Vaginal and Rectal Microbicides

Vaginal and rectal microbicides are an emerging technology designed to allow at-risk HIV-negative women and men to protect themselves from HIV. A microbicide has not yet been approved for this purpose.

In July 2010, a clinical trial (CAPRISA 004) found that a microbicide gel containing the ARV Viread (tenofovir) demonstrated a 39 percent level of efficacy at preventing HIV infection when applied vaginally within 12 hours before and within 12 hours after sex. In November 2011, however, an interim review of data from another clinical trial (the VOICE study) revealed that the tenofovir gel was no more effective than a placebo gel at preventing HIV infection among females who used the microbicide once daily, regardless of the timing or frequency of sexual acts.

Microbicide gels, applied vaginally and anally, continue to be explored in clinical trials. Researchers are also beginning studies of silicone rings containing ARVs that can be inserted vaginally and replaced on a monthly basis, making the microbicide easier to use (and potentially more effective).

Last Reviewed: February 14, 2016