

Frequently Asked Questions

About Microbicides

What are microbicides?

(Mĭ-KRO'-bĭ-sĭdz) Microbicides are a new type of product being developed that people could use vaginally or rectally to protect themselves from HIV and possibly other sexually transmitted infections. Microbicides could be produced in a number of forms, including gels, creams, suppositories, films, lubricants, or delivered through a sponge or a vaginal ring that slowly releases the active ingredient.

When will microbicides be available?

Scientists are currently testing many substances to see whether they help protect against HIV and/or other STIs, but no safe and effective microbicide is currently available to the public. Researchers are seriously pursuing numerous product leads, including several that have proven safe and effective in animals and are now being tested in people in clinical trials. It is not possible to say how long it will take to find a microbicide that is both safe and effective. On average, new drug development takes over a decade from discovery in a research lab to availability on the market. Ninety percent of candidates that enter preclinical (laboratory) testing are rejected before they enter clinical trials. Only a few microbicide candidates are in the last stages of testing¹ to determine whether they are effective (which can take up to 4 years). The results of the Phase IIb CAPRISA 004 trial in South Africa provided proof of concept for ARV-based tenofovir vaginal gel. If a future trial shows that tenofovir—or another candidate—does work, another two to four years are expected for individual countries' regulatory processes to approve the microbicide for wide availability. Due to these individual country processes, it must be noted that a microbicide will not be available in all countries at the same time and not all people within a country will get it at the same time. It is likely to be made available to some people and not others during introduction and scale-up. For example, efficacy for women may be determined before efficacy in men, as advanced trials to date have focused on vaginal use.

How would microbicides work?

Microbicides could potentially work in a variety of ways such as disrupting the life cycle of HIV before or after it enters the blood cells or inhibiting attachment of the virus to the CD4 cell. Some candidates might be HIV-specific and others multi-purpose or broad spectrum (meaning they would work against other STIs as well as HIV).

Would microbicides eliminate the need for condoms?

No. When used consistently and correctly, male or female condoms are likely to provide better protection against HIV and STIs than microbicides, so they will still be the preferred option. The recommendation will be to use both a microbicide and a condom. But for people who cannot or will not use condoms, and particularly for women whose partners refuse condoms, using microbicides would save lives and have a substantial impact on the spread of HIV.

What if a woman wants to get pregnant?

The candidates furthest advanced in trials right now are all non-contraceptive. Ideally in the future, women would have access to microbicides that allow pregnancy and to multi-purpose microbicides that could prevent pregnancy. Contraceptive microbicides could provide both pregnancy and HIV/STI prevention to women wishing to meet both needs with one product. It may be possible, if a non-contraceptive product proves effective, to add a contraceptive component to it.

¹ For more information on the exact number of candidate products in the pipeline, please visit the AVAC website at www.avac.org

Would microbicides protect against all sexually transmitted infections?

Although protection against HIV is the primary goal, we hope that microbicides that could protect against other STIs as well as HIV might also become available in the future. Testing of the vaginal use of 1% tenofovir gel indicated that it may also protect against infection by Herpes Simplex Virus-2.

Would microbicides be safe?

Any new product must go through rigorous safety testing and receive government approval before becoming available to the public. Women's health activists and researchers are working closely together to ensure that the testing of microbicides is thorough and ethical. Fortunately many of the substances under investigation are drugs that are already available.

Would men benefit from microbicides as well?

Although it is possible that microbicides could protect HIV-positive women's partners, it is also possible that they will not. Trials with serodiscordant couples will need to take place in order to test this. There is research under way to develop and test microbicides for rectal use. The safety and effectiveness of such products must be established separately from those developed for vaginal use.

Who is working on microbicides research and development?

Virtually all microbicides research to date has been conducted by nonprofit and academic institutions or small biotech companies. Studies are funded by charitable foundations and government grants. These public funds also support basic science, social and behavioural research, and clinical trial infrastructure that contribute to microbicides research and development. Large pharmaceutical companies have not invested significantly in this field. This is mostly because profits from sales of microbicides are expected to be low. Pharmaceutical companies have donated products for developers to test in their efforts to develop new prevention methods.

Why do we need microbicides if we will eventually have an HIV vaccine?

No one strategy or technology will "solve" the AIDS pandemic. We must employ all existing prevention strategies—such as behaviour change, voluntary counselling and testing, STI diagnosis and treatment, broad access to male and female condoms, access to sterile syringes, and anti-retroviral interventions—as well as expand our repertoire of tools and technologies. Microbicides will likely be available and accessible sooner than an HIV vaccine. Even after a safe and effective vaccine is discovered, vaccines and microbicides will have different, complementary roles to play in an integrated, multi-faceted global HIV-prevention strategy.

How much will microbicides cost, and will people be able to afford them?

It is essential that microbicides get into the hands of women and men who need them at a price they can afford. In the past, new health technologies have rarely become widely available in developing countries until more than a decade after their approval in the North. This would be unacceptable for this life-saving technology, especially as HIV-prevention products have been developed primarily with public funds for high HIV-incidence areas. Advocates are working with researchers and policymakers now to emphasise the need to address issues of access and affordability up front, to be prepared to deliver a microbicide rapidly as soon as one is proven safe and effective.

How can you get involved?

Visit the Global Campaign for Microbicides website (www.global-campaign.org) to sign a petition, sign up to receive news, write to your parliamentarian, meet up with local advocacy groups in your region, and learn more about microbicides. We need your help to make a safe and effective microbicide available as soon as possible.

The Global Campaign for Microbicides (GCM) is a civil society organization working to ensure the ethical and accelerated development of, and widespread access to, new and existing HIV-prevention options—especially for women.

Visit our website: www.global-campaign.org or email: info@global-campaign.org