

Male birth control gel to go into trials

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A team at the US National Institute of Child Health and Human Development has announced that it will be putting a contraception gel it has developed into trials starting this April. The trials will involve more than 400 couples in the U.S., Italy, Chile, Kenya, the U.K. and Sweden. The group has previously published a paper in the *Journal of Clinical*

Endocrinology & Metabolism, detailing the makeup of the gel, how it is used, and how effective it is believed to be.

Currently, the only forms of contraception available to men are condoms and vasectomies, though researchers have sought contraception options similar to those for women in recent years. To date, most such attempts have met with failure due to unwanted side effects. In this new effort, the researchers claim they have found what they believe is a solution to the problem, a dual chemical gel that can be applied to the arms and shoulders every day without causing [mood swings](#) or other side effects.

The active chemicals in the gel will include a form of progestin called Nesterone and a synthetic form of testosterone. Progestin prevents the testicles from producing testosterone, which the body needs to produce [sperm cells](#). The synthetic testosterone is needed to replace the loss of natural testosterone to restore hormonal balance—but in a way that does not result in sperm production.

The gel is applied to the upper arms and shoulders—about a half-teaspoon's worth—but not the genitals, because maximum skin coverage is required. The active ingredients make their way slowly into the bloodstream that way. The team reports that they found the method worked much better than a pill because it is not cleared from the body so quickly.

The men in the trial will be given a pump bottle of the gel that they will apply every day—the researchers note it dries in approximately one minute. Application of the gel will cause a drop in [sperm production](#) for approximately 72 hours. During the first four months of the trial, the female partners will be asked to use a female contraceptive while the sperm levels of the men are monitored. A level of 1 million sperm per milliliter of semen is considered to be an acceptable level of comfort. After that, the couples will be asked to rely solely on the gel for at least

one year.

More information: Niloufar Ilani et al. A New Combination of Testosterone and Nestorone Transdermal Gels for Male Hormonal Contraception, *The Journal of Clinical Endocrinology & Metabolism* (2012). [DOI: 10.1210/jc.2012-1384](https://doi.org/10.1210/jc.2012-1384)

Hermann M. Behre et al. Efficacy and Safety of an Injectable Combination Hormonal Contraceptive for Men, *The Journal of Clinical Endocrinology & Metabolism* (2016). [DOI: 10.1210/jc.2016-2141](https://doi.org/10.1210/jc.2016-2141)

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