

## May 2017

### What is PRAMS?

PRAMS (Pregnancy Risk Assessment Monitoring System) is a population-based risk factor surveillance system jointly sponsored by the Wyoming Department of Health and the Centers for Disease Control and Prevention (CDC). The purpose of PRAMS is to find out why some babies are both healthy and others are not. To do this, PRAMS asks a sample of Wyoming women who had a live birth infant in the past two to six months, questions about their experience and behaviors before, during, and shortly after pregnancy.

PRAMS Mission: To promote the collection, analysis, and dissemination of population-based data of high scientific quality and to support the use of data to develop policies and programs in order to decrease maternal and infant morbidity and mortality.

Visit our WY PRAMS website for more information:

https://health.wyo.gov/publichealth/chronic-disease-and-maternal-child-health-epidemiology-unit/mch-epi/pregnancy-risk-assessment-monitoring-system-prams/data/

### **Wyoming PRAMS: Postpartum Contraception**

In 2015, the Wyoming Department of Health, Maternal and Child Health (MCH) Unit selected "improve access to and use of effective family planning" as a 2016-2020 MCH priority. In late 2016, MCH Epidemiology created a fact sheet with a focus on long acting reversible contraception (LARC) use in Wyoming. This issue of the PRAMS listserv focuses on levels of effectiveness of birth control used during the postpartum period by Wyoming women.

As noted by the Centers for Disease Control and Prevention's (CDC) Division of Reproductive Health, "the best way to reduce the risk of unintended pregnancy among women who are sexually active is to use effective birth control correctly and consistently".<sup>2</sup>

Eighty-two percent (82.3%) of Wyoming women (2012-2014 PRAMS) reported using birth control during the postpartum period, defined as the period from birth to approximately six months after delivery. When examining the use of postpartum birth control by demographic factors, a significant difference was observed only by race/ethnicity.

White, non-Hispanic women were more likely to report using birth control (83.6%) than were Native American women (77.1%) and Hispanic women (80%). There were no differences in postpartum birth control use by maternal age or level of maternal education.

### **Categories of Effectiveness of Family Planning Methods**

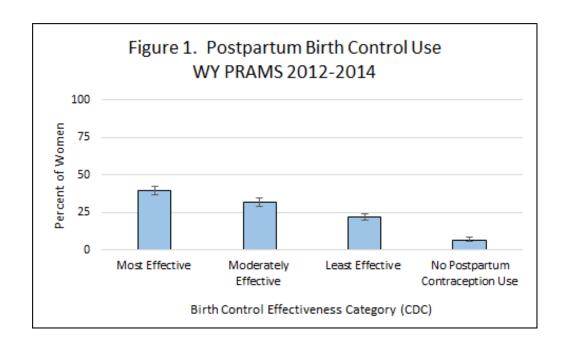
In 2011, the CDC developed a resource for providers<sup>3</sup>, adapted from the World Health Organization that described categories of effectiveness<sup>4</sup> of family planning methods. The four categories of effectiveness are provided in Table 1, below.

Table 1. Categories of Effectiveness of Family Planning Methods (CDC) <sup>3</sup>	
Most Effective Non-Reversible	Tubal Ligation, Vasectomy
Most Effective Reversible <sup>5</sup>	Implant, Intrauterine Device (IUD).
Moderately Effective	Injectable, Birth Control Pill, Patch, Ring, Diaphragm.
Least Effective	Male/Female Condom, Sponge, Spermicide, Withdrawal, Fertility Awareness-Based Methods.

To create the categories of effectiveness used in Figures 1 through 3, two categories were combined into one (most effective non-reversible and most effective reversible), resulting in the "Most Effective" methods category.

### Postpartum Birth Control by Effectiveness Category, Wyoming (2012-2014)

Figure 1 shows birth control use in the postpartum period by level of effectiveness, as reported by women who were sexually active, not currently pregnant or seeking to become pregnant, and thus at risk of unintended pregnancy. Because some women reported birth control methods spanning more than one category (e.g. IUD and condoms), we selected the most effective method of birth control reported as the primary method. Among postpartum women, 39.6% used the most effective methods, 31.7% moderately effective methods, and 21.9% least effective methods. Additionally, 6.8% of women reported no postpartum contraception use.



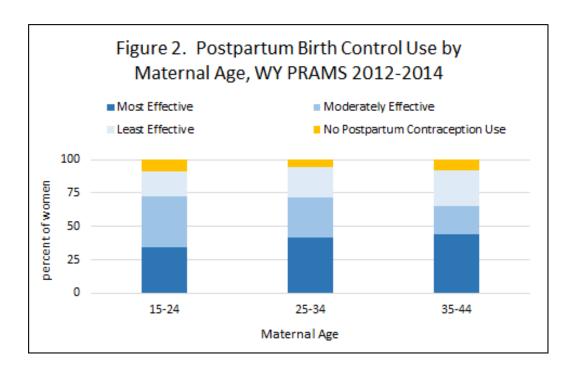
# Effectiveness of Birth Control Methods in Wyoming by Demographic Characteristics (2012-2014)

Differences in level of effectiveness of birth control used were observed by maternal age and maternal education. No differences were observed by race or ethnicity.

### Maternal Age

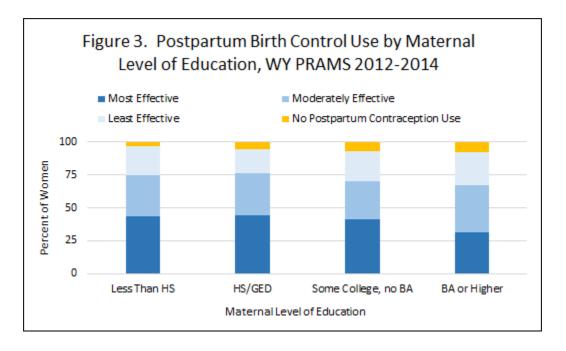
Significant differences in effectiveness of birth control used in the postpartum period were observed by maternal age (Figure 2). While younger women (aged 15-24) were the least likely to report the use of the most effective methods (34.7%), more women in this age group reported LARC use (26.8%) than women 25-34 (20.1%) or women 35-44 (10.5%). Younger women also reported the greatest use of moderately effective methods (37.5%) as compared to the other two age groups.

Older women (35-44 years) were the most likely to report the use of most effective methods (44.5%) in part because one third reported the use of non-reversible methods (tubal ligation and vasectomy). They were also the most likely to use least effective methods (26.4%) when compared to the other two age groups.



### Maternal Education

Significant differences in effectiveness of birth control used in the postpartum period were also observed by maternal education (Figure 3). The highest use of the most effective methods were reported by two groups; women with less than a high school education (43.8%), and those with a high school education or GED (44.3%). Women who reported a college degree were more likely to use either moderately effective methods (35.8%) or the least effective methods (25.0%) as compared to women with lower levels of education.



More information about national and state-level data for postpartum contraception use among youth may be found in is available in the Morbidity and Mortality Weekly Report<sup>6</sup>.

Additional information may be found about current contraception use by selected maternal characteristics (including age and education level) in Daniels et al., (2015).

In June, the PRAMS listserv topic will examine trend data for birth control use by level of effectiveness.

- (1). Maternal and Child Health Priority Overview: Long Acting Reversible Contraception (LARC). Accessed 05/11/2017 at https://health.wyo.gov/wp-content/uploads/2016/04/LARCS-2016-FINAL-3.pdf
- (2). Centers for Disease Control and Prevention (CDC). Reproductive Health Contraception: How effective are birth control methods? Access 05/11/2017 at https://www.cdc.gov/reproductivehealth/contraception/
- (3). CDC. Effectiveness of Family Planning Methods. Accessed 05/11/2017 at <a href="https://www.cdc.gov/reproductivehealth/contraception/">https://www.cdc.gov/reproductivehealth/contraception/</a>
- (4). Effectiveness of birth control methods are measured in two ways: perfect use and typical use. *Perfect use* describes the risk of pregnancy when the method is used correctly and consistently as directed at all times. *Typical use* describes a methods level of effectiveness during actual use, which includes inconsistent and incorrect use. Please see more information at the CDC's Division of Reproductive Health: <a href="https://www.cdc.gov/reproductivehealth/contraception/">https://www.cdc.gov/reproductivehealth/contraception/</a>
- (5). Highly Effective Reversible methods are also known as LARC (Long Acting Reversible Contraception).
- (6). Dee D.L., Pazol K, Cox S, Smith, R.A., Bower, K, Kapaya M., ... Warner, L. (2017). Trends in Repeat Births and Use of Postpartum Contraception Among Teens United States, 2004-2015. Accessed 05/19/2017 at <a href="https://www.cdc.gov/mmwr/volumes/66/wr/mm6616a3.htm">https://www.cdc.gov/mmwr/volumes/66/wr/mm6616a3.htm</a>
- (7). Daniels K., Daugherty J., Jones J., and Mosher W. (2015). Current Contraceptive Use and Variation by Selected Characteristics Among Women Aged 15-44: United States, 2011-2013. National Health Statistics Reports (86). Access 05/30/2017 at <a href="https://www.cdc.gov/nchs/data/nhsr/nhsr086.pdf">https://www.cdc.gov/nchs/data/nhsr/nhsr086.pdf</a>

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### Our goals with WY PRAMS continue to be to:

- 1. To work with YOU to disseminate data from WY PRAMS
- 2. To inform WY stakeholders, programs, and policies.
- 3. To conduct and present analyses of WY PRAMS data pertaining to priorities of stakeholders and programs across the state.

If you would like more information please contact the WY PRAMS Project (wdh-wyprams@wyo.gov)

To Subscribe to the WY PRAMS Listserv: Please encourage anyone you feel would be interested in participating in PRAMS activities to subscribe to the Wyoming PRAMS Listserv. To subscribe, send an email to sympa@lists.health.wyo.gov. In the subject line of the email please type "subscribe wyoprams", and in the body of the email, please provide your first and last name.

To unsubscribe send an email to sympa@lists.health.wyo.gov. In the subject line of the email please type "unsubscribe wyoprams", and in the body of the email please provide your first name and last name.