



FACT SHEET FOR CLINICIANS – revised 6 Jan 2016

LONG ACTING REVERSIBLE CONTRACEPTIVES (LARC)



What is Long-Acting Reversible Contraception (LARC)?

LARCs available in the U.S. include contraceptive implants and intrauterine contraceptives.

In general, LARCs are:

- extremely effective in preventing pregnancy (>99% effective)
- low maintenance for clinicians and users
- discreet
- provide continuous contraception for 3-12 years
- safe for most women, including teens and HIV positive women
- safe for women who have had a cesarean section, STIs, PID, ectopic pregnancy and for non-monogamous women
- well tolerated by adolescents and most nulliparas
- enjoy very high user satisfaction
- enjoy very high user continuation rates
- cost-saving when compared to oral contraceptive pills
- enjoy easy placement and removal by an insertion-certified clinician
- enable rapid return to fertility after removal

Copper T 380A (TCu380A) (Paragard)

First year pregnancy probability is 0.5 - 0.8%. First year user continuation rate is 85-90%. Use is associated with a reduction in risk for endometrial cancer. Effective up to 10 years after placement. Can be placed at any point in the menstrual cycle and immediately after delivery of the placenta. Chlamydia testing can be performed at the time of placement. Common but benign side effects include menstrual disturbances, cramping and pain, expulsion of the device, and Actinomyces-like organisms on Pap smear. Spontaneous expulsion rate in the first year is 2-10%, (increased chance with nulliparity, age under 20, menorrhagia, or severe dysmenorrhea). Rare but serious health risks include infection, pregnancy complications, and uterine perforation (for skilled providers, rate is 1 per 1000 or less; perforation risk may be elevated during lactation). Absolute contraindications include current pregnancy, active pelvic infection, unexplained vaginal bleeding or severe uterine distortion. Use is NOT contraindicated by prior STI, PID, ectopic pregnancy or current non-monogamy. NO evidence suggests that the IUD should be removed for treatment of Chlamydia or gonorrhea. Most women, including nulliparas, experience rapid return to fertility after IUD removal. Litigation related to IUDs has virtually disappeared.

Levonorgestrel (LNg) IUC (Mirena)

First year pregnancy probability is 0.1 – 0.2%. First year user continuation rate is 85-90%. Use is associated with a reduction in risk for endometrial cancer. Effective up to 5 years after placement. Can be placed at any point in the menstrual cycle but should be delayed until 6-8 weeks post-partum. Chlamydia testing can be performed at the time of placement. Common but benign side effects include menstrual disturbances, cramping and pain, and expulsion of the device (2-10% in the first year of use). Rare but serious health risks and absolute contraindications are the same as for Paragard. Unlike hormonal contraception containing estrogen, Mirena is NOT associated with an increased risk of venous thrombosis. Use is NOT contraindicated by prior STI, PID, ectopic pregnancy or current non-monogamy. NO evidence suggests that the IUD should be removed for treatment of Chlamydia or gonorrhea. Multiple noncontraceptive benefits. Most women, including nulliparas, experience rapid return to fertility after LNg IUC removal. Litigation related to IUDs has virtually disappeared.

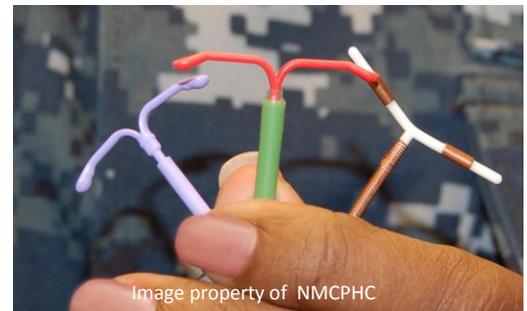


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Levonorgestrel (LNg) IUC (SKYLA)

FDA approved 9 January 2013. Effective up to 3 years after placement. Skyla is a progestin-containing intrauterine system (IUS) indicated for prevention of pregnancy for up to 3 years. To be inserted by a trained healthcare provider. Patient should be re-examined and evaluated 4 to 6 weeks after insertion; then, yearly or more often if indicated. PID was observed in 0.4% of women overall and occurred more frequently within the first year and most often within the first month after insertion. In clinical trials, a total of 77 subjects out of 1,672 (4.6%) discontinued due to uterine bleeding complaints. The incidence of perforation during clinical trials was < 0.1%. A 3-year expulsion rate of 3.2% was reported. Skyla is MRI conditional and can be safely scanned only under specific conditions.



Implanon / Nexplanon Hormonal Implant

The implant is a single rod containing etonogestrel, placed under the skin of the upper arm. Pregnancy probability is estimated to be 0.5%. First year user continuation rate is 65-91%. Effective up to 3 years after placement. Ideal timing of placement depends on previous contraception used by the patient, but in general should be timed to minimize the possibility she is pregnant or might become pregnant between insertion and initiation of the contraceptive effects of the implant. Disadvantages include uterine bleeding abnormalities, rare insertion and removal complications, possible weight gain, ovarian cysts in a small proportion of users, and possible decrease in bone density. Unlike hormonal contraception containing estrogen, Implanon/Nexplanon are NOT associated with thrombophlebitis, pulmonary embolism, or cardiovascular effects. Users may experience multiple noncontraceptive benefits. Most women experience rapid return to fertility after implant removal (most ovulate within 6 weeks). Nexplanon, approved by the FDA in 2011, is the new bioequivalent to Implanon but contains barium to allow localization on X-ray or CT scan and has a different insertion mechanism from Implanon, designed to reduce implantation errors. The implant must be removed after 3 years.



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What are some Myths and Truths about Intrauterine Contraceptives (IUCs)?

Myth	Fact*
IUCs should not be used in women who have not had a child	IUCs are safe for nulliparous women and most have a rapid return of fertility after removal
IUCs expose the provider to medicolegal risk	Litigation related to IUCs has virtually disappeared
IUCs increase the risk of PID	The IUC itself appears to have no effect on risk. Rather, placement carries a small, transient risk of post-procedure infection.
IUCs increase the risk of ectopic pregnancy	IUCs significantly reduce the risk of ectopic pregnancy compared to not using contraception.
IUCs increase the risk of Sexually Transmitted Infections (STIs)	IUC users are not at increased risk for STIs. Women at risk should be advised to use condoms but are generally still good candidates for IUCs
IUCs are too expensive	By 5 years of use, IUCs and Implanon are the two most cost-effective methods of reversible contraception.

*Hatcher, et al (2011). Contraceptive Technology. 20th ed, pages 152,162

To what extent do unplanned pregnancies occur among women in the Navy?

Like their young American civilian counterparts, unplanned pregnancy among young Navy and Marine Corps enlisted women is not uncommon. Among Navy enlisted women, 56% say her last pregnancy while in the Navy was unplanned (Rosenfeld P, Uriell Z., 2015). Among enlisted women aged 21-25, about 1 in 6 sailors and marines say she had an unplanned pregnancy in the past 12 months. (DoD-HRB, 2011). An analysis of 2008 data suggests unplanned pregnancy rates among military (78/1000) are significantly higher than their civilian counterparts (52/1000) (Grindlay and Grossman, 2013).

What forms of contraception do Navy women typically use? Navy women who said they were using birth control when they became pregnant, most were using the birth control pill (56% among female enlisted women). OCPs are an exceedingly failure-prone method in the Navy, far more so than LARCs. In 2014, 37% of surveyed active duty Navy women used LARC. Patient satisfaction with LARC is very high in the U.S. and in the DoN. Among 1,721 female Navy and Marine Corps recruits who started LARCs during boot camp during FY2010 and FY2011, most were still using their IUD (81%) or Implanon (91%) 12 months post-insertion.

Where can I read more? Please visit the NMCPHC SHARP- "LARC" webpage at:

<http://www.med.navy.mil/sites/nmcphc/health-promotion/reproductive-sexual-health/Pages/larc.aspx>

Sources:

- 2011 Department of Defense (DoD) Survey of Health Related Behaviors Among Military Personnel.
- CDC (2010). MMWR June 18, 2010 / 59(RR04);1-6, United States Medical Eligibility Criteria (USMEC) for Contraceptive Use
- FDA (2013). SKYLA approved labeling. http://www.accessdata.fda.gov/drugsatfda_docs/label/2013/203159s000lbl.pdf
- Grindlay and Grossman (2013). Unintentional pregnancy among active duty women in US military. Obst & Gyn. 121;2(1); 241-6
- Hatcher et al (2011) Contraceptive Technology, 20th ed
- Rosenfeld P., Uriell, Z. (2015) Results of the 2014 Pregnancy and Parenthood Survey Navy Personnel Research, Studies, & Technology, Millington TN, (unpublished briefing, 27 Sept 2011)
- Navy and Marine Corps Public Health Center (2012). Analysis of LARC Implantation and Extraction Among Female Sailors and Recruits. Sep 2012 (unpublished)