

WORLD CONTRACEPTIVE USE 2019

METHODOLOGY

World Contraceptive Use 2019 provides a comprehensive and up-to-date data set of family planning indicators for women of reproductive age (from 15 to 49 years). The data pertain to 1247 surveys from 195 countries or areas of the world for the period from 1950 to 2018 and were updated as of 12 February 2019. 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, modern and traditional), the unmet need for family planning (total) and the demand for family planning that was satisfied by using modern methods of contraception. Where available, the indicators are disaggregated by marital status and age. Information on contraceptive prevalence by method, and unmet need for spacing and for limiting, is presented for women who were married or in a union at the time the information was collected.

These indicators — contraceptive prevalence, the unmet need for family planning and the demand satisfied by modern methods — are used for tracking progress in achieving universal access to sexual and reproductive health-care services, including for family planning, as part of target 3.7 of the 2030 Agenda for Sustainable Development. The demand satisfied by modern methods is used for the global monitoring of the indicator 3.7.1. “Proportion of women of reproductive age (aged 15–49 years) who have their need for family planning satisfied with modern methods” and marital status and age are both relevant dimensions of the disaggregation of this SDG indicator.

Family planning indicators are compiled for several categories of marital status and by five-year age groups. The *All women* category pertains to all women of reproductive age (from 15 to 49 years). The *Married/In-union* category pertain to women who are married (defined in relation to the marriage laws or customs of a country) and to women in a union, which refers to women living with their partner in the same household (also referred to as cohabiting unions, consensual unions, unmarried unions, or “living together”). The *Unmarried/Not-in-union* category pertain to women who are not married and not in a union and is a complement to the *Married/In-union* category. Notes on the population included in the data set indicate when estimates refer to the previously defined categories. Data availability varies across the different marital status categories. Table 1 summarises the number of observations available.

Table 1: Number of surveys with data on contraceptive prevalence and unmet need for family planning and number of countries covered

Marital Status	<i>Contraceptive use</i>		<i>Unmet need for family planning</i>	
	<i>Number of surveys</i>	<i>Number of countries</i>	<i>Number of surveys</i>	<i>Number of countries</i>
All women	614	152	255	75
Married/In-union	1151	184	539	143
Unmarried/Not-in-union	555	138	258	77

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 reported as a percentage with reference to women of respective marital status and age group.

$$\text{Contraceptive prevalence} = \frac{\text{Number of women of respective marital status and age group who are currently using a method of contraception}}{\text{Number of women of respective marital status and age group}}$$

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.

Among women who are married/in-union, this data set presents levels of contraceptive prevalence for individual methods, any modern method, any traditional method, and any method (modern or traditional). In some cases, data for specific methods are not available, and the corresponding missing values are designated in the database by two dots (..). Notes on data in “Contraceptive use: residuals” indicate if the method is included in the respective residual category.

Unmet need for family planning

The unmet need for family planning illustrates 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. In this dataset, it is reported as a percentage with reference to women of respective marital status and age group.

$$\text{Unmet need for family planning} = \frac{\text{Number of women of respective marital status and age group who have an unmet need for family planning}}{\text{Total number of women of respective marital status and age group}}$$

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 whose pregnancies were unwanted or mistimed at the time of conception; and
- Postpartum amenorrheic women 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.

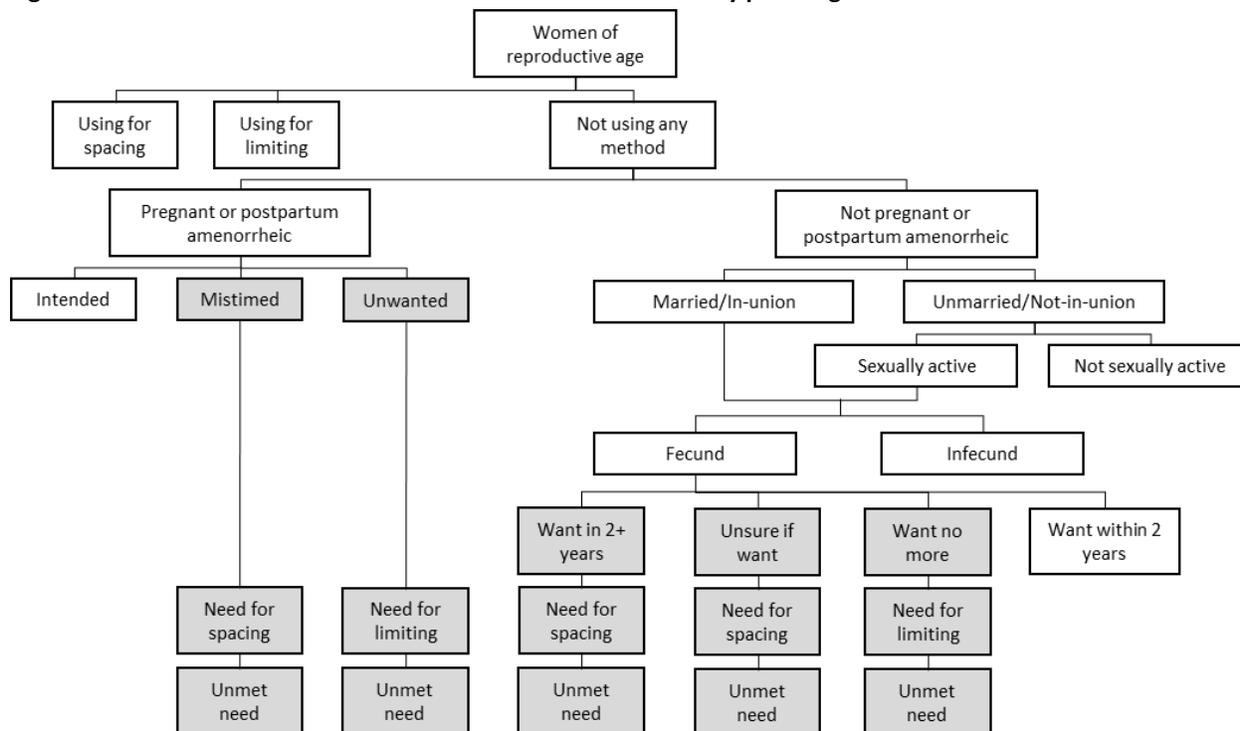
Postpartum amenorrheic women are women who have not had a menstrual period since the birth of their last child, if the birth occurred in the period 0-23 months prior to the survey interview. If their period has not returned 24 months or more after the previous birth, women are considered fecund, unless they fall into one of the infecund categories above.

Women who are married or in a union are assumed to be sexually active. For unmarried women, it is necessary to determine the timing of their most recent sexual activity. Unmarried women who are not pregnant or postpartum amenorrheic are considered currently at risk for pregnancy (and thus could be included potentially in the numerator as having unmet need) if they have had intercourse in the four weeks prior to the survey interview. The unmet need for unmarried women who are pregnant or postpartum amenorrheic is determined in the same way as for married women and regardless of their most recent sexual activity. Unmarried pregnant women whose pregnancies were unwanted or mistimed at the time of conception; and unmarried postpartum amenorrheic women who are not using family planning and whose last birth was unwanted or mistimed are assumed to have an unmet need.

The diagram below indicates the procedure set out by the Demographic and Health Survey (DHS) program (See figure 1) for computing the number of women of reproductive age who have an unmet

need for family planning (referred to as the 2012 DHS definition). These data are available for DHS from Round 2 and for MICS surveys from Round 4 (for married/in-union women and from Round 5 also for unmarried/not-in-union women of reproductive age). Further information on 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 at the following website: <http://measuredhs.com/Topics/Unmet-Need.cfm>.

Figure 1: DHS 2012 revised definition of the unmet need for family planning indicator



Source: Based on Bradley, S.E.K., et al. (2012). Revising Unmet Need for Family Planning. *DHS Analytical Studies No. 25*, Calverton, Maryland: ICF International.

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.

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 women of reproductive age who have a demand for family planning, either by using any method of contraception or by having an unmet need for family planning, as defined above. The denominator is total demand for family planning, which equals the sum of contraceptive prevalence for any method and the unmet need for family planning.

$$\begin{array}{l} \text{Demand} \\ \text{satisfied} \\ \text{by modern} \\ \text{methods} \end{array} = \frac{\text{Number of women of respective marital status and age group who are} \\ \text{currently using a modern method of contraception}}{\text{Total number of women of respective marital status and age group who} \\ \text{are using any method of contraception or are having an unmet need for} \\ \text{family planning}}$$

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 2019* 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 Gender and Generations Survey (GGS), 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 2019* 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.

Where available, microdata for the DHS, MICS, PMA, and GGS surveys and some national surveys were used to calculate family planning indicators. Survey variables related to family planning indicators for DHS and MICS surveys were harmonised over time and across countries. Several estimates produced from microdata are not presented in the data set to address issues with small numbers of events and small sample population size of specific age and marital status combinations. First, family planning indicators are not presented for any combination of marital status and age group that has fewer than 50

cases. Second, the estimates of demand for family planning satisfied by modern methods are presented only for the combination of age group and marital status for which the total demand for family planning (contraceptive prevalence of any method plus unmet need for family planning) is greater than 5 per cent. Furthermore, in cases where the total number of contraceptive users of any marital status category is less than 10, the estimates of family planning indicators are not published.

Where no microdata were available, family planning indicators were obtained from survey reports, secondary sources or externally provided custom tabulations. Family planning indicators are often not reported for unmarried women separately. In these cases, estimates were calculated indirectly based on the published tabulations of the contraceptive prevalence among all women and married/in-union women or among never married and formerly women, weighted by the numbers of women of respective marital status and age. Notes included in the data set indicate when estimates were produced by this approach.

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. The estimates of family planning indicators can also be affected by rounding and small sample population size of the surveys.

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.

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 specification of some of the characteristics of the study population (age groups or definitions of marital or union status categories) 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), women with a partner (cohabiting or not), and ever-married women. In the *World Contraceptive Use 2019* data set, notes have been used to indicate any deviations from the standard definitions of the indicators or of the populations represented.

Suggested citation: United Nations, Department of Economic and Social Affairs, Population Division (2019). *World Contraceptive Use 2019* (POP/DB/CP/Rev2019).