



# Issue Brief

## Long Acting Reversible Contraception (LARC) Use Among Rhode Island Post Partum Mothers, 2012-2015

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### Definition and Significance

Contraception, also referred to as birth control, helps individuals plan or prevent pregnancy. Patients who use contraception should have access to a broad range of contraceptive methods so they can select a method that is best suited to their lifestyle and reproductive health priorities. Long Acting Reversible Contraceptives (LARCs), including intrauterine devices (IUDs) and subdermal implants, provide highly effective contraception (less than 1% failure rate) without requiring regular user action. IUDs are small, T-shaped contraceptive devices (hormonal or non-hormonal) that are placed into the uterus to prevent pregnancy and can sometimes be used as emergency contraception and as a treatment to mitigate menopause sequelae. A subdermal implant is a plastic, thin, matchstick-sized, hormone-regulating rod inserted under the skin of the upper arm.<sup>1</sup> LARCs can remain a highly effective contraceptive method in a person's body for three to 10 years, depending on the method. However, these long-acting forms of contraception are reversible and can be removed at any time by a trained health professional. It is important to note that neither an IUD or an implant can protect against sexually transmitted infections.<sup>2</sup>

Comprehensive contraceptive counseling should include LARC methods, which can lead to more effective interventions that might increase the adoption of, and access to, the most effective contraceptive methods while also possibly decreasing rates of unintended pregnancies (including adverse pregnancy outcomes). It gives women more autonomy over their sexual and reproductive health. The Pregnancy Risk Assessment Monitoring System (PRAMS) asks mothers about their post-partum contraception use.

### Recommendations for Healthcare Providers

Provide comprehensive reproductive health counseling, including contraceptive counseling, reproductive life planning, and preconception care, to all women and men of reproductive age.

- Open dialogue with *One Key Question* (Do you want to become pregnant in the next year?) to clarify pregnancy intention and initiate follow-up with contraceptive counseling, reproductive life planning, and preconception care.
- Integrate reproductive health counseling and preconception care into comprehensive service delivery, including preventive and related acute care visits.
- Train all health team members in reproductive health counseling using a trauma-informed approach.
- Engage in professional development opportunities to stay informed about updates to contraceptive technologies and medical eligibility criteria.

Offer a broad range of FDA-approved contraceptive methods; communicate information about effectiveness, hormonal impact, user compliance, potential side effects, procedural descriptions; and other relevant decision factors.

- Ensure that the unique priorities, needs, and preferences of individual women are paramount.
- Improve LARC method satisfaction and continuation through comprehensive patient counseling, including benefits and potential side effects of LARCs.
- Provide handouts about contraceptive options.
- Maintain a referral list for contraceptive methods and reproductive health services that are not provided on site.

Provide contraceptive counseling during the prenatal period to identify patient's postpartum contraceptive goals.

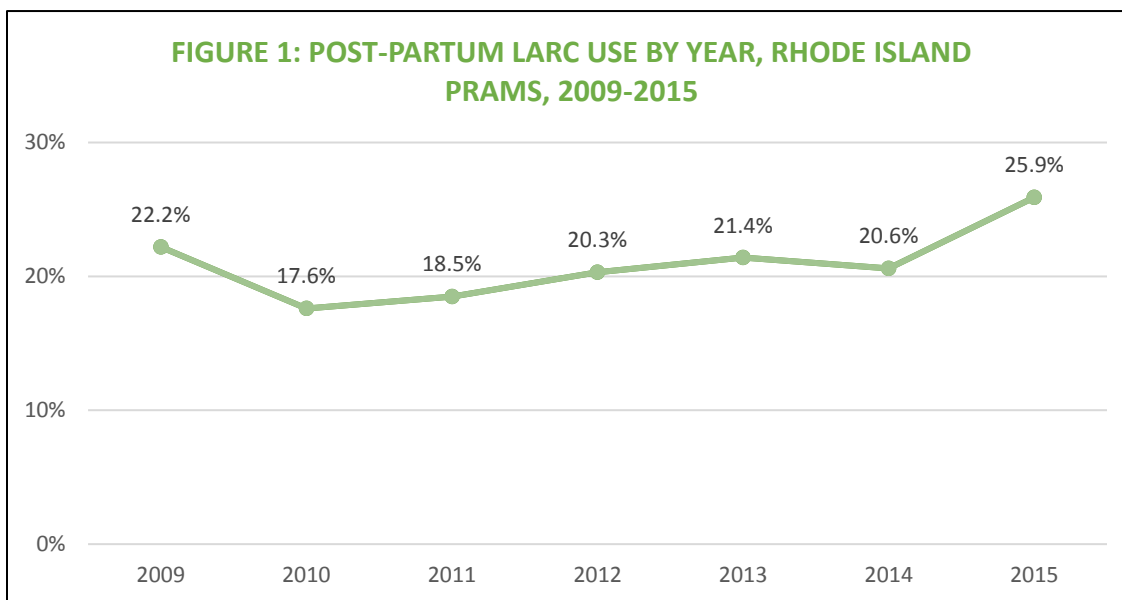
- Offer contraceptive implant and IUD immediately postpartum (insertion before hospital discharge after a hospital stay for birth) and routinely as a safe and effective option of postpartum contraception.

## Rhode Island PRAMS

This brief uses state-specific PRAMS data to examine post-partum LARC use among Rhode Island mothers. The goal of the Pregnancy Risk Assessment Monitoring System (PRAMS) survey is to improve the health of mothers and infants by providing accurate data to a wide audience. The Rhode Island PRAMS program is conducted through a collaboration between the Rhode Island Department of Health and the Centers for Disease Control and Prevention (CDC), and surveys about 1,900 recent mothers per year. Responses are weighted to be representative of women who delivered a live infant in Rhode Island from 2012-2015. More information is available on the PRAMS website.<sup>3,4</sup>

## Methods

Post-partum LARC use among Rhode Island mothers was evaluated by examining responses to the question *What kind of birth control are you or your husband or partner using now to keep from getting pregnant?* In addition to other contraceptive measure options, respondents could choose whether or not to check the box signaling use of IUD (including Mirena or ParaGaurd) and/or contraceptive implant (Implanon).<sup>4</sup> Those who reported that they are using an IUD or an implant were categorized as using a LARC.



### Prevalence and Trends, 2009-2015

The proportion of Rhode Island mothers who reported using a LARC post-partum ranged from 17.6% to 25.9% during a seven-year period (linear trend:  $p < 0.001$ ).

## Demographic Characteristics, 2012-2015

The overall prevalence of LARC use among post-partum Rhode Island mothers was 22.0% during this time period. Demographics significantly ( $p$ -value less than 0.05) associated with post-partum LARC use included maternal age, maternal race, household income, maternal marital status, maternal education, and insurance for prenatal care.

Mothers who were younger than age 20 (41.8%), other than White or Black (28.0%), reported a household income of less than \$15,000 (29.4%) or \$15,000 - \$26,000 (29.4%), were unmarried (27.9%), did not complete high school (30.3%), or had no insurance (34.3%), had a higher prevalence of post-partum LARC use compared to their counterparts (Figure 2).

**FIGURE 2: POST-PARTUM LARC USE BY DEMOGRAPHIC CHARACTERISTICS, RHODE ISLAND, 2012-2015**

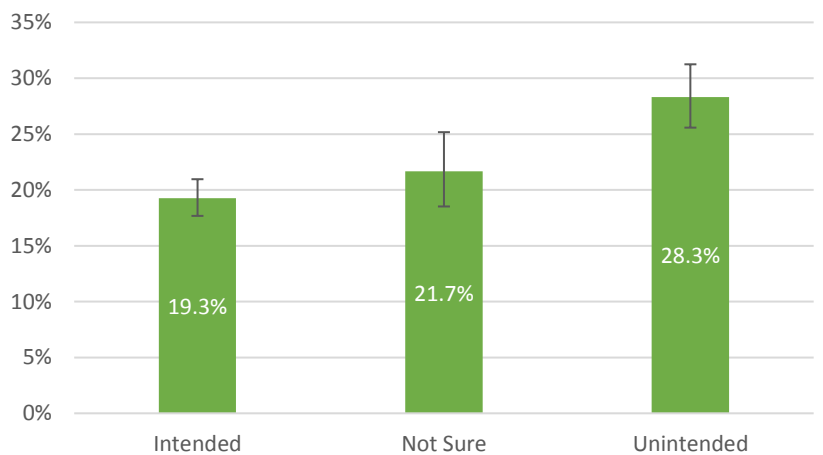


**Is pregnancy intention a good predictor of post-partum LARC use?**

Yes, without adjusting for potential confounders (race, age, education), pregnancy intention is statistically significantly associated with LARC use postpartum (p-value<0.05).

With a likelihood of 28.3% (95% CI 25.6-31.2), Rhode Island mothers who experience an unintended pregnancy are the most likely to use a LARC post-partum compared to *intended* and *not sure* pregnancies.

**FIGURE 3: POST-PARTUM LARC USE BY PREGNANCY INTENTION, PRAMS RHODE ISLAND, 2012-2015**



**Limitations**

The questionnaire is reliant upon self-reporting and is not verified through clinical measurement. Desirability and recall bias, providing socially desirable responses, and inability to accurately remember less salient health information, is a limitation. As the questionnaire is mailed and includes follow-up phone calls, it is likely that there are vulnerable populations that may not have been reached. Additionally, and more specific to these analyses, a limitation is that the survey does not ask about potential ideological confounders such as political or religious affiliations. Information concerning previous exposures and/or engagements with sexual and reproductive health education and contraceptive-use history were also not collected.

## Discussion and Conclusion

These data are informative to the Rhode Island Department of Health alongside local community health partners, as their collaborative efforts continue to address public health concerns throughout the state. By examining LARC use among post-partum mothers in Rhode Island, we are able to learn more about those who are and are not using these types of contraceptive methods. While certain groups seem to be using LARCs at higher rates than others (those younger than age 20), overall, 22.0% of mothers were using an IUD or implant post-partum during 2012-2015. This knowledge is useful when working to identify potential gaps in accessibility as well as in the communication of post-partum contraceptive method options. Like any other contraceptive method, IUDs or implants may not be the most appropriate or even preferred option for some Rhode Island mothers. Nonetheless, in order to safeguard individual sexual and reproductive autonomies, it is critical that providers and other related health professionals engage in continuous, comprehensive conversations with patients about their pregnancy-related priorities and the contraceptive methods that are available to them.

## Acknowledgements

- Annie Gjelsvik, PhD; School of Public Health, Brown University
- Hanna Kim, PhD; Rhode Island Department of Health
- Karine Monteiro, MPH; Rhode Island Department of Health
- Sounivone Phanthavong, MPH; Rhode Island Department of Health

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