FSRH The Faculty of Sexual & Reproductive Healthcare

UK MEDICAL ELIGIBILITY CRITERIA

FOR CONTRACEPTIVE USE | UKMEC 2016 (AMENDED SEPTEMBER 2019)

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Details of changes to original document

Since this document was first published, the following changes have been made:

December 2017
The UKMEC category for use of progestogen-only injectable contraception by women at high risk of acquiring HIV has been revised from UKMEC2 (benefits of use generally outweigh risks) to UKMEC1 (no restrictions to use).

September 2019
The UKMEC category for use of progestogen-only injectable contraception and intrauterine contraception by women at high risk of acquiring HIV has been revised from UKMEC2 (benefits of use generally outweigh risks) to UKMEC1 (no restrictions to use).

Additional Resource: Diagnosis of Migraine With or Without Aura has been updated to signpost directly to the International Headache Society's International Classification of Headache Disorders (3rd edition).

SECTION A: INTRODUCTION

The UK medical eligibility criteria for contraceptive use (UKMEC)

The UK Medical Eligibility Criteria for Contraceptive Use (UKMEC) offers guidance to providers of contraception regarding *who can* use contraceptive methods safely. These evidence-based recommendations do not indicate a *best method* for a woman nor do they take into account efficacy (and this includes drug interactions or malabsorption). The recommendations allow for consideration of the possible methods that could be used safely by individuals with certain health conditions (e.g. hypertension) or characteristics (e.g. age) to prevent an unintended pregnancy.

Most contraceptive users are medically fit and can use any available contraceptive method safely. However, some medical conditions are associated with potential or theoretical increased health risks when certain contraceptive methods are used, either because the method adversely affects the condition or because the condition or its treatment affects the safety of the contraceptive. Since most trials of new contraceptive methods deliberately exclude subjects with chronic medical conditions, there is often little direct evidence on which to base accurate prescribing advice.

Development of the UKMEC

The World Health Organization (WHO) developed a set of internationally agreed norms for providing contraception to individuals with a range of medical conditions that may contraindicate one or more contraceptive methods. The first edition of the WHO Medical Eligibility Criteria for Contraceptive Use (WHOMEC) was published in 1996. The fifth edition was published in 2015 and is available on the WHO website.[1] The WHOMEC is primarily intended for use in developing countries where the risks associated with pregnancy are often extremely high but it is the intention of WHO that the guidance be adapted for use in different settings in which the risk benefit ratio of contraceptive methods may differ.

The first edition of the UKMEC was published in 2006 with a grant from the Department of Health (England).The document was widely distributed to clinicians throughout the United Kingdom (UK) with funding from the Department of Health (England), the Scottish Executive (Scotland) and the Faculty of Sexual and Reproductive Healthcare (FSRH). The second edition of the UKMEC[2] was published in 2009. UKMEC 2016 supersedes the second version and has taken account of new evidence included in the WHOMEC (fifth edition).

The UKMEC update was led by the Clinical Effectiveness Unit (CEU) of the FSRH and involved a guideline development group (GDG) consisting of 19 members (see Appendix 1 for the UKMEC development process and Appendix 2 for the list of contributors). A formal consensus process[3] was used by the GDG with the aim of making the best use of published evidence and capturing the collective knowledge of experts in the fields of sexual and reproductive health and allied specialties to inform the recommendations included in the UKMEC classifications. The changes in UKMEC 2016 from UKMEC 2009 are summarised and highlighted at the end of Section A.

USING THE UKMEC

The UKMEC considers the following groups of contraceptive methods: intrauterine contraception (IUC), progestogen-only contraception (POC), combined hormonal contraception (CHC) and emergency contraception (EC). The UKMEC categories for each of these groups can be found in Section B, together with evidence summaries and clarifications. Additional comments can be found at the end of each method section. References and additional resources are located in Section C. Commonly used abbreviations are listed in Appendix 3.

The UKMEC Categories

For each of the personal characteristics or medical conditions considered by the UKMEC a Category 1, 2, 3 or 4 is given. The definitions of the categories are given in Table 1.

Table 1: Definition of UKMEC categories

UKMEC	DEFINITION OF CATEGORY
Category 1	A condition for which there is no restriction for the use of the method
Category 2	A condition where the advantages of using the method generally outweigh the theoretical or proven risks
Category 3	A condition where the theoretical or proven risks usually outweigh the advantages of using the method. The provision of a method requires expert clinical judgement and/or referral to a specialist contraceptive provider, since use of the method is not usually recommended unless other more appropriate methods are not available or not acceptable
Category 4	A condition which represents an unacceptable health risk if the method is used

When applied in a clinical setting, a UKMEC Category 1 indicates that there is no restriction for use. A UKMEC Category 2 indicates that the method can generally be used, but more careful follow-up *may* be required. A contraceptive method with a UKMEC Category 3 can be used; however, it may require expert clinical judgement and/or referral to a specialist contraception provider since use is not usually recommended unless other methods are not available or acceptable. A UKMEC Category 4 indicates that use in that condition poses an unacceptable health risk and should not be used.

Initiation and Continuation of a Method

The initiation (I) and continuation (C) of a method of contraception can sometimes be distinguished and classified differently (see Table 2). The duration of use of a method of contraception prior to the new onset of a medical condition may influence decisions regarding continued use. However, there is no set duration and clinical judgement will be required.

Table 2: Initiation and continuation of a method by women with a medical condition

Initiation (I)	Starting a method by a woman with a specific medical condition.
Continuation (C)	Continuing with the method already being used by a woman who develops a new medical condition.

For example, the initiation of a progestogen-only pill (POP) is not restricted in a woman with stroke (cerebrovascular accident) as the advantages of using the method generally outweigh the theoretical or proven risks (UKMEC 2). However, if a woman has a stroke (cerebrovascular accident) while using a POP, the continuation of the method will require expert clinical judgement and/or referral to a specialist contraceptive provider because use of that method is not usually recommended unless other, more appropriate methods are not available or acceptable (UKMEC 3).

Using the UKMEC Tables

The UKMEC tables are set out as follows (from left to right, see Table 3):

- The first column indicates the ***CONDITION***. Each condition is defined as representing either an individual's characteristics (e.g. age, parity) or a known pre-existing medical condition (e.g. diabetes, hypertension). Some conditions are subdivided to differentiate between varying degrees of the condition (e.g. migraine with or without aura).
- The ***CATEGORY*** (UKMEC 1 to 4) for each ***CONDITION*** is given for each method of contraception. Occasionally, NA (not applicable) is used, which denotes a condition for which a ranking was not given but for which clarifications have been provided.
- The last column is used to provide ***CLARIFICATION*** or to make comment on the ***EVIDENCE*** for the recommendation where appropriate.

Table 3: Example of tables in UKMEC

METHOD OF CONTRACEPTION		
CONDITION	CATEGORY I = Initiation, C = Continuation	CLARIFICATION/EVIDENCE
Obesity	Category 1, 2, 3 or 4	Clarifications and evidence regarding the condition or classification

It is important to note that the UKMEC categories:

- Relate to the **SAFETY** of use of a method of contraception by a woman with a particular medical condition or personal characteristic. The **EFFICACY** of contraception may be affected by the condition or by a medication required for the condition but the UKMEC category does not reflect this.
- Are intended to be applied to use of the method of contraception for contraceptive purposes. Where a method of contraception is used for a non-contraceptive indication [e.g. management of heavy menstrual bleeding (HMB)] the risk/benefit profile and eligibility criteria may differ.
- Cannot simply be added together to indicate the safety of using a method. For example, if a woman has two conditions that are each UKMEC 2 for use of CHC, these should **not** be added to make a UKMEC 4. However, if multiple UKMEC 2 conditions are present that all relate to the same risk, clinical judgement must be used to decide whether the risks of using the method may outweigh the benefits. For example, consider a 34-year-old woman wishing to use CHC who has a body mass index (BMI) of 34 kg/m^2 (UKMEC 2), is a current smoker (UKMEC 2), has a history of superficial venous thrombosis (UKMEC 2), and has a first-degree relative who had a venous thromboembolic event at age 50 years (UKMEC 2), all potential risk factors for venous thromboembolism (VTE). She might be better advised to consider a different method of contraception that does not increase her risk of VTE. When an individual has multiple conditions all scoring UKMEC 3 for a method, use of this method may pose an unacceptable risk; clinical judgement should be used in each individual case.

Contraceptive Choice

Many factors determine the method of contraception an individual chooses to use. Provided the woman is medically eligible to use a particular method, she should be free to choose the method that is most acceptable to her. To be effective, contraception must be used correctly and consistently. Effective and continued use of a method is directly related to its acceptability to the user.

Women should be given accurate information about all methods for which they are medically eligible and helped to decide which might best suit their needs. Health professionals who give advice about contraception should be competent to give information about the efficacy, risks and side effects, advantages and disadvantages, and non-contraceptive benefits of all available methods.

Information on contraception for women in the UK can be found on the Family Planning Association (fpa) website.[4]

Effectiveness of Contraceptive Method

Methods that require consistent and correct use by individuals have a wide range of effectiveness and can vary greatly with characteristics such as age, socioeconomic status, users' desires to prevent or delay pregnancy, and culture. Table 4 compares the percentage of women experiencing an unintended pregnancy during the first year of contraceptive use when the method is used 'typically' (which includes both incorrect and inconsistent use) or 'perfectly' (correct and consistent use).[5] Methods considered as long-acting reversible contraception (LARC) are highlighted in Table 4.

Table 4: Percentage of women experiencing an unintended pregnancy within the first year of use with typical use and perfect use (modified from Trussell et al.)[5]

Method	Typical use (%)	Perfect use (%)
No method	85	85
Fertility awareness-based methods	24	0.4–5
Female diaphragm	12	6
Male condom	18	2
Combined hormonal contraception (CHC)*	9	0.3
Progestogen-only pill (POP)	9	0.3
Progestogen-only injectable (DMPA)	**6**	**0.2**
Copper-bearing intrauterine device (Cu-IUD)	**0.8**	**0.6**
Levonorgestrel-releasing intrauterine system (LNG-IUS)	**0.2**	**0.2**
Progestogen-only implant (IMP)	**0.05**	**0.05**
Female sterilisation	0.5	0.5
Vasectomy	0.15	0.1

*Includes combined oral contraception (COC), transdermal patch (patch) and vaginal rings.

A pictorial chart on the effectiveness of family planning methods is available from the Centers for Disease Control and Prevention (CDC) website.[6]

Drug Interactions with Hormonal Contraception

Use of other medications may increase or decrease serum levels of contraceptive hormones; likewise, hormonal contraception may increase or decrease serum levels of other medications. This can potentially cause adverse effects. Health professionals providing hormonal contraception should ask women about their current and previous drug use including prescription, over-the-counter, herbal, recreational drugs, and dietary supplements. Women should be advised to use the most effective methods for them; this may include the additional use of non-hormonal barrier methods when potential drug interactions pose concern.

For further guidance and resources regarding specific contraceptive method/formulation, please refer to

- FSRH guidance on drug interactions with hormonal contraception,[7] available on the FSRH website
- The British National Formulary (BNF) publications and website.[8]
- Summary of product characteristics (SPC), available on electronic Medicine Compendium (eMC) website.[9]

Online Drug Interaction Checkers

There are online drug interaction checkers available which give useful information on drug interactions. For up-to-date information on the potential drug interactions between hormonal contraception and antiretroviral (ARV) drugs, please refer to the online HIV drugs interaction checker.[10]

For up-to-date information on the potential drug interactions between hormonal contraception and other drugs, please refer to Stockley's Drug Interactions website.[11]

Please note that the contraceptive effectiveness of DMPA and the LNG-IUS is not reduces by concurrent use of enzyme-inducing medications.

If in doubt please refer to the current FSRH Guideline on Drug Interactions with Hormonal Contraception.[7]

Conditions that May Pose a Significant Health Risk During Pregnancy

Women with conditions that may pose a significant health risk during pregnancy should be advised to consider using the most effective LARC methods, which provide a highly reliable and effective method of contraception (failure rate <1 pregnancy per 100 women in a year). The sole use of barrier methods and user-dependent methods of contraception (e.g. oral contraception) may not be the most appropriate choice for these women given their relatively higher typical-use failure rates.

Some conditions that expose a woman to increased risk as a result of unintended pregnancy include but are not limited to:

- Bariatric surgery within the past 2 years
- Breast cancer
- Cardiomyopathy
- Complicated valvular heart disease
- Cystic fibrosis
- Diabetes: insulin-dependent, or with nephropathy/retinopathy/neuropathy or other vascular disease
- Endometrial or ovarian cancer
- Epilepsy
- Gestational trophoblastic neoplasia
- HIV-related diseases
- Hypertension (systolic >160 mmHg or diastolic >100 mmHg)
- Ischaemic heart disease
- Malignant liver tumours (hepatocellular carcinoma)
- Morbid obesity (BMI ≥40 kg/m^2)
- Organ failure/transplant
- Rheumatoid arthritis
- Severe (decompensated) cirrhosis
- Sickle cell disease
- Stroke
- Systemic lupus erythematosus (SLE)
- Systemic sclerosis
- Thrombogenic conditions
- Tuberculosis
- Teratogenic drugs (see below)

Women using teratogenic drugs (e.g. methotrexate, some anti-epileptic drugs and retinoids) or drugs with potential teratogenic effects should also be advised to use reliable and effective contraception both during treatment and for the recommended timeframe after discontinuation to avoid unintended pregnancies. More information is available from the UK Teratology Information Service (UKTIS) website.[12]

Summary of Changes from UKMEC 2009

A total of 27 topics and more than 126 recommendations were reviewed as part of the UKMEC revision. Changes from UKMEC 2009 include the exclusion of some methods and conditions, inclusion of new conditions and ulipristal acetate (UPA) as a new method of EC, removal of split UKMEC categories, revision of sub-conditions and the reordering of the contraceptive methods in the UKMEC tables.

Method Sections No Longer Included

Comprehensive, method-specific FSRH guidance on barrier methods for contraception and sexually transmitted infection (STI) prevention[13], fertility awareness methods[14] [including the lactational amenorrhoea method (LAM)], and male and female sterilisation[15] is available on the FSRH website. The GDG considered the sections on these methods in the UKMEC as not particularly helpful and so agreed to remove them.

Conditions No Longer Included

The following conditions are no longer included in the UKMEC:

Schistosomiasis and malaria: These infectious diseases are uncommon in the UK population. Evidence suggests no contraindication to hormonal contraception use with both conditions (UKMEC 1 for all methods in UKMEC 2009). Please refer to the WHOMEC[1] if required.

Raynaud's disease/phenomenon: Expert opinion from UK rheumatologists was that the UKMEC classification given in the UKMEC 2009 was unhelpful/no longer appropriate since the risks associated with Raynaud's disease relate to the underlying disease process rather than the condition itself. Raynaud's disease/phenomenon is therefore no longer included in the UKMEC.

Drug interactions: Drug interactions are no longer presented at the end of each method section since the recommendations quickly become outdated as new drugs become available. Where appropriate to a specific condition (e.g. HIV infection or epilepsy), references to the section on drug interactions with hormonal contraception and to relevant online drug interaction checkers are made.

Inclusion of New Conditions

The new conditions added to the UKMEC include history of bariatric surgery, organ transplant, cardiomyopathy, cardiac arrhythmias, rheumatoid arthritis, and positive antiphospholipid antibodies.

The inclusion of these conditions into the UKMEC reflects increasing prevalence of women with these conditions requesting contraception and the need of contraception providers for guidance.

Conditions for which there is a Revision of Sub-condition Description

Conditions where the sub-conditions have been revised include postpartum, gestational trophoblastic disease, cervical cancer, HIV infection, and SLE.

Revisions to the sub-condition descriptions have been made to provide guidance that is more specific/ relevant to the sub-population of women with each condition based on new evidence or development of clinical practice/opinion.

Removal of Split Categories

As they were considered unhelpful, split categories (e.g. UKMEC 2/3 or 3/4) are no longer used in the UKMEC for the following conditions: multiple risk factors for cardiovascular disease, known dyslipidaemias, viral hepatitis (acute or flare) and diabetes (nephropathy/retinopathy/ neuropathy and other vascular disease).

Clarifications have been added or expanded upon to aid clinicians in their judgement regarding whether a particular method of contraception is safe and appropriate for a woman.

Reordering of the Method Categories Presented in the UKMEC Tables

The order of contraceptive methods presented in the UKMEC has been changed to broadly reflect (from left to right) long-acting, medium-acting and short-acting methods of contraception.

Inclusion of Ulipristal Acetate as New Method of Emergency Contraception

The UKMEC now includes ulipristal acetate (UPA) as a method of EC. The order of the methods presented in the UKMEC table reflects the effectiveness of the method (from left to right): copper-bearing IUD (Cu-IUD), UPA and levonorgestrel (LNG).

Changes to the UKMEC 2009 in the EC section include the addition of obesity as a new condition (UKMEC 1 for all methods) and the expansion of the sub-conditions and UKMEC classification recommendations for gestational trophoblastic disease (GTD).