

IUDs may cut risk of cervical cancer by a third, study indicates

More work is needed to understand how the contraceptive device works to protect against cancer, but researchers say discovery could be “very impactful”

Intrauterine contraceptive devices can be either copper or hormonal; further research is needed to determine which type might offer the most protection. Photograph: Alamy

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Women who use intrauterine contraceptive devices may also be cutting their chances of getting cervical cancer, according to a new study.

Research from the [Keck School of Medicine at the University of Southern California](#) analysed data from several observational studies involving more than 12,000 women worldwide. The results, published in the journal *Obstetrics & Gynecology*, showed that in women who used an intrauterine device (IUD) the incidence of cervical cancer was a third lower.

An IUD is a small, often T-shaped mechanism that is inserted into a woman’s uterus. Women can opt for copper IUDs which disrupt sperm motility or hormonal ones which inhibit thickening of the womb lining, preventing pregnancy.

“The pattern we found was stunning. It was not subtle at all,” says the study’s lead author [Victoria Cortessis](#), associate professor of clinical preventive medicine at the Keck School. “The possibility that a woman could experience some help with cancer control at the same time she is making contraception decisions could potentially be very, very impactful.”

Scientists say more work is needed to understand how IUDs work to protect against cancer. It has been speculated that the placement of the device stimulates an immune response in the cervix, giving the body an opportunity to fight an existing [human papilloma virus](#) (HPV) infection that could one day lead to cervical cancer. Another possibility is that when an IUD is removed, some cervical cells that contain HPV infection or precancerous changes may be scraped off.

Researchers were unable to determine whether the IUD type or duration of use made a difference.

“If we can demonstrate that the body mounts an immune response to having an IUD

placed, for example, then we could begin investigating whether an IUD can clear a persistent HPV infection in a clinical trial,” says study coauthor [Laila Muderspach](#), chair of obstetrics and gynaecology at the Keck School. “The results of our study are very exciting. There is tremendous potential.”

According to the World [Health](#) Organization, about 528,000 women were diagnosed with cervical cancer worldwide in 2012, and 266,000 women died from the disease. By 2035, the WHO projects that those numbers will climb to more than 756,000 and 416,000 respectively.

The paper notes that because contributing studies were completed before an [HPV vaccine](#) was available, the findings may be most relevant to populations in which women 30 years of age and older remain largely unvaccinated.

“A staggering number of women in the developing world are on the verge of entering the age range where the risk for cervical cancer is the highest – the 30s to the 60s. Even if the rate of cervical cancer remains steady, the actual number of women with cervical cancer is poised to explode,” Cortessis says. “IUDs could be a tool to combat this impending epidemic.”

Cancer Research UK’s Dr Jasmine Just said: “This research is interesting but is most relevant for countries where cervical cancer rates are particularly high and cervical screening and the HPV vaccine aren’t routinely available. There are still unanswered questions though, like what type of IUD could be most protective and how long it may need to be used for.

“For women in the UK, attending cervical screening and having the HPV vaccine are the most effective ways to reduce the risk of cervical cancer, along with not smoking.”