

Facts on Contraception and Abortion

1. Almost all modern contraceptives are in the World Health Organization's (WHO) Model List of Essential Medicines.

The latest list of the WHO (2007, p. 109) include the most common oral contraceptive pills and injectables, the copper-containing IUD, condoms, diaphragms and one type of implantable contraceptive. They are all classified by the WHO under the subgroup "Contraceptives".

No.	Name	Formulation	Year Added
18.3	Contraceptives		
18.3.1	<i>Oral hormonal contraceptives</i>		
	• ethinylestradiol + levonorgestrel	Tablet: 30 micrograms + 150 micrograms.	1979
	• ethinylestradiol + norethisterone	Tablet: 35 micrograms + 1.0 mg.	1977
	• levonorgestrel	Tablet: 30 micrograms; 750 micrograms (pack of two); 1.5 mg.	2000
18.3.2	<i>Injectable hormonal contraceptives</i>		
	• medroxyprogesterone acetate	Depot injection: 150 mg/ml in 1-ml vial.	2005
	• medroxyprogesterone acetate + estradiol cypionate	Injection: 25 mg + 5 mg.	2007
	• norethisterone enantate	Oily solution: 200 mg/ml in 1-ml ampoule.	2005
18.3.3	<i>Intrauterine devices</i>		
	• copper-containing device		1988
18.3.4	<i>Barrier methods</i>		
	• condoms		1988
	• diaphragms		1988
18.3.5	<i>Implantable contraceptives</i>		
	• levonorgestrel-releasing implant	Two-rod levonorgestrel-releasing implant, each rod containing 75 mg of levonorgestrel (150 mg total).	2007

Sources: WHO, 2007, p. 109 and Aziz J. et al for the "Year Added" column

2. Contraceptives are systematically reviewed and chosen carefully by an Expert Committee of the WHO on the basis of priority health care needs, efficacy, safety and cost-effectiveness.

The entire Contraceptives Subgroup was systematically reviewed from 2006-2007, triggered by the Expert Committee's decision not to list several contraceptive medicines in 2005 (WHO, 2007, p. 48).

The review resulted in the retention of all previously listed contraceptives and the addition of two new products for the 2007 list (WHO Reviewer No. 1; WHO, 2007, pp. 50-52).

The WHO Expert Committee on the Selection and Use of Essential Medicines is independent of the WHO Department of Reproductive Health and Research (RHR). In fact, the RHR challenged "the commissioned review on the perspective taken, arguing that the review considers the biomedical view, whereas the biosocial science point of view is more relevant" to the question of expanding contraceptive choices (d'Arcangues, 2007).

In the end, the WHO Expert Committee reiterated its selection criteria and the "evidenced-based approach to listing contraceptives" (WHO, 2007, p. 50). It stated that ...the selection of contraceptives are based on the definition and selection criteria defined in the procedures for the Expert Committee 2002, which defines essential medicines as those that satisfy the priority health care needs of the population and where medicines are selected with due regard to disease prevalence, evidence on efficacy and safety, and comparative cost-effectiveness. ... After discussion of the review and considering the various arguments, the Committee confirmed that it would take an evidence-based approach to listing contraceptives. The Committee will assess new products on a case-by-case basis using the accepted criteria of comparative efficacy, comparative safety and comparative cost, as well as suitability and acceptability.

3. Drugs for abortion were only added to the WHO Model List of Essential Medicines in 2005 (Aziz, et al) and clearly marked with a boxed note stating *"Where permitted under national law and where culturally acceptable."*

The WHO Expert Committee, in its Technical Report, stated the following points on medical abortion (2005, pp. 36-37):

The Committee therefore recommended that mifepristone (200-mg tablet) followed by misoprostol (200-microgram tablet) be included on the complementary list of the Model List for medical abortion within nine weeks of the start of pregnancy, and that the following footnote be added:

Requires close medical supervision.

Note from the Secretariat: In reviewing the recommendation relating to this combination of products, the Director-General decided to add a note adjacent to the combination in the WHO Model List stating:

Where permitted under national law and where culturally acceptable.

The added note of the WHO Director-General is a measure of its sensitive and transparent handling of abortion. All listed contraceptives **do not** have this note (WHO, 2007, p. 109).

4. Modern contraceptives like the IUDs, pills and injectables are available even in countries where abortion is prohibited.

The belief that IUDs, pills and injectables are abortifacients that must be subjected to abortion regulations is a minority opinion not shared by most nations. For example, there are 35 countries with a total ban on abortion and 34 that explicitly allow it only to save the woman's life (CRR, 2007; UN Population Division, 2007 a). In contrast, worldwide contraceptive use data show that pills, injectables and IUDs are allowed and available in almost all countries (UN Population Division, 2007 b).

Another example is Ireland, which has a provision in its Constitution protecting the "unborn", stating that

"The State acknowledges the right to life of the unborn and, with due regard to the equal right to life of the mother, guarantees in its laws to respect, and, as far as practicable, by its laws to defend and vindicate that right." (Article 40, Sec. 3.3)

Despite this provision, the Irish government funds and delivers all modern contraceptive methods (DHC-Ireland), including IUDs, pills, injectables and implants (IFPA).

5. IUDs—the contraceptive most often labeled as an abortifacient—has zero use in only eight countries: Afghanistan, Chad, Gabon, Haiti, Rwanda, Somalia, Swaziland and Timor-Leste (UN Population Division, 2007 b).

All of these countries are poor and have suffered from recent or current wars and conflicts. The lack of IUDs is probably the result of inadequate or damaged public health services rather than abortion-related government or religious restrictions.

Countries with the least use of modern contraceptives are typically poor, African countries. This suggests that the limited use is mainly due to inadequate or even damaged public health services.

20 Countries with Lowest Use of Modern Contraceptives	Year	Contraceptive Prevalence (% of married women of reproductive age)
Somalia	1999	1.0
Chad	2004	1.7
Guinea-Bissau	2000	3.6
Sierra Leone	2005	4.3
Democratic Republic of the Congo	2001	4.4
Angola	2001	4.5
Niger	2006	5.0
Mauritania	2000/01	5.1
Eritrea	2002	5.1
Liberia	1986	5.5

20 Countries with Lowest Use of Modern Contraceptives	Year	Contraceptive Prevalence (% of married women of reproductive age)
Sudan	2006	5.7
Mali	2001	5.7
Guinea	2005	5.7
Central African Republic	2000	6.9
Benin	2001	7.2
Côte d'Ivoire	1998/99	7.3
Albania	2002	8.0
Nigeria	2003	8.2
Afghanistan	2003	8.5
Burundi	2002	8.5

Source: UN Population Division, 2007 b

6. Countries with predominantly Catholic populations allow and use modern contraceptives like IUDs, pills and injectables.

Country (top 25 with pop. greater than 1 M)	Population (M)	Percent Catholic	Contraceptive Prevalence (% of married women of reproductive age)			
			Pills	Injectables & Implants	IUD	Any Modern Method
Italy	59.7	97%	13.6	0.0	5.5	38.9
Poland	37.1	94%	2.3	0.0	5.7	19.0
Paraguay	5.7	92%	15.0	10.4	11.5	60.5
Portugal	10.5	90%	45.3	0.2	5.9	62.9
Ecuador	13.1	90%	13.3	5.9	10.1	58.0
Argentina	38.6	89%	30.4	0.0	9.5	63.8
Venezuela	28.3	88%	21.1	0.0	9.5	61.7
Spain	42.3	88%	13.1	0.1	6.6	66.0
Peru	32.1	88%	7.1	14.6	5.6	47.6
México	142.4	87%	4.7	5.0	11.6	66.5
Colombia	44.5	86%	9.7	6.1	11.2	68.2
Dominican Republic	9.3	86%	13.5	2.4	2.2	65.8
Panama	2.1	85%	11.8	0.8	6.0	54.2
Bolivia	9.7	85%	3.6	8.0	10.2	34.9
Costa Rica	4.5	83%	25.6	5.9	6.9	70.7
Nicaragua	6.4	82%	14.6	14.3	6.4	66.1
Slovenia	2.0	81%	21.7	0.2	21.5	59.1
Philippines	86.0	81%	13.2	3.1	4.1	33.4
Lithuania	3.5	80%	3.2	0.2	13.9	30.5
Honduras	7.3	79%	11.3	13.8	6.6	56.4
Brazil	184.2	79%	20.7	1.2	1.1	70.3
Guatemala	13.5	77%	3.4	9.1	1.9	34.4
El Salvador	7.1	76%	5.8	18.3	1.3	61.0
Belgium	10.3	76%	46.7	0.0	5.0	74.3
France	58.9	76%	43.8	0.0	21.9	76.5

Sources: Cheney D., 2005 for columns 1-3 and the UN Population Division, 2007 b for the rest

7. Evidence-based information from health authorities clearly state that IUDs and hormonal contraceptives are not abortifacients based on their mechanisms of action.

A position paper by the UNDP/UNFPA/WHO/World Bank Special Programme of Research, Development and Research Training in Human Reproduction (2006 November) on a 2006 House Bill on "Abortive Substances and Devices" clearly stated that hormonal contraceptives and IUDs *"cannot be labelled as abortifacients"*, that doing so *"contradict both WHO's evidence-based international standards on the mechanisms of action and the drug and device labelling in the WHO Model List of Essential Medicines."* The following explanations are taken from this position paper:

Mechanisms of action for selected contraceptive drugs and devices

1. Combined Hormonal Methods (oral contraceptives and Evra patch): There has been a growing body of evidence for more than four decades indicating that administration of combined oral contraceptives (COC) inhibits follicular development and ovulation, and that this is their primary mechanism of action (Mishell et al. 1977; Killick et al. 1987; Rivera et al. 1999). They also affect cervical mucus, making it thicker and more difficult for sperm to penetrate. This effect may also contribute to their high efficacy (Rivera et al. 1999). Although it is known that there are changes in the endometrium during combined oral contraceptive (COC) use, no evidence to date has supported the hypothesis that these changes lead to disruption of implantation. Given the high efficacy of COCs in preventing ovulation, it is very unlikely that "interference with implantation" is a "primary mechanism" of contraceptive action.

The same mechanism of action also applies to the Evra patch.

2. Progestin-only Methods (Depo Provera, minipills, implants): Progestin-only methods also inhibit follicular development and ovulation although the level of this effect varies for different progestin-only methods and among individuals. For Depo Provera, the level of ovarian suppression is very high; therefore inhibition of ovulation is the primary mechanism of action (Rivera et al. 1999). However, about 40% of women on the minipill may ovulate (Landgren and Diczfalusy 1980).

A second contraceptive effect of progestin-only methods is the change they make to cervical mucus, including increasing its viscosity and cell content, reducing its volume, and altering its pH, proteins and molecular structure. This makes it "hostile" and impenetrable to sperm (Moghissi et al. 1973). These changes are likely to play a more important role in the mechanism of contraceptive action of minipills and implants.

Progestin-only methods also cause changes in the endometrium. However, these changes show great variability among patients, from atrophy to normal secretory structures. There is no direct evidence that

suggests a relationship between endometrial structure and contraceptive effectiveness of these methods.

3. Emergency Contraception (morning-after pills, levonorgestrel, levonorgestrel 2): Levonorgestrel emergency contraceptive pills (ECPs) have been shown to prevent ovulation and they do not have any detectable effect on the endometrium (uterine lining) or progesterone levels when given after ovulation. ECPs are not effective once the process of implantation has begun, and will not cause abortion (WHO 2005; Marions L et al. 2002; Durand M et al. 2001; Croxatto HB et al. 2004).

4. Intrauterine Devices (IUD): The major effect of all IUDs is to induce a local inflammatory reaction in the uterine cavity. During the use of copper-releasing IUDs the reaction is enhanced by the release of copper ions into the luminal fluids of the genital tract, which is toxic to sperm (Ortiz 1978; Seseru and Carnacho-Ortega 1972; Ullman and Hammerstein 1972). In these users, it is likely that few sperm reach the tubes and those that do reach them have low fertilizing power.

In addition, studies on recovery of eggs from women using copper-bearing IUDs and from women not using any method of contraception show that rates of embryos formed in the tubes are much lower in copper-bearing IUD users than those not using contraception (Alvarez et al. 1988). Thus, the hypothesis that the primary mechanism of copper-bearing IUDs in women is destruction of embryos in the uterus (i.e., abortion) is not supported by available evidence.

When used appropriately by adequately trained staff, an IUD does not cause abortion, as it is not going to be inserted unless it is certain that the woman is not pregnant.

All the above-mentioned methods (combined hormonal methods, including pills and Evra patch; progestin-only methods, including Depo Provera, implants, and minipills; emergency contraception pills; and, intrauterine devices) directly or indirectly have effects on the endometrium that may hypothetically prevent implantation, however there is no scientific evidence supporting this possibility. When used appropriately and in doses/ways recommended, none of these methods have been shown to cause the abortion of an implanted fetus. Therefore they cannot be labelled as abortifacients. The contraceptive drugs and devices highlighted in the HB4643 definitions of abortifacient drugs and devices contradict both WHO's evidence-based international standards on the mechanisms of action and the drug and device labelling in the WHO Model List of Essential Medicines (2005).

8. The lactational amenorrhea method (LAM, or FP through full breastfeeding) affects the endometrium in a way that may hypothetically interfere with implantation. Labeling such effects on the endometrium as abortion will lead to the absurd conclusion that *breastfeeding causes abortions*.

In one study (Diaz et al, 1992), researchers at the *Pontificia Universidad Catolica de Chile* observed that the one-year cumulative pregnancy rate of women on LAM was 17% compared to 25% for non-breastfeeding control women of similar characteristics. However, they also found out that 51% of the women on LAM had **already ovulated** by the 8th month after childbirth, 70% by the 10th month, and 94% by the 12th month.

The researchers then concluded that prevention of ovulation "*does not account for all the contraceptive efficacy of lactational amenorrhea*" and hypothesized that "*interference with implantation associated with luteal phase defects seems the most plausible explanation.*"

9. Smoking, alcohol and caffeine can increase the risk of miscarriage or produce harmful effects on the fetus (CDC, 2005; WHO Europe 2001). If, as argued by some conservative groups, such risks are characteristic of abortive substances, then *cigarettes, alcoholic drinks, coffee, tea, soft drinks and chocolates will be classified as abortifacients.*

Pregnant women are routinely advised by health authorities to avoid or cut back on these substances. For example, the US Centers for Disease Control and Prevention publishes the following pregnancy tips at its website:

Cigarette smoking during pregnancy increases the chances of premature birth, certain birth defects, and infant death. Women who smoke during pregnancy are more likely than other women to have a miscarriage....

Legal drugs such as alcohol and caffeine are important issues for pregnant women. There is no known safe amount of alcohol a woman can drink while pregnant. Fetal alcohol syndrome, a disorder characterized by growth retardation, facial abnormalities, and central nervous system dysfunction, is caused by a woman's use of alcohol during pregnancy. Caffeine, found in tea, coffee, soft drinks and chocolate, should also be limited. Be sure to read labels when trying to cut down on caffeine during pregnancy. More than 200 foods, beverages, and over-the-counter medications contain caffeine!

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