METHODOLOGY

World Contraceptive Use 2017 provides a comprehensive and up-to-date data set of family planning indicators for women of reproductive age (from 15 to 49 years) who were married or in a union at the time the information was collected. The data pertain to 195 countries or areas of the world for the period from 1950 to 2016 and were updated as of March 2017. This data set supersedes previously published versions.

The data set contains time-specific estimates calculated from nationally-representative household surveys for the following indicators: contraceptive prevalence (total and by method), the unmet need for family planning (total, for spacing and for limiting) and the demand for family planning that was satisfied by using modern methods of contraception. World Contraceptive Use 2017 contains 1,150 observations of contraceptive prevalence for 195 countries or areas, 472 observations of the unmet need for family planning for 142 countries or areas, and 471 observations of the demand satisfied by modern methods for 142 countries or areas.

These indicators — contraceptive prevalence, the unmet need for family planning and the demand satisfied by modern methods — are useful for tracking progress in achieving universal access to sexual and reproductive health-care services, including family planning, as part of target 3.7 of the Sustainable Development Goals.

DEFINITIONS

Contraceptive prevalence

Contraceptive prevalence is the proportion of women who are currently using, or whose sexual partner is currently using, at least one method of contraception, regardless of the method being used. It is typically reported as a percentage with reference to married or in-union women of reproductive age (usually, ages 15-49).

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\text{Contraceptive prevalence} = \frac{\text{Number of women of reproductive age who are married or in a union and who are currently using a method of contraception}}{\text{Number of women of reproductive age who are married or in a union}}
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For analytical purposes, contraceptive methods are often classified as either modern or traditional. Modern methods of contraception include female and male sterilization, the intra-uterine device (IUD), the implant, injectables, oral contraceptive pills, male and female condoms, vaginal barrier methods (including the diaphragm, cervical cap and spermicidal foam, jelly, cream and sponge), the lactational...
amenorrhea method (LAM), emergency contraception and other modern methods not reported separately (e.g., the contraceptive patch or vaginal ring). Traditional methods of contraception include rhythm (e.g., fertility awareness-based methods, periodic abstinence), withdrawal and other traditional methods not reported separately.

This data set presents levels of contraceptive prevalence for individual methods, for any modern method, for any traditional method, and for any method (modern or traditional). In some cases, data for specific methods are not available, and the corresponding missing values, designated in the database by two dots (…), are treated as zeros. In these cases, the level of contraceptive prevalence for any method should be interpreted as a lower-bound value.

**Unmet need for family planning**

The unmet need for family planning shows the gap between women’s reproductive intentions and their contraceptive behaviour. It is defined as the proportion of women who want to stop or delay childbearing but are not using any method of contraception. It is typically reported as a percentage with reference to married or in-union women of reproductive age (usually, ages 15-49).

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\text{Unmet need for family planning} = \frac{\text{Number of women of reproductive age who are married or in a union and who have an unmet need for family planning}}{\text{Total number of women of reproductive age who are married or in a union}}
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The standard definition of unmet need for family planning includes in the numerator women who are fecund and sexually active, and who report not wanting any (more) children, or who report wanting to delay the birth of their next child for at least two years or are undecided about the timing of the next birth, but who are not using any method of contraception. The numerator also includes:

- Pregnant women (married or in a union) whose pregnancies were unwanted or mistimed at the time of conception; and
- Postpartum amenorrheic women (married or in a union) who are not using family planning and whose last birth was unwanted or mistimed.

Infecund women are excluded from the numerator. Women are assumed to be infecund if:

- They were first married more than five years ago, have not had a birth in the past five years, are not currently pregnant, and have never used any kind of contraceptive method; or
- They report being infecund or menopausal, having had a hysterectomy, never having menstruated, or being postpartum amenorrheic for five years or longer; or
- For women who are not pregnant or in postpartum amenorrhea, they report that their last menstrual period occurred six months or more prior to the survey.

Postpartum amenorrheic women are women who have not had a menstrual period since the birth of their last child, if the birth occurred in the period 0-23 months prior to the survey interview. If their
period has not returned 24 months or more after the previous birth, women are considered fecund, unless they fall into one of the infecund categories above. Note that in previous definitions of unmet need for family planning, women were classified as being postpartum amenorrheic if their period had not returned for up to five years after the birth of their last child.

Women who are married or in a union are assumed to be sexually active. To include unmarried women in the calculation of unmet need, it would be necessary to determine the timing of the most recent sexual activity. Unmarried women are generally considered currently at risk for pregnancy (and thus could be included in the denominator and potentially in the numerator as well) if they have had intercourse in the four weeks prior to the survey interview.

The diagram below indicates the procedure for computing the number of women of reproductive age, either married or in a union, who have an unmet need for family planning.


When the unmet need for family planning is measured in a comparable way at different dates, the trend indicates whether there has been progress towards meeting women’s needs for family planning. Nevertheless, even when contraceptive prevalence is rising, the unmet need for family planning may not decline, and it may even increase. This happens because in many populations the need for family planning increases with a decline in the number of children desired. Changes in the desired spacing of
births or in the percentage of women who are at risk of pregnancy also influence the trend in the need for family planning, independently of trends in contraceptive prevalence.

Levels of unmet need exceeding 25 per cent are generally considered very high, while values of five per cent or less are generally considered very low.

Further information on the history of refinements in the operational definition of the unmet need for family planning, as well as survey questions and statistical programs needed to derive the indicator, can be found on the following website:  http://measuredhs.com/Topics/Unmet-Need.cfm.

**Demand satisfied by modern methods**

The demand for family planning that is satisfied by using modern methods of contraception is defined as the number of women who are currently using, or whose sexual partner is currently using, at least one modern contraceptive method as a proportion of the number of married or in-union women of reproductive age who express a demand for family planning, either by using any method of contraception or by having an unmet need for family planning as defined above.

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\text{Demand satisfied by modern methods} = \frac{\text{Number of women of reproductive age who are married or in a union and who are currently using a modern method of contraception}}{\text{Total number of women of reproductive age who are married or in a union and who express a demand for family planning}}
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The indicator can be calculated using measures of contraceptive prevalence and the unmet need for family planning, the numerator being the prevalence of contraceptive use for any modern method, and the denominator being the total demand for family planning, which equals the sum of contraceptive prevalence for any method and the unmet need for family planning. It is typically reported as a percentage with reference to married or in-union women of reproductive age (usually, ages 15-49).

Levels of demand satisfied by modern methods exceeding 75 per cent are generally considered high, while values of 50 per cent or less are generally considered very low.

**DATA SOURCES**

The indicators presented in *World Contraceptive Use 2017* have been estimated using data from nationally-representative household surveys. Much of the information was obtained from multi-country survey programmes that routinely collect the necessary data, including the Contraceptive Prevalence Surveys (CPS), the Demographic and Health Surveys (DHS), the Fertility and Family Surveys (FFS), the Reproductive Health Surveys (RHS), the Multiple Indicator Cluster Surveys (MICS), the Performance Monitoring and Accountability 2020 surveys (PMA), and the World Fertility Surveys (WFS). Additional information was provided by other international survey programmes and national surveys.
Generally, there is no discrepancy between the estimates presented in *World Contraceptive Use 2017* and those published in national survey reports. However, in some cases the estimates published by the United Nations have been adjusted to improve comparability. Notes included in the data set indicate when adjustments were made and where the survey data differed from standard definitions.

**DATA LIMITATIONS**

Differences in survey design and implementation, and in the representativeness of the sample, can affect the comparability of survey-based estimates over time and between countries. One of the most common differences in the measurement of contraceptive prevalence relates to the range of contraceptive methods included and the existence, or not, of questions to probe the types of methods used. The lack of probing questions, which are asked to ensure that the respondent understands the meaning of the different contraceptive methods, can result in an underestimation of contraceptive prevalence. Leading, probing questions can elicit more affirmative than responses.

The time frame used to assess contraceptive prevalence may also vary. Often it is left to the respondent to determine what is meant by “currently using” a method of contraception. Some surveys ask specifically about use within the past month. Occasionally, when information on current use is not collected, data on the use of contraceptive methods at last sexual intercourse or during the previous year are utilized for estimating the prevalence of use at the time of the survey.

Differences in questions asked may also affect estimates of the unmet need for family planning and make comparability difficult over time or across countries. For example, some surveys do not gather all of the information required to estimate infecundity in the same way. Differences in questions about contraceptive prevalence, fertility desires and assessment of postpartum amenorrhea may also affect the estimated level of unmet need for family planning and, as a consequence, of the demand satisfied by modern methods.

Although the majority of estimates of the unmet need for family planning follow the standard method of calculation, there can be differences in the definition used for calculating this indicator. For instance, some surveys do not include pregnant women with a mistimed or unwanted pregnancy in the count of women with an unmet need for family planning.

The characteristics (age, sex, marital or union status) of the study population can also affect the comparability of estimates for these indicators. Alternative reference populations that are sometimes used include all sexually-active women (irrespective of marital status) and ever-married women. In the *World Contraceptive Use 2017* data set, notes have been used to indicate any deviations from the standard definitions of the indicators or of the populations represented.