



What's Up with Nonoxynol-9?

I heard that Nonoxynol-9, the ingredient used in over-the-counter birth control products, is dangerous. Is that true?

In 2000, researchers demonstrated conclusively that Nonoxynol-9 (N-9) was not effective in reducing HIV risk. N-9 products are sold over the counter as contraceptive spermicides, not for the prevention of HIV or other infections. Since N-9 kills HIV in a test tube, research was undertaken in the 1980s and 90s to see if these products would also work for HIV prevention.

The 2000 study data showed that a 52.5 mg. N-9 gel (the lowest dose product on the market) did not protect women from HIV infection. In fact, when used more than once a day, N-9 contraceptive products may actually increase HIV risk slightly by irritating the vaginal membranes and causing disruptions that make it easier for the virus to enter the blood stream. Other studies show that N-9 is even more irritating to rectal tissue than to vaginal tissue.

Does this mean that people shouldn't be using N-9 products at all?

In 2001, World Health Organization (WHO) experts came to the following conclusions:

- N-9 is not effective at preventing the transmission of HIV or other sexually transmitted infections (STI). It shouldn't be used or promoted for disease prevention.
- N-9 contraceptive products (used alone or with a diaphragm or cervical cap) offer an important option for women who chose not to use hormonal birth control methods. But N-9 may also increase a woman's chances of getting infected, if exposed to HIV. **So women at risk of HIV, especially those having sex more than once a day, shouldn't use N-9 for birth control.**
- Women who are at low risk of HIV can continue to use N-9 for birth control purposes safely.
- Condoms with N-9 provide no more protection against pregnancy or infection than plain lubricated condoms. Since N-9 condoms may cause irritation, they should not be promoted. Instead, lubricated condoms without N-9 should be used.
- **Products with N-9 – including condoms, lubes and birth control products – should never be used for anal sex.** The rectum is more fragile than the vagina. Even the small amount of N-9 on condoms can damage the rectum, raising HIV risk.

What does this say about the feasibility of microbicides?

Microbicides (mī-KRO'-bī-sīdz) are products designed to be used vaginally or rectally to reduce the risk of getting infected with HIV and possibly other STIs. They are being formulated as gels, creams, suppositories, etc. **No approved microbicides are yet available.** But over 50 microbicides are in the research pipeline and 11 of them are already in human testing.

Unfortunately, the failure of N-9 has given some people the impression that developing a safe, effective microbicide is impossible. That isn't true! Scientists are confident that microbicides can be developed. But N-9 is not one of them.

With adequate funding, the microbicides furthest along could be ready for distribution in a handful of countries within 2 to 3 years. If the current set of products does not prove effective, the time horizon will be longer (although there are several second-generation leads already in human testing). It would provide a life-saving alternative to people who can't insist on condom use, a valuable back-up method in case of condom failure and a much-needed boost, in the form of a new tool, for ongoing STI and HIV prevention efforts.