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## What are contraindications to IUDs?

### EVIDENCE-BASED ANSWER

Based on limited evidence, use of intra-uterine devices (IUDs) is not contraindicated for women with HIV/AIDS (strength of recommendation [SOR]: **C**), multiple sexual partners (SOR: **C**), previous actinomyces colonization (SOR: **C**), most types of fibroids (SOR: **C**), or previous ectopic pregnancy (SOR: **C**).

The risk to IUD users of pelvic inflammatory disease (PID) is similar to women using no contraception (SOR: **B**). Nulliparous women may experience increased insertion discomfort and higher rates of expulsion (SOR: **B**). IUD use of <3.5 years is not associated with decreased fertility (SOR: **B**).

### CLINICAL COMMENTARY

#### IUDs are an excellent choice when estrogens are contraindicated or adherence is an issue

One percent of contraceptive users in the United States choose an IUD, compared with 25% in Europe. This is partly due to misinformation. An older IUD, the Dalkon shield, had a braided polyfilament tail that was associated with a higher risk of PID. People in the US still associate IUDs with this risk.

However, modern IUDs have a monofilament tail, which has not been linked to higher rates of PID. IUDs are an excellent alternative when estrogens are contraindicated, for prevention of pregnancy up to 5 days after unprotected sex, during lactation, and when adherence to a contraceptive has been difficult.

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### Evidence summary

IUDs are an effective and safe form of contraception. However, many clinicians have questions about the true contraindications to IUD use in the following situations.

**Infection.** IUDs do not increase the risk of complications among immunosuppressed HIV-positive women.<sup>1</sup> IUD insertion does not increase the risk of PID for women with gonorrhea or chlamydia infection compared with infected nonusers.<sup>2</sup> In one study, having multiple sexual partners was not associated with an increased risk of PID unless those part-

ners carry specific infections, such as gonorrhea or chlamydia.<sup>3</sup>

In the US, approximately 1 in 1000 women develop PID after IUD insertion.<sup>3</sup> Bacterial vaginosis may increase dysmenorrhea for women with IUDs (34.8 vs 13.9%,  $P=.03$ ).<sup>4</sup> In an observational study, all of 7 women with actinomyces who had IUDs removed remained negative for actinomyces after insertion of a new IUD.<sup>5</sup>

**Nulliparity and infertility.** Nulliparous women have increased rates of discomfort with IUD placement (17.8% vs 8.8%) and may have an increased risk of expulsion

CONTINUED

TABLE

## Contraindications to IUD placement

	ACOG	WHO*	MANUFACTURER
Uterine anomaly (including distension of uterine cavity)	L, C	L, C	L, C
History of PID	L, C (past 3 mo only)	L, C (current PID only for both)	L (if no subsequent pregnancy), C
Postpartum endometritis or septic abortion in the past 3 months	L, C	L, C (immediately post-septic abortion for both)	L, C
Untreated cervicitis/vaginitis, including bacterial vaginosis	L, C	L, C (not bacterial vaginosis)	L, C (including genital actinomycosis)
Multiple sexual partners		L, C (increased STI risk is a relative contraindication for both)	L, C
Immunosuppression		L, C (AIDS is a contraindication for both, unless clinically well on antiretroviral therapy)	L, C

\* Includes conditions rated as level 3 (risks usually outweigh benefits) or 4 (represents an unacceptable health risk) by WHO

L, levonorgestrel (Mirena) IUD; C, Copper T 380 (Paragard) IUD; IUD, intrauterine device; ACOG, American College of Obstetricians and Gynecologists; WHO, World Health Organization; PID, pelvic inflammatory disease; STI, sexually transmitted infection

## FAST TRACK

## Significant uterine enlargement can increase the risk of IUD expulsion

(up to 18.5% in one study, compared with less than 5.7% for all IUD users).<sup>6</sup> Short-term ( $\leq 3.5$  years) IUD use by nulliparous women was not associated with decreased fertility in a case-control study;<sup>7</sup> however, 1 cohort study demonstrated lower fertility with use of a copper IUD for longer periods: hazard ratio (HR): 0.69 (95% confidence interval [CI], 0.497–0.97) for 42–78 months; HR=0.50 (95% CI, 0.34–0.73) for >78 months.<sup>8</sup>

**Uterine anomalies.** Significant uterine enlargement can increase the risk of IUD expulsion (0 vs 4 women [13%];  $P=.04$  in 1 retrospective cohort study).<sup>9</sup> There are case reports of IUD failure and uterine perforation among women with anomalies that distort the uterine cavity.<sup>10,11</sup>

**Other.** Some contraindications to IUD use, such as concurrent pregnancy, are obvious. Other common sense con-

traindications might include insertion by patients with recent postpartum endometritis, gynecologic malignancy, genital bleeding of unknown cause, and gestational trophoblastic disease.

### Recommendations from others

Manufacturer product labeling lists a number of contraindications. The American College of Obstetrics and Gynecology and the World Health Organization have similar but generally less restrictive lists of contraindications to IUD placement (TABLE).

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