Information on hormonal contraceptive methods, their impact on HIV risk in HIV-negative women, and their use in women living with HIV, is constantly evolving. We encourage you to supplement this factsheet with a visit to www.avac.org/hc-hiv for the most recent information.

What are the available data about hormonal contraceptive use and risk of HIV infection?

There are mixed data. Some studies suggest that use of certain hormonal contraceptives—particularly injectable progestogen-only methods like Depo-Provera (DMPA) and NET-EN—increase women's risk of HIV infection. There is far more information on DMPA than on NET-EN at the moment. The available information is primarily observational data. This means it was derived from trials or studies designed primarily to answer other questions. This type of information is hard to analyze since there are many variables that could have influenced or biased the outcome. There has not been a randomized controlled trial (RCT) of HIV acquisition in women using hormonal contraceptives or other methods.

How are available data being used to guide contraceptive use and programs?

As of March 2017, WHO's Guidance Statement on "Hormonal contraceptive eligibility for women at high risk of HIV" states that there "continues to be evidence of a possible increased risk of acquiring HIV" among women using DMPA, NET-EN and other progestogen-only injectables. The guidance states that women should be counseled about this risk, and that no woman should be denied her method of choice, regardless of HIV risk. Even with this possibility, DMPA and other injectables remain important options, including for women living with HIV.

What exactly do available data say?

As of July 2016, a WHO-commissioned systematic review of available data has found "increased concern" regarding the impact of Depo-Provera (DMPA) on HIV-negative women's risk of HIV acquisition.

A "systematic review" involves gathering all available evidence on an issue, evaluating the quality of that evidence and summarizing it to provide a reliable overview of knowledge on a topic. Such reviews are often conducted by teams of independent researchers who agree on search terms and criteria for identifying quality evidence. This was the approach used in the recently published paper.

Two previous systematic reviews concluded that there was uncertainty about the relationship between DMPA and HIV risk. This latest review indicates concern but does not draw a firm conclusion. The key findings from this review are summarized below:

- Data on oral contraceptive pill and levonorgestrel implants do not suggest an association with HIV acquisition, though data on implants are limited. Right now, there’s no suggestion that hormonal methods other than progestogen-only injectables might impact HIV risk. But the information is limited on some methods.
- The 2016 review noted that a previous systematic review had suggested a possible association between NET-EN and increased HIV risk but that updated review did not show this association. In March 2017, WHO gave NET-EN a "MEC 2" rating indicating that there is a possible increased HIV risk among users. This is one example of how research findings and policy guidance can diverge.
- New, higher-quality observational data on DMPA, added to previous information, increase concerns about DMPA and HIV acquisition in women. The cumulative data strengthen concerns that DMPA might...
be increasing women’s HIV risk. It’s not definite, but it’s looking more likely than it did the last time the data were reviewed.

- The study states that, “Recent analyses contradict the hypothesis that differential over-reporting of condom use by HC users explains observed associations between HC use and HIV infection in some studies.” The argument that women who use DMPA also use fewer condoms than women who choose other methods has been suggested to explain previous data. It’s important to note that this review directly addresses this argument and supports research suggesting that it is not valid.

What’s the difference between hormonal contraceptive methods?

All hormonal contraceptive methods contain synthetic versions of the hormones that orchestrate women’s menstrual cycles. These synthetic hormones change the normal cycle in ways that prevent pregnancy. Hormonal contraceptives differ by type of synthetic hormone(s), level of dosage or frequency of dosage, and they include pills, injections and implants. There are also non-hormonal methods like the copper intrauterine device, diaphragms, male and female condoms and others. Right now, concern is focused only on hormonal methods because they affect the lining of the genital tract as well as the immune environment. Non-hormonal methods like the copper intrauterine device (IUD) and male and female condoms do not have the same effects on the genital tract.

Is the current discussion about all hormonal contraceptives?

When it comes to concern about impact on HIV risk, the main focus is on DMPA. Extensive data on the oral contraceptive pill offers no indication of increased HIV risk. This doesn’t mean that other hormonal methods do not affect HIV risk—there just isn’t as much information about rates of HIV in women who use them. This is because the oral pill and DMPA are among the most widely used contraceptive methods in sub-Saharan Africa. NET-EN is also classified as having a possible association with HIV risk however there are fewer data on this specific method than there are on DMPA. There are many other gaps in the data. For example, there are no data on the Sayana Press method, which uses the same hormone found in DMPA but at a lower dose.

Do all hormonal contraceptives have the same effects on the genital tract?

No. Different contraceptive methods contain different synthetic hormones and/or different doses of the same synthetic hormones.

What are the primary concerns for women living with HIV?

Drug interactions are an issue for women living with HIV. Do ART regimens undermine contraceptive efficacy— or vice versa? There is some evidence that the hormones found in some contraceptive methods interact with some antiretrovirals. For example, the efficacy of implants containing the synthetic hormone called etonogestrel can be adversely impacted by antiretroviral treatments containing efavirenz. There may be more method failure—increased pregnancy rates—in women taking etonogestrel and efavirenz. There is evidence of interactions between ARVs and some other synthetic hormones as well. This is one of many reasons why DMPA and a full range of options needs to be available for all women. At this time no evidence suggests any contraceptive method increases women’s risk of transmitting HIV.

Who is most impacted by the concern about DMPA, NET-EN and HIV risk?

All women have the right to a complete, informed choice of a range of family planning methods and HIV prevention tools. If women stopped using DMPA or NET-EN and did not switch to another method, they would be at greater risk of unplanned pregnancy, maternal morbidity and mortality. This issue is of greatest relevance in East and Southern African countries where rates of HIV are high and where injectable hormonal contraceptives like DMPA and NET-EN are widely used.

Will there ever be a clear answer about how different contraceptives affect HIV risk?

Maybe. We hope so. There is an ongoing trial known as ECHO that is currently or soon-to-be enrolling women in Kenya, South Africa, Swaziland and Zambia to learn more about how three different contraceptive methods impact risk of HIV. The three methods are DMPA, the Jadelle implant and the copper IUD. Women in the trial are randomly assigned to one of these three methods (though all participants have the right to refuse randomization). All receive a package of HIV prevention. Researchers are measuring rates of HIV in each group of women. At the conclusion of the trial, there could be clarity about how all three methods impact HIV risk—and how they compare to each other. It’s also possible that the trial won’t provide a definitive answer. Right now, enrollment is going well and the vast majority of women are agreeing to randomization.
What’s needed now?

Many of the stakeholders working on this issue agree that key actions are needed. Many of these actions are also recommended or suggested by the March 2017 WHO guidance on hormonal contraception and HIV. Specifically:

- Programs, policies and messages that reflect women’s *right to know* all available information regarding the contraceptive method(s) they are being offered. Women weigh risks and benefits all the time. If properly delivered, information about DMPA or NET EN and HIV risk should not cause women to abandon contraception or the method of choice.
- Investment in programs that provide women with choices in contraception and HIV prevention. In most of East and Southern Africa, DMPA is the only invisible, long-acting method available for women. Saying that women "prefer DMPA" when it is their only option other than a daily pill (which requires adherence, keeping pills at home, et cetera) is not accurate. The way to learn about preference is to increase the number of options that women can choose from (method mix), provider training and engagement with women as experts on their own lives.
- Ongoing engagement with women affected by these issues. Their perspectives and experiences must guide policy, programs and messaging.

Do hormonal contraceptives protect against HIV infection?

No. Hormonal contraceptives do not protect against HIV or other sexually transmitted infections (STI). Currently, there are no contraceptives, with the exception of condoms (male and female), that protect against HIV. Women using hormonal contraceptives must also use a condom or take other measures to protect themselves against HIV.

What is the history of World Health Organization guidance regarding hormonal contraceptive use and HIV risk?

Since 1991, there have been data suggesting a possible link between some hormonal contraceptives and HIV. The WHO has been tracking the issue for many years and has reflected its analysis in the grading system it uses to classify contraceptive methods. This grading system is known as the Medical Eligibility Criteria, or MEC. For a plain language explanation of the MEC see AVAC’s fact sheet, “What’s up with DMPA and family planning grades?” available at www.avac.org/dmpa-grades.

In early 2012, the World Health Organization issued a “technical statement” on hormonal contraceptives and HIV risk that stated: “The World Health Organization should continue to recommend that there are no restrictions (MEC Category 1) on the use of any hormonal contraceptive method for women living with HIV or at high risk of HIV”. However, the statement recommended a clarification that changed the grade to a MEC 1*. The clarification stated that

> Because of the inconclusive nature of the body of evidence on possible increased risk of HIV acquisition, women using progestogen-only injectable contraception should be strongly advised to also always use condoms, male or female, and other HIV preventive measures. Expansion of contraceptive method mix and further research on the relationship between hormonal contraception and HIV infection is essential.

In 2014, WHO updated this technical statement. DMPA and other similar methods remained a MEC 1* with the additional recommendation that women at risk of HIV selecting DMPA be informed of the mixed data regarding that method’s impact on risk of HIV acquisition. In March 2017, WHO updated guidance changes the MEC from a 1* to a 2.

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