



# Southern African HIV Clinicians Society 3rd Biennial Conference

13 - 16 April 2016  
Sandton Convention Centre  
Johannesburg

**Our Issues, Our Drugs,  
Our Patients**

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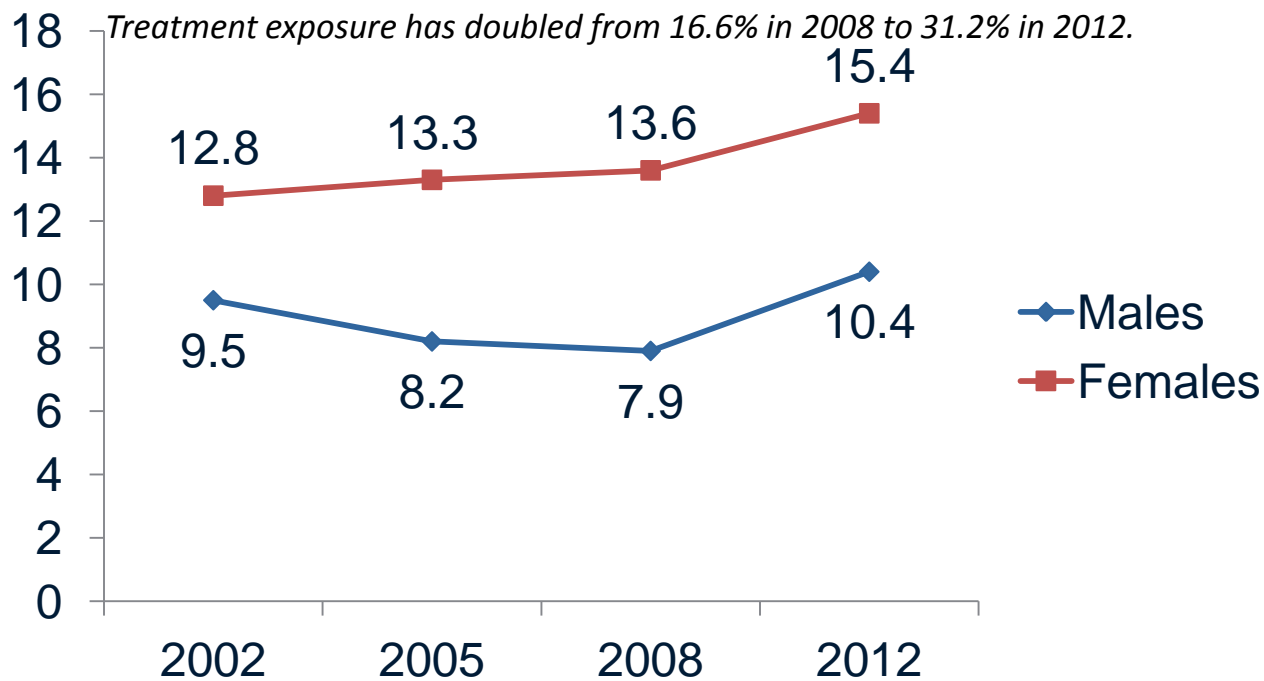
# Sticking to guidelines: PrEP guidelines

Michelle Moorhouse  
15 Apr 2016



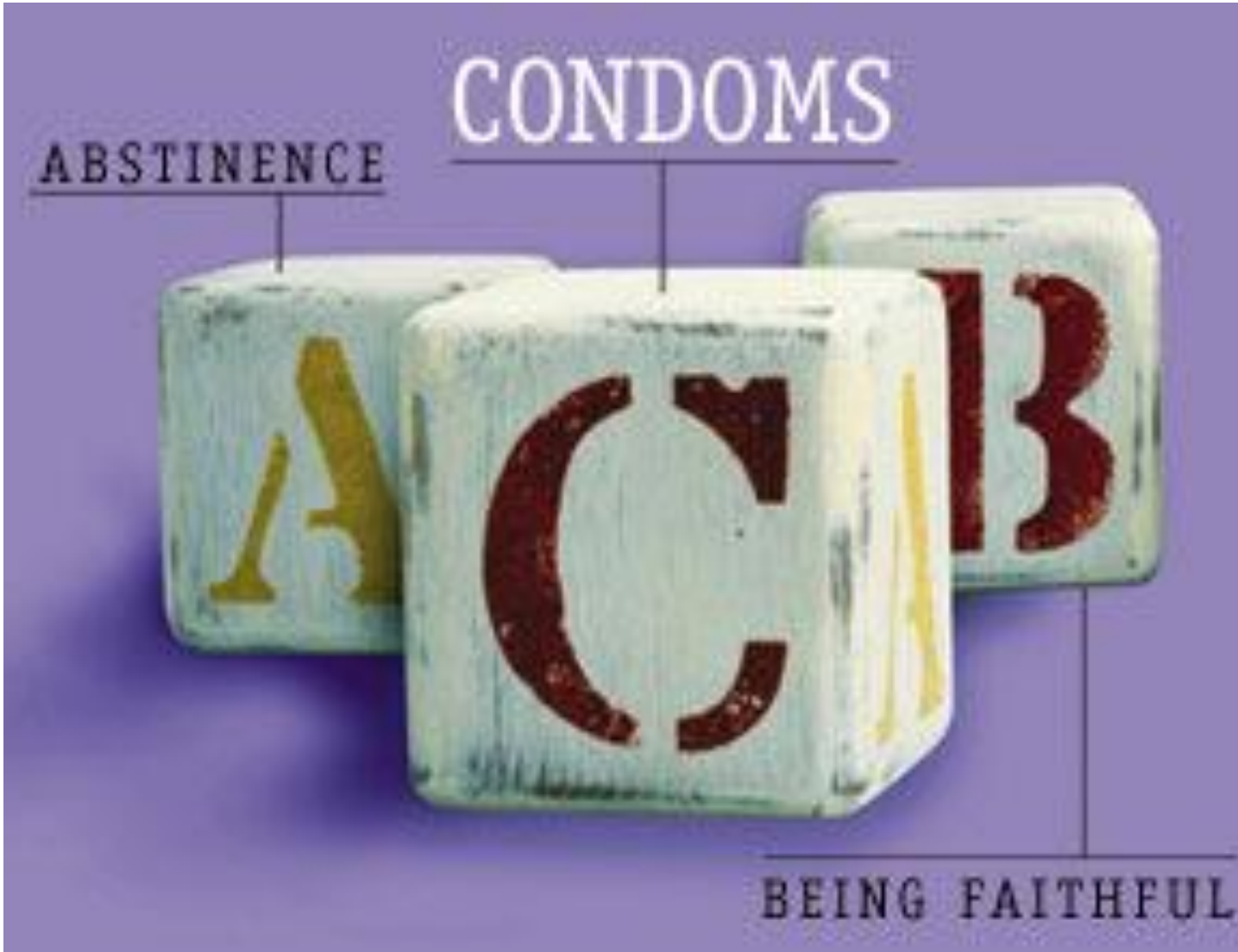
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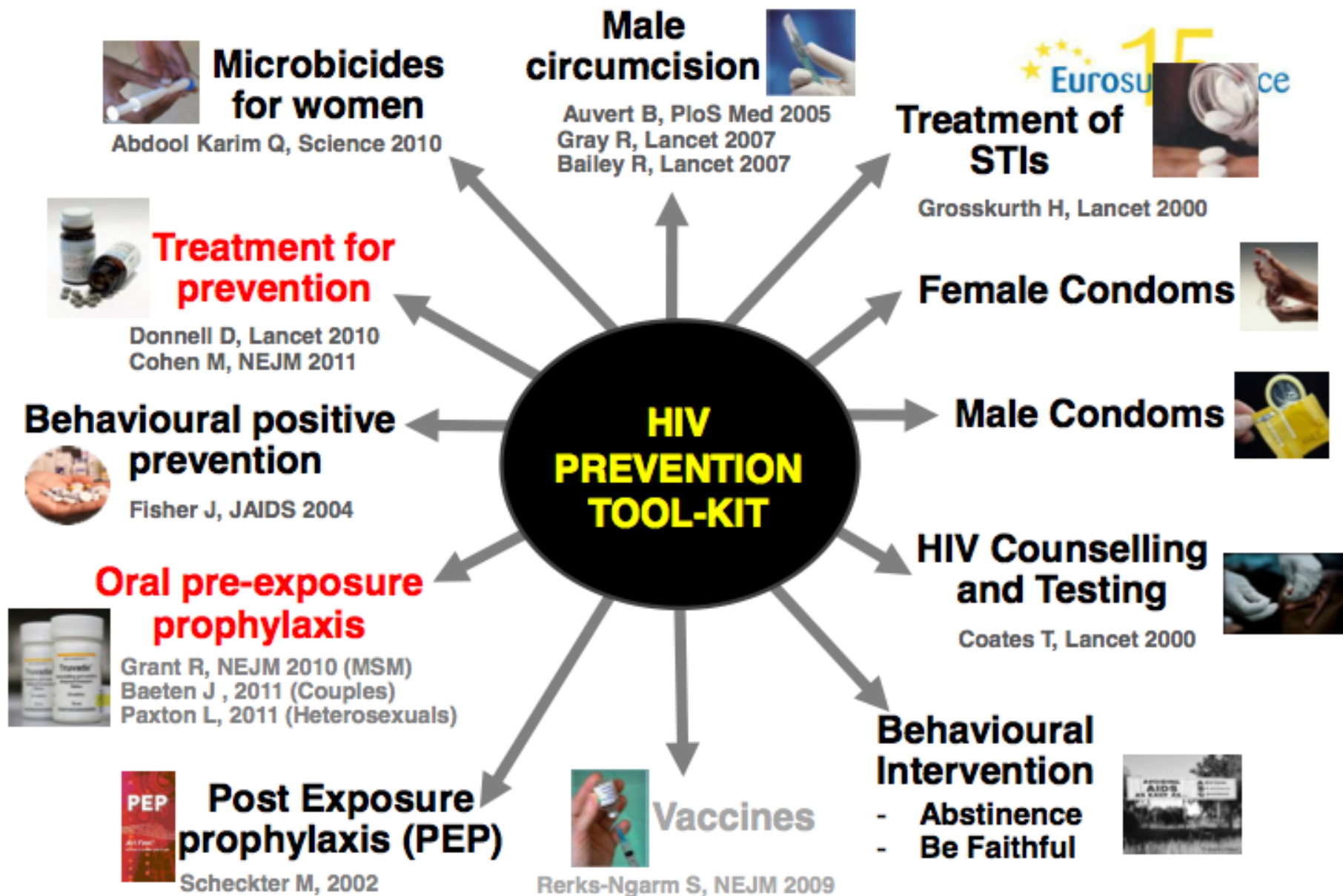
# Ongoing HIV transmission despite expanding access to ART – SA



Source: HSRC, 2012







*Note: PMTCT, Screening transfusions, Harm reduction, Universal precautions, etc. have not been included – this is focused on reducing sexual transmission*



## **GUIDELINES**

# **Southern African guidelines for the safe use of pre-exposure prophylaxis in men who have sex with men who are at risk for HIV infection**

GUIDANCE ON PRE-EXPOSURE ORAL PROPHYLAXIS (PrEP) FOR SERODISCORDANT COUPLES, MEN AND TRANSGENDER WOMEN WHO HAVE SEX WITH MEN AT HIGH RISK OF HIV: Recommendations for use in the context of demonstration projects

July 2012



## **GUIDELINE ON WHEN TO START ANTIRETROVIRAL THERAPY AND ON PRE-EXPOSURE PROPHYLAXIS FOR HIV**

US Public Health Service

**PREEXPOSURE PROPHYLAXIS FOR THE PREVENTION OF HIV INFECTION IN THE UNITED STATES - 2014**





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**Southern African guidelines on the safe use of pre-exposure prophylaxis in persons at risk of acquiring HIV-1 infection**

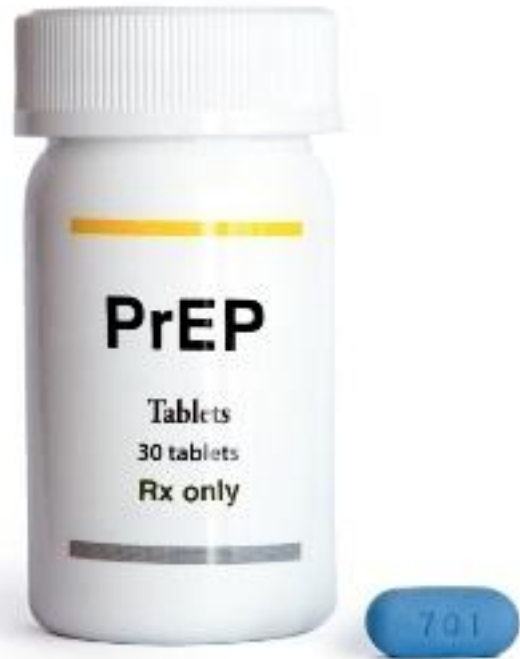
**GENERAL VIRAL THERAPY AND PRE-EXPOSURE PROPHYLAXIS FOR HIV**

US Public Health Service

**PREEXPOSURE PROPHYLAXIS FOR THE PREVENTION OF HIV INFECTION IN THE UNITED STATES - 2014**

# What is PrEP?

- PrEP involves taking a pharmaceutical agent prior to an exposure to prevent an outcome
  - (e.g. infection by a microbe, such as malaria). PrEP for
- HIV: ARV medications to prevent HIV infection







# Indications for PrEP



**PrEP should be considered for people who are HIV-negative and at significant risk of acquiring HIV infection**

1. any sexually active HIV-negative *MSM* or *transgender person* who wants PrEP
2. *heterosexual* women and men who want PrEP
3. people who inject *drugs*
4. include *adolescents* and *sex workers*
  - especially vulnerable: young MSM and adolescent girls.

# Contra-indications to PrEP

1. HIV-1 infected or evidence of possible acute infection
2. suspicion of window period following potential exposure
3. adolescents <35 kg or <15 years who are not  $\geq$ Tanner stage 3
4. poor renal function (creatinine clearance <60 mL/min)
5. other nephrotoxic drugs (eg aminoglycosides)
6. unwilling or unable to return for 3-monthly visits
7. pregnant or breastfeeding women



# Risk assessment

In the past 6 months:

1. Have you had sex with men, women or both?
2. How many men/women have you had sex with?
3. How many times did you have sex without a condom?
4. How many of your partners were HIV-positive or of unknown HIV status?
5. With these positive/unknown status partners, how many times did you have sex without wearing a condom?

# Or more simply

In the past 3/6 months:

1. Have you had sex within the past three months?
2. Have you had unprotected (condomless) sex?
3. Have you had sex with partners who are HIV-positive or whose HIV status you did not know?
4. Have you had sex under the influence of alcohol and/or drugs?



# Eligibility criteria

- Anyone identified as being at high risk for HIV exposure
- No contraindications to FTC/TDF FDC
- HIV-negative / not thought to be in the window period
- Absence of symptoms of acute HIV infection
- Willing and able to attend 3-monthly visits
- Understands that the protection provided by PrEP is not complete
- Recurrent use of PEP



# Starting PrEP

Screening

PrEP initiation visit

One month follow up

Three monthly maintenance visits



# Screening visit

Educate about the risks and benefits of PrEP

Assess risk and eligibility

Conduct HIV counselling and testing, serum creatinine level, hepatitis B and STI screen, pregnancy test

Contraceptive counselling and offer services (including condoms and lubricant)

Arrange follow-up visit



# Starting PrEP

**TABLE 1:** Mandatory baseline investigations for pre-exposure prophylaxis initiation.

Screening	Method
HIV infection	Laboratory ELISA preferably - fourth generation rapid if ELISA not available
Renal function	eGFR > 60 mL/min
Hepatitis B screen	Surface antigen (HBsAg) Antibody to surface antigen (HBsAb)
STI screen	Symptomatic screen Examination if indicated Urine dipstix for urethritis Serological screening for syphilis (rapid or laboratory) Full STI panel if resources allow
Pregnancy screen	Rapid pregnancy test or beta HCG

# PrEP initiation visit

Conduct HIV counselling and testing

Confirm eligibility (including investigation results and creatinine clearance)

Commence hepatitis B vaccination if indicated

Provide STI treatment if indicated

Educate client about PrEP side-effects and management

Educate client about signs and symptoms of acute HIV infection

Discuss behaviours that promote bone health, such as weight-bearing exercise and avoiding alcohol, tobacco and recreational drugs

Initiate a medication effective use plan

Provide condoms and lubricant

Contraceptive counselling and offer services

Provide one-month TDF/FTC (FDC) prescription and follow-up date



2016

# One month follow up

## PrEP initiation visit, PLUS:

Assess tolerability, side-effects and effective use

Actively manage side-effects

Measure serum creatinine and calculate creatinine clearance

Contraceptive services

Provide three-month TDF/FTC (FDC) prescription and follow-up date



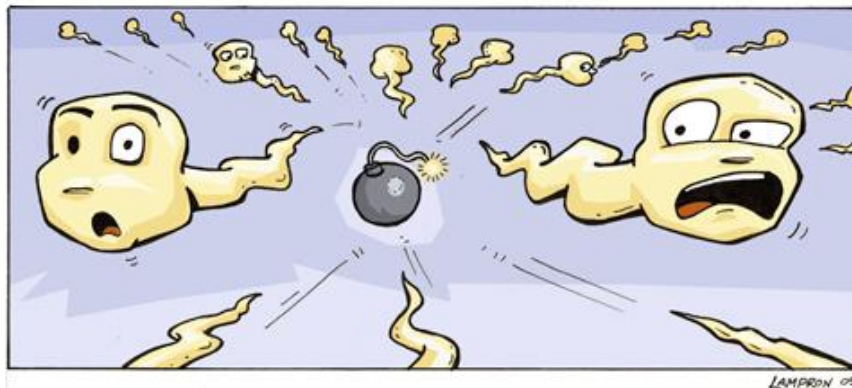
# Maintenance visits

Repeat procedures done at one-month follow-up

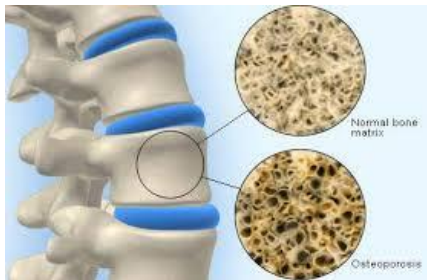
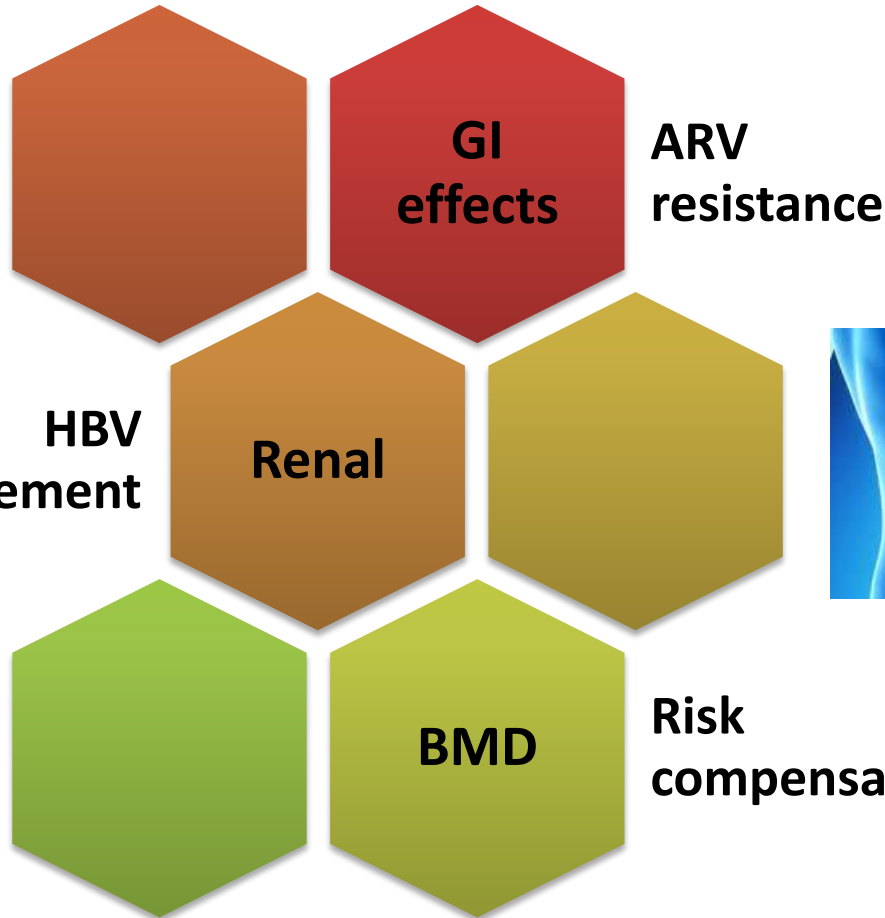
Measure serum creatinine and calculate creatinine clearance at four-month follow-up, and 12-monthly thereafter

Conduct 6-monthly STI screen, including urine dipstix and rapid syphilis test

Complete hepatitis B immunisation at 6 months



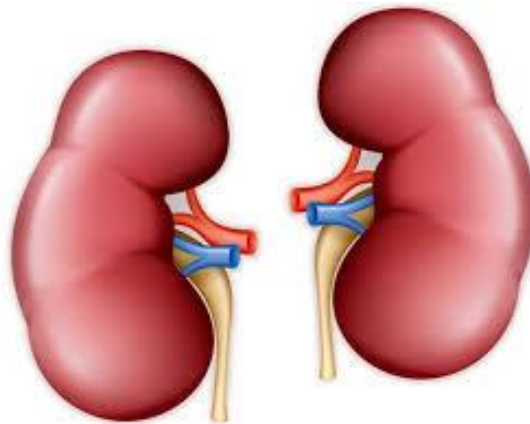
# Risks and side effects





# Stopping PrEP

1. Positive HIV test
2. Request of user
3. Safety concerns
  - Creatinine clearance  $<60$  mL/min
4. Risks outweigh benefits



# Cycling on and off PrEP

## When starting

- For anal sex: 7 days of daily TDF/FTC to reach adequate tissue levels
- For vaginal sex: 20 days
- Use other methods of protection

## When stopping

- Continue PrEP for 28 days after last potential HIV exposure



# Full of little gifts

**BOX 4:** What if users ask about stopping condom use while on PrEP?

1. Do not be judgemental about patient preferences.
2. Explain that this is a valid choice but discuss any negative consequences.
3. Stress that PrEP prevents HIV.
4. Stress that PrEP prevents hepatitis B.
5. Confirm a regular management plan.
6. Confirm a reliable contraception plan where indicated.
7. Discuss vaccine-preventable STIs, e.g. hepatitis A and B and HPV.

**STOPPING CONDOM USE**



# Full of little gifts

**BOX 4:** What if users ask about stopping condom use while on pre-exposure prophylaxis?

1. Do not be judgemental about patient preferences.
2. Explain that this is a valid choice but there are potentially negative consequences.
3. Stress that
4. Stress that
5. Confirm
6. Confirm
7. Vaccinate where

**BOX 5: 'Adherence' versus 'effective use'.**

These guidelines use the term 'effective use' to describe adherence. Adherence is often understood by healthcare providers as the degree to which a patient applies to ARV treatment adherence, as life-long adherence to ARV treatment intervals to ensure viral suppression. Oral PrEP must be taken consistently during times of HIV exposure risk, although there are some situations where less than perfect adherence is still highly effective. For example, a person may stop taking PrEP when it would be appropriate to cycle off oral PrEP, or when they move out of 'seasons of risk', or when female sex workers come to visit family, taking a break from sexual activity. The extent to which consistent use of oral PrEP is measured with the same metrics as ARV treatment adherence, it may show up as lacking, even though the person at risk has used the drug effectively. The term 'effective use' is used when discussing whether ARV-based prevention has been used consistently. This is akin to 'effective use of condoms' as we seldom talk about condom adherence.

**ADHERENCE VS EFFECTIVE USE**



# Full of little gifts

**BOX 4:** What if users ask about stopping condom use while on pre-exposure prophylaxis?

1. Do not be judgemental about patient preferences.

2. **BOX 5:** 'Adherence' versus 'effective use'.

These guidelines use the term 'effective use' rather than 'adherence'. Adherence

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**BOX 6:** Tips to support effective use.

Include user-focused effective use strategies to support adherence. Provide a clear explanation of the benefits of PrEP. In a neutral manner, ask if the user has any challenges that make PrEP difficult. Also explore possible facilitators to pill taking and adherence. Explore facilitators when developing strategies to improve effective use.

**Optimizing pill taking:**

Use reminders (e.g., smartphone, alarm clock, diary, partner reminder).

Link pill taking to a daily activity (breakfast, brushing teeth).

See **BOX 5**.

PrEP is **NOT** required for pill taking.

Join an on-line support group, e.g. Facebook: PrEP Rethinking HIV Prevention or #wethebrave.

**SUPPORTING EFFECTIVE USE**



# And the gifts keep coming

**BOX 7:** Strategies to reduce the likelihood of antiretroviral resistance.

**Feasibly exclude acute HIV infection before initiating PrEP by:**

- conducting antibody HIV testing before commencing or re-prescribing PrEP
- enquiring about pill taking patterns and whether any pills were missed
- among persons with a negative HIV antibody test, screening to detect signs and symptoms of acute infection (fever, sore throat, rash, joint pain, cough, etc.) and physical examination (temperature, ENT and chest examination) (see text box)
- considering time period between last sexual exposure and window period of tests being used
- If symptoms or signs of acute infection are present:
  - At screening, if symptoms are severe, PrEP should be withheld until symptoms subside and rapid antibody test remains negative
  - At follow-up, if symptoms are mild, PrEP should be withheld until follow-up HIV antigen/antibody testing is available
- If symptoms or signs of acute infection are not present, PrEP should continue while awaiting results of follow-up HIV antigen/antibody testing (2–4 weeks) or may decide to withhold PrEP until follow-up HIV antigen/antibody testing is available
- If PrEP has been taken consistently, breakthrough infection is unlikely. Withholding PrEP may put an effective user at greater risk for HIV acquisition
- Support client to maximise effective use and include effective use counselling at each visit
- Stop PrEP should requirements for PrEP eligibility not be fulfilled or if client recognises risk profile has altered or wishes to use a different combination of prevention
- Counsel client that recommencement will require all of the above steps again.

**EXCLUDE ACUTE INFECTION**



# And the gifts keep coming

**BOX 7:** Strategies to reduce the likelihood of antiretroviral resistance.

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  - Note that, if unlikely. With acquisition
- Support client t each visit
- Stop PrEP shou recognises risk prevention
- Counsel client t

## **BOX 8:** Acute HIV-infection.

Severity of the syndrome ranges from mild non-specific 'viral' symptoms to a severe infectious mononucleosis-like illness with dysregulation and transient profound CD4 depletion.<sup>47,48</sup>

### Symptom:

- malaise
- anorexia
- myalgias
- headache
- sore throat
- sore glands
- rash.

### Sign:

- lymphadenopathy
- pharyngitis
- herpetiform ulceration
- rash (maculopapular or urticarial)
- viral meningitis
- Guillian-Barre syndrome
- *Pneumocystis pneumonia*†
- cryptococcal meningitis†
- oral/oesophageal candidiasis.

**SYMPTOMS OF ACUTE HIV**

# And the gifts keep coming

**BOX 7:** Strategies to reduce the likelihood of antiretroviral resistance.

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**BOX 8:** Acute HIV-infection.

Severity of the syndrome ranges from mild non

**BOX 9:** HIV prevention for pre-exposure prophylaxis users.

**General factors to consider:**

- accessibility of condoms and compatible water-based l addressed
- no single HIV risk reduction intervention is likely to
- combinations of prevention options, tailored to offered ('menu of prevention choices'), in al/behaviour change interventions
- prevention options are likely to available.

**Biomedical:**

- male or female c
- access to fre
- early a
- po

amcision  
ment

change and opioid substitution therapy for people who inject

**Social:**

- education: risk and safer sex practices
- regular HIV counselling and screening
- reducing number of sex partners
- reducing alcohol and substance abuse
- addressing mental health needs
- couple counselling and programming
- harm reduction counselling and support for clients who use drugs.

**HIV PREVENTION METHODS**

# What about pregnancy and breastfeeding?

- Risk of seroconversion during conception and pregnancy
- Limited data regarding safety of PrEP for foetus
  - RCTs excluded pregnant women
  - Demonstration projects will provide some data
- APR: no evidence adverse outcomes to TDF/FTC ART

# TDF/FTC PrEP CI in pregnant or breastfeeding women



# Some final thoughts

- PrEP is seasonal
- PrEP isn't for everyone
- PrEP use requires commitment
- Role of PrEP in serodiscordant couples
- Risk reduction counselling
- PrEP users are NOT patients

# Acknowledgements

- SA HIV Clinicians Society
- Francois Venter
- PrEP guideline writing group



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