



Contraceptive Effectiveness In the United States

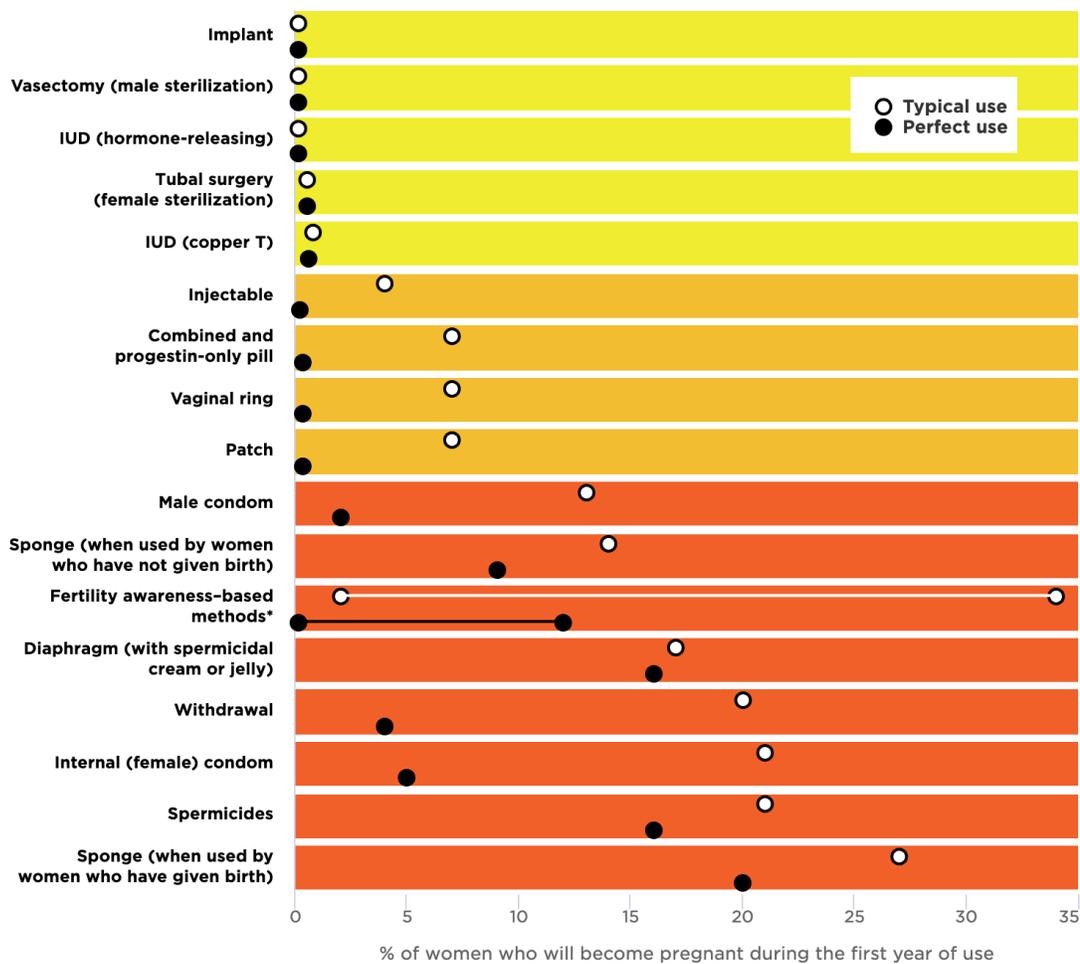
Contraceptive failure rates describe the risk of becoming pregnant among users of each contraceptive method; they are used to inform individuals' method choice. The effectiveness of contraceptive methods varies according to many different factors, including how difficult the methods are to use consistently and correctly. These failure-rate

estimates are based on the experiences of individuals who use the methods and may change over time. The estimates provided below are based on the most recent studies available.

Contraceptive failure rates are defined as the proportion of women who will become pregnant within the first 12

months after initiating method use. Typical-use failure rates express effectiveness among all women who use the method, including those who use it inconsistently and incorrectly. Perfect-use failure rates express effectiveness among only those women who use the method both consistently and correctly.

CONTRACEPTIVE FAILURE RATES



*Range of estimates comes from a small number of moderate-quality studies and may not apply to all populations; higher-quality data are needed (Peragallo Urrutia et al., 2018). Notes: Typical-use failure rates express effectiveness among all women who use the method, including those who use it inconsistently and incorrectly. Perfect-use failure rates express effectiveness among only those women who use the method both consistently and correctly. IUD=intrauterine device.



See page 2 for failure rates by IUD type and by fertility awareness-based method type.

- Male and female sterilization are considered permanent contraceptive methods. These methods have failure rates of less than 1% in both typical and perfect use. Restoring fertility after undergoing one of these procedures is possible but difficult.

- The implant and the intrauterine device are the most effective reversible contraceptive methods available. They have failure rates of less than 1% for both typical and perfect use; typical-use failure rates are low because these methods do not require user intervention. Implants and IUDs are often referred to as long-acting reversible contraceptives, or LARCs.

- Shorter-acting hormonal methods include the pill, patch, injectable and vaginal ring. The injectable has a typical-use failure rate of 4%, and a perfect-use failure rate of less than 1%. The pill, ring and patch have typical-use failure rates of 7%, and perfect-use failure rates of less than 1%.

- Male condoms and internal (female) condoms are considered "coitally dependent" methods, because they are generally employed near the time of sexual intercourse. The male condom has a typical-use failure rate of 13%, and a perfect-use failure rate of 2%. Internal condoms have a typical-use failure rate of 21% and a perfect-use failure rate of 5%. Male and internal condoms are the only contraceptive methods available that simultaneously prevent pregnancy and protect against STIs, including HIV.

- Other coitally dependent methods include the sponge, the diaphragm, withdrawal and spermicides. Typical-use failure rates for these methods range from 14% to 27%; perfect-use failure rates range from 4% to 20%.

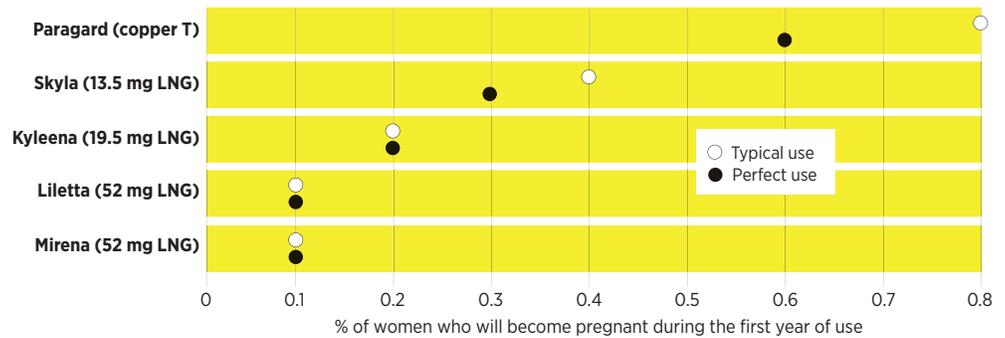
- There are many fertility awareness-based methods

(FABMs) for pregnancy prevention. For each FABM, users track changes in one or more specific biomarkers of fertility (menstrual dates, basal body temperature, cervical mucus or position, urinary hormone metabolites) to estimate the beginning and end of the "fertile window" during which pregnancy is

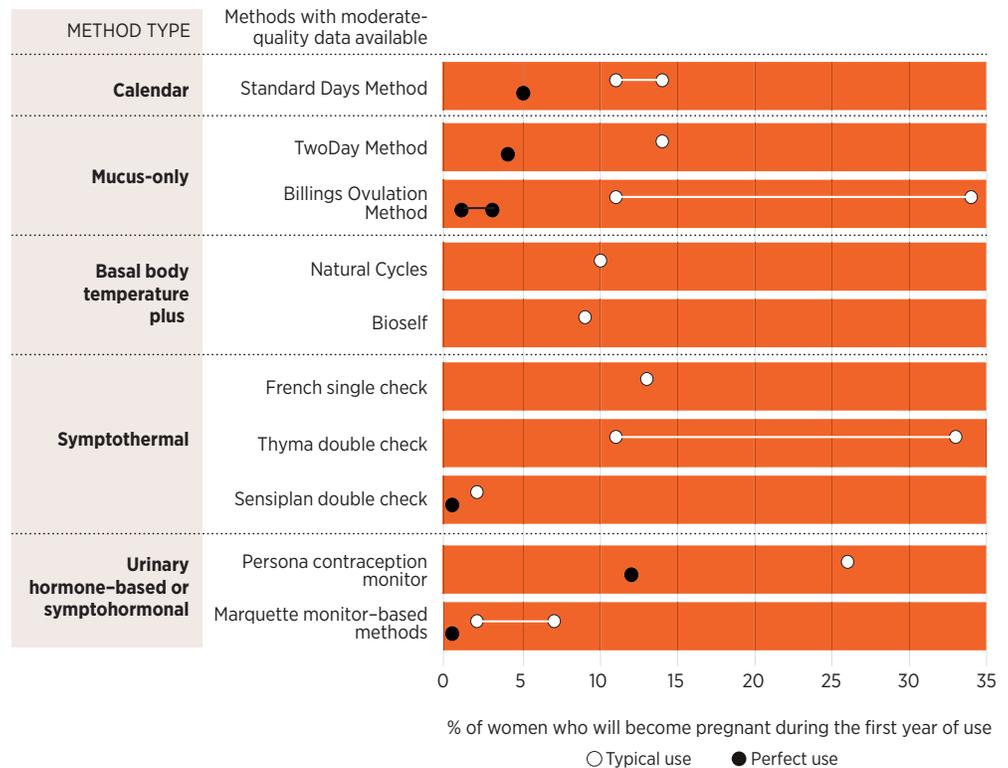
possible. Effectiveness estimates vary across different FABMs, with typical-use failure rates ranging from 2% to 34% and perfect-use failure rates ranging from less than 1% to 5%, based on moderate-quality studies.

- Studies estimating failure rates for emergency contraception differ

FAILURE RATES FOR IUDs



FAILURE RATES FOR FERTILITY AWARENESS-BASED METHODS



Notes: Perfect-use failure rates are not available for Natural Cycles, Bioself, French single check and Thyma double check methods because it was not possible to calculate accurate rates during a systematic review (Peragallo Urrutia et al., 2018). Perfect-use failure rates for Natural Cycles (Berglund Scherwitzl et al., 2017) and the DOT fertility app (Jennings et al., 2019) were published after the systematic review was conducted, and have not yet been rigorously evaluated. This table excludes information on the modified mucus method (data were available only for experienced users) and methods with no moderate-quality data available at the time of the systematic review (e.g., rhythm and Creighton).

methodologically from studies for other methods, and these rates are not included in the table and figure. However, use of emergency contraceptive pills or placement of a copper IUD after unprotected intercourse substantially reduces the risk of pregnancy.

- The lactational amenorrhea method is a highly effective, temporary contraceptive method that relies on the body's natural response to exclusive breast-feeding, but to maintain effective protection against pregnancy, another contraceptive method must be used as soon as menstruation resumes, the frequency or duration of breast-feeding is reduced, bottle feeds are introduced or the baby reaches six months of age. The six-month perfect-use failure rate for the lactational amenorrhea method is less than 2%.

SOURCES

References are available in the HTML version: <https://www.guttmacher.org/fact-sheet/contraceptive-effectiveness-united-states>



**Good reproductive
health policy starts with
credible research**

125 Maiden Lane
New York, NY 10038
212.248.1111
info@guttmacher.org

www.guttmacher.org

 This fact sheet is part of a collection on contraceptive use in the United States.
Read more: www.guttmacher.org