WHO PrEP Guidance
Outline

• Public health perspective: HIV prevention matters (and PrEP is a new tool with untapped promise)

• WHO HIV strategy and WHO guidance on PrEP

• Messaging of PrEP

• Future of PrEP (research and scale-up)
From a public health perspective, what is the issue?
HIV Testing, Treatment & Viral Suppression

- People living with HIV who know their status: 35 million
  - Gap to reaching the first 90: 4.3 million
    - 79% [67–92%]

- People living with HIV on treatment: 30 million
  - Gap to reaching the first and second 90s: 7.4 million
    - 62% [46–74%]

- People living with HIV who are virally suppressed: 25 million
  - Gap to reaching all three 90s: 7.7 million
    - 53% [43–63%]

Source: UNAIDS special analysis, 2019; see annex on methods for more details.
Global HIV transmission **PERSISTS:**

Treatment scale-up has ‘masked stagnation in the estimated annual number of new HIV infections’ (Baggaley et al, *JIAS*)

**FIGURE 2.4** Number of new HIV infections, global, 1990–2018 and 2020 target

Source: UNAIDS 2019 estimates.
New HIV infections Global, 2018

http://aidsinfo.unaids.org/
What happens when you don’t have services for certain populations: E.g. MSM HIV epidemic in the Philippines

So to summarize, thus far:

- Globally, we are not seeing a decrease in new HIV infections in adults
- We are doing a good job in scaling up treatment
- HIV prevention + treatment go together
- More to do at global, regional, national and local levels: fast-track approach
- Interventions to prevent HIV that are evidence-based should be offered to those that can benefit as part of fast-tracking to 2020 (and 2030)
We have the tools to prevent HIV (except a vaccine)
HIV testing technology has improved (e.g. rapid tests, self-testing)

WHO HIV testing guidelines (2015):
http://www.who.int/hiv/pub/guidelines/hiv-testing-services/en/
Condoms + lubricants

WHO-UNAIDS-UNFPA statement on condoms:
VMCC (circumcision prevents HIV)

10 million men stepped up for HIV prevention through voluntary medical male circumcision services

Voluntary medical male circumcision reduces the risk of female-to-male HIV transmission

Reduces risk among men by 60%

New HIV infections

5,500 every day globally

66% of new HIV infections are in sub-Saharan Africa

In only 5 years more than 10 million men circumcised – contributing to an AIDS-free generation

VMMC focuses in 14 countries in East and Southern Africa

Medical male circumcision plus other prevention services for men

A package of HIV prevention services is available to men, including offer of HIV testing and links to treatment, condom promotion and provision, management of other sexually transmitted infections and safer sex education.

World Health Organization

WH/OAI/2015.30
What is the comprehensive **harm reduction** package for people who inject drugs?

1. Needle and syringe programmes
2. Opioid substitution therapy (OST) and other evidence-based drug dependence treatment
3. HIV testing and counselling
4. Antiretroviral therapy
5. Prevention and treatment of STIs
6. Condom programmes for people who inject drugs and their sexual partners
7. Targeted information, education and communication for people who inject drugs and their sexual partners
8. Prevention, vaccination, diagnosis and treatment for viral hepatitis
9. Prevention, diagnosis and treatment of TB.

Guidelines on HIV prevention and treatment for Key Populations (WHO, 2016):
[http://apps.who.int/iris/bitstream/10665/246200/1/9789241511124-eng.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/246200/1/9789241511124-eng.pdf?ua=1)
Recent years, oral PrEP (containing TDF) has become available in some countries.
What does the WHO actually say about PrEP?
Oral PrEP (containing TDF) should be offered as an additional prevention choice for people at substantial risk of HIV infection as part of combination prevention approaches.

- strong recommendation
- high quality evidence
Features of the Recommendation

• Enabling
  – **Not population specific**
  – For people **at substantial HIV risk** (provisionally defined as HIV incidence > 3 per 100 person–years in the absence of PrEP)

• An **additional prevention choice** within combination prevention
  – Condoms and lube
  – Harm reduction
  – HIV testing and links to ART

• Provide PrEP with **comprehensive support**
  – Adherence counselling
  – Legal and social support
  – Mental health and emotional support
  – Contraception and reproductive health services
Systematic review results: HIV Infection outcome

- PrEP significantly effective in reducing risk of HIV infection across gender, PrEP regimen, dosing, and mode of acquisition.
- ↑ adherence, ↑ effectiveness

Note: Results from overall analysis had significant heterogeneity; therefore, results stratified by adherence level for GRADE tables
Adherence and Effectiveness

The graph illustrates the relationship between log risk ratio and percent drug detection in the active arm. Points labeled VOICE, FEM-PrEP, iPrEx, Bangkok TDF, Partners PrEP, and CDC Safety Study are plotted on the graph. The data suggests a trend where higher adherence (percent drug detection) is associated with lower log risk ratio.
Safety of PrEP drugs in pregnancy and breastfeeding

Given available safety data, there **does not appear to be a safety-related rationale for prohibiting PrEP** during pregnancy and lactation or for discontinuing PrEP in HIV-negative women receiving PrEP who become pregnant (and are at continued risk of HIV acquisition)

(Mofenson, *AIDS*, 2016)
Tenofovir Disoproxil Fumarate Safety for Women and their Infants during Pregnancy and Breastfeeding: Systematic Review.

Mofenson LM, Baggaley RC, Mameletzis I.

Abstract

OBJECTIVES: Pregnant/lactating women in some sub-Saharan Africa settings are at substantial risk of HIV acquisition and could benefit from pre-exposure prophylaxis (PrEP) with tenofovir disoproxil fumarate (TDF), but safety data in pregnancy/lactation are limited.

DESIGN: Systematic data review through August 2016.

METHODS: We reviewed research reports/conference abstracts with maternal/child adverse outcome data in HIV-infected and HIV-uninfected pregnant/lactating women receiving TDF alone or in combination with other drugs compared with non-TDF regimens.

## Recurrent concerns expressed by ministries of health

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<td>People taking PrEP, esp. with poor adherence: Will this result in lots of drug resistance use?</td>
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New Dosing Regimen for MSM, 2019

86% reduction in HIV risk in the placebo controlled randomised phase
97% reduction in open label extension including in infrequent users (9.5 pills/mo)

“Loading dose”
- Is appropriate if sex can be predicted or delayed by at least 2 hours, or occurs less than 2 times per week.
Positive messaging + marketing
PrEP

ONE PILL.
ONCE A DAY.
Protect against HIV.

PrEP4love.com
Chicago PrEP line:
872.215.1905

SPREADtingle
BE IN THE MOMENT
A once a day pill that keeps you HIV negative

I'M ENDING HIV

F*CK W/O OUT FEAR

LOS ANGELES LGBT CENTER®

ONE Prep PILL A DAY CAN PREVENT HIV.

PREVENT STDs WITH A CONDOM.
NYC PLAYS SURE

PLAY SURE: CALL 311 OR VISIT NYC.GOV/HEALTH TO DESIGN THE RIGHT HIV AND STI PREVENTION COMBINATION FOR YOU

#PLAYSURE
PrEP TAKEN DAILY, PrEP IS AN ADDITIONAL PREVENTION OPTION FOR HIV-NEGATIVE PEOPLE

Pre-exposure prophylaxis, or PrEP, is a new, safe, HIV prevention method in which HIV-negative people take a pill daily to reduce their risk of becoming infected. The pill contains medicines that prevent HIV from making new virus as it enters the body. In this way PrEP medicines can help keep the virus from establishing a permanent infection.

PrEP adds an extra HIV prevention option to the use of condoms, behavioural counselling, post-exposure prophylaxis, treatment for sexually transmitted infections, voluntary male medical circumcision, and antiretroviral therapy for partners living with HIV.

PrEP is only for people who are HIV-negative. PrEP is recommended for individuals with high risk for HIV exposure.
WE’RE BRAVER TOGETHER
COME AND GET TESTED FOR HIV WITH A FRIEND BY YOUR SIDE
How does PrEP implementation look now?
30+ Countries have policies pending
Prevention is often perceived as complicated, difficult, and boring. But it doesn’t have to be, especially in the era of PrEP.