

# Microbicides: Woman-centered HIV Prevention Products to Help End AIDS by 2030

## Invest in microbicide R&D for women—it's the smart choice

### What are microbicides?

Vaginal microbicides are biomedical products being developed to protect women from HIV during vaginal sex. They could come in different forms—such as a long-acting vaginal ring found to help reduce HIV risk in large clinical trials—and other products in earlier stages of development such as films and inserts.

### Women bear the burden of the HIV/AIDS epidemic

- Women and girls lack the range of prevention options they need to protect their own health.
- HIV/AIDS is one of the **leading causes of death globally** in women ages 15-49, and one of the biggest threats to women's health and well-being.
- **Every day, more than 1,800 women acquire HIV**, putting their sexual and reproductive health at risk.
- **Young women ages 15-24 are at greater risk.** Worldwide they are more than twice as likely to be living with HIV as young men and, in sub-Saharan Africa, are three times as likely to acquire HIV.
- Women urgently need new HIV prevention methods like microbicides that they can control themselves to help them **protect their sexual and reproductive health.**

### Small investment, enormous pay-off

- Modeling studies show that a microbicide like a monthly vaginal ring could have a **meaningful impact on the HIV/AIDS epidemic as part of a combination prevention strategy** while helping to empower women and girls to safeguard their health.
- In 2020, the **European Medicines Agency issued a positive opinion** for the product, and in 2021, the **World Health Organization recommended the ring** in its updated HIV prevention guidelines. To save lives and see years of global investment and scientific progress pay off, we must **sustain investment in microbicides.**

Microbicide R&D is a **tiny fraction**—about 0.1%—of annual development budgets globally



0.1%



## The dapivirine ring—hope for women’s HIV prevention

- The monthly microbicide vaginal ring—developed by the nonprofit International Partnership for Microbicides (IPM) with investment from the United States and many European governments—is the **first long-acting HIV prevention method designed specifically for women.**
- The flexible silicone ring, which women insert into the vagina themselves, is designed to slowly release the antiretroviral drug dapivirine over the course of a month.
- The ring would help **fill a critical gap** in the prevention portfolio and offer women a monthly option they can control themselves when they are unable or choose not to use higher-efficacy products like daily oral PrEP or a future injectable. Women need different options so they can choose the most effective product that best meets their individual needs and circumstances. No product is perfect, so offering a **range of products** is important to ensure every woman has a way to protect herself.



## PREVENTION IS CRITICAL

With 1.5 million new adult infections in 2020, treatment is essential but cannot end the AIDS epidemic on its own.

“Simply put, girls and women are the keys that will unlock sustainable development. They are also at the center of the healthier and more resilient societies we desire.”

– Tedros Adhanom Ghebreyesus  
Director-General, World Health Organization



## Advancing the dapivirine ring: Status and next steps

The ring was approved in Zimbabwe and several other countries in Africa in 2021, with additional reviews underway in eastern and southern Africa, where HIV incidence among women is persistently high and they urgently need new HIV prevention methods.

Where approved, the product’s introduction will be crucial to launching follow-on products like IPM’s three-month dapivirine-contraceptive ring, which could offer greater convenience and be appealing to women.

## Why are women at such high risk?

Gender inequities play a major role in limiting women’s ability to negotiate safe sex, or even select their partners or the timing of sex. Women are also biologically more susceptible to HIV infection than men.

## A SMART INVESTMENT

Investment in woman-centered HIV prevention promises to yield significant economic benefits in two key ways:



### Drive economic growth

by ensuring women are healthy enough to work and invest in their families' well-being.



Bring down the global cost of AIDS treatment through HIV infections averted.

## Investing in microbicides is smart for economic growth, political stability and gender equality

Current HIV prevention options aren't enough to end the epidemic. Between 2015 and 2020, 3.5 million more infections occurred than if UNAIDS targets had been met—including three times higher than the target for young women.

- UNAIDS' Global AIDS Strategy 2021-2026 explicitly recognizes the potential for new HIV prevention tools, including ARV-based vaginal rings, to offer women more options so they can make **informed choices** about their sexual and reproductive health.
- **Each dollar invested** in ending the HIV/AIDS epidemic by 2030 **could generate US\$6.44 in economic returns** in low- and middle-income countries, according to a 2019 analysis.
- Economic growth would **decrease poverty**, help maintain **political stability** and decrease dependence on foreign aid.
- Countries that received PEPFAR assistance saw political instability and violence fall by 40% over 10 years (2004–2014) compared to a 3% drop in similar countries that did not.
- Microbicide R&D builds research capacity and infrastructure in areas most affected by the epidemic, **strengthening health systems**.
- Microbicides would help lower HIV infection rates among women, allowing them to **pursue work** and support their families, and enabling more girls to **stay in school**.

## Access to the ring

We are now preparing the dapivirine ring for potential market introduction to help ensure it will be affordable and accessible if it is approved for use. Access to potentially lifesaving new technologies depends on sustained and new funding.





## Investment in microbicides like the dapivirine ring are leveraged by generous global financial support

### Country governments

Germany  
Ireland  
Netherlands  
United Kingdom  
United States

### Philanthropic sector

*BILL & MELINDA  
GATES foundation*

### Private sector

*Johnson & Johnson*

Intellectual property, technical assistance  
and support for product introduction

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**INTERNATIONAL  
PARTNERSHIP FOR  
MICROBICIDES**

As a nonprofit product development partnership (PDP), IPM leverages resources from public and private sectors to develop women-centered HIV prevention technologies for use in developing countries, where the need is urgent but market incentive is lacking.