
Network-based testing toolkit training modules

Module 8: Network-based testing and
prevention

Why is this important?

Network-based testing gives us an opportunity to engage persons at high risk for HIV, hepatitis B, hepatitis C, and/or other STIs

- Partners/contacts of people living with HIV or HBV
- Key populations at elevated risk
- People who have had exposures and may have future exposures
- Using a “status neutral” approach we can ensure that all network-based testing contacts are given appropriate referrals

Learning objectives

By the end of the module, participants will be able to:

- Identify different prevention modalities that may be appropriate for offering to individuals contacted through network-based testing
- Reinforce the importance of condoms and lubricants for preventing HIV, other STIs, and pregnancy
- Describe harm reduction and its importance in prevention for HIV, hepatitis B and hepatitis C
- Describe what pre-exposure prophylaxis (PrEP) for HIV is and the difference between HIV PrEP, PEP, and ART treatment.
- Understand what clients are eligible for PrEP and population-specific guidance
- Describe eligibility and requirements for hepatitis B vaccination

Prevention options for network-based testing

HIV

Hepatitis B & C

Other STIs

Condoms & lubricants

Substance abuse & mental health care

Treatment as prevention

Harm reduction, including NSP and OAMT for PWID

All subject to local
guidelines and
eligibility

- PrEP
- PEP
- VMMC

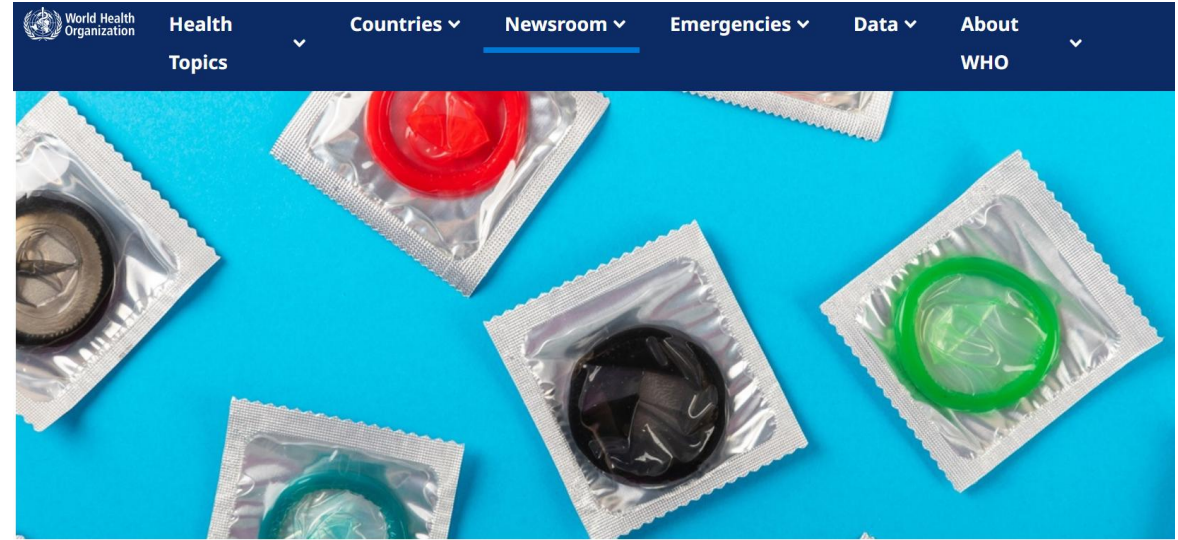
- Hepatitis B
vaccination

- Expedited
partner
treatment

Condoms and lubricants

The importance of condoms

- Condoms remain the only option that prevents HIV, other STIs, and pregnancy
- When used effectively and consistently, male condoms are 98% effective and female condoms are 95% effective at preventing pregnancy
- Condoms are listed as a WHO Essential Medicine
- Lubricants increase both effectiveness and pleasure. Water- or silicone- based lubricants are recommended for use with condoms



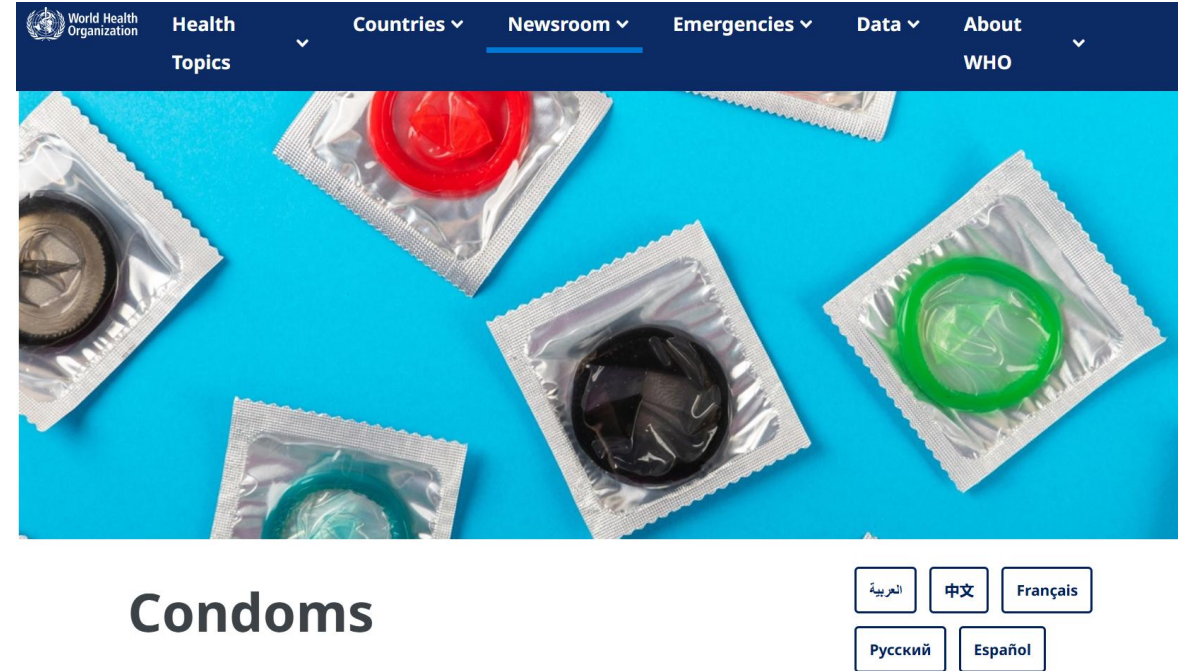
Condoms



<https://www.who.int/news-room/fact-sheets/detail/condoms>

Condoms and lubricants within NBT services

- Condoms should be offered to anyone reached through network-based testing, aside from biological children and household contacts
- Consider condom distribution through social network testing services, partner services, and self-test distribution



<https://www.who.int/news-room/fact-sheets/detail/condoms>

Harm reduction

Harm reduction

- Harm reduction encompasses policies and strategies aimed at minimizing the negative health, social, and legal impacts associated with drug use, drug policies, and drug laws.
- **Harm reduction includes:**
 - Needle and syringe distribution
 - Opioid agonist maintenance therapy (OAMT)
 - Overdose prevention, including naloxone
 - Prevention, testing & treatment for HIV, other STIs, and hepatitis B & C
 - Condoms & lubricants



Harm reduction and NBT services

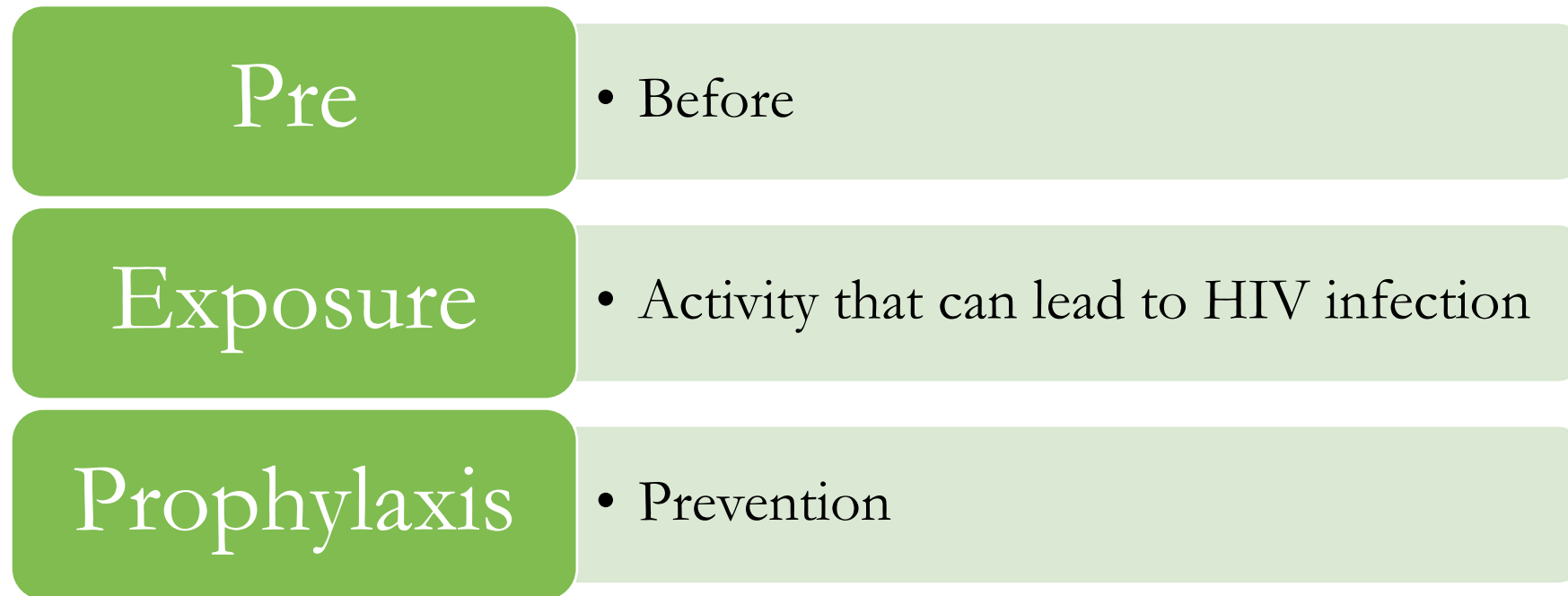
- Linkages and referrals to harm reduction services should be offered to those reached through NBT services among people who use drugs (PWUD) or people who inject drugs (PWID)
- Testing packages within these populations may also include testing for HIV, hepatitis C and hepatitis B, depending on local epidemiology



Pre-exposure prophylaxis (PrEP) and post-exposure prophylaxis (PEP) for HIV

Pre-exposure prophylaxis (PrEP)

PrEP is the use of ARV drugs by HIV-uninfected persons to prevent the acquisition of HIV before exposure to HIV.



Post-exposure prophylaxis (PEP)

PEP is the use of ARV drugs by HIV-uninfected persons to prevent the acquisition of HIV **after they have had a recent (within 72 hours) exposure to HIV.**

Post

- After

Exposure

- Exposure that can lead to HIV infection

Prophylaxis

- Prevention

Pre-exposure prophylaxis options

WHO-recommended PrEP products



Oral PrEP (tenofovir disoproxil fumarate (TDF) 300 mg + emtricitabine (FTC) 200 mg OR TDF 300 mg + lamivudine (3TC) 300 mg tablets)



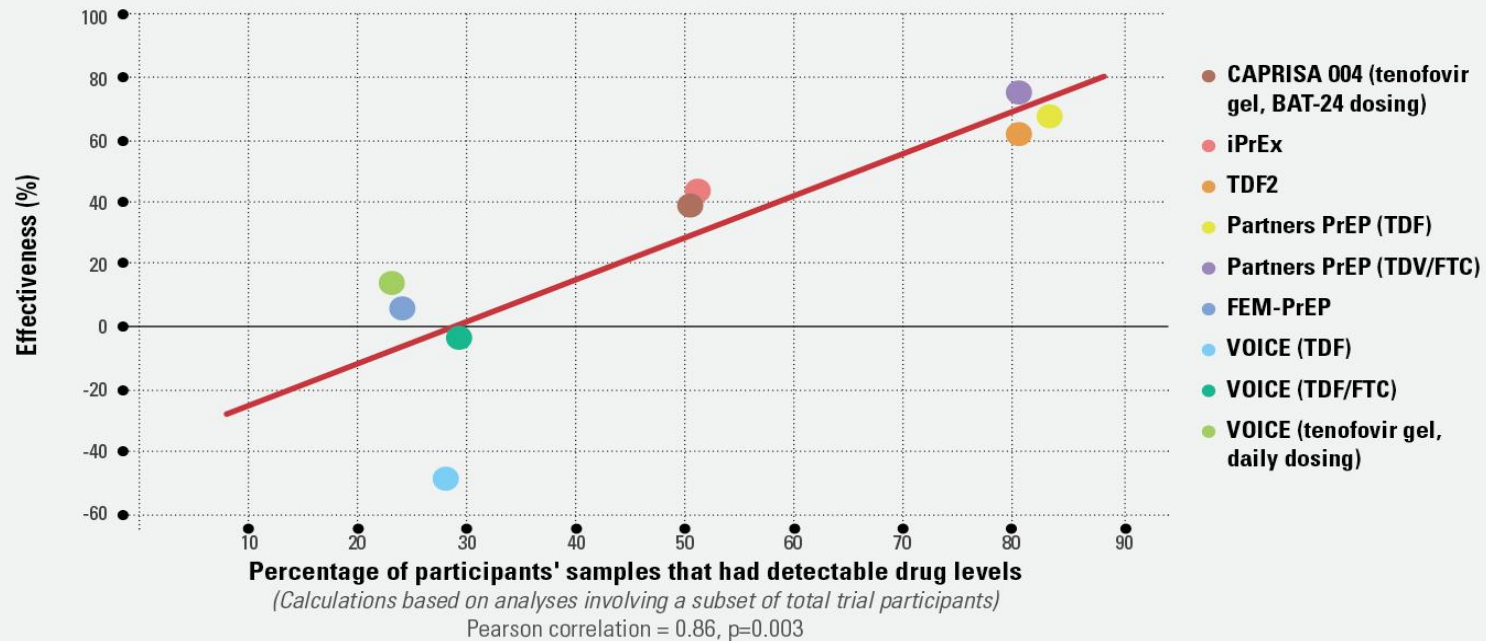
DVR (25 mg dapivirine impregnated silicone ring) – long-acting



CAB-LA (600 mg cabotegravir extended-release injectable suspension) – long-acting

PrEP effectiveness is strongly related to adherence

→ Effectiveness and Adherence in Trials of Oral and Topical Tenofovir-Based Prevention



Trials of oral and topical tenofovir-based PrEP show that these strategies reduce risk of HIV infection if they are used correctly and consistently. Higher adherence is directly linked to greater levels of protection.

Source: Salim S. Abdool Karim, CAPRISA

AVAC Report 2013: Research & Reality
www.avac.org/report2013

Who should be offered PrEP?

PrEP may be a suitable and preferred HIV prevention option for a variety of clients. Irrespective of the product chosen, PrEP providers should consider PrEP for clients who are:

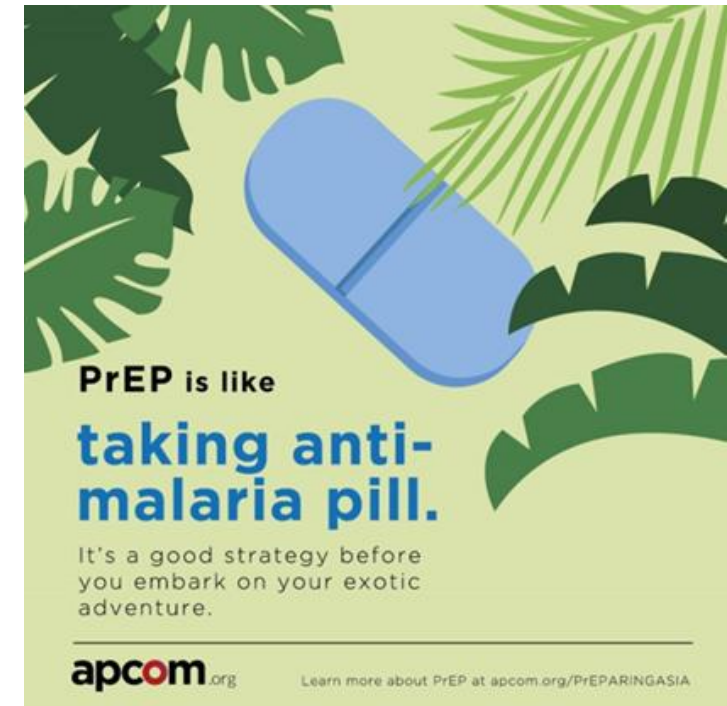
- requesting PrEP OR identified by a PrEP provider as someone who could benefit from PrEP
- HIV-negative²⁰
- not indicated for PEP
- not suspected of AHI with a probable recent HIV exposure in the previous 14 days²¹
- not contraindicated to the PrEP product or who do not have an allergy or hypersensitivity to any ingredient in the PrEP product²²
- willing and able to use PrEP as directed.

**PrEP may
benefit
people with:**

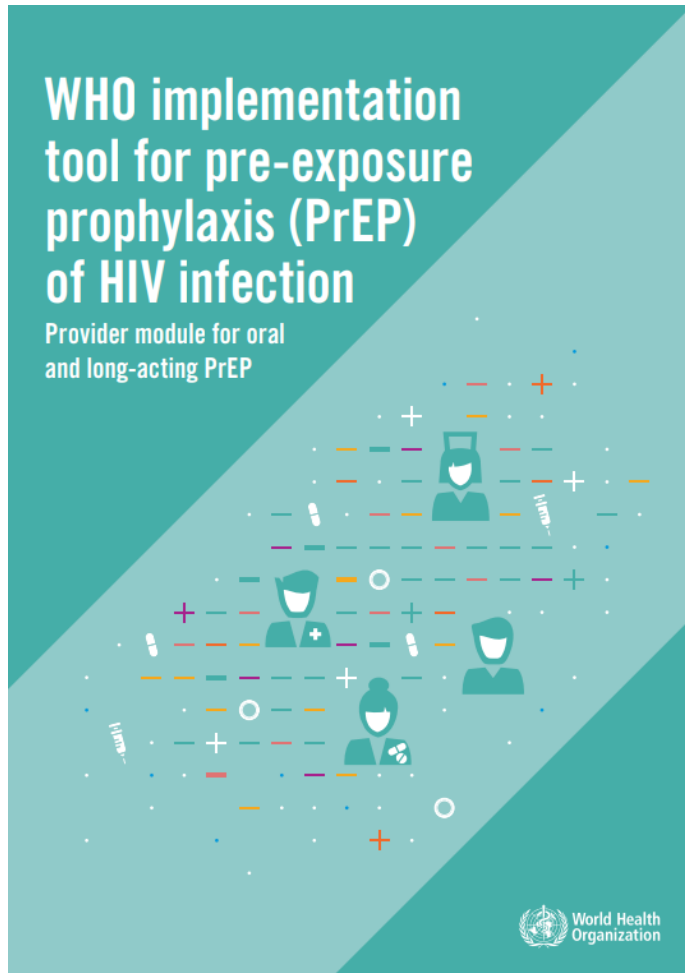
- inconsistent condom use (for example, within the last six months²⁴) for vaginal or anal sex, intention to use condoms inconsistently, or anticipating that condoms may not be used consistently
- a recent²⁵ STI by laboratory testing, self-report or syndromic STI screening²⁶
- recent²⁶ PEP use for a sexual exposure, especially individuals using PEP more than once
- a sexual partner(s) living with HIV who is not virally suppressed on ART.

Features of the recommendation

- **Enabling** for all individuals at risk for HIV acquisition
 - **Not population specific**
 - For people **at substantial HIV risk**, which can be determined on an individual basis. **People requesting PrEP should be considered at substantial risk.**
- An **additional prevention choice** within combination prevention
 - Condoms and lubricants
 - Harm reduction, including needle syringe programs and opioid agonist maintenance therapy (OAMT)
 - HIV testing and linkage to ART
- Provide PrEP with **comprehensive support**
 - Adherence counselling
 - Legal and social support
 - Mental health and emotional support
 - Contraception and reproductive health services



WHO guidance on PrEP implementation



<https://www.who.int/tools/prep-implementation-tool#modules>

SUMMARY OF MODULES



Module 1: Clinical. This module is for clinicians, including physicians, nurses and clinical officers. It gives an overview of how to provide PrEP safely and effectively, including: screening for substantial risk of HIV; testing for HIV before initiating someone on PrEP and how to follow up PrEP users and offer counselling on adherence.



Module 2: Community educators and advocates. Community educators and advocates are needed to increase awareness about PrEP in their communities. This module provides information on PrEP that should be considered in community-led activities that aim to increase knowledge about PrEP and generate demand and access.



Module 3: Counsellors. This module is for staff who counsel people as they consider PrEP or start taking PrEP and support them in coping with side-effects and adherence strategies. Those who counsel PrEP users may be lay, peer or professional counsellors and healthcare workers, including nurses, clinical officers and doctors.



Module 4: Leaders. This module aims to inform and update leaders and decision-makers about PrEP. It provides information on the benefits and limitations of PrEP so that they can consider how PrEP could be effectively implemented in their own settings. It also contains a series of frequently asked questions about PrEP.



Module 5: Monitoring and evaluation. This module is for people responsible for monitoring PrEP programmes at the national and site levels. It provides information on how to monitor PrEP for safety and effectiveness, suggesting core and additional indicators for site-level, national and global reporting.



Module 6: Pharmacists. This module is for pharmacists and people working in pharmacies. It provides information on the medicines used in PrEP, including on storage conditions. It gives suggestions for how pharmacists and pharmacy staff can monitor PrEP adherence and support PrEP users to take their medication regularly.



Module 7: Regulatory officials. This module is for national authorities in charge of authorizing the manufacturing, importation, marketing and/or control of antiretroviral medicines used for HIV prevention. It provides information on the safety and efficacy of PrEP medicines.



Module 8: Site planning. This module is for people involved in organizing PrEP services at specific sites. It outlines the steps to be taken in planning a PrEP service and gives suggestions for personnel, infrastructure and commodities that could be considered when implementing PrEP.



Module 9: Strategic planning. As WHO recommends offering PrEP to people at substantial HIV risk, this module offers public health guidance for policy-makers on how to prioritize services, in order to reach those who could benefit most from PrEP, and in which settings PrEP services could be most cost-effective.



Module 10: Testing providers. This module is for people who provide testing services at PrEP sites and laboratories. It offers guidance in selecting testing services, including screening of individuals before PrEP is initiated and monitoring while they are taking PrEP. Information is provided on HIV testing, creatinine, HBV and HCV, pregnancy and STIs.



Module 11: PrEP users. This module provides information for people who are interested in taking PrEP to reduce their risk of acquiring HIV and people who are already taking PrEP – to support them in their choice and use of PrEP. This module gives ideas for countries and organizations implementing PrEP to help them develop their own tools.



Module 12: Adolescents and young adults. This module is for people who are interested in providing PrEP services to older adolescents and young adults who are at substantial risk for HIV. It provides information on: factors that influence HIV susceptibility among young people; clinical considerations for safety and continuation on PrEP; ways to improve access and service utilization; and inclusive monitoring approaches to improve the recording and reporting of data on young people.

Comparing PrEP and PEP

What is the Same?	
PrEP & PEP	
<ul style="list-style-type: none">• Used by persons who are HIV-negative• Uses ARVs to prevent HIV acquisition• May be available in a variety of settings (clinics, pharmacies, drop-in-centres)• Very effective when taken correctly and consistently	

What's Different?	
PrEP	PEP
Started BEFORE potential exposure to HIV	Taken AFTER potential exposure to HIV
Taken for as long as HIV risk exists (different schedules exist)	Taken for 28 days following exposure, then stopped

Differences between HIV treatment and PrEP

- HIV treatment requires adherence to life-long therapy with consistent, fully-suppressive dosing.
- PrEP is needed during periods of high HIV risk.
- Both ART and PrEP require optimal adherence.
 - Individuals using PrEP require ongoing risk assessment and PrEP can be discontinued if they:
 - are no longer at substantial risk for HIV infection.
 - decide to use other effective prevention methods.
 - acquire HIV infection.
- Motivation for adherence is different: ART is taken by persons living with HIV to remain healthy and prevent onward transmission, while PrEP is used by persons without HIV to prevent acquisition of infection.

Oral daily use PrEP

- HIV prevention strategy where antiretroviral drugs are used prior to potential exposure to reduce the risk of infection
- Currently approved medication regimens are once-daily combinations of 2 antiretroviral drugs:

tenofovir disoproxyl fumarate (TDF) + emtricitabine (FTC)

- Fixed-dose, available widely

tenofovir disoproxyl fumarate (TDF) + Lamuvidine (3TC)

- Two separate pills

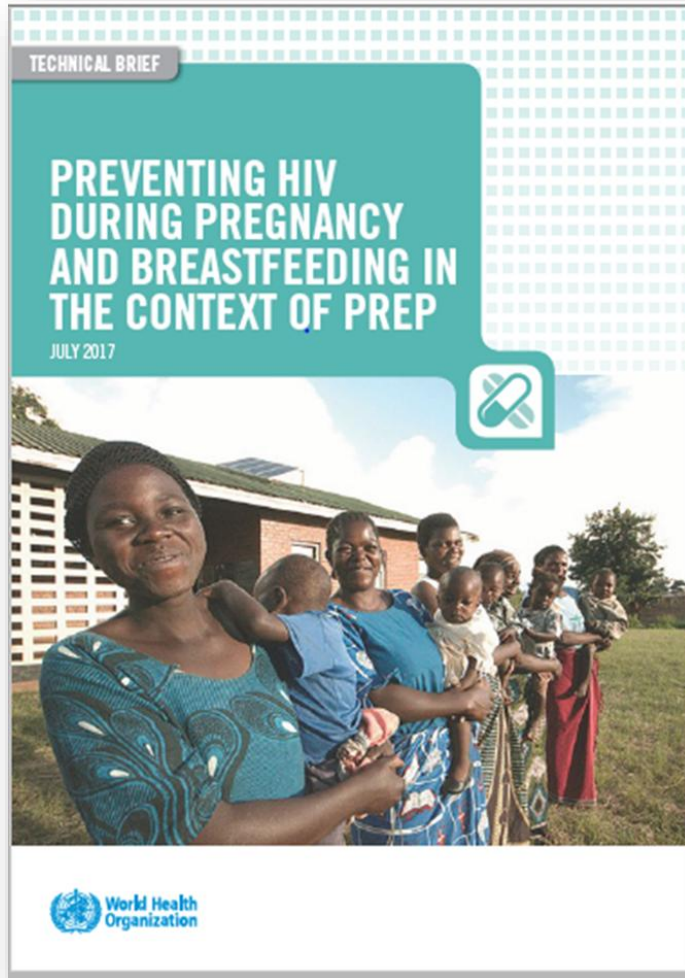


Other PrEP modalities

- New, more convenient, methods of taking PrEP are becoming available
 - **The dapivirine ring**
 - Designed for women to discreetly use
 - No daily pills to take, no pill bottles to be found
 - Inserted into the vagina and replaced monthly (with a 3 month version under development)
 - WHO approved
 - **Long acting injectable PrEP**
 - Injectable prevention options (CAB-LA and LEN)
 - No pills to take, no pill bottles to be found
 - Approved by US FDA, and WHO (CAB-LA)

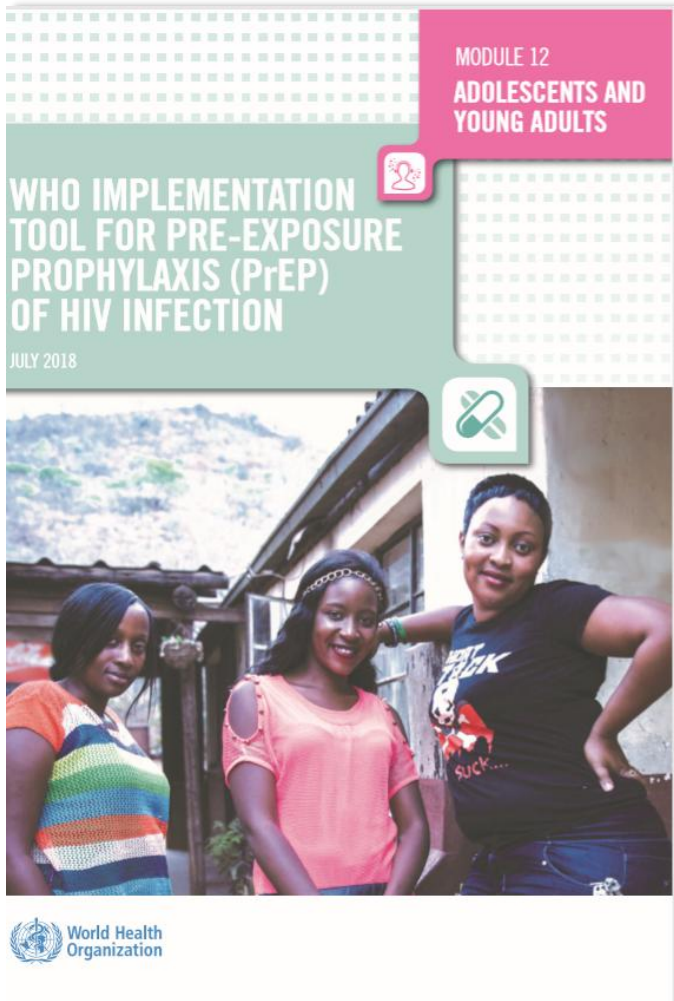


PrEP in pregnancy and breastfeeding



- Pregnancy and the postpartum period are associated with a higher risk of acquiring HIV
- HIV acquired during pregnancy or breastfeeding can increase the risk of HIV acquisition for the fetus or infant, respectively
- Exposure to oral PrEP in the first trimester is not associated with adverse pregnancy or infant outcomes
- Contraceptive services and links to antenatal care should be available when providing PrEP services to women
- The risks and benefits of continuing to use oral PrEP in pregnancy and during breastfeeding should be discussed with each client

PrEP among adolescents: key messages



- Many youth struggle to take a pill daily and may be able to benefit from other PrEP options such as dapavirine or injectable long acting PrEP
- Adolescents and young adults (≤ 24 years old) may benefit from additional monitoring and adherence support
- More frequent clinic visits or other approaches, to address their changing routines and multiple needs should be considered
- Counselling should be grounded in supportive, adolescent-centred language without judgement
- Ensure that STI screening and counseling about contraception options are available for adolescents on PrEP.

PrEP is not one size fits all



Pill



Vaginal ring



Injectable



Vaginal/rectal
inserts



Vaginal/rectal
film

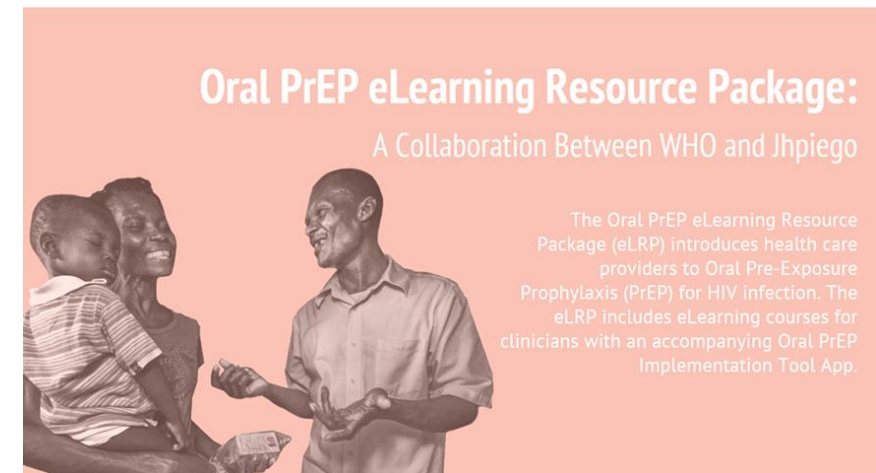


Vaccine

- Tenofovir containing pills are not for everyone
- There are many new prevention products that could offer additional options
- No single option will work for every persons
- *Choice is important to meet diverse needs*

Resources

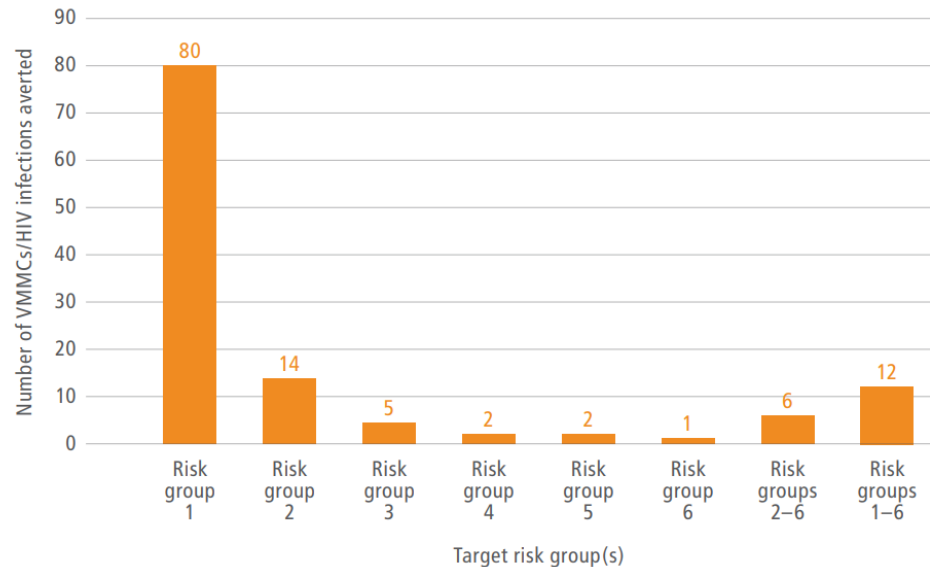
- WHO: <http://www.who.int/hiv/topics/prep/en/>
- WHO: <http://www.who.int/hiv/pub/prep/prep-implementation-tool/en/>
- WHO: <https://apps.who.int/iris/bitstream/handle/10665/325955/WHO-CDS-HIV-19.8-eng.pdf?ua=1>
- WHO: <https://www.who.int/publications/i/item/9789240053694>
- ICAP: <http://icap.columbia.edu/resources/PrEP-kit>
- PrEPWatch: <https://www.prepwatch.org/>
- PrEPFacts: <https://men.prepfacts.org/the-basics/>
- Clinical options: <https://clinicaloptions.com/hiv>
- JHPIEGO: <https://www.hivoralprep.org/>



Voluntary medical male circumcision (VMMC)

WHO Recommendation

Fig. 2.1. Modelled VMMCs per HIV infection averted among men by sexual activity risk group



Source: Awad et al., 2015 (55).

Table 2.1. Randomized controlled trial findings of protection from STIs for women with circumcised male partners

STI	Circumcised partner versus uncircumcised partner
High-risk HPV	Incidence ratio: 0.72 (95% CI: 0.60–0.86; $P=0.001$)
Genital ulcer disease	Adjusted prevalence ratio: 0.78 (95% CI: 0.63–0.97)
Trichomonas vaginalis	Adjusted prevalence ratio: 0.52 (95% CI: 0.05–0.98)
Bacterial vaginosis	Adjusted prevalence ratio: 0.60 (95% CI: 0.38–0.94)

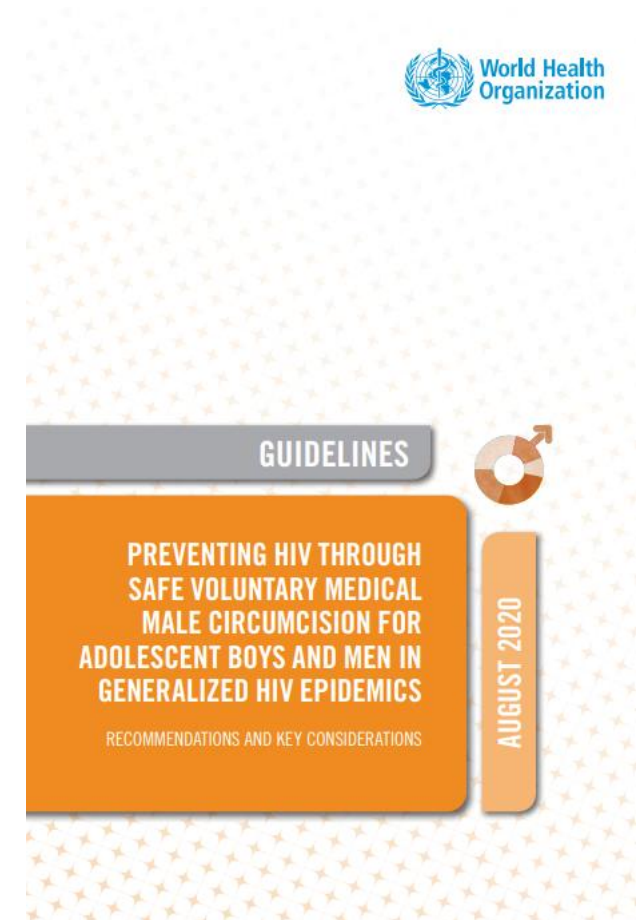
Source: Adapted from Morris et al., 2019 (56).

- 6-12 voluntary medical male circumcisions modeled to avert 1 HIV infection
- VMMC also protects against many other STIs

<https://www.who.int/publications/i/item/978-92-4-000854-0>

WHO Recommendation

- WHO recommends offering voluntary medical male circumcision (VMMC) within combination prevention for adolescents aged 15 years and older and adult men in settings of high HIV prevalence



<https://www.who.int/publications/i/item/978-92-4-000854-0>

Hepatitis B vaccination

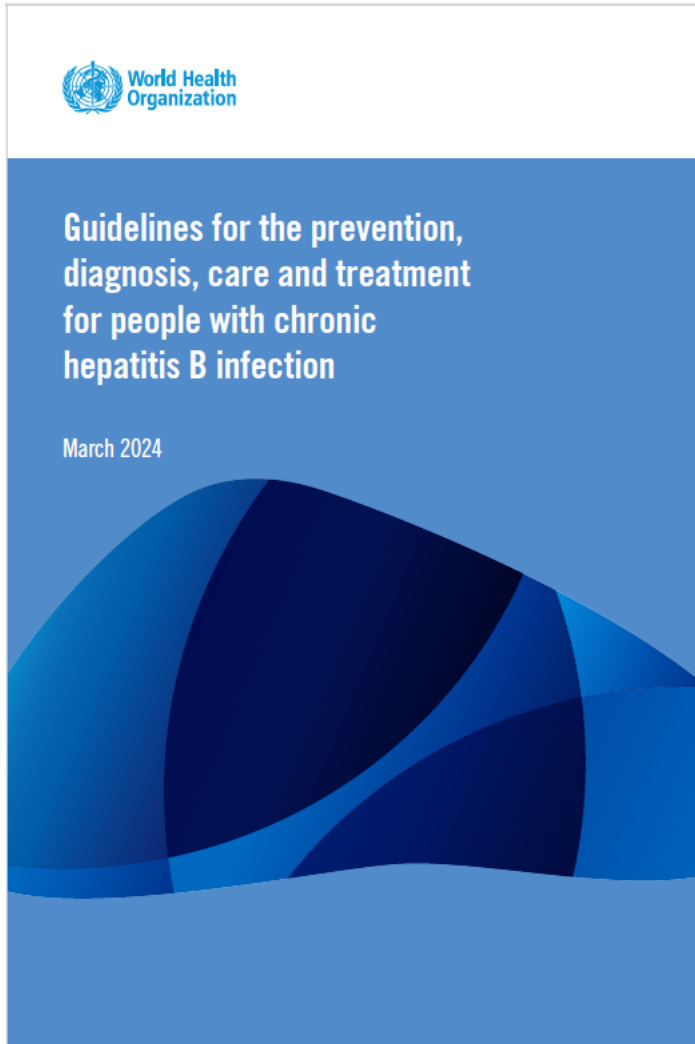
Hepatitis B vaccination



WHO recommends adult Hepatitis B vaccination for the following groups after negative HBsAg test:

- Sexual partners of HBV index clients, including spouses
- First-degree relatives (children, siblings, parents) of HBV index clients
- Any other person living in the household of an HBV index client
- Male partners of pregnant women

Who is eligible for hepatitis B vaccination?



- Adults at significant risk (including partners and household contacts of HBV index clients)
- AND
- Negative for active HBV infection (HBsAg negative)
- AND
- No documented or definitive previous vaccination or immunity