

## **TravelByte CE Blog #17042634**

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### **Today's LARC: Not Your Mother's LARC**

#### **More Effective Contraceptive Options in the Zika Era**

CDC currently estimates that 41 states are in the range of *Aedes aegypti* or *Aedes albopictus* mosquitoes that can transmit the Zika virus. Infected pregnant women can pass this along to their developing fetuses. One important aspect of preventing complications of the Zika virus such as microcephaly and other severe fetal brain defects is encouraging the use of effective methods of contraception among teens and women who do not want to become pregnant. [According to the most recent data, approximately 45% of pregnancies in the US are unintended.](#)

This is simply staggering in the era of highly effective, **Long-Acting Reversible Contraception (LARC)**. LARC includes implants and intrauterine devices. [Studies](#) have shown these to be **20 times** more effective at preventing pregnancy than oral contraceptive pills, transdermal patches or rings. Unfortunately, according to the [CDC](#), the majority of women and teens at risk for unintended pregnancy in potential Zika areas are using less effective methods or no method at all.

LARC methods are considered extremely safe, and most women tolerate them quite well. Until recently, they were costly for many women, but because of [The Affordable Care Act](#), signed by President Obama in 2010, most insurance plans cover them. Both the [American College of Obstetricians and Gynecologists](#) and the [American Academy of Pediatrics](#) have strongly encouraged the use of LARC, even for teens and for women who have never given birth. In fact, for AAP, LARC is their first-line recommendation for teens not choosing to remain abstinent.

Sadly, clinicians and patients have been slow to embrace these methods in the U.S. Many formed negative opinions about IUDs after an early version known as the [Dalkon Shield](#) resulted in many serious infections. It was released in 1971 and taken off the market in 1974. Experts speculate that its unique multifilament tail string probably facilitated ascent of bacteria into the uterus, causing PID. New IUDs have a completely different design that uses different materials.

While many travel nurses do not provide contraceptive services per se, the following information and resources will enable you to properly address this important issue with patients and provide appropriate referrals as indicated.

A good place to start is the recent MMWR publication, [Contraceptive Use Among Nonpregnant and Postpartum Women at Risk for Unintended Pregnancy, and Female High School Students, in the Context of Zika Preparedness — United States, 2011–2013 and 2015](#) which provides updated surveillance data on current contraception use in the U.S.

LARC Methods available in the U.S. include two types:

I. IUDs (4 varieties in US)

Copper IUD (Cu-IUD) *ParaGard® T 380A Intrauterine Copper Contraceptive*. This is a hormone free method approved for 10 years of use. The copper interferes with sperm movement, fertilization and possibly implantation. Women may experience increased cramping or bleeding with this method, but these often diminish with time.

Levonorgestrel-releasing IUDs (LNG-IUD) *Mirena®* (52 mg levonorgestrel, approved for 5 years of use), *Skyla®* (13,5 mg levonorgestrel and approved for three years of use) and *Liletta®* (52 mg levonorgestrel – *currently* approved for three years of use). All of these thicken cervical mucus and block sperm. These tend to decrease cramping and bleeding with many women becoming amenorrheic over time. This is can be viewed as a feature by some travelers, especially students, long-stay travelers and employees.

II. Implants (1 in U.S.)

Etonogestrel implant, *Nexplanon®* (68 mg of etonogestrel, approved for three years). This device, inserted in the upper arm, prevents ovulation and thickens cervical mucus. It is associated with *unpredictable bleeding* but the pattern varies.

**\*Keep in mind that none of these methods prevent sexually transmitted infections (including Zika!), so don't forget to encourage condom use.**

The CDC also has some great free tools you can use to counsel patients:

1. [Effectiveness of Family Planning Methods](#) I strongly recommend using a chart like this as it really clarifies the idea of effectiveness for many patients. Also check out [Bedsider.org](#) for additional resources and infographics.
2. [When to Start Contraceptive Methods and Routine Follow-up](#)

Anyone providing contraceptive services should familiarize themselves with the current CDC guidelines. These recently updated recommendations are summarized in the following two documents:

1. [U.S. Selected Practice Recommendations for Contraceptive Use, 2016 \(MMWR\)](#)
2. [United States Medical Eligibility Criteria \(US MEC\) for Contraceptive Use, 2016 \(MMWR\)](#)

Unplanned pregnancies and severe birth defects don't help anyone. Nurses have shown over and over again they play a crucial role in preventing both. Travel health nurses can help prevent the tragedy of Zika infections in women who travel internationally.

#### References:

1. Boulet SL, D'Angelo DV, Morrow B, et al. Contraceptive Use Among Nonpregnant and Postpartum Women at Risk for Unintended Pregnancy, and Female High School Students, in the Context of Zika Preparedness — United States, 2011–2013 and 2015. *MMWR Morb Mortal Wkly Rep* 2016;65:780–787. DOI: <http://dx.doi.org/10.15585/mmwr.mm6530e2>
2. Committee Opinion No. 642: Increasing Access to Contraceptive Implants and Intrauterine Devices to Reduce Unintended Pregnancy. Committee on Gynecologic Practice Long-Acting Reversible Contraception Working Group. *Obstet Gynecol.* 2015 Oct; 126(4):e44-8.
3. Lawrence B. Finer, Ph.D., and Mia R. Zolna, M.P.H., Declines in Unintended Pregnancy in the United States, 2008–2011, *N Engl J Med* 2016; 374:843-852 March 3, 2016 DOI: 10.1056/NEJMsa1506575
4. Winner B, Peipert JF, Zhao Q, Buckel C, Madden T, Allsworth JE, Secura GM., Effectiveness of long-acting reversible contraception. *N Engl J Med.* 2012 May 24;366(21):1998-2007.
5. Curtis KM, Jatlaoui TC, Tepper NK, et al. U.S. Selected Practice Recommendations for Contraceptive Use, 2016. *MMWR Recomm Rep* 2016; 65(No. RR-4):1–66. DOI: <http://dx.doi.org/10.15585/mmwr.rr6504a1>
6. Curtis KM, Tepper NK, Jatlaoui TC, et al. U.S. Medical Eligibility Criteria for Contraceptive Use, 2016. *MMWR Recomm Rep* 2016; 65(No. RR-3):1–104. DOI: <http://dx.doi.org/10.15585/mmwr.rr6503a1>

Additional Resources:

1. CDC Zika Updates <https://www.cdc.gov/zika/>
2. ACOG Zika Virus Resource Summary for Ob-Gyns and Health Care Providers <http://www.acog.org/About-ACOG/ACOG-Departments/Zika-Virus>

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