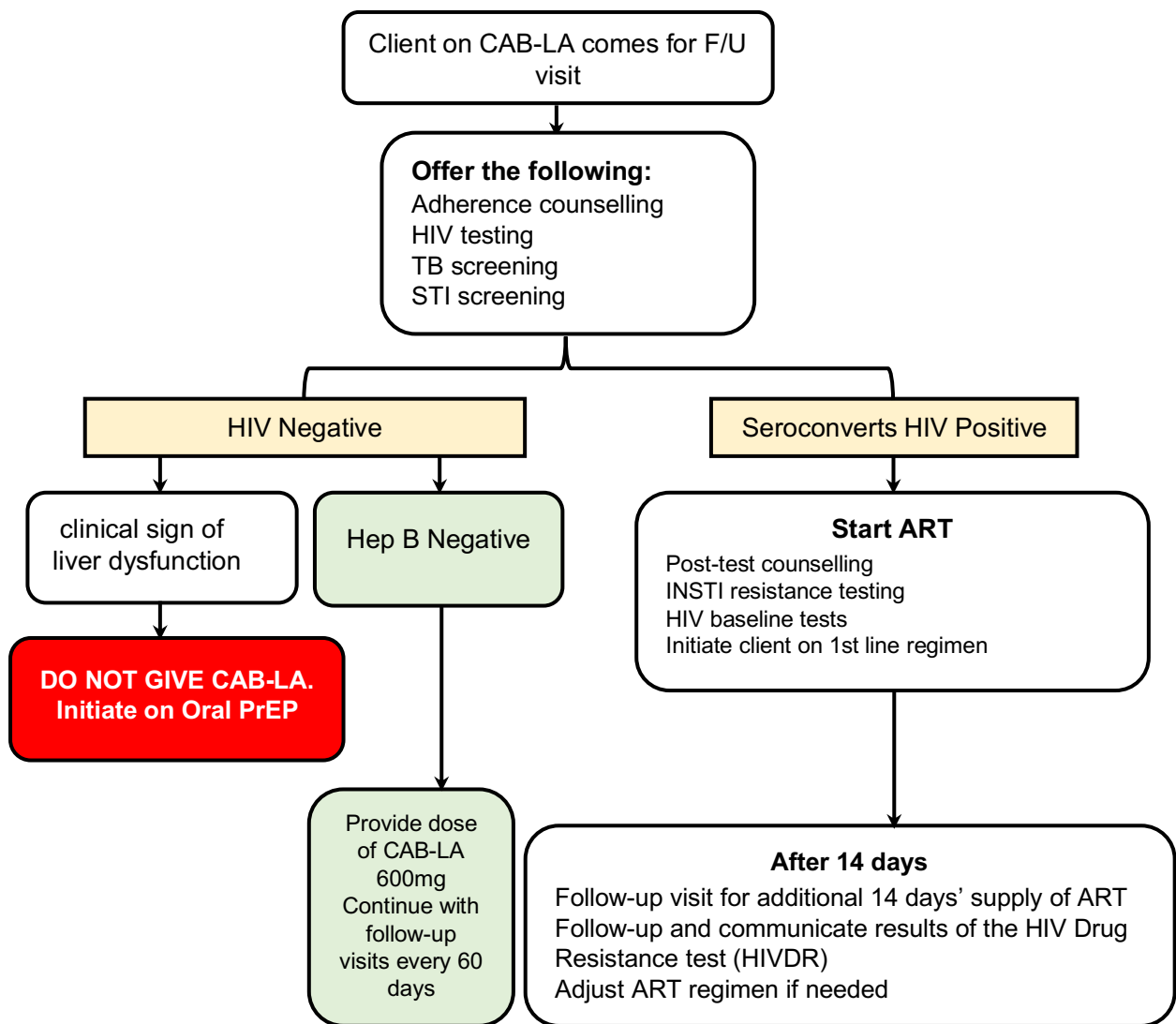


Figure 9: Algorithm for Clients who come for Follow Up Visit

**Key Message**

**For consideration:** The process for switching between PrEP methods will depend on the methods being used. When advising clients on switching between PrEP methods, providers should use their best clinical judgment, considering the time to effectiveness/waning effectiveness of each PrEP method after discontinuation, coverage of previous and future potential exposures to HIV, and client preferences

### Lenacapavir for PrEP

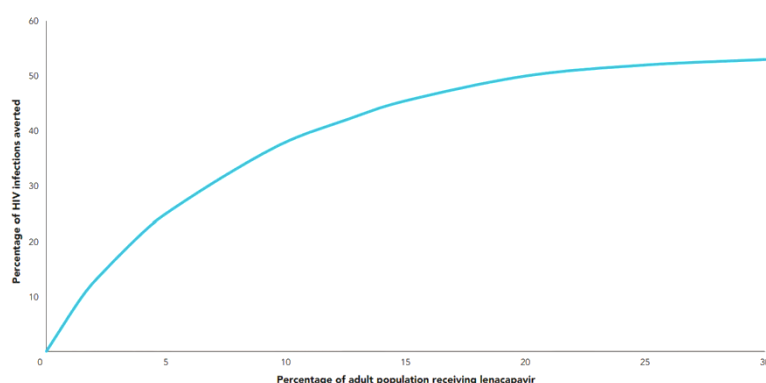
Lenacapavir is a first-in-class HIV-1 capsid inhibitor that binds to the capsid protein (p24), disrupting multiple critical stages of the viral life cycle. It impairs capsid-mediated nuclear uptake of proviral DNA, interferes with capsid disassembly and virus assembly, and hinders viral release. By blocking the interaction between the capsid and host proteins required for nuclear entry, Lenacapavir disrupts a key step in viral replication. It also inhibits capsid disassembly, a process essential for reverse transcription. Additionally, it prevents proper capsid formation, leading to malformed, non-infectious viral particles. Collectively, these actions significantly reduce the virus's ability to replicate and spread.

Lenacapavir is administered orally and as a subcutaneous injection. Oral Lenacapavir is used as an initial "lead-in" to quickly achieve effective drug concentrations in the body. It is also used for temporary bridging if injections need to be interrupted. The injectable form provides long-acting protection against HIV.

Long-acting injectable Lenacapavir should be offered as an additional HIV prevention choice to reduce the risk of sexually acquired HIV-1 in adults and adolescents weighing at least 35kg who are at risk of HIV-1 acquisition. It should be used as part of a comprehensive combination prevention strategy. It is administered via subcutaneous injection and provides protection for six months.

### A. Effectiveness in preventing HIV infections

HIV epidemics among the general population in the African region, the EMOD-HIV model found that offering Lenacapavir to 5% of adults, *prioritized by location and risk behaviour*, could avert 25–35% of new HIV infections over 10 years, depending on the surrounding incidence levels.



Source: Summary of the consultation on the projected impact and cost-effectiveness of lenacapavir as pre-exposure prophylaxis (PrEP). London: Joint United Nations Programme on HIV/AIDS and Gates Foundation 2025. Figure based on analysis by Wu L, Kattan D, Wittenauer R, et al. Health impact, budget impact, and price threshold for cost-effectiveness of lenacapavir for HIV pre-exposure prophylaxis in eastern and southern Africa: a modelling analysis. *Lancet HIV*. 2024;11(11):e765–e773. [https://doi.org/10.1016/S2352-3018\(24\)00239-X](https://doi.org/10.1016/S2352-3018(24)00239-X)

Figure 10: Projected impact of Lenacapavir use for PrEP

When used with high uptake, Lenacapavir has the potential to reduce new HIV infections substantially. The PURPOSE 1 and PURPOSE 2 trials demonstrated that LEN provides >95% protection against HIV acquisition among cisgender women, men who have sex with men, transgender women, and gender-diverse populations at high risk (Gilead Sciences, 2024; WHO, 2024). These results confirm Lenacapavir's potential to significantly reduce new infections in diverse populations.

### B. Storage

Lenacapavir must be stored properly to maintain its effectiveness. Both the oral tablet and injectable forms require storage at controlled room temperature, specifically between 20°C and 25°C. The oral tablets should remain in their original packaging, which contains a desiccant to protect against moisture. It is important not to remove the desiccant, as exposure to moisture could compromise the medication's stability. The container with the tablets should be kept tightly closed and away from excessive heat or humidity. The injectable form of Lenacapavir, supplied in vials, also requires storage at room temperature within the same range. Vials must be kept in their original carton to protect them from light.

### C. Method of Administration

The preferred site of administration is the abdomen, placing the 2 injections on opposite sides of the umbilicus. The two injections should be administered at least five centimetres from the umbilicus on each side of the abdomen. Alternatively, injection can be administered into each lateral thigh if preferred by a trained provider. Lenacapavir injections are administered at a 90° angle to decrease the risk of injection site reactions. At the apex of pinched skin, insert the needle fully. It is preferable for the needle to be inserted perpendicular (at a 90° angle) to the skin.

Lenacapavir should not be administered intradermally. Lenacapavir tablets can be taken with or without food. See figure 11.

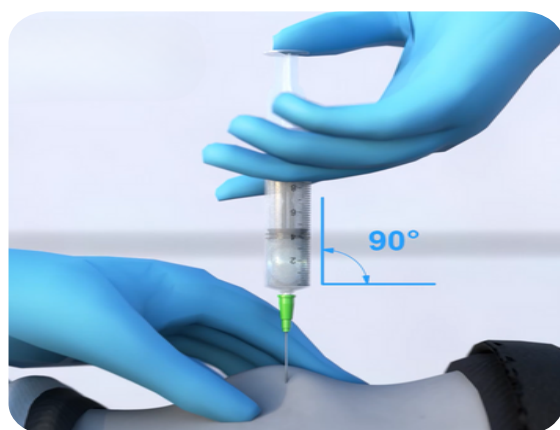


Figure 11: Correct technique for administering a SC injection

#### D. Dosing

The Lenacapavir initiation regimen requires both oral and injectable components. The injectable dose has two separate 463.5mg/1.5mL (totalling 927mg/3mL) administered on day one: 927mg (3mL) Lenacapavir by subcutaneous injection two 1.5mL injections in separate areas to minimise injection site reactions. Once the solution has been drawn into the syringes, administer as soon as possible. Discard solution if not used within 4 hours. The oral component consists of two 300mg Lenacapavir tablets taken on day one, followed by two additional 300mg Lenacapavir tablets on day two. The oral tablets must be taken over two days, as taking all four on the same day would exceed the gastrointestinal tract's capacity for absorption. This initial dosing schedule is designed to maintain consistent therapeutic drug levels over time. Subsequent Lenacapavir doses are two injections administered every 26 weeks. Adherence to the 6-month interval is important to ensure continued efficacy.

#### E. Dosing schedule for initiation and continuation

Lenacapavir is initiated with a lead-in dose of oral tablets and subcutaneous injections, followed by a maintenance dose administered subcutaneously every six months.

Table 5: Dosing and Scheduling for Oral and Long-Acting Injectable Lenacapavir

Time	Dose of Lenacapavir
<b>Initiation<sup>a</sup></b>	
Day 1	927mg subcutaneous injection (2 x 1.5mL injections <sup>b</sup> ) 600mg orally (2 x 300mg tablets)
Day 2	600mg orally (2 x 300mg tablets)
<b>Continuation</b>	
Every 6 Months (26 weeks) <sup>c</sup> +/- 2 weeks	927mg subcutaneous injection (2 x 1.5mL injections <sup>b</sup> )

**a** - The complete initiation dosing schedule, consisting of subcutaneous injections and oral tablets, is required

**b** - Two injections, with the second injection at least 5 centimetres from the first injection (see Method of Administration)

**c** - From the date of the last injection

#### F. Pharmacokinetic properties

The oral loading dose and the initial LEN injection work together to rapidly establish protective drug levels in the body. The oral loading dose provides an early boost in LEN concentrations, while the injection creates a long-acting depot that maintains these levels over time.

The oral loading dose allows LEN to reach target plasma concentrations within 3–24 hours after the first two tablets are taken. If the Day 2 dose is missed, it should be taken as soon as possible to support timely achievement of therapeutic drug levels (see figure 12) (Gilead Sciences, 2024). Oral reloading is not required for on-time follow-up injections, which should occur at approximately Week 26, within a  $\pm 2$ -week window of the initiation dose. However, individuals who return after more than 28 weeks and wish to continue LEN must repeat the two-day oral loading regimen.

Subcutaneous Lenacapavir forms a depot from which the drug is slowly released. Injections alone, without the oral loading dose, do not achieve therapeutic concentrations rapidly enough for immediate protection. In such cases, it may take approximately 3 – 4 weeks post-injection for LEN levels to reach protective thresholds. This delay may leave individuals vulnerable to HIV acquisition during the initial weeks after injection, underscoring the importance of completing the oral loading regimen to ensure rapid onset of protection.

Figure 12 illustrates the time required to achieve target plasma concentrations (IQ4 threshold) following subcutaneous administration of LEN 927mg, with and without the oral loading dose. The data demonstrate that inclusion of the oral loading phase enables LEN to reach therapeutic levels within the first 24 hours post-dose, compared to delayed attainment when the injection is given alone (Gilead Sciences, 2024).

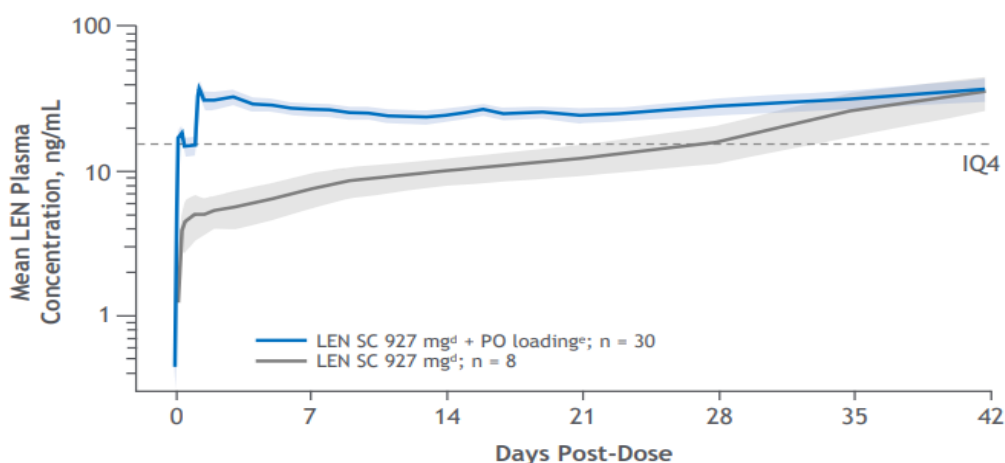


Figure 12: Time to reach IQ4 with and without LEN Oral Dosing

### G. Anticipated delayed injections

Individuals who anticipate missing or delaying their scheduled subcutaneous Lenacapavir injection should initiate oral Lenacapavir as a temporary bridging strategy. This involves taking 300mg orally once every seven days, starting between weeks 26 and 28 following their last subcutaneous injection. Weekly oral dosing may be continued for up to six months, if needed, to maintain therapeutic drug levels. When ready to resume SC injections, individuals should receive the next LEN SC dose exactly seven days after their final oral bridging dose.

### H. Missed Scheduled Injection

If a scheduled Lenacapavir injection is missed or delayed beyond 28 weeks, re-initiation with a two-day oral loading dose (600mg per day) is required, as drug levels may fall below protective levels, potentially increasing the risk of HIV acquisition.

Figure 13 illustrates how LEN achieves and maintains therapeutic plasma levels following the two-day oral loading phase and SC injection. It also highlights the seven-day interval between the last oral dose and the first injection, as well as the need to restart the initiation regimen if more than 28 weeks have elapsed since the previous injection.

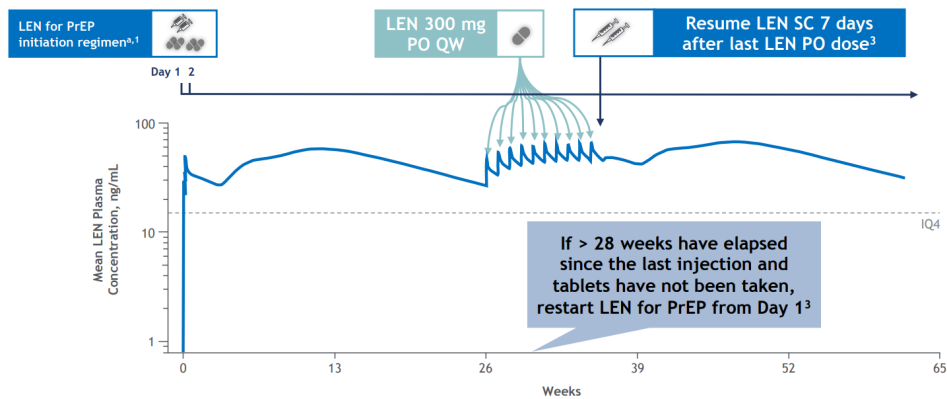


Figure 13: Dosing for anticipated delayed injections

1. Ogbuagu OE, et al. AIDS. 2025;39:639-48. 2. Jogiraju V, et al. Poster TUPEB07 presented at IAS 2023; July 23–26, 2023; Brisbane, Australia. 3. Gilead Sciences. [https://www.accessdata.fda.gov/drugsatfda\\_docs/label/2025/220020s000lbl.pdf](https://www.accessdata.fda.gov/drugsatfda_docs/label/2025/220020s000lbl.pdf) (accessed June 26, 2025).

The amount of time elapsed since their last injection will determine how to proceed, as follows: If less than or equal to 28 weeks (6 months plus 2 weeks) elapsed since prior injection, continue with scheduled dosing. If more than 28 weeks elapsed since prior injection, restart with initiation regimen. Refer to figure 14

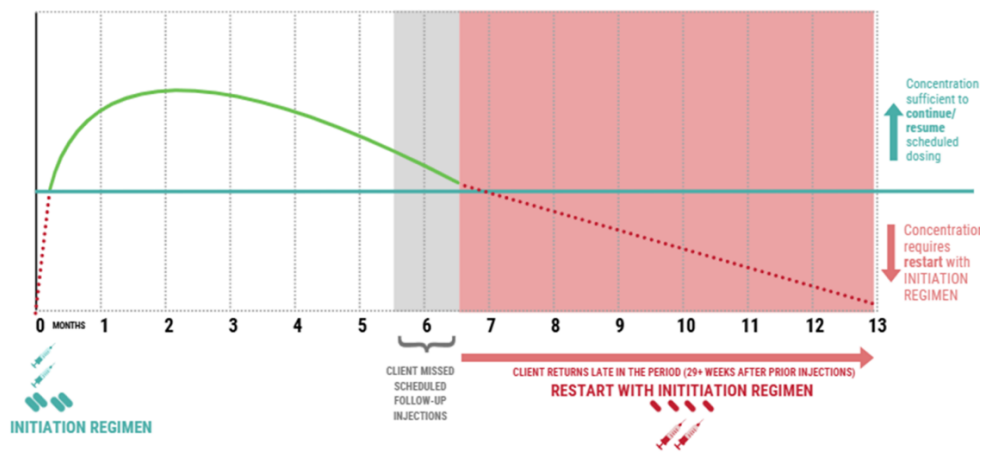


Figure 14: Concentration of Lenacapavir following Missed Doses

## I. Safety and Potential Side Effects

Lenacapavir has been shown to be safe and highly tolerable. Injection-site reactions (ISRs) including nodules, pain and erythema are common, however, these are typically mild and decrease over time.

### Injection Site Reactions

#### ***Slow or non-resolving injection site nodules and indurations***

Administration of Lenacapavir may result in local injection site reactions (ISRs), including nodules and indurations.

#### ***Injection site reactions with improper administration***

Lenacapavir injections must only be administered subcutaneously. Improper administration (intradermal injection) has been associated with serious injection site reactions, including necrosis and ulceration.

## J. Drug Interactions

Preliminary pharmacokinetic data analyses indicate that Lenacapavir does not cause significant changes in hormone levels for individuals on gender-affirming hormonal therapy (GAHT) – whether testosterone-based or estradiol-based regimens or long-acting hormonal contraceptives, and hormone regimens do not seem to influence Lenacapavir concentrations. Therefore, no dose adjustments will be required for individuals taking GAHT or long-acting hormonal contraceptives.

Table 6: Drug-Drug Interactions for Lenacapavir

Drug class	Interaction and management
<b>Antibiotics for treatment of tuberculosis (TB)</b> Rifabutin Rifampicin Rifapentine	<b>Co-administration is not recommended and/or contraindicated</b> Induction of CYP3A4 can substantially reduce LEN concentrations which may result in loss of its prevention efficacy. For people who used LEN within the last 9 months who are starting TB preventive treatment (TPT), a daily isoniazid regimen for six months (6H) may be preferred compared with regimens that include rifamycin. For people starting TB treatment, switching to other PrEP methods such as daily oral TDF-based PrEP may be considered. At least a 4-week cessation period is recommended prior to initiation of LEN after using these drugs due to the persisting inducing effect after discontinuation of a strong inducer.
<b>Anticonvulsants</b> Carbamazepine Phenobarbital Phenytoin	<b>Coadministration is not recommended and/or contraindicated</b> Induction of CYP3A4 can substantially reduce LEN concentrations, which may result in loss of its prevention efficacy.
<b>Illicit/recreational</b> Ketamine	Potential interaction, which may persist after discontinuation of Lenacapavir Ketamine concentrations may increase due to inhibition of CYP3A4 by LEN and may increase side-effects associated with ketamine, such as respiratory depression and hallucinations.
<b>Erectile dysfunction</b> Avanafil Sildenafil Tadalafil Vardenafil	Potential interaction, which may persist after discontinuation of Lenacapavir Sildenafil, tadalafil and vardenafil concentrations may increase due to inhibition of CYP3A4 by LEN. Use with caution and with the following dose adjustments: <i>Avanafil:</i> A maximum dose of 100 mg, not to exceed once every 48 hours, is recommended. <i>Sildenafil:</i> A starting dose of 25 mg is recommended <i>Tadalafil:</i> No more than 10 mg every 72 hours should be used as needed or, if given daily the dose, should not exceed 2.5 mg once daily. <i>Vardenafil:</i> No more than 5 mg in a 24-hour period should be used.
<b>Gender-affirming hormones</b> Estradiol Conjugated estrogens Ethinyl estradiol Medroxyprogesterone Micronized progesterone Testosterone	No dose adjustment required. LEN is a moderate inhibitor of CYP3A4 and could potentially increase exposure of the gender-affirming hormone, although to an extent that does not require dose adjustment.
<b>Hormonal contraceptives</b> Ethinylestradiol Etonogestrel Levonorgestrel Medroxyprogesterone Norethisterone Norgestrel	No dose adjustment required. LEN is a moderate inhibitor of CYP3A4 and could potentially increase exposure of the contraceptive hormone, although to an extent that does not require dose adjustment.

Adapted from WHO guidelines

#### K. Contraindications to use

- Unknown HIV status
- An HIV-positive test result according to the national HIV testing algorithm
- Potential exposure to HIV in the within 72 hours (these clients should be offered PEP)
- Signs of AHI
- Some co-administered anticonvulsants (see [table 6](#) on LEN and other Drug Interactions section above)
- Unwillingness or inability to commit to effectively using LEN
- Allergic or hypersensitivity reaction(s) with previous use of LEN or other integrase inhibitor medications

#### L. Effect on Kidney and Liver Function

The use of Lenacapavir has not been associated with nephrotoxicity or hepatotoxicity. Thus, no liver or kidney function testing and monitoring are required during Lenacapavir initiation or follow-up. No dose adjustment is required in individuals with mild, moderate or severe renal impairment (creatinine clearance  $\geq 15\text{mL/min}$ ). Lenacapavir has not been studied in individuals with end-stage renal disease; thus, it should be used with caution in these individuals.

#### M. Drug Resistance

Following the national HIV testing algorithm, testing for HIV is essential for prevention of HIV drug resistance. The risk of developing HIV drug resistance exists if Lenacapavir is initiated in individuals with undetected HIV infection in the window period, or if HIV is acquired during use or following discontinuation of Lenacapavir.

#### N. Clients who test HIV Positive while on LEN

If a client tests HIV positive while on Lenacapavir, PrEP should be discontinued, and the individual should be initiated on a full antiretroviral therapy regimen in accordance with the national treatment guidelines. Timely diagnosis, rapid linkage to care, and close clinical follow-up are critical to ensure effective treatment and reduce the risk of onward transmission. As part of surveillance Lenacapavir resistance testing is recommended.

#### O. Use of Lenacapavir in Pregnancy and Breastfeeding

Lenacapavir has shown no increase in adverse pregnancy or birth outcomes in the 193 pregnancies among the 184 women reported in the PURPOSE 1 study. When someone becomes pregnant, the choice to start, continue, stop or switch PrEP should be made by the individual, following the discussion of the risks and benefits with a healthcare provider. All pregnancy and infant outcomes should be monitored, documented, and reported including adverse events such as miscarriage, stillbirth, congenital anomalies, and neonatal death with particular attention to rare and uncommon events.

#### P. Lenacapavir Use in Co-Infections and Required Monitoring

Individuals with hepatitis B virus (HBV) infection may consider Tenofovir Disoproxil Fumarate (TDF)-based oral PrEP due to its effectiveness against both HIV and HBV. Lenacapavir (LEN) is not contraindicated in people with HBV or hepatitis C virus (HCV) infections; however, LEN has not been extensively studied in individuals co-infected with HIV and active HBV or untreated HCV, nor in those with severe liver impairment. As a result, careful monitoring is recommended when prescribing LEN to patients with HBV or HCV. Additionally, screening for sexually transmitted infections (STIs) such as gonorrhoea, chlamydia, syphilis, and trichomoniasis should be offered to individuals initiating or continuing LEN.

## Dapivirine Vaginal Ring

Dapivirine vaginal ring may be offered as an additional prevention choice for cisgender women at substantial risk of HIV infection as part of combination HIV prevention strategy. It is a flexible silicone vaginal ring that slowly releases the antiretroviral drug Dapivirine (25mg), which is a non-nucleoside reverse transcriptase inhibitor (NNRTI), into the vaginal mucosa over the course of 28 days. The ring must be in place for at least 24 hours before it is maximally effective. The ring is above 50% effective (when used correctly and consistently) and may be offered as an option for people assigned female at birth (AFAB) who wish to prevent HIV acquisition through receptive vaginal sex and 1) *are unable to use other PrEP options* or 2) *do not want to use other PrEP options* or 3) *when other PrEP options are not available* or 4) *in addition to other prevention methods*. Therefore, the use of the Dapivirine Vaginal Ring (DVR) must be under the guidance of healthcare experts and must not be the first choice or option unless under the criteria set above.

### A. Dosing

The ring must be inserted correctly into the vagina and worn for 28 days without removal. It is replaced every 28 days and should not be removed during menstruation or sex. The ring can also be offered in community settings to increase access.

### B. Method of Administration Inserting the PrEP Ring

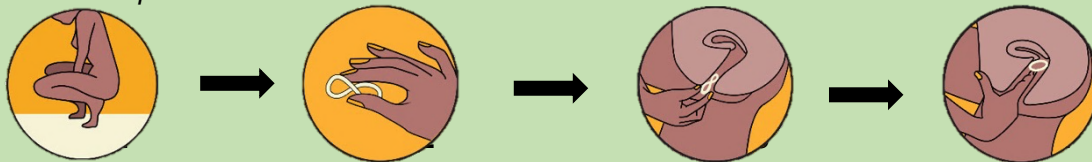
Clients should be given initial information, demonstration and support on ring insertion and removal, and once confident, clients can continue to use the ring on their own. Some clients are comfortable using the ring on their own. The ring is inserted by hand; there is no need to use a speculum or other tools to insert the ring. Clear visual instructions are offered with the ring insert. See [Box 2](#) below

There are clear steps for insertion for the clients in the provider training manual.

#### Box 2: Ring Insertion Steps for Clients

1. Get into a position that is comfortable for inserting the ring, such as squatting, lifting one leg, or lying down. If a healthcare provider is assisting you, you should be in a reclining position
2. With clean hands, squeeze the ring between the thumb and forefinger, pressing both sides of the ring together so that the ring forms a "Figure 8" shape
3. Use the other hand to open the folds of skin around the vagina
4. Place the tip of the ring into the vaginal opening and use your fingers to push the folded ring gently up into the vagina
5. Push the ring as far toward the lower back as possible. If the ring feels uncomfortable, it is probably not inserted far enough into the vagina. Use a finger to push it as far up into the vagina as is comfortable

*\*Ring insertion should be painless. If you have any bleeding or discomfort upon insertion, contact your healthcare provider.*



### Removing the PrEP Ring

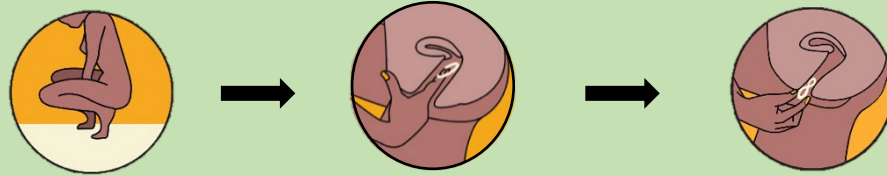
Clients can remove the ring with or without the help of a healthcare provider. The ring is removed by hand; there is no need to use a speculum or other tools to remove the ring. Ring removal steps for clients are listed in [Box 3](#) Refer to the ring insert package or training manual for ring removal steps.

If a client wishes to discontinue use of the ring, they can remove it. Ideally, clients who are discontinuing PrEP use will alert their providers and receive support to use other HIV prevention practices if they are still having ongoing exposure to HIV.

#### Box 3: Steps for removing the Ring

1. Get into a position that is comfortable for removing the ring, such as squatting, lifting one leg, or lying down
2. With clean hands, insert one finger into the vagina and hook it around the edge of the ring
3. Gently pull the ring out of the vagina

*\*Ring removal should be painless. If you have any bleeding or discomfort upon removal, contact your healthcare provider.*



#### C. Potential Side Effects

Possible side effects of the ring are typically mild and experienced by few users. These include:

- Urinary tract infections (UTIs)
- Vaginal discharge
- Vulvar itching
- Pelvic and lower abdominal pain

These side effects usually occur during the first month of use and resolve without the need to remove the ring. Clients using the ring should be counselled on possible side effects and advised to contact their healthcare provider if they experience any urinary or reproductive tract changes, because these could be a sign of an STI or UTI needing treatment.

#### D. Drug Interactions

There are currently no data on concurrent use of vaginally administered antimicrobial products (including vaginal Metronidazole or Clindamycin) for vulvovaginal infections and the PrEP ring and other vaginal rings (contraceptive rings or diaphragms); therefore, concomitant use is not recommended. Concurrent use of vaginally administered Clotrimazole and the DVR has been reported to be safe and well tolerated, however, additional HIV prevention options, such as condoms, should be offered during co-administration. Consider if there are alternatives available for treatment of candida.

There are no known interactions between Dapivirine and contraceptive hormones; hormones used for gender-affirming hormone therapy, alcohol, or recreational drugs.

#### E. Contraindications for Use

The ring should not be provided to people with:

- An HIV-positive test result according to the national HIV testing algorithm
- Potential exposure to HIV within the last 72 hours (these clients should be offered PEP)
- Signs of acute HIV infection (AHI) and potential exposure within the last 3 months
- Unwillingness or inability to commit to effectively using the ring and attending scheduled follow-up visits
- Allergy or hypersensitivity to active substance or other substances listed in the product information sheet

#### F. Transitioning to other PrEP Products

Clients can switch from the Dapivirine Vaginal Ring to other PrEP methods.

## Transitioning between PrEP products

Clients may choose to switch between PrEP products based on their personal needs, preferences, or changing circumstances. The fundamental principle for any PrEP method is consistent and correct use to ensure protection during periods of potential HIV exposure. The following sections outline the key steps for transitioning between specific products. For a visual overview, refer to [figure 15](#).

### General Principles for Transitioning

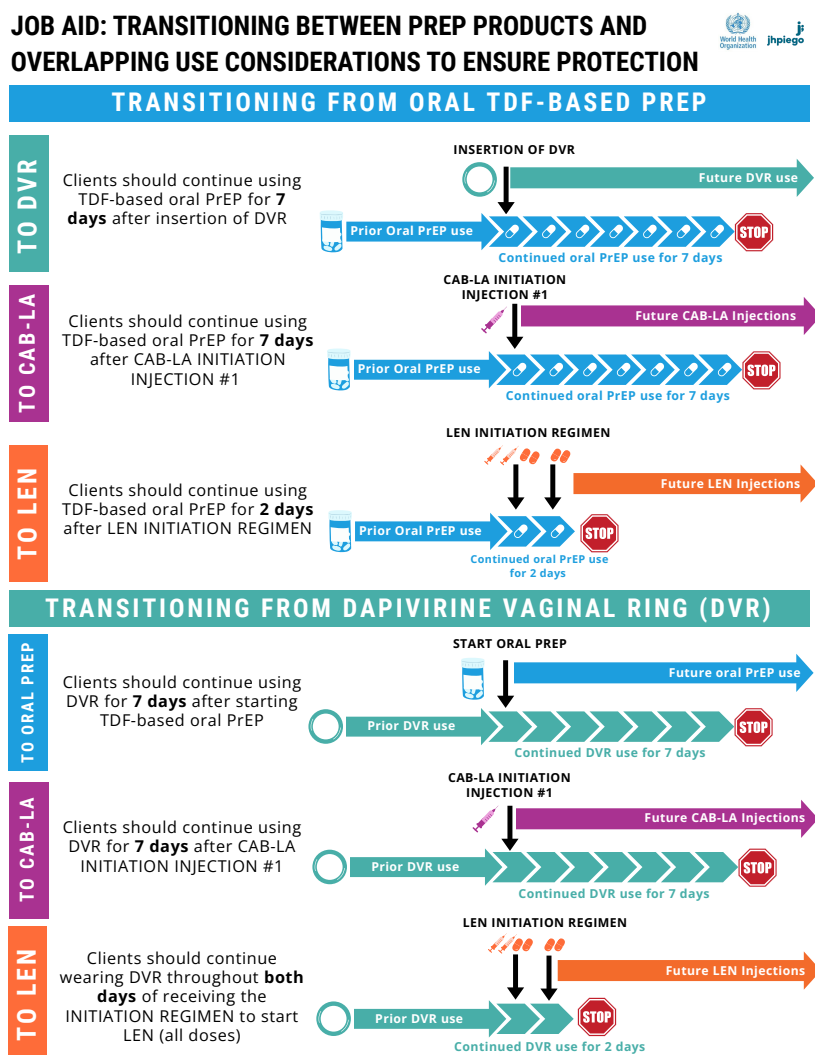
Before switching between any PrEP products, the following steps must be completed:

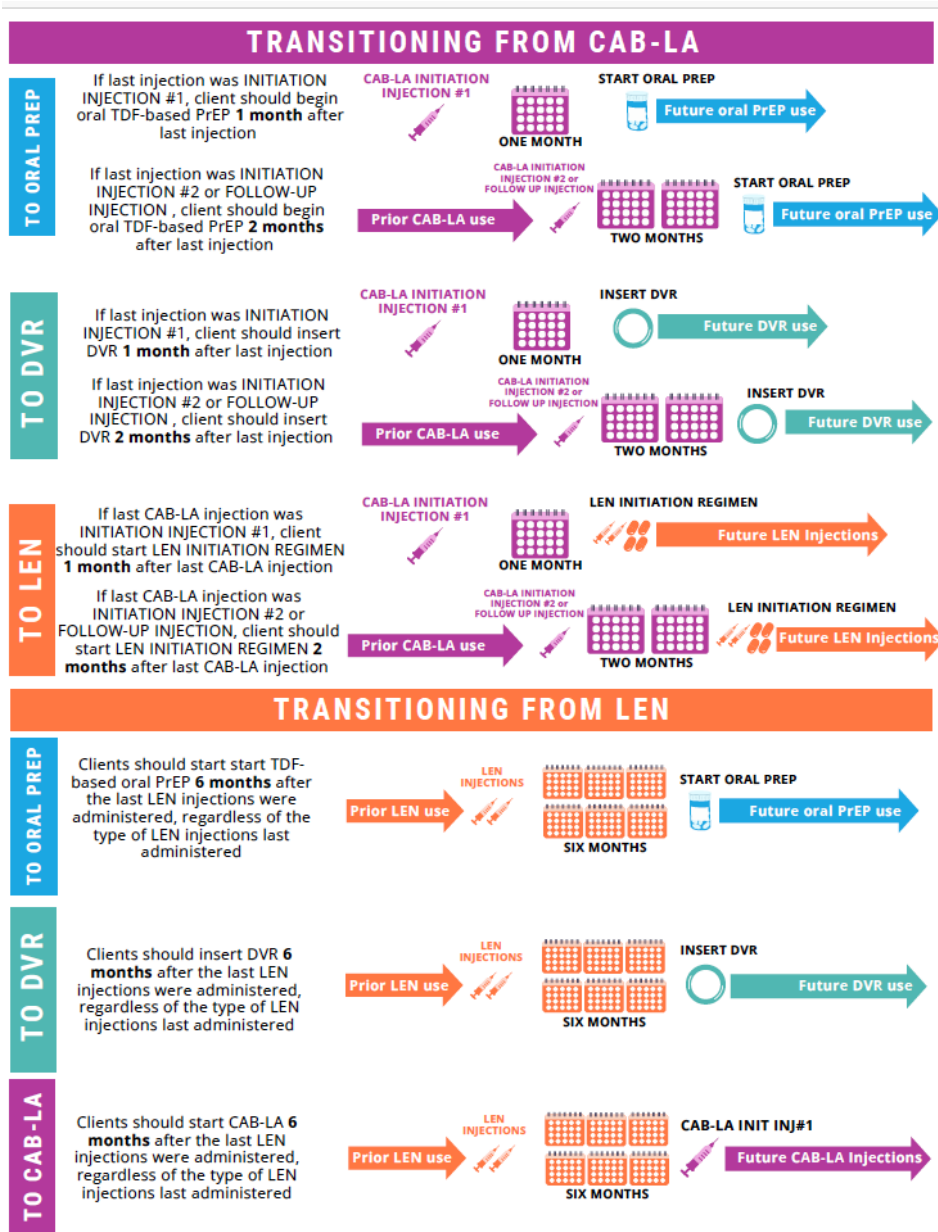
- A negative HIV test result, confirmed according to the national testing algorithm
- Screening for Acute HIV Infection (AHI), pregnancy, Hepatitis B Virus (HBV), and other STIs

### Important Consideration for Clients with Hepatitis B:

Clients with chronic HBV who are on oral PrEP containing Tenofovir (which contains antivirals active against HBV) should generally be maintained on oral PrEP. If a transition to a non-oral PrEP method is necessary, close monitoring of liver function tests is essential to detect and manage potential rebound hepatitis.

The following is a job aid to help in the transition between PrEP products:





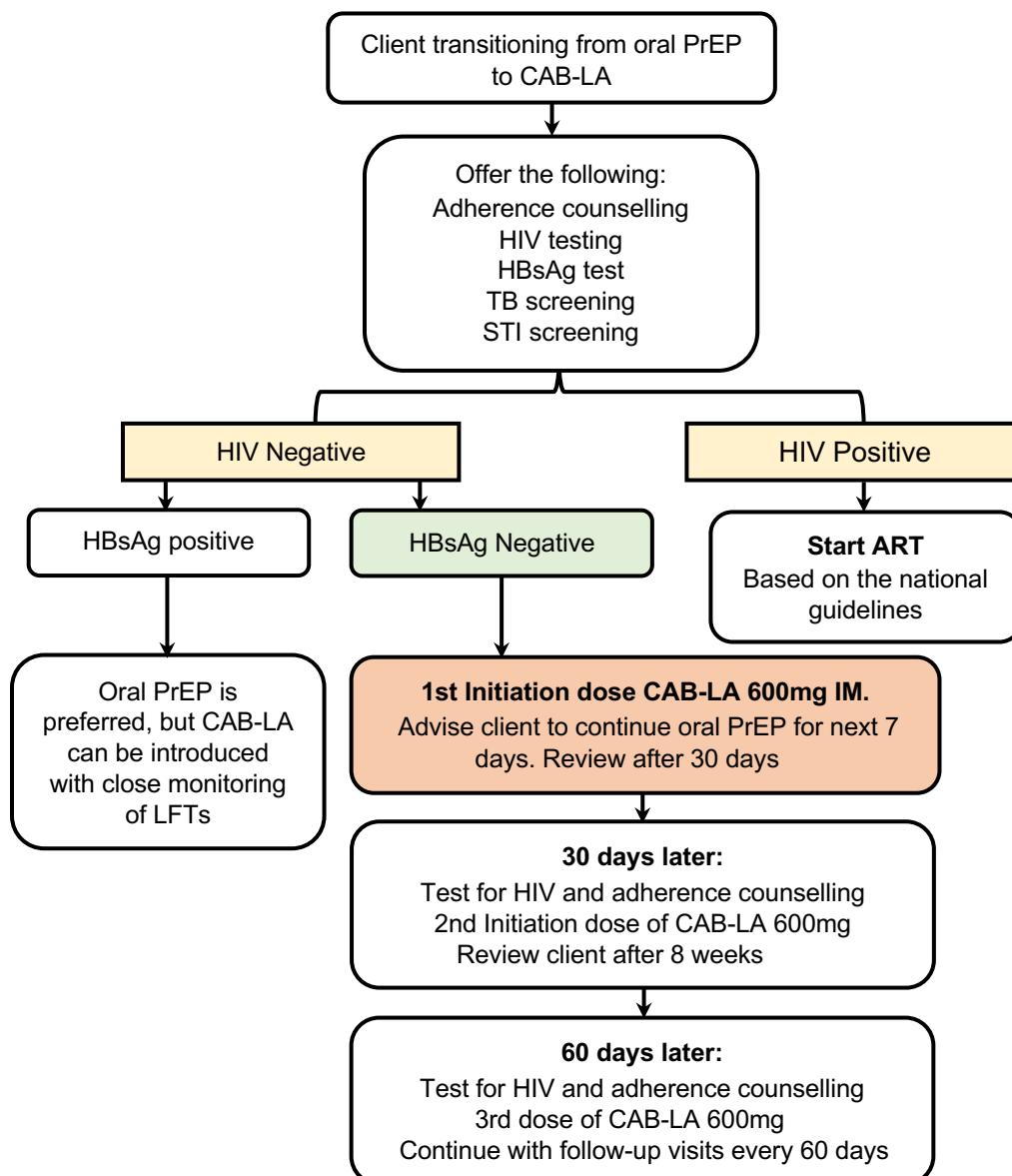


Figure 16: Algorithm for Clients on oral PrEP transitioning to CAB-LA

### Transitioning from Injectable PrEP to Oral PrEP

When switching from CAB-LA to oral PrEP and if the client remains at high risk of HIV acquisition, it is recommended that the client should start taking the oral PrEP 8 weeks from the last injection. For clients who have only received the 1<sup>st</sup> injection, they should start taking oral PrEP 4 weeks after the injection.

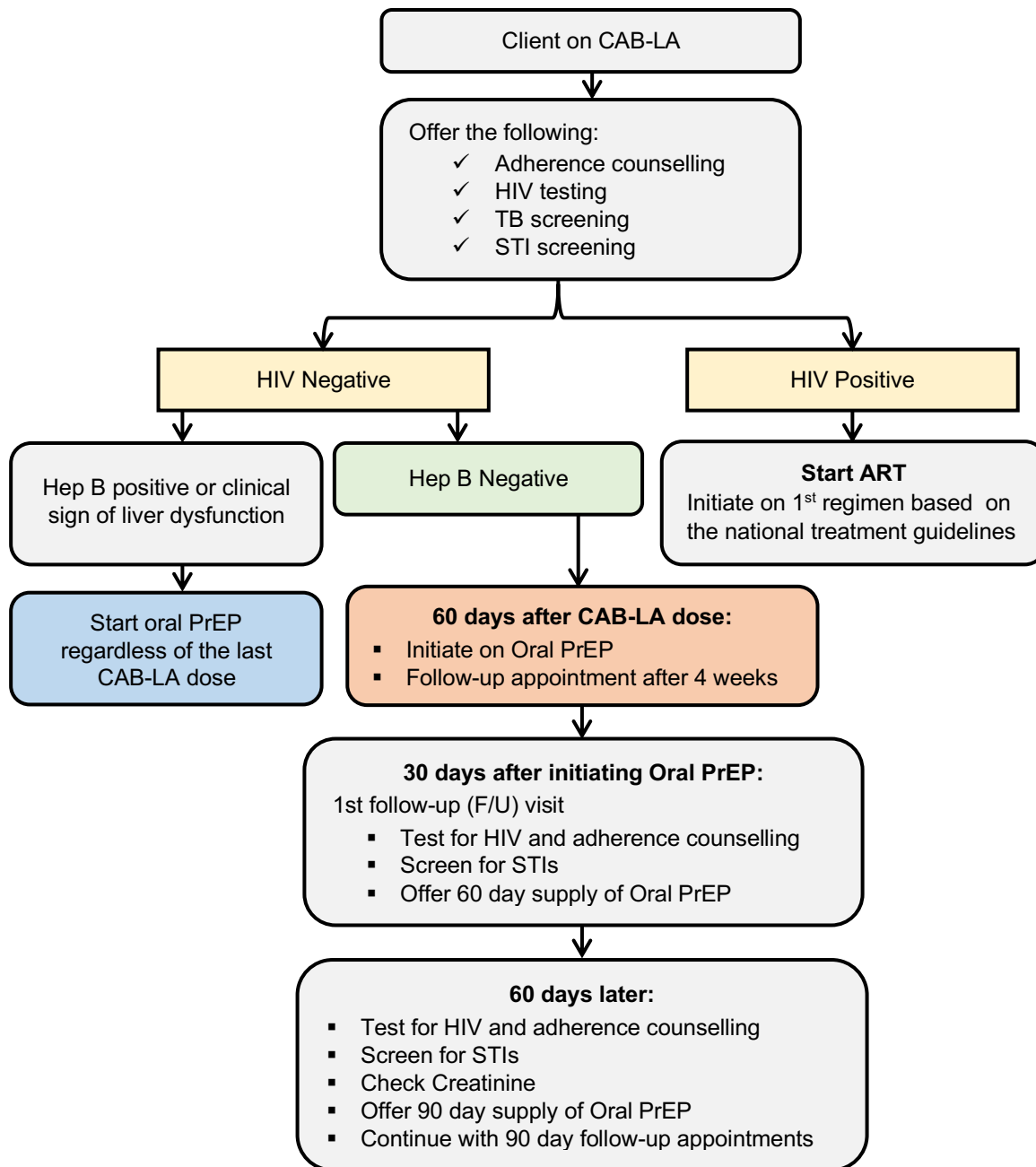


Figure 17: Algorithm for Clients on CAB-LA transitioning to Oral PrEP

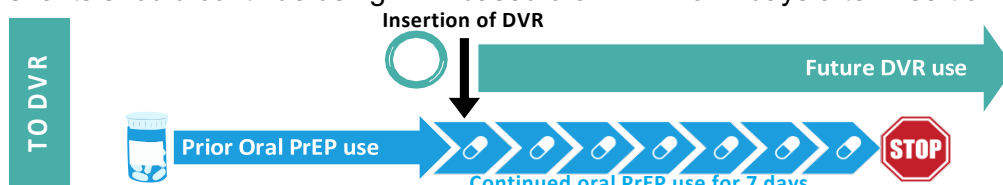
### Transitioning from the PrEP Ring to other PrEP Products

Clients may want to transition from product to the other depending on the current needs and choices.

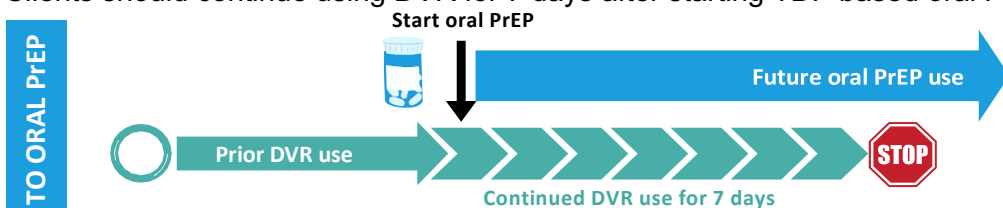
Table 7: Transitioning Between PrEP Products

PrEP Ring to Oral PrEP	PrEP Ring to CAB-LA
<ul style="list-style-type: none"> <li>After removal of the ring, the client should take oral PrEP for at least 7 days before a potential exposure</li> <li>If the client is to have sex before taking oral PrEP for at least 7 days, they should:                             <ul style="list-style-type: none"> <li>Use a condom for at least 7 days after removal of the ring, * or</li> <li>Take oral PrEP for at least 7 days before removal of the ring</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>The client should get a CAB-LA injection after removal of the ring and should not have unprotected sex for at least 7 days after the injection</li> <li>If the client is to have sex within 7 days of removing the ring and receiving a CAB-LA injection, they should:                             <ul style="list-style-type: none"> <li>Use a condom for at least 7 days after removal of the ring, *or</li> <li>Get a CAB-LA injection 7 days before removal of the ring</li> <li>before removal of the ring</li> </ul> </li> </ul>
<p>* If a client stops using a condom after the 7 days, they will be at increased likelihood of exposure to STIs and (for clients AFAB) pregnancy</p>	

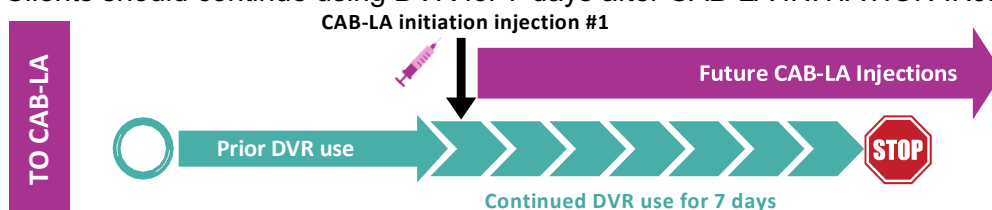
Clients should continue using TDF based oral PrEP for 7 days after insertion of DVR



Clients should continue using DVR for 7 days after starting TDF-based oral PrEP



Clients should continue using DVR for 7 days after CAB-LA INITIATION INJECTION #1

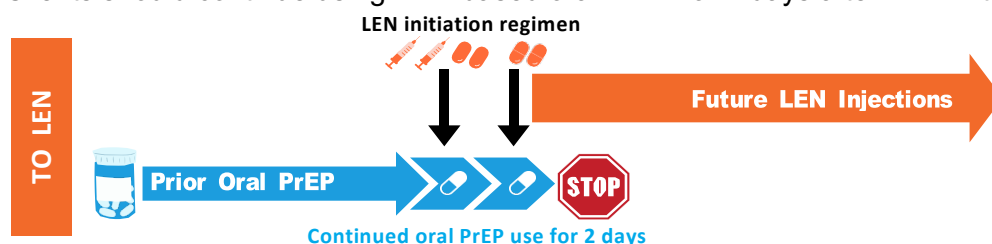


### Transitioning between PrEP Products

Strategies for transitioning from Lenacapavir to other PrEP options, such as oral PrEP, long acting Cabotegravir, or the Dapivirine vaginal ring, are described below. During these transitions, providers should prioritize maintaining uninterrupted HIV prevention coverage, which may involve a brief overlap between PrEP products. No drug-drug interactions are expected between Lenacapavir and other PrEP agents.

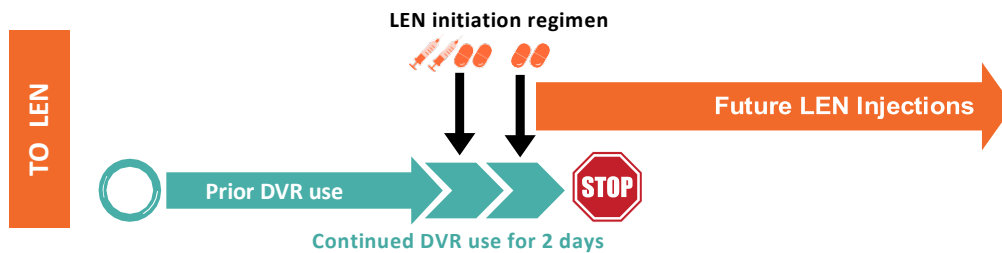
#### Transitioning from Oral TDF-Based PrEP to Lenacapavir

Clients should continue using TDF-based oral PrEP for 2 days after LEN initiation regimen.

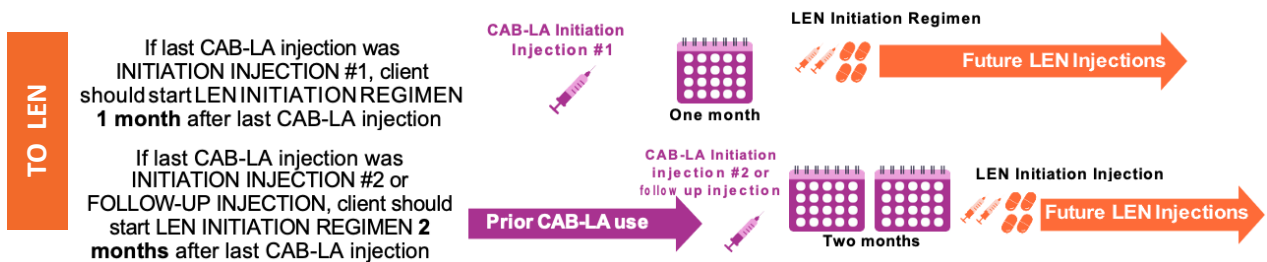


## Transitioning From Dapivirine Vaginal Ring (DVR) to Lenacapavir

Clients should continue wearing DVR throughout **both days** of receiving the INITIATION REGIMEN to start LEN (all doses)



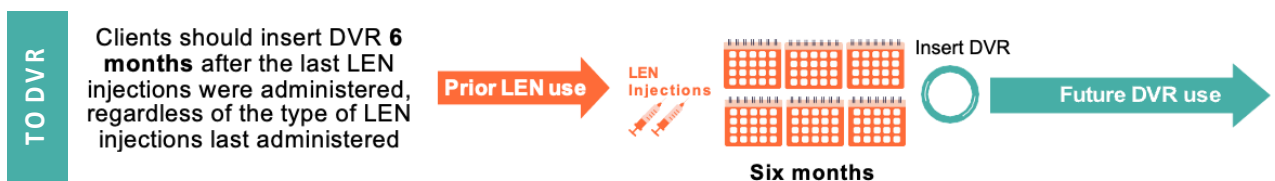
## Transitioning From CAB-LA to Lenacapavir



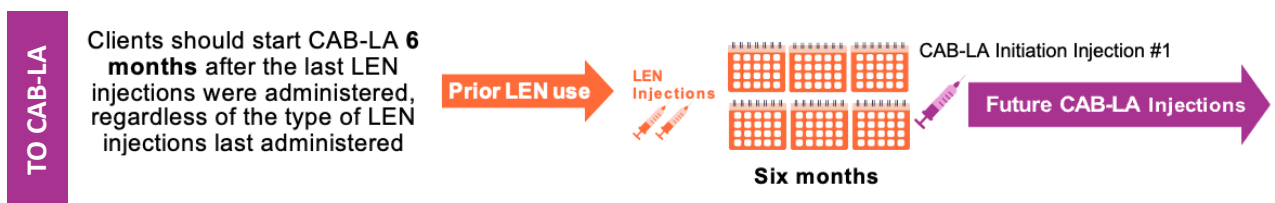
## Transitioning From LEN to Oral PrEP



## Transitioning From LEN to DVR



## Transitioning From LEN to CAB-LA



[1] <https://www.nejm.org/doi/full/10.1056/NEJMoa2407001>

[2] <https://www.nejm.org/doi/10.1056/NEJMoa2411858>

[3] *PURPOSE 3* will study LEN among cisgender women in the United States who are disproportionately affected by HIV, with a focus on Black women and other women of color; *PURPOSE 4* will study LEN among people who inject drugs in the United States; and, *PURPOSE 5* will evaluate LEN among people who could benefit from PrEP in France and the UK.

[4] [https://www.nejm.org/doi/10.1056/NEJMoa2407001?url\\_ver=Z39.88-2003&rft\\_id=ori:rid:crossref.org&rft\\_dat=cr\\_pub%20%20pubmed](https://www.nejm.org/doi/10.1056/NEJMoa2407001?url_ver=Z39.88-2003&rft_id=ori:rid:crossref.org&rft_dat=cr_pub%20%20pubmed)

<https://www.frontiersin.org/journals/reproductive-health/articles/10.3389/frph.2023.1155948/full>

[https://www.prepwatch.org/wp-content/uploads/2025/03/2025\\_03\\_25-DPP-FAQs\\_FINAL.pdf](https://www.prepwatch.org/wp-content/uploads/2025/03/2025_03_25-DPP-FAQs_FINAL.pdf)

## Chapter 4: HIV Post-Exposure Prophylaxis

HIV Post-Exposure Prophylaxis (PEP) is a short-term (28-day) course of combination antiretroviral medicines taken as soon as possible, ideally 24 hours, but within 72 hours (about 3 days) of potential exposure to prevent HIV infection. Potential exposure to HIV can either be occupational and nonoccupational as shown in the table below.

Table 8: Potential Exposure Risk Categorization

Risk Category	ART	Duration
No risk: intact skin	Not recommended	
Medium risk: Invasive injury, no blood visible on needle	Preferred: TDF or TAF + XTC + DTG Alternative: TDF or TAF + XTC + DRV-r TDF or TAF + XTC + LPV-r	28 days
High risk: large volume of blood/fluid, known HIV-infected patient, large bore needle, deep extensive injury	AZT + 3TC + DTG (children $\geq 3$ kg, where available) TAF + FTC + DTG (children $\geq 25$ kg)	
Penetrative sexual abuse		

Before starting PEP, a client should be tested for HIV, using the standard national guidelines. If the HIV test result is negative, PEP should be started immediately. **If HIV tests are unavailable but the person is suspected to have been exposed to HIV, PEP should be started regardless.**

### Assessing for PEP Initiation

#### HOW:

1. Assess whether a client had an exposure to HIV within 72 hours
2. Test for HIV if available
3. If negative, initiate PEP, if HIV test not available still initiate PEP
4. If a client reports an exposure to HIV past 72 hours, PEP may not be beneficial, therefore do not initiate, however, should be tested at 28 days and 3 months if HIV negative
5. If HIV results are positive, do not initiate PEP, initiate ART

### Follow up Services for a Client on PEP

#### Test the PEP Client for HIV at 28 days

1. If still at risk of HIV acquisition and negative after 28 days of PEP, the client may be directly transitioned to PrEP if eligible
2. If HIV positive transition to ART care and services

**Note:** Healthcare providers should prescribe and dispense both PEP and PrEP, to increase access to comprehensive HIV prevention.

## Assessing for PrEP use in clients returning after full course of PEP

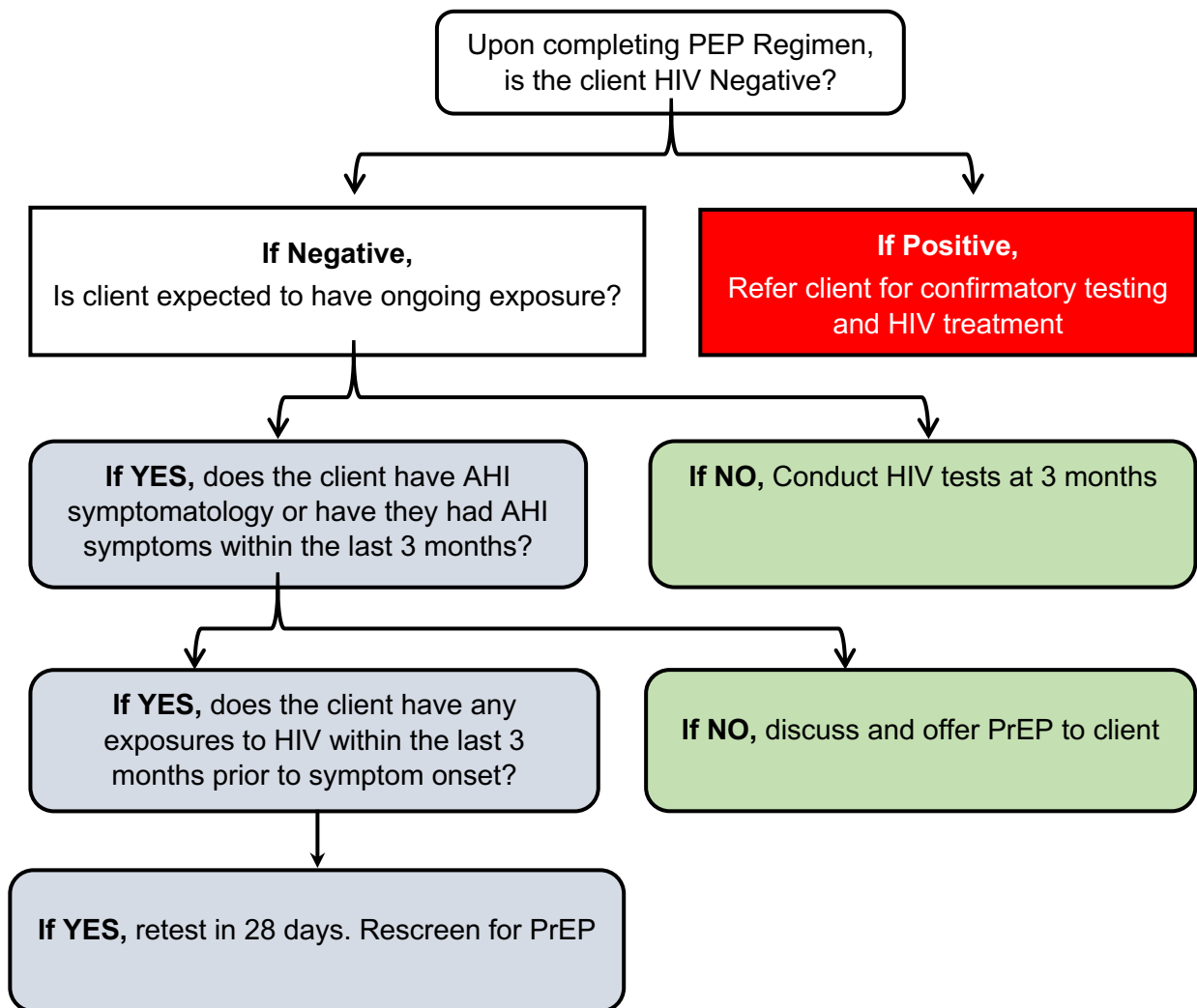


Figure 18: Algorithm for Assessing PrEP use in Clients after Full Course of PEP

### Key Messages

PEP clients should be tested for HIV at initiation, 28 days and at 3 months. While on PEP, the client should be reviewed and offered appropriate laboratory investigations

Clients initiated on PEP and not switched to PrEP after completing 28 days of PEP should be tested for HIV at 28 days and 3 months.

## Transitioning from PEP to PrEP

HIV Post-Exposure Prophylaxis (PEP) is when HIV negative individuals take antiretroviral (ARV) drugs after potential HIV exposure, ideally within 72 hours. With PEP, ARVs are taken daily and continued for 28 days. The preferred ARV regimen for adults and adolescents is TDF+3TC (or FTC) with Dolutegravir (DTG) as the third drug.

Clients with possible exposure to HIV in the previous 72 hours should have an HIV test and offered PEP without delay. Providers should provide individuals offered PEP with information about PrEP, as well as PEP to PrEP transition. Caution should be taken while assessing the client for PrEP as they might be better suited for PEP.

Individuals who have completed PEP can be immediately transitioned to PrEP with a negative HIV test result, provided they do not have any contraindications to the PrEP product chosen (and have ongoing exposure to HIV). Individuals transitioning from PEP to PrEP can be managed similarly to other individuals on PrEP and additional barrier methods should be used to enhance protection during the transition period.

Individuals using PrEP but who are concerned about a recent HIV exposure (for example, not taking oral PrEP according to the prescribed regimen, or due to discontinuing PrEP) can transition to PEP as soon as possible after exposure, ideally within 72 hours.

## Comparing PEP and oral PrEP Standard of Care

While both Post-Exposure Prophylaxis (PEP) and Pre-Exposure Prophylaxis (PrEP) use antiretroviral drugs to prevent HIV, they differ fundamentally in their timing, purpose, and usage protocols. The table below outlines the key operational differences.

Table 9: Comparing PEP to PrEP

Feature	Post-Exposure Prophylaxis (PEP)	Oral PrEP	Injectable PrEP (e.g., CAB-LA, LEN)	Topical PrEP (e.g., DVR)
<i>Timing of Use</i>	After a potential, recent HIV exposure	Before and during periods of potential HIV exposure	Before and during periods of potential HIV exposure	Before and during periods of potential HIV exposure
<i>Purpose</i>	Emergency prevention following a specific exposure event	Ongoing, proactive prevention for individuals at sustained risk	Ongoing, proactive prevention for individuals at sustained risk	Ongoing, proactive prevention for individuals at sustained risk (currently indicated for women)
<i>Regimen &amp; Duration</i>	A strict 28-day course of oral drugs. Must be initiated within 72 hours of exposure	Daily oral dosing. Can be used for short or long-term periods based on risk	Long-acting injection administered every 2 months. Suitable for long-term use	A vaginal ring replaced by the user monthly. Suitable for long-term use
<i>Usage Context</i>	Reactive; a time-sensitive emergency response	Proactive; integrated into a user's daily or sexual routine	Proactive; involves bi-monthly clinical visits	Proactive; user-controlled, long-lasting protection



- **Comparing PEP and Oral PrEP:** While PEP is a 28-day emergency regimen started *after* a potential exposure, oral PrEP is an ongoing preventive strategy taken *before* potential exposure.
- **Comparing PEP and Injectable PrEP:** Both are highly effective biomedical interventions, but they serve distinct purposes. PEP is a reactive, short-term oral course, whereas injectable PrEP is a proactive, long-acting option that eliminates the need for a daily or event-based pill regimen. Injectable PrEP is for sustained protection, not for use after an exposure.
- **Comparing PEP and Topical PrEP:** These methods represent opposite ends of the prevention spectrum in terms of timing and user agency. PEP is a systemic, emergency oral treatment initiated after an exposure. In contrast, topical PrEP (like the vaginal ring) is a localized, proactive method that provides continuous, discreet protection controlled by the user, preventing the need for emergency PEP.

#### Key Message

Transitioning between PEP and PrEP: WHO recommends offering PrEP to individuals after the completion of PEP if they are HIV negative and potential exposure to HIV is expected to continue after PEP completion



## Chapter 5: Clinical and Laboratory Monitoring

### Clinical Monitoring

Clinical monitoring includes history and examination, as well as evaluation of adherence, side effects and relevant drug toxicities. This section addresses the clinical monitoring considerations that a healthcare worker should focus on as they provide PrEP.

Table 10: PrEP Initial and Follow up Checklist

PrEP Initial Check List		Initiation	Every follow up visit	PrEP Option Oral PrEP, injectable PrEP, DVR
1	Assess for signs and symptoms of acute HIV infections	X	X	All
2	Assess risk of HIV/STI acquisition	X	X	All
3	Screen for and Treat STIs	X	X	All
3	Counsel clients on PrEP, available options and adherence	X	X	All
4	Screen for clinical signs and symptoms for renal dysfunction	X	X	TDF based PrEP at initiation, at 3 months then annually
5	Screen for clinical signs and symptoms for liver dysfunction	X	Every 6 month	Injectable PrEP
7	Screen for pregnancy	X	X	All
9	Screen for IPV	X	X	All
10	DDI and other considerations (TB medication, anti-convulsant, etc.)	X	X	All
11	Screen for Depression	X	X	All
12	Screen for substance abuse	X	X	All

## Laboratory Monitoring

This section addresses the laboratory monitoring considerations that a healthcare worker should focus on as they provide PrEP.

Table 11: Laboratory Monitoring of a Client on PrEP

Laboratory monitoring of a client on PrEP		Initiation	Follow Up	PrEP Options Oral PrEP, Injectable PrEP, DVR
1	Determine HIV negative status using two serologic tests	X	X	All
2	Nucleic Acid Test*	X		All
3	Kidney function test using serum creatinine or urinalysis for oral PrEP	X	X	TDF based PrEP at initiation, at 3 months then annually.**
4	Liver Function Test (ALT) for injectables	X	X	Injectable PrEP
5	HBsAg	X	Annually	All
6	Pregnancy Test***	X	X	All

\*NAT to be done at initiation on individuals with recent high risk exposure event but no signs and symptoms of Acute HIV Infection.

\*\*WHO guidance specifies the following in relation to kidney function testing:

- If under 49 years and free of renal comorbidities, testing is optional, noting that reduced renal function is infrequent at younger ages but can increase with increasing age
- If 50+ years and/or with renal comorbidities, testing at baseline is recommended

\*\*\*Unavailability of test-kits should not be a barrier to accessing PrEP products

### Key Notes

- Serum Creatine test should be done at initiation, at 3 months then annually
- ALT threshold for avoiding injectable PrEP use is 5x upper limit of the normal value.
- Assess for Intimate Partner Violence (IPV) using IPV LIVES
- Assess for substance abuse
- Assess for depression using PHQ4 questionnaire

## Monitoring Toxicity and other Adverse Outcomes

Monitoring adverse outcomes such as seroconversions, drug-related toxicities, and HIV drug resistance in cases of PrEP failure is important. Additionally, it is critical to monitor pregnancy and foetal outcomes among women taking PrEP during pregnancy.

## Client-Level Monitoring: Clinical Safety and Outcomes

This component focuses on individual-level health outcomes and pharmacovigilance.

### Key Components:

- Baseline and periodic clinical assessments (e.g., renal function, HIV testing)
- Pharmacovigilance: Monitor adverse drug reactions and tolerability
- Seroconversion tracking for early HIV detection among PrEP/PEP users
- Surveillance of drug resistance, particularly among seroconverters on PrEP
- Client feedback mechanisms on side effects, satisfaction, and service barriers

## Monitoring, Evaluation and Learning

Monitoring, Evaluation, and Learning (MEL) ensures high-quality implementation, continuous program improvement, and accountability in the delivery of PrEP and PEP services.

To efficiently and effectively monitor the provision and effectiveness of HIV PrEP and PEP services, ensure that services provided are documented. This information is crucial for client management, programmatic planning and evidence-based decision making.

Data is collected either through paper or electronic Health Record System (EHR). In an event that the health facility has both systems, electronic health record system takes precedence.

*Refer to the HIV PrEP and PEP implementation plan for further guidance.*



## Annex 1: Managing PrEP Side Effects for Pregnant and Breastfeeding Clients

PrEP use is generally well-tolerated outside of and during pregnancy and the postnatal periods. However, some side effects are possible. The table below highlights side effects that may be related to PrEP use.

### Side Effects

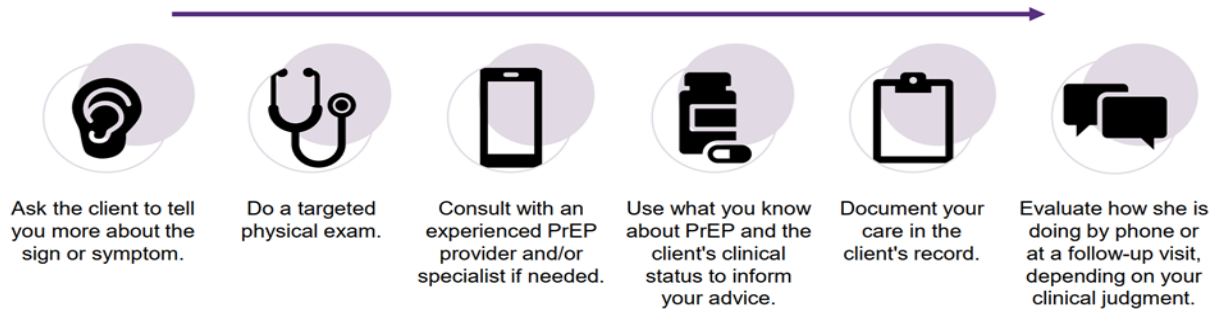
Table 12: Side Effects for Pregnant and Breastfeeding Clients

Sign or symptom	Possible expected finding in pregnancy	Possible expected finding in postnatal period	Expected with some (not all) FP methods	May be related to PrEP	May be related to another condition such as:
Back pain	X	X			Back injury
Constipation	X				Iron pills
Nausea or vomiting	X		X	X	Foodborne illness
Diarrhoea				X	Foodborne illness
Mild abdominal pain or cramping	X (especially round ligament pain or heartburn)	X (uterine involution or post-caesarean pain)	X	X	Preterm contractions, foodborne illness
Vaginal discharge	X	X (if consistent with normal lochia)	X		Vaginitis or sexually transmitted infection
Frequent urination	X				Urinary tract infection
Dizziness	X		X	X	Anaemia, dehydration
Headache	X		X	X	Pre-eclampsia (serious complication of blood pressure)
Fatigue	X	X	X	X	Anaemia or depression, other possibilities
Sleep issues	X	X		X	Anxiety or depression
Abnormal kidney function tests (e.g., serum creatinine)				X	Pre-eclampsia

## Annex 2: Deciding Whether to Pause or Stop PrEP Use for Pregnant and Breastfeeding Women

Before deciding to pause or stop PrEP use, it is important to consider whether or not there is reasonable suspicion that a complaint was caused by PrEP use.

### Evaluating Potential Side Effects of PrEP



Clinicians can consider the following guiding questions

- What is the sign or symptoms noted by the client?
- Did the problem begin soon after the start of PrEP use?
- What is the sign or symptom noted by the client?
- If the client has already stopped PrEP use, has there been any improvement after stopping?
- Did the issue come back if the client stopped and restarted PrEP?
- Is the problem something that has been seen before in other people using PrEP?
- Is it plausible (does it make sense) that PrEP could have caused the problem?
- Is there any other explanation?

## Annex 3: Frequently Asked Questions for Injectable PrEP

√	What to discuss	How to discuss it
	<b>How does Injectable PrEP work?</b>	Discuss with the client that the medicine is injected into the muscle on one side of their buttocks, and over the following days and weeks, the medicine will make its way into their blood and throughout the rest of their body where it can protect them
		The client will be protected from HIV after seven days. During the first week, the client will need to use other HIV prevention methods, like condoms
		To stay protected, the client must return in one month, on [date], so they can give them more CAB-LA. After that, they need to come back every two months to stay protected from HIV
	<b>How long does it take for injectable PrEP to be effective?</b>	The client will be protected from HIV after seven days. During the first week, the client will need to use other HIV prevention methods, like condoms
		To stay protected, the client must return in one month, on [date], so they can give them more CAB-LA. After that, they must return every two months to stay protected
	<b>HIV resistance risk</b>	After the client has an injection today, they must be on time for their next dose. This is because, over time, the amount of medicine in the client's body reduces. When the client gets their next injection on time, they will keep enough medicine in their body to stay protected, lasting two months
	<b>Importance of receiving follow-up injections on time</b>	If the client misses any appointments, they will slowly become less protected. If the client were to get HIV when Injectable PrEP is still in their body, the HIV virus may try to find a way to change itself so that medicines like injectable PrEP will no longer work against it
		HIV has a better chance of changing itself when injectable PrEP levels are low, which is why returning on time is so important. If the client were to get HIV and it was to change itself successfully, it could make treating HIV more difficult
		The medicines we usually use could be less effective, so that different medications could be needed
	<b>Side Effects</b>	Tell the client that it is normal to experience some side effects after the injection and that, for most people, these are minor discomforts and not bad enough to stop using injectable PrEP
		Some clients might experience some normal soreness around the place where they were injected, which can last for a few days, while others might notice swelling and might feel bumps under the skin and have a bruise or redness. All of this is normal and nothing to worry about. To feel better, the client could take a pain reliever available at the pharmacy without a prescription and put ice or heat on the area
		The client may also experience headaches, upset stomach, and feel feverish or more tired than usual. These side effects usually go away on their own as your body gets used to the drug, and after that, you should feel fine
	<b>Drug-drug Interactions</b>	Discuss with the client that Injectable PrEP does interact with a few other medicines. If the client starts any new medicines while taking injectable PrEP, they must ask about it or tell a provider they are taking injectable PrEP in case they need to choose a different medication. It's very rare, but some clients who have taken injectable PrEP have found they feel very sad or depressed. If those are feelings that the client is already dealing with now, talk about them with them
	<b>When to seek help</b>	Discuss with the client If any of the following things happen, are severe, or don't go away, they should return to see a provider immediately:
		If the client has a rash on their body AND blisters or sores in their mouth
		· If the client has shortness of breath—trouble catching their breath

√	What to discuss	How to discuss it
		<ul style="list-style-type: none"> <li>· If the client's whites of their eyes start to look yellow</li> <li>· If the client becomes very nauseated and starts vomiting</li> <li>· If the client has thoughts about killing themselves</li> <li>· If the client feels very sad or depressed, and it gets worse or doesn't go away</li> </ul>
	<p><b>Stopping Injectable PrEP</b></p>	<p>Please discuss with the client that after their final injection, Injectable PrEP would continue to protect them from HIV for up to two months, but after that, they'd gradually lose their protection. Because this medicine is long-acting, it stays in their body for about a year after their last injection</p> <p>If the client were to become infected with HIV when the injectable PrEP medicine is still in their body, the HIV virus would try to find a way to change itself so that injectable PrEP and other medicines like it do not work as well against the virus. That could make treating HIV in the future more difficult. The medicines that would usually be used to keep them healthy might not work as well, and they would have to choose other medicines instead</p> <p>The client needs to stay protected against HIV in the year after they get their last injectable PrEP injection. Some clients might use a pill form of PrEP, and others are very careful to use condoms every time they have sex during that time, but they will have to visit the clinic every three months for that year after they stop using injectable PrEP</p>



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