



**COSRH**

The College of Sexual &  
Reproductive Healthcare

# UK MEDICAL ELIGIBILITY CRITERIA

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FOR CONTRACEPTIVE USE | UKMEC 2025

Published by the College of Sexual and Reproductive Healthcare  
Registered in England No. 2804213 and Registered Charity No.  
1019969 UKMEC first published in July 2006

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Published in the UK.

A digital version can be accessed from the BMJ SRH website: The UK Medical Eligibility Criteria for  
Contraceptive Use (UKMEC). BMJ Sexual & Reproductive Health 2026;52:1-138.  
<https://doi.org/10.1136/bmj-srh-2026-UKMEC>.

## 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 the best method for an individual, nor do they consider efficacy (including drug interactions or malabsorption).

The first edition of the UKMEC was published by the Faculty of Sexual and Reproductive Health (FSRH) in 2006 with a grant from the Department of Health (England). The second edition of the UKMEC was published in 2009 and the third edition in 2016 (updated 2019). In August 2025, the FSRH changed its name to the College of Sexual and Reproductive Health (CoSRH). UKMEC 2025 supersedes the third edition. It was developed by the CoSRH via funding for the CoSRH Clinical Effectiveness Unit (CEU). Funding for the CEU is provided via income from CoSRH membership fees, with CEU outputs delivered in fulfilment of the CoSRH charitable purpose.

There are two other publications of medical eligibility criteria: the US MEC and the WHO MEC. The WHO MEC is primarily intended for use in developing countries where the risks associated with pregnancy are often extremely high, but it is the intention of the World Health Organisation (WHO) that the guidance be adapted for use in different settings in which the risk benefit ratio of contraceptive methods may differ.

Some medical conditions are associated with potential or theoretically 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.

Provided individuals are medically eligible, they should be free to choose the method most acceptable to them. Individuals should be given accurate information about all contraceptive methods for which they are medically eligible. 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.

While most people using or considering the contraceptive methods in the UKMEC are women and girls, we recognise that some may identify differently. Where we have used the term 'woman' or 'women', we include everyone registered as female at birth and at risk of becoming pregnant. All contraception care should be based on a patient's individual needs and be sensitive to their preferences.

For details on how the UKMEC has been developed, please refer to Section C, Appendix 1.

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# CONTENTS

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<b>SECTION A: INTRODUCTION</b> .....	<b>1</b>
Using the UKMEC .....	1
Summary of changes from UKMEC 2016 .....	6
<b>SECTION B: METHODS OF CONTRACEPTION</b> .....	<b>14</b>
Intrauterine devices (IUD).....	14
Progestogen-only contraception (POC) .....	32
Combined hormonal contraception (CHC).....	56
Emergency contraception (EC).....	75
<b>SUMMARY TABLES</b> .....	<b>81</b>
<b>BIBLIOGRAPHY</b> .....	<b>95</b>
<b>SECTION C: APPENDICES</b> .....	<b>132</b>
Appendix 1: UKMEC Development Process .....	132
Appendix 2: List of contributors .....	134
Appendix 3: Commonly used abbreviations.....	138
<b>TABLES</b>	
Table 1: Definition of UKMEC categories.....	1
Table 2: Percentage of women experiencing an unintended pregnancy within the first year of use with typical use <sup>5</sup> and perfect use.....	4
Table 3: Summary of changes from UKMEC 2016 .....	8
Table 4: Intrauterine devices.....	15
Table 5: Progestogen-only Contraception (POC).....	34
Table 6: Combined hormonal contraception (CHC) .....	57
Table 7: Emergency contraception .....	76
Table 8: UKMEC summary table – hormonal and intrauterine contraception.....	84



# SECTION A: INTRODUCTION

## Using the UKMEC

The UKMEC considers the following groups of contraceptive methods: intrauterine devices (IUD), 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 are located at the end of Section B. Commonly used abbreviations are listed in Section C, Appendix 3.

### The UKMEC categories

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

**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 follow-up *may* be required, and careful consideration should be given where multiple category 2s exist. A UKMEC Category 3 is not usually recommended unless other methods are not available or acceptable. In certain circumstances, UKMEC Category 3 can be used; however, it may require expert clinical judgement and/or referral to a specialist contraception provider. A UKMEC Category 4 indicates 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 classified differently. The duration of use of a method of contraception prior to the new onset of a medical condition may influence decisions regarding continued use; clinical judgement will be required.

For example, the initiation of a progestogen-only pill (POP) is not generally restricted in a woman with stroke (UKMEC 2). However, if a woman has a stroke 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:

### Condition/characteristics

The first column indicates the **condition**. Each condition is defined as representing either an individual's characteristics (e.g. age, parity) or a pre-existing medical condition (e.g. diabetes, hypertension). Some conditions are subdivided to differentiate between varying degrees of the condition (e.g. with or without aura).

Absence of a condition or characteristic in the UKMEC does not always mean that it is safe to use contraceptive methods. For uncommon conditions, there is rarely sufficient evidence to make clinical recommendations, and in these circumstances, clinical judgement and/or advice from a specialist may be appropriate.

### MEC category

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.

### Clarification and evidence

The last column is used to provide **clarifications** and/or to comment on the **evidence** for the recommendation where appropriate.

### Example of tables in the UKMEC

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

### UKMEC recommendations and off-label use

There are areas of the UKMEC where recommendations fall outside of the product licence (i.e. are off-label). Recommendations made in the UKMEC are evidence-based and made after consideration by the Guideline Development Group (GDG). Guidance for use of a product outside of its licence is available from the Medicines and Healthcare products Regulatory Agency (MHRA).<sup>1</sup>

## It is important to note that UKMEC categories:

### Relate to safety not efficacy

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 medication required for the condition, but the UKMEC category does not reflect this.

### Are for contraceptive purposes only

Are intended to be applied to use of the method for **contraceptive purposes only**. 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.

### Multiple UKMEC 2 categories may indicate a cumulative risk

UKMEC categories 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 with inflammatory bowel disease and a body mass index (BMI) of 32 kg/m<sup>2</sup> requesting combined hormonal contraception.

- Inflammatory bowel disease: UKMEC 2 for CHC
- BMI 32 kg/m<sup>2</sup>: UKMEC 2 for CHC

Given that these are both risk factors for venous thromboembolism (VTE), the risks of using CHC may outweigh the benefit in this case.

### Multiple UKMEC 3 categories may pose an unacceptable health risk

When an individual has multiple conditions scoring UKMEC 3 for a method, use of this method may pose an unacceptable risk; clinical judgement should be used in each individual case.

### Where multiple risk factors exist, a method may not be suitable

Multiple risk factors are included in the UKMEC for cardiovascular disease and VTE. The GDG have agreed that multiple risk factors can be defined as **more than one risk factor**. Where more than one risk factor is present, clinical judgement must be applied.

Examples of VTE risk factors include previous VTE, cancer, recent major surgery, recent trauma, significant immobility, high BMI, pregnancy and the postnatal period, inflammatory disorders, antiphospholipid antibody syndrome and other thrombotic disorders. For a full list of [DVT<sup>2</sup>](#) and pulmonary embolism ([PE](#))<sup>3</sup> risk factors risk please see National Institute for Health and Care Excellence (NICE) guidance.

A family history of unprovoked VTE (i.e. no precipitating factors) is a stronger risk factor for VTE than a family history of provoked VTE.

Provoked VTE includes major surgery, hospital admission with acute infection or inflammatory state (e.g. sepsis), temporary significant reduction in mobility (e.g. bed or sofa bound >3 days) and long-haul flight.

## Effectiveness of contraceptive method

Table 2 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).<sup>4</sup>

Methods considered as long-acting reversible contraception (LARC) are highlighted in bold in table 2.

**Table 2: Percentage of women experiencing an unintended pregnancy within the first year of use with typical use and perfect use**<sup>5,6</sup>

Method	Typical use (%)	Perfect use (%)
No method	85	85
Fertility awareness-based methods	2 – 23	0.4–5
Female diaphragm with spermicide	17	16
Male condom	13	2
Combined hormonal contraception (CHC)*	7	0.3
Progestogen-only pill (POP)	7	0.3
<b>Progestogen-only injectable (DMPA)</b>	<b>4</b>	<b>0.2</b>
<b>Copper-bearing intrauterine device (Cu-IUD)</b>	<b>0.8</b>	<b>0.6</b>
<b>Levonorgestrel-releasing intrauterine device (LNG-IUD)</b>	<b>0.1 – 0.4</b>	<b>0.3</b>
<b>Progestogen-only implant (IMP)</b>	<b>0.1</b>	<b>0.1</b>
Female sterilisation	0.5	0.5
Vasectomy	0.15	0.1

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

## 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 should ask women about their current and previous medication use including prescription, over the counter, on-line, 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.

The contraceptive effectiveness of DMPA and the LNG-IUD is not reduced by concurrent use of enzyme-inducing medications.

For further guidance and resources regarding specific drug interactions, please refer to:

- CoSRH guidance on drug interactions with hormonal contraception, available on the CoSRH website.<sup>7</sup>
- The British National Formulary (BNF) publications and website.<sup>8</sup>

- Summary of product characteristics (SPC), available on electronic Medicine Compendium (eMC) website.<sup>9</sup>
- Stockley's Drug Interactions website (which requires a log in).<sup>10</sup>
- For interactions between hormonal contraception and antiretroviral (ARV) drugs, please refer to the online human immunodeficiency virus (HIV) drugs interaction checker.<sup>11</sup>

## Individuals using teratogenic drugs

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,<sup>12</sup> the CoSRH reference source: use of teratogens,<sup>13</sup> and the MHRA guide on pregnancy testing and contraception during treatment with teratogens.<sup>14</sup>

## 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 may pose a significant risk during 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 - unwell and not on treatment
- Hypertension (sustained systolic blood pressure  $\geq 140$  mmHg and/or diastolic blood pressure  $\geq 90$  mmHg)
- Ischaemic heart disease
- Malignant liver tumours (hepatocellular carcinoma)
- BMI  $\geq 40$  kg/m<sup>2</sup>
- Organ failure/transplant
- Rheumatoid arthritis
- Severe (decompensated) cirrhosis
- Sickle cell disease
- Stroke
- Systemic lupus erythematosus (SLE)
- Systemic sclerosis
- Thrombogenic conditions
- Tuberculosis
- Teratogenic drugs (see above)

## Summary of changes from UKMEC 2016

A total of 21 topics were reviewed as part of the UKMEC revision. Osteoporosis and risk factors for VTE have been considered throughout the UKMEC where relevant.

### Revisions to terminology

References to intrauterine contraception (IUC) or intrauterine systems (IUS) have been replaced with intrauterine device (IUD) to reflect WHO terminology.

### New conditions/characteristics

- Multiple sclerosis
- Chronic kidney disease (CKD)
- Sickle cell trait
- Multiple risk factors for VTE (see NICE guidance for [DVT<sup>2</sup>](#) and [PE<sup>3</sup>](#) risk factors)

### Conditions no longer included

No conditions have been removed from the UKMEC, but sub-conditions removed are:

- Increased risk of sexually transmitted infections (STI): The IUD guidance has been updated since the UKMEC in 2016, and it is no longer recommended that a clinician awaits a negative sexual health screen result prior to fitting an IUD. Therefore, a consensus was reached among the GDG to remove this category from the UKMEC.

### Conditions that have been reviewed and not added

- E-cigarettes: clarification added
- New products drospirenone (DRSP) and Estetrol (E4): clarification added
- High risk human papillomavirus (HPV): clarification added
- Metabolic dysfunction-associated steatotic liver disease (MASLD): insufficient evidence to make recommendations

### Conditions where the sub-conditions have been revised

These are highlighted by grey shading in the table below:

- Hypertension: to reflect NICE classification of blood pressure
- VTE: to simplify and reflect current evidence and practice
- Breast cancer: change to definitions of current and past
- STI: to include mycoplasma genitalium and to simplify classifications
- HIV: removal of all reference to CD4 counts and a shift towards person-centred language. Inclusion of HIV prophylaxis.

## Conditions where there has been a change to the UKMEC category

Changes to the MEC categories are highlighted by grey shading in the table below. In those conditions where there has been a change to the MEC category, there have also been revisions to the clarification and/or evidence sections.

## Conditions where there have been changes to clarifications or evidence

In addition to the table below, the following conditions have had changes to evidence or clarification only. There has been no change to MEC categories for the following conditions:

- Postpartum IUD (evidence updated)
- Migraine (additional resources moved into table)
- Pelvic inflammatory disease (PID) (clarification added)
- Radical trachelectomy (clarification wording amended)
- Age > 45 and progestogen-only contraception (evidence regarding DMPA added)
- Organ transplant (evidence added)
- Rheumatoid arthritis (evidence added)
- Liver tumours (evidence added)

## Changes to emergency contraception section

- Postpartum use: no interruption of breastfeeding is necessary following a single dose of ulipristal acetate or levonorgestrel when given for emergency contraception
- VTE: Cu-IUD changed from category 2 to 1 for consistency.
- CKD: added to this section

## References

References from the individual sections have been merged into one set of references. These are available at the end of Section A. Hyperlinks to the references are available throughout the document. Guidance published prior to the change of name to CoSRH (August 2025) is referenced with FSRH as the author but these guidelines remain current and valid.

**Table 3: Summary of changes from UKMEC 2016**

<b>SUMMARY OF CHANGES FROM UKMEC 2016</b>						
<p>Conditions for which there has been a change to the MEC category, a change in how the condition is classified or an update to the clarification or evidence are shown below.            Conditions that do not appear below remain unchanged.</p> <p>Cu-IUD = Copper-bearing intrauterine device; LNG-IUD = Levonorgestrel-releasing intrauterine device.            IMP = Progestogen-only implant.            DMPA = Progestogen-only injectable: depot medroxyprogesterone acetate.            POP = Progestogen-only pill; CHC = Combined hormonal contraception</p>						
CONDITION	Cu-IUD	LNG-IUD	IMP	DMPA	POP	CHC
I = Initiation, C = Continuation						
<b>PERSONAL CHARACTERISTICS AND REPRODUCTIVE HISTORY</b>						
<b>Postpartum</b>						
a) 0 to <3 weeks						
(i) With other risk factors for VTE	<b>See below</b>		1	3	1	4
(ii) Without other risk factors			1	2	1	3
b) 3 to <6 weeks						
(i) With other risk factors for VTE	<b>See below</b>		1	3	1	3
(ii) Without other risk factors			1	1	1	2
c) ≥6 weeks			1	1	1	1
<b>Smoking</b>	UKMEC does not include use of e-cigarettes as there is insufficient evidence to establish associated risks. However, given the unknown long term cardiovascular risks with e-cigarettes alternatives to CHC should be prioritised.					
a) Age <35 years	1	1	1	1	1	2
b) Age ≥35 years						
(i) <15 cigarettes/day	1	1	1	1	1	3
(ii) ≥15 cigarettes/day	1	1	1	1	1	4
(iii) Stopped smoking <1 year	1	1	1	1	1	3
(iv) Stopped smoking ≥1 year	1	1	1	1	1	2
<b>Obesity</b>						
a) BMI ≥30–34.9 kg/m <sup>2</sup>	1	1	1	1	1	2
b) BMI ≥35 kg/m <sup>2</sup>	1	1	1	2	1	3
<b>History of bariatric surgery</b>						
a) With BMI <30 kg/m <sup>2</sup>	1	1	1	1	1	1
b) With BMI ≥30–34.9 kg/m <sup>2</sup>	1	1	1	1	1	2
c) With BMI ≥35 kg/m <sup>2</sup>	1	1	1	2	1	3

# SUMMARY OF CHANGES FROM UKMEC 2016

Conditions for which there has been a change to the MEC category, a change in how the condition is classified or an update to the clarification or evidence are shown below. Conditions that do not appear below remain unchanged.

Cu-IUD = Copper-bearing intrauterine device; LNG-IUD = Levonorgestrel-releasing intrauterine device.  
IMP = Progestogen-only implant.

DMPA = Progestogen-only injectable: depot medroxyprogesterone acetate.  
POP = Progestogen-only pill; CHC = Combined hormonal contraception

CONDITION	Cu-IUD	LNG-IUD	IMP	DMPA	POP	CHC
	I = Initiation, C = Continuation					
<b>CARDIOVASCULAR DISEASE (CVD)</b>						
<b>Multiple risk factors for CVD</b> (e.g., smoking, diabetes, hypertension, obesity, dyslipidemias).  Where more than one risk factor is present, clinical judgement must be applied	1	2	2	3	2	3
<b>Hypertension</b>						
a) Controlled hypertension	1	1	1	2	1	3
b) Consistently elevated blood pressure (BP) levels (properly taken measurements)						
(i) Stage 1 hypertension <u>Clinic</u> Systolic 140 – 159 and/or Diastolic 90 – 99  <u>Home</u> Systolic 135 – 149 and/or Diastolic 85 - 94	1	1	1	2	1	3
(ii) Stage 2 or 3 hypertension <u>Clinic</u> Systolic ≥ 160 and/or Diastolic ≥ 100  <u>Home</u> Systolic ≥ 150 and/or Diastolic ≥ 95	1	1	1	2	1	4
c) Vascular disease	1	2	2	3	2	4
<b>Stroke and transient ischemic attack*</b> (includes arterial thrombosis, venous thrombosis and intracerebral haemorrhage)	1	2	I 2 C 3	3	I 2 C 3	4
<b>Venous thromboembolism (VTE)</b>						
History of VTE or current VTE (on anticoagulants)	1	2	2	3	2	4
<b>Risk factors for VTE</b>						
a) Family history of VTE (first degree relative)	1	1	1	2	1	3

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Conditions for which there has been a change to the MEC category, a change in how the condition is classified or an update to the clarification or evidence are shown below.

Conditions that do not appear below remain unchanged.

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IMP = Progestogen-only implant.

DMPA = Progestogen-only injectable: depot medroxyprogesterone acetate.

POP = Progestogen-only pill; CHC = Combined hormonal contraception

CONDITION	Cu-IUD	LNG-IUD	IMP	DMPA		POP	CHC
	I = Initiation, C = Continuation						
b) Major surgery	1	1	2	I 3	C 2	2	4
c) Immobility (e.g. wheelchair use, chronic conditions)	1	1	1	2		1	3
<b>Multiple risk factors for VTE</b> (additional examples include cancer, high BMI, thrombotic or inflammatory disorders)  Where more than one risk factor is present, clinical judgement must be applied.	1	1	1	3		1	4
<b>Superficial venous thrombosis</b>							
a) Varicose veins	1	1	1	1	1	1	1
b) Superficial venous thrombosis	1	1	1	2		1	2
<b>Known thrombogenic mutations</b> (e.g. factor V Leiden, prothrombin mutation, protein S, protein C and antithrombin deficiencies)	1	2	2	3		2	4
<b>Multiple Sclerosis (MS)</b>							
a) MS with prolonged immobility	1	1	1	2		1	3
b) MS without prolonged immobility	1	1	1	2		1	1
<b>MENTAL HEALTH CONDITIONS</b>							
<b>Anxiety and mood disorders</b>	There is not consistent evidence that hormonal contraceptives (HCs) worsen or improve anxiety or mood (affective) disorders in those with pre-existing conditions. When starting hormonal contraception, clinicians should provide individualised counselling and advise patients to monitor their mood, seeking follow-up with their healthcare provider if they notice a deterioration. See CoSRH statement. <a href="#">15</a>						

# SUMMARY OF CHANGES FROM UKMEC 2016

Conditions for which there has been a change to the MEC category, a change in how the condition is classified or an update to the clarification or evidence are shown below. Conditions that do not appear below remain unchanged.

Cu-IUD = Copper-bearing intrauterine device; LNG-IUD = Levonorgestrel-releasing intrauterine device.  
IMP = Progestogen-only implant.

DMPA = Progestogen-only injectable: depot medroxyprogesterone acetate.  
POP = Progestogen-only pill; CHC = Combined hormonal contraception

CONDITION	Cu-IUD	LNG-IUD	IMP	DMPA	POP	CHC	
	I = Initiation, C = Continuation						
<b>BREAST AND REPRODUCTIVE TRACT CONDITIONS</b>							
<b>Cervical intraepithelial neoplasia (CIN)</b> Includes individuals with high-risk human papillomavirus (HR-HPV)	1	2	1	2	1	2	
<b>Breast conditions</b>							
a) Undiagnosed mass/breast symptoms	1	2	2	2	2	I 3	C 2
b) Benign breast conditions	1	1	1	1	1	1	
c) Family history of breast cancer	1	1	1	1	1	1	
d) Carriers of high-risk gene mutations associated with breast cancer (e.g. BRCA1/BRCA2)	1	2	2	2	2	3	
e) Breast cancer							
(i) Currently being treated for breast cancer	1	4	4	4	4	4	
(ii) Completed treatment for breast cancer	1	3	3	3	3	3	
<b>Ovarian cancer (epithelial)</b> <i>BRCA carriers – see above</i>	1	1	1	2	1	2	
<b>Endometrial cancer</b>	I 4	C 2	I 4	C 2	1	2	1 2
<b>Sexually transmitted infections (STIs)</b>							
a) Chlamydia, gonorrhoea or mycoplasma genitalium* (current infection)	I	C	I	C			
(i) Clinical symptoms/signs of infection**	4	2	4	2	1	1	1
(ii) No clinical symptoms/signs of infection	3	2	3	2	1	1	1
b) Other current STIs (excluding HIV & hepatitis)	2	2	1	1	1	1	

## SUMMARY OF CHANGES FROM UKMEC 2016

Conditions for which there has been a change to the MEC category, a change in how the condition is classified or an update to the clarification or evidence are shown below.

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**Cu-IUD = Copper-bearing intrauterine device; LNG-IUD = Levonorgestrel-releasing intrauterine device.**

**IMP = Progestogen-only implant.**

**DMPA = Progestogen-only injectable: depot medroxyprogesterone acetate.**

**POP = Progestogen-only pill; CHC = Combined hormonal contraception**

CONDITION	Cu-IUD		LNG-IUD		IMP	DMPA	POP	CHC
	I = Initiation, C = Continuation							
c) Current vaginitis, including trichomonas vaginalis (TV) and bacterial vaginosis (BV)	2		2		1	1	1	1
* M Gen testing is only recommended in certain circumstances, see British Association for Sexual Health and HIV (BASHH) guidelines. <sup>16</sup>								
**Clinical symptoms and signs of infection include cervicitis, purulent discharge, lower abdominal pain, post-coital bleeding and/or systemic manifestations. PID is covered above.								
<b>Human immunodeficiency virus (HIV)</b>								
a) High risk for HIV	1		1		1	1	1	1
b) Living with HIV								
(i) Living with HIV Clinically well, on treatment	2		2		1	1	1	1
(ii) Living with HIV Clinically unwell and not on treatment	I	C	I	C	1	1	1	1
	3	2	3	2				
c) Taking HIV medications (for treatment or prophylaxis)	<p>Certain HIV drugs have the potential to affect the bioavailability of steroid hormones in hormonal contraception. Drug interactions are not presented in the UKMEC as MEC categories relate to safety of contraceptive use, not effectiveness. For current recommendations, clinicians should refer to the FSRH Clinical Effectiveness Unit (CEU) Guidance: Drug Interactions Between HIV Antiretroviral Therapy and Contraception<sup>17</sup> and the University of Liverpool HIV Drug Interactions Checker.<sup>11</sup></p> <p>Note: there may be specific bone mineral density considerations around coadministration of tenofovir disoproxil (TDF) when used for HIV pre-exposure prophylaxis (PrEP) or treatment and DMPA.</p>							
<b>Chronic kidney disease (CKD)</b>								
a) Current nephrotic syndrome	2		2		2	3	2*	4
b) Haemodialysis	2		2		2	3	2*	4
c) Peritoneal dialysis	2		2		2	3	2*	4
*POP: excluding drospirenone (DRSP), which should not be used in individuals with severe renal insufficiency or acute renal failure <sup>18</sup> and should be used with caution in individuals at risk of hyperkalaemia. See FSRH Clinical Guideline: Progestogen-only pills. <sup>19</sup>								

# SUMMARY OF CHANGES FROM UKMEC 2016

Conditions for which there has been a change to the MEC category, a change in how the condition is classified or an update to the clarification or evidence are shown below. Conditions that do not appear below remain unchanged.

Cu-IUD = Copper-bearing intrauterine device; LNG-IUD = Levonorgestrel-releasing intrauterine device.  
IMP = Progestogen-only implant.

DMPA = Progestogen-only injectable: depot medroxyprogesterone acetate.

POP = Progestogen-only pill; CHC = Combined hormonal contraception

CONDITION	Cu-IUD	LNG-IUD	IMP	DMPA	POP	CHC
	I = Initiation, C = Continuation					
<b>GASTROINTESTINAL CONDITIONS</b>						
<b>Inflammatory bowel disease</b> (including Crohn's disease and ulcerative colitis)	1	1	1	2	2	2
<b>ANAEMIAS</b>						
<b>Sickle cell disease</b>	2	1	1	2	1	2
<b>Sickle cell trait</b>	There is insufficient evidence to give MEC ratings for sickle cell trait (SCT). There is a small increase in the risk of VTE with SCT, therefore alternatives to CHC should be prioritised.					
<b>RHEUMATIC DISEASES</b>						
<b>Systemic lupus erythematosus (SLE)</b> No antiphospholipid antibodies	1	2	2	2	2	2
<b>Positive antiphospholipid antibodies</b>	1	2	2	3	2	4
<b>DRUG INTERACTIONS</b>						
<b>Taking medication</b>	Refer to CoSRH guideline Drug Interactions with Hormonal Contraception. <sup>7</sup> See Drug interactions with hormonal contraception in Section A: Introduction for further resources including drug interaction checkers.					

## SECTION B: METHODS OF CONTRACEPTION

### Intrauterine devices (IUD)

Intrauterine devices are highly effective and long-acting with a licensed duration of use of 3-10 years depending on the type. The IUD is significantly more cost effective than shorter acting methods due to very low failure rates and the requirement for very minimal action by the user apart from undergoing the initial insertion procedure.

There are two types of IUD:

- Copper-bearing intrauterine device (Cu-IUD)
- Levonorgestrel-releasing intrauterine device (LNG-IUD)

It is important to note that IUDs do not protect against sexually transmitted infections (STIs) including HIV. If there is a risk of STI/HIV (including during pregnancy or postpartum), the correct and consistent use of condoms is recommended, either alone or with another contraception method. Condoms reduce the risk of STI/HIV.

FSRH guidance on IUD<sup>20</sup> is available on the CoSRH website.

#### Copper intrauterine device (Cu-IUD)

Cu-IUDs have copper on their central stems and may also be banded with copper sleeves on the arms. The surface area from which copper is released varies between devices. In general, banded Cu-IUDs which have the higher surface areas of copper are the most effective and long-lasting so are recommended as the first-choice copper devices.

#### Levonorgestrel-releasing intrauterine device (LNG-IUD)

Several LNG-IUDs are available in three dosages of LNG. The 13.5mg LNG-IUD is licensed for 3 years, the 19.5mg LNG-IUD for 5 years and the 52mg LNG-IUD for 8 years. Although there is significantly more data for the 52mg LNG-IUD, the categories within the UKMEC can be extrapolated to all doses of LNG-IUD.

#### Definitions 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.

**Table 4: Intrauterine devices**

<b>INTRAUTERINE DEVICES (IUD)</b> Copper-bearing intrauterine device (Cu-IUD), Levonorgestrel-releasing IUD (LNG-IUD)			
<b>CONDITION</b> *See additional comments at end of section	<b>CATEGORY</b> I = Initiation C = Continuation		<b>CLARIFICATION/EVIDENCE</b>
	Cu-IUD	LNG-IUD	
<b>PERSONAL CHARACTERISTICS AND REPRODUCTIVE HISTORY</b>			
<b>Pregnancy</b>	NA	NA	<b>Clarification:</b> Most pregnancies which occur in women using an IUD will be intrauterine, but ectopic pregnancy must be excluded.  Women who become pregnant whilst using an IUD should be informed of the increased risks of second-trimester septic miscarriage, preterm delivery and infection if the IUD is left <i>in situ</i> . Women who are pregnant with an IUD <i>in situ</i> and wish to continue with the pregnancy should be informed that, when possible, IUD removal reduces the risk of an adverse outcome. However, removal itself carries a small risk of miscarriage. Whether or not an IUD is removed, pregnant women should be advised to seek medical care if they develop heavy bleeding, cramping pain, abnormal vaginal discharge or fever. <sup>20</sup>
<b>Age</b>			
a) Menarche to <20 years	2	2	<b>Evidence:</b> Risks of pregnancy, infection and perforation are low among IUD users of all ages. Removals for bleeding issues do not appear to be related to age. Younger women using the IUD may have an increased risk of expulsion compared with older women. <sup>21-31</sup>
b) ≥20 years	1	1	
<b>Parity</b>			
a) Nulliparous	1	1	<b>Evidence:</b> Risks for expulsion, perforation, pregnancy and infection are low among all IUD users and differences by parity may not be clinically meaningful. Data do not suggest an increased delay in return to fertility for nulliparous IUD users. <sup>21,23,27-30</sup>
b) Parous	1	1	
<b>Postpartum</b> (in breastfeeding or non-breastfeeding women, including post-caesarean section)			
a) 0 to ≤ 48 hours	1	1	<b>Immediate insertion</b> (0 to <48 hours): Evidence has shown that insertion within the first 48 hours after vaginal or caesarean delivery is safe. <sup>32</sup> A systematic review of observational studies
b) 48 hours to 4 weeks	3	3	
c) ≥4 weeks	1	1	

<b>INTRAUTERINE DEVICES (IUD)</b>			
<b>Copper-bearing intrauterine device (Cu-IUD), Levonorgestrel-releasing IUD (LNG-IUD)</b>			
<b>CONDITION</b> <small>*See additional comments at end of section</small>	<b>CATEGORY</b> I = Initiation C = Continuation		<b>CLARIFICATION/EVIDENCE</b>
	Cu-IUD	LNG-IUD	
			<p>reported low rates of abnormal bleeding, uterine infection and perforation following immediate insertion of IUD.<sup>33</sup> A recent systematic review of randomised trials found that immediate IUD insertion (within days of childbirth while in hospital) compared with delayed insertion at 4–6 weeks is associated with higher expulsion rates at 6 months postpartum.<sup>34</sup></p> <p><b>Interval insertion (48 hrs to &lt; 4 weeks):</b> Evidence for insertions between 48 hours and &lt;4 weeks is limited and inconsistent. In a randomised trial of 404 women, insertion at 2–4 weeks versus 6–8 weeks resulted in no perforations, three pelvic infections in the early group (3/149, 2.0%) versus none in the interval group (0/145), and more malpositioned devices with earlier insertion, although numbers were small and certainty was low.<sup>35</sup> Studies using broader definitions of later postpartum insertion (e.g. 72h to &lt;4w, 96h to &lt;6w) reported expulsion and perforation rates of around 2%.<sup>36–38</sup></p> <p><b>Breastfeeding:</b> Two interval postpartum trials provide consistent evidence that hormonal and non-hormonal IUD initiated from 6 weeks postpartum do not adversely affect breastfeeding or infant outcomes (differences in milk intake, milk composition, infant growth, breastfeeding continuation and exclusivity).<sup>39,40</sup> For further detail please see Supplementary Evidence Tables (Topic 1).</p>
d) Postpartum sepsis	4	4	<b>Clarification:</b> Immediate insertion of an IUD may substantially worsen the condition.
<b>Post-abortion</b>			
a) First trimester	1	1	<p><b>Evidence:</b> IUDs can be inserted immediately after first- or second-trimester, surgical or medical abortion.<sup>41</sup></p> <p><b>Evidence:</b> There is no difference in the risk of complications for immediate versus delayed insertion of an IUD after abortion. Expulsion may be greater when the IUD is inserted following a second-trimester abortion versus following a first-trimester abortion.<sup>41–60</sup></p>
b) Second trimester	2	2	
c) Post-abortion sepsis	4	4	<b>Clarification:</b> Immediate insertion of an IUD may substantially worsen the condition.
<b>Past ectopic pregnancy</b>	1	1	
<b>History of pelvic surgery</b>	1	1	

INTRAUTERINE DEVICES (IUD)					
Copper-bearing intrauterine device (Cu-IUD), Levonorgestrel-releasing IUD (LNG-IUD)					
CONDITION *See additional comments at end of section	CATEGORY I = Initiation C = Continuation				CLARIFICATION/EVIDENCE
	Cu-IUD		LNG-IUD		
<b>Smoking</b>					<p><b>Clarification:</b> UKMEC does not include the use of e-cigarettes as there is insufficient evidence to establish associated risks. However, given the unknown long term cardiovascular risks with e-cigarettes alternatives to combined hormonal contraception (CHC) should be prioritised.</p> <p><b>Evidence:</b> Combined oral contraception (COC) users who smoke are at an increased risk of cardiovascular disease (CVD), especially myocardial infarction (MI), compared with those who do not smoke. Studies also show an increased risk of MI with an increasing number of cigarettes smoked per day. <a href="#">39-44,61-66</a></p> <p>The 35 year age cut-off is identified because any excess mortality associated with smoking is only apparent from this age. <a href="#">67</a> The mortality rate from all causes (including cancers) decreases to that of a non-smoker within 20 years of smoking cessation. The CVD risk associated with smoking decreases within 1 to 5 years of smoking cessation. <a href="#">67-69</a></p>
a) Age <35 years	1		1		
b) Age ≥35 years					
(i) <15 cigarettes/day	1		1		
(ii) ≥15 cigarettes/day	1		1		
(iii) Stopped smoking <1 year	1		1		
(iv) Stopped smoking ≥1 year	1		1		
<b>Obesity</b>					
a) BMI ≥30–34.9 kg/m <sup>2</sup>	1		1		
b) BMI ≥35 kg/m <sup>2</sup>	1		1		
<b>History of bariatric surgery</b>					
a) With BMI <30 kg/m <sup>2</sup>	1		1		
b) With BMI ≥30–34.9 kg/m <sup>2</sup>	1		1		
c) With BMI ≥35 kg/m <sup>2</sup>	1		1		
<b>Organ transplant</b>					
a) Complicated: graft failure (acute or chronic), rejection, cardiac allograft vasculopathy	I	C	I	C	<p><b>Evidence:</b> No comparative studies have examined IUD use among transplant patients. Four case reports of transplant patients using the IUD provide inconsistent results, including beneficial effects and contraceptive failures. <a href="#">70-73</a></p> <p>Also see 'major surgery' section.</p>
	3	2	3	2	
b) Uncomplicated	2		2		
<b>CARDIOVASCULAR DISEASE (CVD)</b>					
<b>Multiple risk factors for CVD</b> (such as smoking, diabetes, obesity and dyslipidaemias)	1		2		<p><b>Clarification:</b> Where more than one risk factor is present, clinical judgement must be applied.</p>

<b>INTRAUTERINE DEVICES (IUD)</b>			
<b>Copper-bearing intrauterine device (Cu-IUD), Levonorgestrel-releasing IUD (LNG-IUD)</b>			
<b>CONDITION</b> <small>*See additional comments at end of section</small>	<b>CATEGORY</b> I = Initiation C = Continuation		<b>CLARIFICATION/EVIDENCE</b>
	Cu-IUD	LNG-IUD	
<b>Hypertension*</b>			
a) Controlled hypertension	1	1	<p><b>Good Practice Point (GPP):</b> obtaining blood pressure measurements.<sup>74</sup></p> <p>If blood pressure measured in the clinic is 140/90 mmHg or higher:</p> <ul style="list-style-type: none"> <li>Take a second measurement during the consultation.</li> <li>If the second measurement is substantially different from the first, take a third measurement.</li> <li>Record the lower of the last two measurements as the clinic blood pressure.</li> </ul> <p>Ambulatory blood pressure monitoring (ABPM): Follow threshold for home readings.</p> <p>For all categories of hypertension, classifications assume that no other risk factor for CVD exists. When multiple risk factors do exist, the risk of CVD may increase substantially. Follow guidance for 'multiple risk factors for CVD'.</p> <p><b>Clarification:</b> Vascular disease includes coronary heart disease presenting with angina, peripheral vascular disease presenting with intermittent claudication, renovascular disease, hypertensive retinopathy and transient ischaemic attack (TIA).</p> <p><b>Clarification:</b> When current BP is measurable and normal.</p> <p><b>Clarification:</b> LNG-IUD may be continued if women develop ischaemic heart disease while using the method. Clinical judgement and assessment of pregnancy risk and other factors are required.</p> <p><b>Evidence:</b> Three observational studies found no evidence of increased risk of ischaemic stroke with LNG-IUD use<sup>75-77</sup> with two of them suggesting a protective effect of LNG-IUD.<sup>75,76</sup></p> <p>A single observational study suggests no difference in the incidence of intracerebral haemorrhage with LNG-IUD use compared to no use of hormonal contraception (HC).<sup>75</sup></p> <p>For further detail please see Supplementary Evidence Tables (Topic 4).</p>
b) Consistently elevated blood pressure (BP) levels (properly taken measurements)			
(i) Stage 1 hypertension <u>Clinic</u> Systolic 140 – 159 and/or Diastolic 90 – 99  <u>Home</u> Systolic 135 – 149 and/or Diastolic 85 - 94	1	1	
(ii) Stage 2 or 3 hypertension <u>Clinic</u> Systolic ≥ 160 and/or Diastolic ≥ 100  <u>Home</u> Systolic ≥ 150 and/or Diastolic ≥ 95	1	1	
c) Vascular disease	1	2	
<b>History of high BP during pregnancy</b>	1	1	
<b>Current and history of ischaemic heart disease*</b>	1	<b>I</b>	<b>C</b>
		2	3
<b>Stroke and transient ischemic attack*</b> (includes arterial thrombosis, venous thrombosis and intracerebral haemorrhage)	1	2	

INTRAUTERINE DEVICES (IUD)			
Copper-bearing intrauterine device (Cu-IUD), Levonorgestrel-releasing IUD (LNG-IUD)			
CONDITION  *See additional comments at end of section	CATEGORY I = Initiation C = Continuation		CLARIFICATION/EVIDENCE
	Cu-IUD	LNG-IUD	
Known dyslipidaemias	1	2	<p><b>Clarification:</b> Routine screening for these genetic mutations is not cost effective.</p> <p>Increased levels of total cholesterol, low-density lipoproteins (LDL) and triglycerides, as well as decreased levels of high-density lipoproteins (HDL), are known risk factors for CVD. Women with known, severe, genetic lipid disorders are at a much higher lifetime risk for CVD and may warrant further clinical consideration.</p>
<b>Venous thromboembolism (VTE)*</b>			
History of VTE or current VTE (on anticoagulants)	1	2	<p><b>Clarification:</b> VTE includes deep vein thrombosis (DVT) and pulmonary embolism (PE).</p> <p><b>Evidence:</b> Very low certainty evidence suggests a lower rate<sup>78,79</sup> or no difference<sup>80</sup> in VTE recurrence with LNG-IUD compared to no HC.</p> <p>Limited evidence indicates that insertion of the LNG-IUD does not pose major bleeding risks in women on long-term anticoagulant therapy.<sup>81–83</sup></p> <p><b>Major surgery:</b> Includes major elective surgery (&gt;30 minutes' duration) and all surgery on the legs, or surgery which involves prolonged immobilisation of a lower limb.<sup>84</sup> These recommendations do not apply to minor surgery with short duration of anaesthesia (e.g. dilation and curettage (D&amp;C) or tooth extraction).</p>
<b>Risk factors for VTE</b>			
a) Family history of VTE (first degree relative)	1	1	
b) Major surgery	1	1	
c) Immobility (e.g. wheelchair use, chronic conditions)	1	1	
<b>Multiple risk factors for VTE</b> (additional examples include cancer, high BMI, thrombotic or inflammatory disorders)	1	1	<p><b>Clarification:</b> Where more than one risk factor is present, clinical judgement must be applied.</p> <p>See NICE guidance for a full list of <a href="#">DVT<sup>2</sup></a> and <a href="#">PE<sup>3</sup></a> risk factors.</p>
<b>Superficial venous thrombosis</b>			
a) Varicose veins	1	1	<p><b>Clarification:</b> Individuals with superficial venous thrombosis are at higher risk for venous thrombosis than the general population.<sup>85</sup></p>
b) Superficial venous thrombosis	1	1	
<b>Known thrombogenic mutations</b> (e.g. factor V Leiden, prothrombin mutation, protein S, protein C and antithrombin deficiencies)	1	2	<p><b>Clarification:</b> Routine screening for these genetic mutations is not cost effective.<sup>78,86–105</sup></p>
<b>Valvular and congenital heart disease</b>			
a) Uncomplicated	1	1	

<b>INTRAUTERINE DEVICES (IUD)</b>			
<b>Copper-bearing intrauterine device (Cu-IUD), Levonorgestrel-releasing IUD (LNG-IUD)</b>			
<b>CONDITION</b> <small>*See additional comments at end of section</small>	<b>CATEGORY</b> I = Initiation C = Continuation		<b>CLARIFICATION/EVIDENCE</b>
	Cu-IUD	LNG-IUD	
b) Complicated (e.g. pulmonary hypertension, history of subacute bacterial endocarditis)	2	2	<p><b>Clarification:</b> Uncomplicated cases can be considered where: there is (i) no requirement for cardiac medication, (ii) the woman is asymptomatic and (iii) a cardiology review is required annually or less. If in doubt, discussion with a specialist cardiologist is advised.</p> <p><i>Valvular heart disease:</i> Occurs when any of the heart valves are stenotic and/or incompetent (e.g. aortic stenosis, mitral regurgitation, tricuspid valve abnormalities, pulmonary stenosis).<a href="#">106</a></p> <p><i>Congenital heart disease:</i> Aortic stenosis, atrial septal defects, atrioventricular septal defect, cardiomyopathy (hypertrophic or dilated), coarctation of the aorta, complex transposition of the great arteries, Ebstein’s anomaly, Eisenmenger syndrome, patent ductus arteriosus, pulmonary atresia, pulmonary stenosis, tetralogy of Fallot, total anomalous pulmonary venous connection, tricuspid atresia, truncus arteriosus, ventricular septal defect.<a href="#">106</a></p> <p>Prophylaxis against bacterial endocarditis is no longer indicated for women with artificial heart valves or previous endocarditis when inserting or removing the IUD.<a href="#">84,107</a></p> <p>However, this does not necessarily mean that there is no risk.<a href="#">20</a></p>
<b>Cardiomyopathy</b>			
a) Normal cardiac function	1	1	<p><b>Clarification:</b> A woman who is not on cardiac medication can be considered as having normal cardiac function.</p>
b) Impaired cardiac function	2	2	<p><b>Evidence:</b> No direct evidence exists on the safety of the IUD among women with cardiomyopathy. Limited indirect evidence from non-comparative studies does not demonstrate any cases of arrhythmia or infective endocarditis in women with cardiac disease who used the IUD.<a href="#">108,109</a></p> <p><b>Clarification:</b> IUD insertion may induce cardiac arrhythmias in women with cardiomyopathy. The IUD should be fitted in a hospital setting as a vasovagal reaction presents a particularly high risk of cardiac events.<a href="#">107</a></p>
<b>Cardiac arrhythmias</b>			
a) Atrial fibrillation	1	2	

INTRAUTERINE DEVICES (IUD)					
Copper-bearing intrauterine device (Cu-IUD), Levonorgestrel-releasing IUD (LNG-IUD)					
CONDITION *See additional comments at end of section	CATEGORY I = Initiation C = Continuation				CLARIFICATION/EVIDENCE
	Cu-IUD		LNG-IUD		
	I	C	I	C	
b) Known long QT syndrome	3	1	3	1	<b>Clarification:</b> Cervical stimulation during the insertion of intrauterine methods can cause a vasovagal reaction including bradycardia, which increases the risk of a cardiac event in women with long QT syndrome. The IUD should be fitted in a hospital setting if vasovagal reaction presents a particularly high risk of cardiac events. <sup>107</sup>
<b>NEUROLOGICAL CONDITIONS</b>					
<b>Headaches</b>					
a) Non-migrainous (mild or severe)	1		1		<b>Clarification:</b> Headache is a common condition affecting women of reproductive age. There is no identified evidence which specifically considers migraine in women using an LNG-IUD.  Classification depends on making an accurate diagnosis of migraines and, in addition, those complicated by aura. <sup>110-112</sup>  Useful resources for making a migraine diagnosis include the Mayo clinic video ( <a href="#">Migraine aura - Mayo Clinic</a> ) <sup>113</sup> and the international classification of headache disorders 3 <sup>rd</sup> edition (ICHD-3) ( <a href="#">1. Migraine - ICHD-3</a> ). <sup>114</sup>
b) Migraine without aura, at any age	1		2		
c) Migraine with aura, at any age	1		2		
d) History (≥5 years ago) of migraine with aura, any age	1		2		
<b>Idiopathic intracranial hypertension (IIH)</b>	1		1		
<b>Epilepsy</b>	1		1		
Taking anti-epileptic drugs	Certain anti-epileptic drugs have the potential to affect the bioavailability of steroid hormones in hormonal contraception. Additionally, hormonal contraception may affect the levels of certain anti-epileptic drugs with potential adverse effects.  For up-to-date information on the potential drug interactions between hormonal contraception and anti-epileptic drugs, please refer to the online drug interaction checker available on Stockley's Interaction Checker website. <sup>10</sup>				
<b>Multiple sclerosis (MS)</b>					
a) MS with prolonged immobility	1		1		<b>Clarification:</b> The main safety concerns for hormonal contraception in individuals with MS relate to bone health and VTE risk.  Some evidence exists that individuals with MS are at higher risk of VTE than those without MS. <sup>115</sup> This is likely due mostly to immobility. There is therefore the need to differentiate individuals with MS with prolonged immobility from those without.
b) MS without prolonged immobility	1		1		

<b>INTRAUTERINE DEVICES (IUD)</b>					
Copper-bearing intrauterine device (Cu-IUD), Levonorgestrel-releasing IUD (LNG-IUD)					
CONDITION  *See additional comments at end of section	CATEGORY I = Initiation C = Continuation				CLARIFICATION/EVIDENCE
	Cu-IUD	LNG-IUD			
<b>MENTAL HEALTH CONDITIONS</b>					
<b>Anxiety and mood disorders</b>	There is not consistent evidence that hormonal contraceptives (HCs) worsen or improve anxiety or mood (affective) disorders in those with pre-existing conditions. When starting hormonal contraception, clinicians should provide individualised counselling and advise patients to monitor their mood, seeking follow-up with their healthcare provider if they notice a deterioration. See CoSRH statement. <a href="#">15</a>				
<b>BREAST AND REPRODUCTIVE TRACT CONDITIONS</b>					
<b>Vaginal bleeding patterns*</b>					
a) Irregular pattern without heavy bleeding	1	1			
b) Heavy or prolonged bleeding (includes regular and irregular patterns)	2	<b>I</b>	<b>C</b>		<b>Clarification:</b> Abnormal menstrual bleeding should raise suspicion of a serious underlying condition and be investigated appropriately. <a href="#">116-119</a>  <b>Evidence:</b> Evidence from studies examining the treatment effects of the 52 mg LNG-IUD among women with heavy or prolonged bleeding report no increase in adverse effects and finds the 52 mg LNG-IUD beneficial in treating heavy menstrual bleeding (HMB). <a href="#">120-127</a>
		1	2		
<b>Unexplained vaginal bleeding</b> (suspicious for serious condition) before evaluation	4	<b>I</b>	<b>C</b>	<b>I</b>	<b>C</b>
		4	2	4	2
<b>Endometriosis*</b>	2	1			<b>Evidence:</b> 52 mg LNG-IUD use among women with endometriosis decreases dysmenorrhoea, pelvic pain and dyspareunia. <a href="#">128-132</a>
<b>Benign ovarian tumours</b> (including cysts)	1	1			
<b>Severe dysmenorrhoea*</b>	2	1			
<b>Gestational trophoblastic disease (GTD)*</b>					
a) Undetectable human chorionic gonadotrophin (hCG) levels	1	1			<b>Clarification:</b> Includes hydatidiform mole (complete and partial) and gestational trophoblastic neoplasia.  <b>Evidence:</b> Limited evidence suggests that women using an IUD after uterine evacuation for a molar pregnancy are at no greater risk for gestational trophoblastic neoplasia than are women using other methods of contraception. <a href="#">133-136</a>
b) Decreasing hCG levels	3	3			
c) Persistently elevated hCG levels or malignant disease	4	4			

INTRAUTERINE DEVICES (IUD)					
Copper-bearing intrauterine device (Cu-IUD), Levonorgestrel-releasing IUD (LNG-IUD)					
CONDITION *See additional comments at end of section	CATEGORY I = Initiation C = Continuation				CLARIFICATION/EVIDENCE
	Cu-IUD		LNG-IUD		
Cervical ectropion	1		1		
Cervical intraepithelial neoplasia (CIN)*	1		2		<p><b>Clarification:</b> Includes individuals with high-risk human papillomavirus (HPV).</p> <p><b>Evidence:</b> A single observational study found no difference in the risk of being HPV positive between individuals with Cu-IUD and those with no use of contraception.<sup>137</sup> Another observational study found an increased chance of HPV detection but no evidence of HPV persistence among individuals using LNG-IUD.<sup>138</sup> An observational study found evidence of greater HPV persistence among LNG-IUD users compared to Cu-IUD users, and greater HPV clearance with Cu-IUD use compared to LNG-IUD.<sup>139</sup> None of the studies reported on progression to CIN or cervical cancer. For further details please see Supplementary Evidence Tables (Topic 6).</p>
<b>Cervical cancer*</b>					
a) Awaiting treatment	I	C	I	C	<p><b>Clarification:</b> Concern exists about the increased risk of infection and bleeding at insertion. The IUD will normally be removed at the time of surgery, but until then the woman is at risk of pregnancy.</p>
	4	2	4	2	
b) Radical trachelectomy	3		3		<p><b>Clarification:</b> Insertion of IUD should be conducted with extreme caution and only in a specialist setting due to abnormal anatomy. Other methods should be strongly considered.</p>
<b>Breast conditions</b>					
a) Undiagnosed mass/breast symptoms	1		2		<p><b>Clarification:</b> Breast awareness and reporting changes early should be encouraged.</p> <p>In those with high-risk benign change i.e. atypical hyperplasia and lobular carcinoma in situ (LCIS), hormonal contraception should be used with caution.</p> <p>If a breast cancer is diagnosed, hormonal contraception should be discontinued and non-hormonal contraception discussed. Breast malignancy can be hormone sensitive (ER+ve) or hormone insensitive (ER-ve). However, hormonal contraception should generally be</p>
b) Benign breast conditions	1		1		
c) Family history of breast cancer	1		1		
d) Carriers of high-risk gene mutations associated with breast cancer (e.g. BRCA1/BRCA2)	1		2		
e) Breast cancer					
(i) Currently being treated for breast cancer	1		4		

INTRAUTERINE DEVICES (IUD)					
Copper-bearing intrauterine device (Cu-IUD), Levonorgestrel-releasing IUD (LNG-IUD)					
CONDITION  *See additional comments at end of section	CATEGORY I = Initiation C = Continuation				CLARIFICATION/EVIDENCE
	Cu-IUD		LNG-IUD		
(ii) Completed treatment for breast cancer	1		3		<p>avoided after any breast cancer regardless of hormone receptor status.</p> <p>Currently being treated for breast cancer includes patients receiving any current systemic treatment for breast cancer including tamoxifen and aromatase inhibitors.</p> <p>For further information, please see the FSRH Clinical Guideline: Contraceptive choices for individuals who have or have had breast cancer. <a href="#">140</a></p> <p><b>Evidence:</b> Evidence suggests that CHC and progestogen-only contraception (POC), including LNG-IUD, could have a similar effect on breast cancer risk in the general population. <a href="#">141</a></p>
Ovarian cancer (epithelial)*	1		1		<p><b>Clarification:</b> Ovarian cancer refers to epithelial ovarian cancer. Other types of ovarian cancer should be discussed with a specialist.</p> <p>For BRCA carriers, see BRCA section above. The presence of ovarian cancer is associated with an increased risk of VTE. <a href="#">142,143</a> For further detail please see Supplementary Evidence Tables (Topic 5.3).</p>
Endometrial cancer*	I	C	I	C	The presence of endometrial cancer is associated with an increased risk of VTE. <a href="#">143</a> For further detail please see Supplementary Evidence Tables (Topic 5.3).
	4	2	4	2	
<b>Uterine fibroids</b>					
a) Without distortion of the uterine cavity	1		1		<p><b>Evidence:</b> Among women with uterine fibroids, evidence shows no adverse health events with 52 mg LNG-IUD use and a decrease in symptoms and size of fibroid. Most women experience improvements in serum levels of haemoglobin, haematocrit, ferritin and menstrual blood loss. <a href="#">144-155</a></p>
b) With distortion of the uterine cavity	3		3		<p><b>Clarification:</b> In women with a distorted uterine cavity, it may be appropriate to attempt insertion of the IUD after discussion.</p> <p><b>Evidence:</b> Available studies show that rates of 52 mg LNG-IUD expulsion are higher in women with uterine fibroids than in women without fibroids; however, these findings are either not statistically significant, or significance testing was not conducted. <a href="#">153,156</a> Rates of expulsion</p>

INTRAUTERINE DEVICES (IUD)						
Copper-bearing intrauterine device (Cu-IUD), Levonorgestrel-releasing IUD (LNG-IUD)						
CONDITION <i>*See additional comments at end of section</i>	CATEGORY I = Initiation C = Continuation				CLARIFICATION/EVIDENCE	
	Cu-IUD		LNG-IUD			
						from non-comparative studies ranged from 0% to 20%. <a href="#">150-155</a>
<b>Anatomical abnormalities</b>						
a) Distorted uterine cavity	3		3		<p><b>Clarification:</b> Includes any congenital or acquired uterine abnormality distorting the uterine cavity in a manner that is incompatible with IUD insertion.</p> <p>In some women with a distorted uterine cavity, it may be appropriate to attempt insertion of the IUD after discussion.</p>	
b) Other abnormalities	2		2		<p><b>Clarification:</b> Includes cervical stenosis or cervical lacerations not distorting the uterine cavity or interfering with IUD insertion.</p>	
<b>Pelvic inflammatory disease (PID)</b>						
a) Past PID (assuming no current risk factors for STIs)	1		1		<p><b>Clarification:</b> <b>Initiation:</b> Individuals with symptomatic pelvic infection should be tested and treated and the insertion of an IUD should be delayed until symptoms have resolved. Alternative contraception should be provided until the IUD can be inserted. <a href="#">20</a></p> <p><b>Continuation:</b> For women with symptomatic pelvic infection, treat using appropriate antibiotics and perform testing for STIs.</p> <p>Consider removing the IUD if clinical condition does not improve 48-72 hours after initiation of treatment as per FSRH and BASHH guidance. <a href="#">16,20</a></p>	
b) Current PID	I	C	I	C		
	4	2	4	2		
<b>Sexually transmitted infections (STIs)</b>						
a) Chlamydia, gonorrhoea or mycoplasma genitalium* (current infection)	I	C	I	C	<p><b>Clarification:</b> *M Gen testing is only recommended in certain circumstances, see BASHH guidelines. <a href="#">16</a> **Clinical symptoms and signs of infection include cervicitis, purulent discharge, lower abdominal pain, post-coital bleeding and/or systemic manifestations. PID is covered above.</p>	
(i) Clinical symptoms/signs of infection**	4	2	4	2		
(ii) No clinical symptoms/signs of infection	3	2	3	2		
b) Other current STIs (excluding HIV and hepatitis)	2		2		<p><b>Clarification for continuation:</b> The IUD does not usually need to be removed if the individual wishes to continue using it. Continued use depends on informed choice and current risk factors for STIs and PID. <a href="#">20</a></p> <p>For use of emergency IUD, see 'emergency contraception' section.</p>	
c) Current vaginitis, including trichomonas vaginalis (TV) and bacterial vaginosis (BV)	2		2			

INTRAUTERINE DEVICES (IUD)												
Copper-bearing intrauterine device (Cu-IUD), Levonorgestrel-releasing IUD (LNG-IUD)												
CONDITION *See additional comments at end of section	CATEGORY I = Initiation C = Continuation		CLARIFICATION/EVIDENCE									
	Cu-IUD	LNG-IUD										
			<p><b>Evidence:</b> Earlier data<sup>157,158</sup> reports higher PID rates in IUD users with untreated chlamydia or gonorrhoea. The absolute risk remained low and no studies assessed same day versus delayed insertion.<sup>158</sup></p> <p>In contrast, more recent high-quality evidence from a systematic review found no increased PID risk with IUD use among women with asymptomatic, undiagnosed STIs, with incidence comparable to non-IUD contraceptive users.<sup>159</sup> Prospective trial data from a large multicentre US LNG-IUD study reported very low pelvic infection rates (0.5% over 2 years), and no PID among women with a positive baseline STI who were treated.<sup>160</sup> Two additional studies reported no PID cases at 30 days and 12 months following IUD insertion in women with STIs at baseline.<sup>161,162</sup> For further detail please see Supplementary Evidence Tables (Topic 9).</p>									
<b>Human Immunodeficiency Virus (HIV)</b>												
a) High risk for HIV	1	1	<p><b>Evidence:</b> A single randomised controlled trial found no differences in HIV acquisition between injectable depot medroxyprogesterone acetate (DMPA), Cu-IUD and levonorgestrel implant.<sup>163</sup> The observational and randomised evidence for Cu-IUD is consistent and indicates no increased risk of HIV acquisition with use of Cu-IUD.<sup>164</sup> For further detail please see Supplementary Evidence Tables (Topic 10).</p>									
b) Living with HIV			<p><b>Clarification:</b> The initiation of an IUD method may be appropriate in women with low CD4 counts who have an undetectable viral load.</p>									
(i) Living with HIV Clinically well, on treatment	2	2										
(ii) Living with HIV Clinically unwell and not on treatment	<table border="1"> <thead> <tr> <th>I</th> <th>C</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>2</td> </tr> </tbody> </table>	I	C	3	2	<table border="1"> <thead> <tr> <th>I</th> <th>C</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>2</td> </tr> </tbody> </table>	I	C	3	2	<p><b>Evidence:</b> Among IUD users, limited evidence shows no increased risk of infection or overall complications when comparing people living with HIV and people without HIV. IUD use is not found to adversely affect progression of HIV when compared to hormonal contraception use in people living with HIV. IUD use among people living with HIV is not associated with increased risk of transmission to sexual partners.<sup>165-173</sup> No difference is found in antiretroviral therapy initiation or CD4 count between users and non-users of the LNG- IUD.<sup>174</sup></p>	
I	C											
3	2											
I	C											
3	2											
c) Taking HIV medications (for treatment or prophylaxis)	<p>Certain HIV drugs have the potential to affect the bioavailability of steroid hormones in hormonal contraception. Drug interactions are not presented in the UKMEC as MEC categories relate to safety of contraceptive use,</p>											

INTRAUTERINE DEVICES (IUD)				
Copper-bearing intrauterine device (Cu-IUD), Levonorgestrel-releasing IUD (LNG-IUD)				
CONDITION  *See additional comments at end of section	CATEGORY I = Initiation C = Continuation		CLARIFICATION/EVIDENCE	
	Cu-IUD	LNG-IUD		
	not effectiveness. For up-to-date recommendations and information, see FSRH CEU Guidance on drug interactions between HIV antiretroviral therapy and contraception <sup>17</sup> and the University of Liverpool HIV drug interactions checker. <sup>11</sup>			
<b>OTHER INFECTIONS</b>				
<b>Tuberculosis*</b>				
a) Non-pelvic	1		1	
b) Pelvic	<b>I</b>	<b>C</b>	<b>I</b>	<b>C</b>
	4	3	4	3
<b>ENDOCRINE CONDITIONS</b>				
<b>Diabetes</b>				
a) History of gestational disease	1		1	
b) Non-vascular disease				<b>Evidence:</b> Limited evidence on the use of the LNG-IUD among women with insulin-dependent or non-insulin-dependent diabetes suggests that these methods have little effect on short- or long-term diabetes control (e.g. glycosylated haemoglobin levels), haemostatic markers or lipid profile. <sup>175,176</sup>
(i) Non-insulin dependent	1		2	
(ii) Insulin-dependent	1		2	
c) Nephropathy/retinopathy/neuropathy	1		2	
d) Other vascular disease	1		2	
<b>Thyroid disorders</b>				
a) Simple goitre	1		1	
b) Hyperthyroid	1		1	
c) Hypothyroid	1		1	
<b>Chronic kidney disease (CKD)</b>				
a) Current nephrotic syndrome	2		2	<b>Clarification:</b> In individuals with CKD there is a theoretically increased risk of bleeding and infection (in those who are immunosuppressed).  <b>Evidence:</b> Three observational studies found no increased rate of infections, expulsions or discontinuation due to infection among LNG-IUD users following kidney transplant. <sup>177-179</sup>  For further detail please see Supplementary Evidence Tables (Topic 12.1).
b) Haemodialysis	2		2	
c) Peritoneal dialysis	2		2	
<b>GASTROINTESTINAL CONDITIONS</b>				
<b>Gallbladder disease</b>				
a) Symptomatic				
(i) Treated by cholecystectomy	1		2	
(ii) Medically treated	1		2	

<b>INTRAUTERINE DEVICES (IUD)</b>			
Copper-bearing intrauterine device (Cu-IUD), Levonorgestrel-releasing IUD (LNG-IUD)			
CONDITION <small>*See additional comments at end of section</small>	CATEGORY I = Initiation C = Continuation		CLARIFICATION/EVIDENCE
	Cu-IUD	LNG-IUD	
(iii) Current	1	2	
b) Asymptomatic	1	2	
<b>History of cholestasis</b>			
a) Pregnancy related	1	1	
b) Past combined oral contraception (COC) related	1	2	
<b>Viral hepatitis*</b>			
a) Acute or flare	1	1	
b) Carrier	1	1	
c) Chronic	1	1	
<b>Cirrhosis*</b>			
a) Mild (compensated without complications)	1	1	<b>Clarification:</b> Severe (decompensated) cirrhosis: development of major complications (ascites, jaundice, encephalopathy or gastrointestinal haemorrhage). <a href="#">180</a>
b) Severe (decompensated)	1	3	
<b>Liver tumours*</b>			
a) Benign			
(i) Focal nodular hyperplasia	1	2	
(ii) Hepatocellular adenoma	1	3	
b) Malignant (hepatocellular carcinoma)	1	3	
<b>Inflammatory bowel disease (IBD)*</b> (including Crohn's Disease and ulcerative colitis)	1	1	<b>Evidence:</b> Women with IBD are at higher risk than unaffected women for VTE. <a href="#">181</a>
<b>ANAEMIAS</b>			
<b>Thalassaemia*</b>	2	1	
<b>Sickle cell disease*</b>	2	1	<b>Evidence:</b> A single observational study found no difference in VTE risk between the users of implants and LNG-IUD. <a href="#">182</a>  For further detail please see Supplementary Evidence Tables (Topic 12.1).
<b>Sickle cell trait (SCT)</b>	There is insufficient evidence to give MEC ratings for SCT. There is a small increase in the risk of VTE with SCT <sup><a href="#">183</a></sup> , therefore alternatives to CHC should be prioritised. For further detail please see Supplementary Evidence Tables (Topic 12.2).		
<b>Iron deficiency anaemia*</b>	2	1	

<b>INTRAUTERINE DEVICES (IUD)</b> Copper-bearing intrauterine device (Cu-IUD), Levonorgestrel-releasing IUD (LNG-IUD)			
<b>CONDITION</b> *See additional comments at end of section	<b>CATEGORY</b> I = Initiation C = Continuation		<b>CLARIFICATION/EVIDENCE</b>
	Cu-IUD	LNG-IUD	
<b>RHEUMATIC DISEASES</b>			
Rheumatoid arthritis	1	2	
<b>Systemic lupus erythematosus (SLE)</b> No antiphospholipid antibodies	1	2	<b>Clarification:</b> People with SLE are at increased risk of ischaemic heart disease, stroke and VTE and this is reflected in the categories given.  Available evidence indicates that many women with SLE, particularly those with low disease activity and lacking positive antiphospholipid antibodies (aPL), can be considered good candidates for most methods of contraception, including hormonal contraception. <a href="#">83,184–202</a>
<b>Positive antiphospholipid antibodies (aPL)</b>	1	2	<b>Clarification:</b> Positive antiphospholipid antibodies (aPL) is not a disease state and in the absence of manifestations of the antiphospholipid syndrome a stratification of risk with specialist advice if necessary is recommended. Persistence of aPL positivity, high titre of aPL, lupus anticoagulant (LA) positivity, triple positivity for anticardiolipin antibodies (aCL), anti- $\beta$ 2-glycoprotein I ( $\beta$ gPI) and LA and moderate/high titre immunoglobulin G (IgG) aPL have greater risk for future events. <a href="#">203–206</a>
<b>DRUG INTERACTIONS</b>			
Taking medication	Refer to FSRH guideline Drug Interactions with Hormonal Contraception. <a href="#">7</a>  See Drug interactions with hormonal contraception in Section A: Introduction for further resources including drug interaction checkers.		

### Definition of UKMEC categories

UKMEC	DEFINITION OF CATEGORY
<b>Category 1</b>	A condition for which there is no restriction for the use of the method.
<b>Category 2</b>	A condition where the advantages of using the method generally outweigh the theoretical or proven risks.
<b>Category 3</b>	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.
<b>Category 4</b>	A condition which represents an unacceptable health risk if the method is used.

## Additional comments

### **HYPERTENSION, CURRENT AND HISTORY OF ISCHAEMIC HEART DISEASE, STROKE**

There is a theoretical concern about the effect of LNG on lipids. There is no restriction for Cu-IUD.

### **VENOUS THROMBOEMBOLISM (VTE)**

The LNG-IUD may be a useful treatment for HMB in women on long-term anticoagulation therapy.

### **VAGINAL BLEEDING PATTERNS**

LNG-IUD use frequently causes changes in menstrual bleeding patterns. Over time, LNG-IUD users are more likely than non-users to become amenorrhoeic particularly if they have a 52 mg LNG-IUD fitted. 52mg LNG-IUDs are used as a treatment for HMB.

### **ENDOMETRIOSIS**

Cu-IUD use may worsen dysmenorrhoea associated with the condition.

### **SEVERE DYSMENORRHOEA**

Dysmenorrhoea may intensify with Cu-IUD use. LNG-IUD use has been associated with reduction of dysmenorrhoea.

### **GESTATIONAL TROPHOBLASTIC DISEASE (GTD)**

There is theoretical concern about increased risk of perforation in the presence of persistent molar tissue.

### **CERVICAL INTRAEPITHELIAL NEOPLASIA (CIN)**

There is some theoretical concern that progestogens may enhance the progression of CIN.

### **CERVICAL CANCER**

Awaiting treatment: There is concern about the increased risk of infection and bleeding at insertion. The IUD may need to be removed at the time of treatment but, until then, the woman is at risk of pregnancy.

### **OVARIAN CANCER**

The IUD may need to be removed at the time of treatment but, until then, the woman is at risk of pregnancy.

### **ENDOMETRIAL CANCER**

There is concern about the increased risk of infection, perforation and bleeding at insertion. The IUD may need to be removed at the time of treatment but, until then, the woman is at risk of pregnancy.

### **TUBERCULOSIS**

Pelvic: Insertion of an IUD may substantially worsen the condition.

### **VIRAL HEPATITIS AND CIRRHOSIS**

POC are metabolised by the liver and their use may adversely affect women whose liver function is compromised.

### **LIVER TUMOURS**

POC are metabolised by the liver and their use may adversely affect women whose liver function is compromised. COC use is associated with growth of hepatocellular adenoma, but it is still unknown whether other hormonal contraceptives have similar effects.

### **INFLAMMATORY BOWEL DISEASE**

Risk of VTE may increase in women who are unwell, bed-bound, undergoing major surgery or experiencing prolonged immobilisation. Under these circumstances the use of the Cu-IUD or LNG-IUD is safe.

### **THALASSAEMIA, SICKLE CELL DISEASE, IRON-DEFICIENCY ANAEMIA**

There is concern about an increased risk of blood loss with Cu-IUD. However, LNG-IUD is generally associated with reduced blood loss.



## Progestogen-only contraception (POC)

The section on progestogen-only contraception (POC) includes the following methods:

- Progestogen-only implant (IMP)
- Progestogen-only injectable: depot medroxyprogesterone acetate (DMPA)
- Progestogen-only pill (POP)

CoSRH guidance on the IMP,<sup>207</sup> progestogen-only injectable<sup>208</sup> and POP<sup>209</sup> is available on the CoSRH website.

POC does not protect against sexually transmitted infections (STIs) including HIV. If there is a risk of STI/HIV (including during pregnancy or postpartum), the correct and consistent use of condoms is recommended, either alone or with another contraception method. Condoms reduce the risk of STI/HIV.

### Progestogen-only implant (IMP)

The recommendations in the UKMEC refer to the single-rod implant containing 68 mg etonogestrel licensed for 3 years of use in the UK. For women using LNG implants the UKMEC categories are considered the same as for etonogestrel implants.

### Progestogen-only injectables: depot medroxyprogesterone acetate (DMPA)

The recommendations in the UKMEC refer to DMPA given intramuscularly (IM) or subcutaneously (SC) at 13-weekly intervals.<sup>208</sup>

The available evidence reviewed by the UKMEC Guideline Development Group (GDG) suggests that DMPA-SC and DMPA-IM appear to be therapeutically equivalent with similar safety profiles when used by healthy women. The GDG considers the evidence available for DMPA-IM to be applicable to DMPA-SC and, therefore, DMPA-SC should have the same categories as DMPA-IM. This is presented in the UKMEC tables as the method 'DMPA'. For women using intramuscular norethisterone enantate (NET-EN), which is not licensed in the UK for long-term contraception, the UKMEC categories are considered the same as for DMPA.

There are theoretical concerns that higher doses of progestogen in injectables may be associated with increased risk compared to IMP and POP in some conditions. The higher UKMEC classifications reflect this.

### Progestogen-only pill (POP)

The recommendations in the UKMEC refer to the POP currently available in the UK which contain either norethisterone (NET) 350 µg, LNG 30 µg, desogestrel (DSG) 75 µg or drospirenone (DRSP) 4 mg. Additional considerations are given for drospirenone in the chronic kidney disease section.

Theoretically, the DSG pill may be expected to be more effective than traditional POP, especially with typical use, because ovulation is suppressed more consistently and it has a longer missed pill window.<sup>210</sup>

## 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.

**Table 5: Progestogen-only contraception (POC)**

<b>Progestogen-only contraception (POC)</b>				
Progestogen-only pill (POP); Progestogen-only injectable: depot medroxyprogesterone acetate (DMPA); Progestogen-only implant (IMP)				
	CATEGORY I = Initiation, C = Continuation			
CONDITION	IMP	DMPA	POP	CLARIFICATION/EVIDENCE
*See additional comments at end of section				
PERSONAL CHARACTERISTICS AND REPRODUCTIVE HISTORY				
<b>Pregnancy</b>	NA	NA	NA	<b>Clarification:</b> There is no known harm to the woman, the course of pregnancy or the foetus if POC is accidentally used during pregnancy.
<b>Age</b>				
a) Menarche to <18 years	1	2	1	<b>Clarification:</b> The National Institute for Health and Care Excellence (NICE) recommends that women should be informed that use of DMPA is associated with a small reduction in bone mineral density (BMD), but this usually recovers after discontinuation.  DMPA should be reviewed every 2 years to assess individual situations and to discuss the risks and benefits.  In women aged <18 years, DMPA can be used as a first-line option after consideration of other methods. <a href="#">211</a>  <b>Evidence:</b> Evidence for any long- term effects of DMPA on BMD in women under 18-years-old is lacking. <a href="#">212</a> A case control study with first-time fractures (vertebral and non-vertebral) found that DMPA use was associated with increased fracture risk, in those who had more than three prescriptions, when compared to non-users. <a href="#">213</a>  For further detail please see Supplementary Evidence Tables (Topic 14).
b) 18–45 years	1	1	1	
c) >45 years	1	2	1	
<b>Parity</b>				
a) Nulliparous	1	1	1	
b) Parous	1	1	1	
<b>Postpartum</b>				
a) 0 to <3 weeks				<b>Clarification:</b> This includes any births, including stillbirths from 24 weeks' gestation.
(i) With other risk factors for venous thromboembolism (VTE)	1	3	1	

## Progestogen-only contraception (POC)

Progestogen-only pill (POP); Progestogen-only injectable: depot medroxyprogesterone acetate (DMPA);  
Progestogen-only implant (IMP)

CONDITION	CATEGORY I = Initiation, C = Continuation			CLARIFICATION/EVIDENCE
	IMP	DMPA	POP	
<i>*See additional comments at end of section</i>				
(ii) Without other risk factors	1	2	1	Five observational studies found evidence of an increased risk of VTE with DMPA use compared to no hormonal contraception (HC) <a href="#">80,214–217</a> .
b) 3 to <6 weeks				
(i) With other risk factors for VTE	1	3	1	Where more than one risk factor for VTE is present, clinical judgement must be applied.  Implant and POP may be safely used by non-breastfeeding women immediately postpartum.  Contraception is not required until day 21 postpartum. <a href="#">218</a>  <b>Evidence:</b> Low certainty evidence from one observational study suggests a higher incidence rate of VTE with DMPA use in the postpartum period compared to no HC. <a href="#">219</a>  For further detail please see Supplementary Evidence Tables (Topic 5).
(i) Without other risk factors	1	1	1	
c) ≥6 weeks	1	1	1	
<b>Breastfeeding</b>				
a) 0 to <6 weeks	1	2	1	<b>Evidence:</b> Direct evidence demonstrates no harmful effect of POC on breastfeeding performance <a href="#">39,40,62–65,218,220–260</a> and generally demonstrates no harmful effects on infant growth, health or development. <a href="#">223,237,246,252</a>
b) ≥6 weeks to <6 months (primarily breastfeeding)	1	1	1	
c) ≥6 months	1	1	1	
<b>Post-abortion</b>				
a) First trimester	1	1	1	<b>Clarification:</b> Includes induced abortions and spontaneous miscarriages <24 weeks' gestation.
b) Second trimester	1	1	1	
c) Post-abortion sepsis	1	1	1	POC can be started immediately following surgical abortion or medical abortion. <a href="#">261</a>
<b>Past ectopic pregnancy</b>				
	1	1	1	<b>Clarification:</b> POC reduces the risk of pregnancy (intrauterine and extrauterine).
<b>History of pelvic surgery</b>				
	1	1	1	

## Progestogen-only contraception (POC)

Progestogen-only pill (POP); Progestogen-only injectable: depot medroxyprogesterone acetate (DMPA);  
Progestogen-only implant (IMP)

CONDITION	CATEGORY I = Initiation, C = Continuation			CLARIFICATION/EVIDENCE
	IMP	DMPA	POP	
*See additional comments at end of section				
<b>Smoking</b>				<p><b>Clarification:</b> UKMEC does not include the use of e-cigarettes as there is insufficient evidence to establish associated risks. However, given the unknown long term cardiovascular risks with e-cigarettes alternatives to combined hormonal contraception (CHC) should be prioritised.</p>
a) Age <35 years	1	1	1	<p>POC do not appear to increase the risk of cardiovascular disease (CVD) even in smokers. <a href="#">68,217,262,263</a></p> <p>The mortality rate from all causes (including cancers) decreases to that of a non-smoker within 20 years of smoking cessation. The CVD risk associated with smoking decreases within 1 to 5 years of smoking cessation. <a href="#">67-69,264</a> The 35-year age cut-off is identified because any excess mortality associated with smoking is only apparent from this age. <a href="#">69</a></p>
b) Age ≥35 years				
(i) <15 cigarettes/day	1	1	1	
(ii) ≥15 cigarettes/day	1	1	1	
(iii) Stopped smoking <1 year	1	1	1	
(iv) Stopped smoking ≥1 year	1	1	1	
<b>Obesity</b>				
a) BMI ≥30–34.9 kg/m <sup>2</sup>	1	1	1	<p><b>Evidence:</b> The risk of VTE rises as BMI increases over 30 and rises further with BMI over 35. <a href="#">265</a></p> <p>Five observational studies found evidence of an increased risk of VTE with DMPA use compared to no HC, <a href="#">80,214-217</a> if other risk factors for VTE exist, follow guidance for 'multiple risk factors for VTE'.</p>
b) BMI ≥35 kg/m <sup>2</sup>	1	2	1	
<b>History of bariatric surgery</b>				
a) With BMI <30 kg/m <sup>2</sup>	1	1	1	<p><b>Clarification:</b> Bariatric surgical procedures involving a malabsorptive component have the potential to decrease oral contraception effectiveness, perhaps further decreased by postoperative complications such as long-term diarrhoea and/or vomiting.</p> <p><b>Evidence:</b> Limited evidence demonstrates no substantial decrease in effectiveness of oral contraception among women who underwent laparoscopic placement of an adjustable gastric band. <a href="#">266</a></p>
b) With BMI ≥30–34.9 kg/m <sup>2</sup>	1	1	1	
c) With BMI ≥35 kg/m <sup>2</sup>	1	2	1	

## Progestogen-only contraception (POC)

Progestogen-only pill (POP); Progestogen-only injectable: depot medroxyprogesterone acetate (DMPA);  
Progestogen-only implant (IMP)

CONDITION	CATEGORY I = Initiation, C = Continuation			CLARIFICATION/EVIDENCE
	IMP	DMPA	POP	
*See additional comments at end of section				Limited evidence demonstrates no substantial decrease in effectiveness of oral contraception among women who undergo a biliopancreatic diversion; <sup>267</sup> however, evidence from pharmacokinetic studies suggests conflicting results of oral contraception effectiveness among women who undergo a jejunio-ileal bypass. <sup>268,269</sup>
<b>Organ transplant</b>				
a) Complicated: graft failure (acute or chronic), rejection, cardiac allograft vasculopathy	2	2	2	<b>Clarification:</b> Graft thrombosis is a well-recognised complication of solid organ transplantation; the risk is variable and depends on the organ type. <sup>270</sup>  Also see 'major surgery' section.
b) Uncomplicated	2	2	2	
<b>CARDIOVASCULAR DISEASE (CVD)</b>				
<b>Multiple risk factors for CVD</b> (such as smoking, diabetes, hypertension, obesity and dyslipidaemias)	2	3	2	<b>Clarification:</b> When multiple major risk factors exist, the risk of CVD may increase substantially. Where more than one risk factor is present, clinical judgement must be applied.
<b>Hypertension*</b>				
a) Controlled hypertension	1	2	1	<b>Good Practice Point (GPP): obtaining blood pressure measurements<sup>74</sup></b> If blood pressure measured in the clinic is 140/90 mmHg or higher <ul style="list-style-type: none"> <li>• Take a second measurement during the consultation.</li> <li>• If the second measurement is substantially different from the first, take a third measurement.</li> <li>• Record the lower of the last two measurements as the clinic blood pressure.</li> </ul> <b>Ambulatory blood pressure monitoring (ABPM):</b> Follow threshold for home readings.  <b>Clarification:</b> For all categories of hypertension, classifications assume that no other risk factor for CVD exists. When multiple risk factors do exist, the risk of CVD may increase substantially. Follow guidance for 'multiple risk factors for CVD'.
b) Consistently elevated blood pressure (BP) levels (properly taken measurements)				
(i) Stage 1 hypertension <u>Clinic</u> Systolic 140 – 159 and/or Diastolic 90 – 99  <u>Home</u> Systolic 135 – 149 and/or Diastolic 85 - 94	1	2	1	
(ii) Stage 2 or 3 hypertension <u>Clinic</u> Systolic ≥ 160 and/or Diastolic ≥ 100  <u>Home</u> Systolic ≥ 150 and/or Diastolic ≥ 95	1	2	1	
c) Vascular disease	2	3	2	

## Progestogen-only contraception (POC)

Progestogen-only pill (POP); Progestogen-only injectable: depot medroxyprogesterone acetate (DMPA);  
Progestogen-only implant (IMP)

CONDITION	CATEGORY I = Initiation, C = Continuation			CLARIFICATION/EVIDENCE
	IMP	DMPA	POP	
*See additional comments at end of section				
				<p>Vascular disease includes coronary heart disease presenting with angina, peripheral vascular disease presenting with intermittent claudication, hypertensive retinopathy and transient ischaemic attack (TIA).</p> <p><b>Evidence:</b> Limited evidence suggests that among women with hypertension, those who used POP or DMPA have a small increased risk of cardiovascular events compared with women who do not use these methods.<a href="#">217</a></p> <p>For further detail please see Supplementary Evidence Tables (Topic 3).</p>
History of high BP during pregnancy	1	1	1	<b>Clarification:</b> Where current BP is measurable and normal.
Current and history of ischaemic heart disease*	<b>I</b>	<b>C</b>	3	<p><b>Clarification:</b> The duration of use of POC in relation to the onset of disease should be carefully considered when deciding whether continuation of the method is appropriate.</p> <p><b>Evidence:</b> Cohort studies do not show an increased risk of myocardial infarction (MI) and stroke in users of POC.<a href="#">217,271</a></p>
	2	3		
Stroke and transient ischemic attack* (includes arterial thrombosis, venous thrombosis and intracerebral haemorrhage)	<b>I</b>	<b>C</b>	3	<p><b>Evidence:</b> Some observational studies found no evidence of association between the use of POP and risk of stroke<a href="#">272,273</a> similar for implant.<a href="#">76</a> A more recent observational study found a small increased risk of stroke in users of the implant and POP.<a href="#">77</a></p> <p>For further detail please see Supplementary Evidence Tables (Topic 4).</p>
	2	3		
Known dyslipidaemias	2	2	2	<p><b>Clarification:</b> Routine screening for these genetic mutations is not cost effective.</p> <p>Increased levels of total cholesterol, low-density lipoproteins (LDL) and triglycerides, as well as decreased levels of high-density lipoproteins (HDL), are known risk factors for CVD. Women with known, severe, genetic lipid disorders are</p>

## Progestogen-only contraception (POC)

Progestogen-only pill (POP); Progestogen-only injectable: depot medroxyprogesterone acetate (DMPA); Progestogen-only implant (IMP)

CONDITION	CATEGORY I = Initiation, C = Continuation			CLARIFICATION/EVIDENCE
	IMP	DMPA	POP	
*See additional comments at end of section				at much higher lifetime risk for CVD and may warrant further clinical consideration.
<b>Venous thromboembolism (VTE)</b>				
History of VTE or current VTE (on anticoagulants)	2	3	2	<b>Clarification:</b> VTE includes deep vein thrombosis (DVT) and pulmonary embolism (PE).
<b>Risk factors for VTE</b>				
a) Family history of VTE (first degree relative)	1	2	1	<b>Major surgery:</b> Includes major elective surgery (>30 minutes' duration) and all surgery on the legs, or surgery which involves prolonged immobilisation of a lower limb. <sup>274</sup> These recommendations do not apply to minor surgery with short duration of anaesthesia (e.g. dilation and curettage (D&C) or tooth extraction).  When discontinuation of DMPA is not possible (e.g. after trauma or if a patient is admitted for an elective procedure and still using DMPA), thromboprophylaxis (with low molecular weight heparin and intermittent pneumatic compression) is advised.  <b>Evidence:</b> Five observational studies found evidence of an increased risk of VTE with DMPA use compared to no HC. <sup>80,214-217</sup> If other risk factors for VTE exist, follow guidance for 'multiple risk factors for VTE'.  Limited evidence indicates that use of DMPA in women on chronic anticoagulation therapy does not pose a significant risk of haematoma at the injection site or increase the risk of heavy or irregular vaginal bleeding. <sup>275,276</sup>
b) Major surgery	2	I 3	C 2	
c) Immobility (e.g. wheelchair use, chronic conditions)	1	2	1	
<b>Multiple risk factors for VTE</b> (additional examples include cancer, high BMI, thrombotic or inflammatory disorders)	1	3	1	<b>Clarification:</b> Where more than one risk factor for VTE is present, clinical judgement must be applied. See NICE guidance for a full list of <a href="#">DVT<sup>2</sup></a> and <a href="#">PE<sup>3</sup></a> risk factors.  <b>Evidence:</b> Five observational studies found evidence of an increased risk of VTE with DMPA use compared to no HC. <sup>80,214-217</sup>  For further detail please see Supplementary Evidence Tables (Topic 5).

## Progestogen-only contraception (POC)

Progestogen-only pill (POP); Progestogen-only injectable: depot medroxyprogesterone acetate (DMPA);  
Progestogen-only implant (IMP)

CONDITION	CATEGORY I = Initiation, C = Continuation			CLARIFICATION/EVIDENCE
	IMP	DMPA	POP	
<i>*See additional comments at end of section</i>				
<b>Superficial venous thrombosis</b>				
a) Varicose veins	1	1	1	
b) Superficial venous thrombosis	1	2	1	<p><b>Clarification:</b> Individuals with superficial venous thrombosis are at higher risk for venous thrombosis than the general population.<sup>85</sup> Where multiple risk factors for VTE exist, see 'multiple risk factors for VTE'.</p> <p>Five observational studies found evidence of an increased risk of VTE with DMPA use compared to no HC.<sup>80,214–217</sup></p> <p>For further detail please see Supplementary Evidence Tables (Topic 5).</p>
<b>Known thrombogenic mutations</b> (e.g. factor V Leiden, prothrombin mutation, protein S, protein C and antithrombin deficiencies)	2	3	2	<p><b>Clarification:</b> Routine screening for these genetic mutations is not cost-effective.<sup>86–88</sup></p> <p><b>Evidence:</b> Five observational studies found evidence of an increased risk of VTE with DMPA use compared to no HC.<sup>80,214–217</sup></p>
<b>Valvular and congenital heart disease*</b>				
a) Uncomplicated	1	1	1	

## Progestogen-only contraception (POC)

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CONDITION	CATEGORY I = Initiation, C = Continuation			CLARIFICATION/EVIDENCE
	IMP	DMPA	POP	
*See additional comments at end of section				
b) Complicated (e.g. pulmonary hypertension, history of subacute bacterial endocarditis)	1	1	1	<p><b>Clarification:</b> Uncomplicated cases can be considered where: there is (i) no requirement for cardiac medication, (ii) the woman is asymptomatic and (iii) a cardiology review is required annually or less. If in doubt, discussion with a specialist cardiologist is advised.</p> <p><b>Valvular heart disease:</b> Occurs when any of the heart valves are stenotic and/or incompetent (e.g. aortic stenosis, mitral regurgitation, tricuspid valve abnormalities, pulmonary stenosis).<sup><a href="#">106</a></sup></p> <p><b>Congenital heart disease:</b> Aortic stenosis, atrial septal defects, atrioventricular septal defect, cardiomyopathy (hypertrophic or dilated), coarctation of the aorta, complex transposition of the great arteries, Ebstein's anomaly, Eisenmenger syndrome, patent ductus arteriosus, pulmonary atresia, pulmonary stenosis, tetralogy of Fallot, total anomalous pulmonary venous connection, tricuspid atresia, truncus arteriosus, ventricular septal defect.<sup><a href="#">106</a></sup></p>
<b>Cardiomyopathy</b>				
a) Normal cardiac function	1	1	1	<p><b>Clarification:</b> A woman who is not on cardiac medication can be considered as having normal cardiac function.</p> <p><b>Evidence:</b> No direct evidence exists on the safety of POC among women with cardiomyopathy. Limited indirect evidence from non-comparative studies of women with cardiac disease demonstrates few cases of hypertension, thromboembolism and heart failure in women with cardiac disease using POP and DMPA.<sup><a href="#">108,277</a></sup></p>
b) Impaired cardiac function	2	2	2	
<b>Cardiac arrhythmias</b>				
a) Atrial fibrillation	2	2	2	
b) Known long QT syndrome (LQTS)	1	2	1	<p><b>Evidence:</b> Case reports suggest exacerbation of LQTS with use of DMPA as postpartum contraception.<sup><a href="#">278,279</a></sup></p>

## Progestogen-only contraception (POC)

Progestogen-only pill (POP); Progestogen-only injectable: depot medroxyprogesterone acetate (DMPA);  
Progestogen-only implant (IMP)

CONDITION	CATEGORY I = Initiation, C = Continuation			CLARIFICATION/EVIDENCE				
	IMP	DMPA	POP					
*See additional comments at end of section								
<b>NEUROLOGICAL CONDITIONS</b>								
<b>Headaches</b>								
a) Non-migrainous (mild or severe)	1	1	1	<p><b>Clarification:</b> Headache is a common condition affecting women of reproductive age.</p> <p><b>Evidence:</b> Few studies have specifically assessed migraine in POC users. Since there are no studies comparing active POC with placebo, the true effect of POC on migraine is not clear. However, there is no evidence that the use of progestogen-only POC is associated with an increased risk of ischaemic stroke.<sup>110</sup></p> <p>Classification depends on making an accurate diagnosis of migraines and, in addition, those complicated by aura.<sup>110-112</sup></p> <p>Useful resources for making a migraine diagnosis include the Mayo clinic video (<a href="#">Migraine aura - Mayo Clinic</a>)<sup>113</sup> and the international classification of headache disorders 3<sup>rd</sup> edition (ICHD-3) (<a href="#">1. Migraine - ICHD-3</a>)<sup>114</sup></p>				
b) Migraine without aura, at any age	2	2	<table border="1" style="display: inline-table;"> <tr> <th>I</th> <th>C</th> </tr> <tr> <td>1</td> <td>2</td> </tr> </table>		I	C	1	2
I	C							
1	2							
c) Migraine with aura, at any age	2	2	2					
d) History (≥5 years ago) of migraine with aura, any age	2	2	2					
<b>Idiopathic intracranial hypertension (IIH)</b>	1	1	1					
<b>Epilepsy</b>	1	1	1					
<b>Taking antiepileptic drugs</b>	<p>Certain anti-epileptic drugs have the potential to affect the bioavailability of steroid hormones in hormonal contraception. In addition, hormonal contraception may affect the levels of certain anti-epileptic drugs with potential adverse effects.</p> <p>For up-to-date information on the potential drug interactions between hormonal contraception and anti-epileptic drugs, please refer to the online drug interaction checker available on Stockley's Interaction Checker website.<sup>104</sup></p>							
<b>Multiple sclerosis (MS)</b>				<p><b>Clarification:</b> The main safety concerns for hormonal contraception in individuals with MS relate to bone health and VTE risk.</p> <p>Some evidence exists that individuals with MS are at higher risk of VTE than those without MS.<sup>115</sup> This is likely due mostly to immobility.</p>				
a) MS with prolonged immobility	1	2	1					
b) MS without prolonged immobility	1	2	1					

## Progestogen-only contraception (POC)

Progestogen-only pill (POP); Progestogen-only injectable: depot medroxyprogesterone acetate (DMPA); Progestogen-only implant (IMP)

CONDITION	CATEGORY I = Initiation, C = Continuation			CLARIFICATION/EVIDENCE
	IMP	DMPA	POP	
*See additional comments at end of section				<p>There is therefore the need to differentiate individuals with MS with prolonged immobility from those without.</p> <p><b>Evidence:</b> MS patients have a 1.2-fold increased risk of any fracture.<sup>115</sup></p> <p>A systematic review of observational studies found no evidence for the theoretical concern that progestogen-only injectables may be associated with bone mineral density and fracture risk in the women with MS.<sup>115</sup></p>
<b>MENTAL HEALTH CONDITIONS</b>				
Anxiety and mood disorders	There is not consistent evidence that hormonal contraceptives (HCs) worsen or improve anxiety or mood (affective) disorders in those with pre-existing conditions. When starting hormonal contraception, clinicians should provide individualised counselling and advise patients to monitor their mood, seeking follow-up with their healthcare provider if they notice a deterioration. See CoSRH statement. <sup>15</sup>			
<b>BREAST AND REPRODUCTIVE TRACT CONDITIONS</b>				
<b>Vaginal bleeding patterns</b>				
a) Irregular pattern without heavy bleeding	2	2	2	<p><b>Clarification:</b> Abnormal menstrual bleeding should raise suspicion of a serious underlying condition and be investigated appropriately.<sup>116,117</sup></p> <p>Bleeding patterns in women using POC are often altered particularly in the initial months of use and may not settle with time.<sup>117</sup></p>
b) Heavy or prolonged bleeding (includes regular and irregular patterns)	2	2	2	
Unexplained vaginal bleeding* (suspicious for serious condition) before evaluation	3	3	2	<p><b>Clarification:</b> If pregnancy or an underlying pathological condition (such as pelvic malignancy) is suspected, it must be evaluated and the category adjusted after evaluation.<sup>117</sup></p>
Endometriosis	1	1	1	
Benign ovarian tumours (including cysts)	1	1	1	
Severe dysmenorrhoea	1	1	1	
<b>Gestational trophoblastic disease (GTD)</b>				
a) Undetectable human chorionic gonadotrophin (hCG) levels	1	1	1	<p><b>Clarification:</b> Includes hydatidiform mole (complete and partial) and gestational trophoblastic neoplasia.</p>
b) Decreasing hCG levels	1	1	1	

## Progestogen-only contraception (POC)

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CONDITION	CATEGORY I = Initiation, C = Continuation			CLARIFICATION/EVIDENCE
	IMP	DMPA	POP	
*See additional comments at end of section				
c) Persistently elevated hCG levels or malignant disease	1	1	1	A small study which included women using POP and DMPA concluded that current use of hormonal contraception is not associated with development of gestational trophoblastic neoplasia or delayed time to hCG remission. <sup>280</sup>
<b>Cervical ectropion</b>	1	1	1	
<b>Cervical intraepithelial neoplasia (CIN)</b>	1	2	1	<p><b>Clarification:</b> Includes individuals with high-risk human papillomavirus (HPV).</p> <p><b>Evidence:</b> A prospective cohort<sup>281</sup> (N=1,135) found no association between DMPA use and HPV acquisition or persistence, with moderate certainty but possible residual confounding. In contrast, a smaller case-control study<sup>282</sup> suggested that recent DMPA use <math>\geq 1</math> year increased HPV detection, though DMPA was not associated with CIN2/3 progression and findings may reflect unmeasured confounding. Overall certainty is low to moderate, with no consistent evidence that DMPA increases HPV acquisition or progression.</p> <p>For further detail please see Supplementary Evidence Tables (Topic 6).</p>
<b>Cervical cancer*</b>				
a) Awaiting treatment	2	2	1	<b>Clarification:</b> There is some theoretical concern that POC use could affect prognosis of the existing disease. While awaiting treatment, women may use POC.
b) Radical trachelectomy	2	2	1	
<b>Breast conditions</b>				
a) Undiagnosed mass/breast symptoms	2	2	2	<p><b>Clarifications:</b> Breast awareness and reporting changes early should be encouraged.</p> <p>In those with high-risk benign change i.e. atypical hyperplasia and lobular carcinoma in situ (LCIS), hormonal contraception should be used with caution.</p>
b) Benign breast conditions	1	1	1	
c) Family history of breast cancer	1	1	1	
d) Carriers of high-risk gene mutations associated with breast cancer (e.g. BRCA1/BRCA2)	2	2	2	

## Progestogen-only contraception (POC)

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CONDITION	CATEGORY I = Initiation, C = Continuation			CLARIFICATION/EVIDENCE
	IMP	DMPA	POP	
*See additional comments at end of section				
e) Breast cancer				<p>If a breast cancer is diagnosed, hormonal contraception should be discontinued and non-hormonal contraception discussed. Breast malignancy can be hormone sensitive (ER+ve) or hormone insensitive (ER-ve). However, hormonal contraception should generally be avoided after any breast cancer regardless of hormone receptor status.</p> <p>Currently being treated for breast cancer includes patients receiving any current systemic treatment for breast cancer including tamoxifen and aromatase inhibitors.</p> <p>For further information, please see FSRH Clinical Guideline: Contraceptive choices for individuals who have or have had breast cancer. <a href="#">283</a></p> <p><b>Evidence:</b> Evidence suggests that CHC and POC, including LNG-IUD, could have a similar effect on breast cancer risk in the general population. <a href="#">141</a></p> <p><b>BRCA mutation:</b> Systematic reviews of observational studies <a href="#">284,285</a> found oral contraception, compared to no HC, potentially increases the risk of breast cancer in BRCA carriers.</p>
(i) Currently being treated for breast cancer	4	4	4	
(ii) Completed treatment for breast cancer	3	3	3	
Ovarian cancer*	1	2	1	<p><b>Clarification:</b> Ovarian cancer refers to epithelial ovarian cancer. Other types of ovarian cancer should be discussed with a specialist.</p> <p>For BRCA carriers, see the BRCA section.</p> <p><b>Evidence:</b> Both the use of DMPA <a href="#">80,214-217</a> and the presence of ovarian cancer <a href="#">142,143</a> were found to be associated with an increased risk of VTE. For further detail please see Supplementary Evidence Tables (Topic 5.3).</p>

## Progestogen-only contraception (POC)

Progestogen-only pill (POP); Progestogen-only injectable: depot medroxyprogesterone acetate (DMPA);  
Progestogen-only implant (IMP)

CONDITION	CATEGORY I = Initiation, C = Continuation			CLARIFICATION/EVIDENCE
	IMP	DMPA	POP	
<i>*See additional comments at end of section</i>				
Endometrial cancer*	1	2	1	Both DMPA <sup>80,214–217</sup> and presence of endometrial cancer <sup>143</sup> were found to be associated with an increased risk of VTE. For further detail please see Supplementary Evidence Tables (Topic 5.3).
<b>Uterine fibroids</b>				
a) Without distortion of the uterine cavity	1	1	1	
b) With distortion of the uterine cavity	1	1	1	
<b>Pelvic inflammatory disease (PID)</b>				
a) Past PID (assuming no current risk factors for STIs)	1	1	1	
b) Current PID	1	1	1	
<b>Sexually transmitted infections (STIs)</b>				
a) Chlamydia, gonorrhoea or mycoplasma genitalium* (current infection)				* M Gen testing is only recommended in certain circumstances, see BASHH guidelines. <sup>16</sup>
(i) Clinical symptoms/signs of infection**	1	1	1	<p>**Clinical symptoms and signs of infection include cervicitis, purulent discharge, lower abdominal pain, post-coital bleeding and/or systemic manifestations. PID is covered above.</p> <p><b>Evidence:</b> There is a lack of evidence about the effect of hormonal contraception on STI prognosis.</p> <p>Limited evidence suggests that hormonal contraception does not increase shedding or frequency of lesions in those with herpes simplex virus (HSV)<sup>286</sup> and neither increases nor decreases the risk of TV acquisition.<sup>287,288</sup></p> <p>For other STIs, there is either evidence of no association between DMPA use and STI acquisition or evidence that is too limited to draw any conclusions.<sup>289–295</sup> For further detail please see Supplementary Evidence Tables (Topic 9).</p>
(ii) No clinical symptoms/signs of infection	1	1	1	
b) Other current STIs (excluding HIV and hepatitis)	1	1	1	
c) Current vaginitis, including trichomonas vaginalis (TV) and bacterial vaginosis (BV)	1	1	1	

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CONDITION	CATEGORY			CLARIFICATION/EVIDENCE
	IMP	DMPA	POP	
I = Initiation, C = Continuation				
*See additional comments at end of section				
<b>Human Immunodeficiency Virus (HIV)</b>				
a) High risk for HIV	1	1	1	<p><b>Evidence:</b> High-quality evidence from one large randomised controlled trial (the ECHO study) found no statistically significant differences in HIV acquisition between women using DMPA-IM, the Cu-IUD, or the implant.<sup>163</sup> A systematic review that included 14 observational studies and three implant studies suggested a possible increased risk of HIV infection with progestin-only injectables, although this was most likely due to residual confounding, while no increased risk was found for implant users; no studies of sufficient quality were identified for progestin-only pills.<sup>164</sup></p> <p>For further detail please see Supplementary Evidence Tables (Topic 10).</p>
b) Living with HIV				<p><b>Evidence:</b> Five studies suggest no association between use of progestogen-only injectables and progression of HIV, as measured by CD4 count &lt;200 cells/mm<sup>3</sup>, initiation of ART or mortality.<sup>296-302</sup> One randomised trial shows an increased risk of a composite outcome of declining CD4 count or death among oral contraceptive users (COC and POP) when compared with users of Cu-IUDs but has significant confounders limiting its interpretation.<sup>171,302</sup></p> <p>Most indirect studies measuring whether various hormonal contraception methods affect plasma HIV viral load find no effect.<sup>165,168,174,301,303-315</sup></p>
(i) Living with HIV Clinically well, on treatment	1	1	1	
(ii) Living with HIV Clinically unwell and not on treatment	1	1	1	
c) Taking HIV medications (for treatment or prophylaxis)	<p>Certain HIV drugs have the potential to affect the bioavailability of steroid hormones in hormonal contraception. Drug interactions are not presented in the UKMEC as MEC categories relate to safety of contraceptive use, not effectiveness. For up-to-date recommendations and information, see FSRH CEU Guidance on drug interactions between HIV antiretroviral therapy and contraception<sup>17</sup> and the University of Liverpool HIV drug interactions checker.<sup>11</sup></p> <p>Note, there may be specific bone mineral density considerations around coadministration of tenofovir disoproxil (TDF) when used for HIV pre-exposure prophylaxis (PrEP) or treatment and DMPA.</p>			

## Progestogen-only contraception (POC)

Progestogen-only pill (POP); Progestogen-only injectable: depot medroxyprogesterone acetate (DMPA); Progestogen-only implant (IMP)

CONDITION	CATEGORY I = Initiation, C = Continuation			CLARIFICATION/EVIDENCE
	IMP	DMPA	POP	
*See additional comments at end of section				
<b>OTHER INFECTIONS</b>				
<b>Tuberculosis</b>				
a) Non-pelvic	1	1	1	
b) Pelvic	1	1	1	
<b>ENDOCRINE CONDITIONS</b>				
<b>Diabetes*</b>				
a) History of gestational disease	1	1	1	<b>Evidence:</b> POC has no adverse effects on serum lipid levels in women with a history of gestational diabetes according to two small studies. <a href="#">316,317</a> Limited evidence is inconsistent regarding the development of non-insulin dependent diabetes among users of POC with a history of gestational diabetes. <a href="#">318-322</a>
b) Non-vascular disease				
(i) Non-insulin dependent	2	2	2	<b>Evidence:</b> Among women with insulin or non-insulin dependent diabetes, limited evidence on the use of POC suggests that these methods have little effect on short-term or long-term diabetes control (e.g. HbA1c levels), haemostatic markers or lipid profile. <a href="#">322-325</a>
(ii) Insulin-dependent	2	2	2	
c) Nephropathy/retinopathy/neuropathy	2	2	2	
d) Other vascular disease	2	2	2	
<b>Thyroid disorders</b>				
a) Simple goitre	1	1	1	
b) Hyperthyroid	1	1	1	
c) Hypothyroid	1	1	1	
<b>Chronic kidney disease (CKD)</b>				
a) Current nephrotic syndrome	2	3	2*	<b>Clarification:</b> *POP: excluding drospirenone (DRSP), which should not be used in individuals with severe renal insufficiency or acute renal failure and should be used with caution in individuals at risk of hyperkalaemia. <a href="#">18</a> See FSRH Clinical Guideline: Progestogen only pills. <a href="#">19</a>  <b>DMPA:</b> Use of DMPA should be carefully considered due to the negative impact on bone health in this population.
b) Haemodialysis	2	3	2*	
c) Peritoneal dialysis	2	3	2*	

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CONDITION	CATEGORY I = Initiation, C = Continuation			CLARIFICATION/EVIDENCE
	IMP	DMPA	POP	
*See additional comments at end of section				<p><b>Evidence:</b> A single observational study on the use of DMPA in kidney transplant recipients found no evidence suggestive of impaired renal function among DMPA users. <a href="#">326</a> A single observational study on the use of POP, specifically drospirenone, in individuals with renal impairment found no evidence suggestive of increased rate of hyperkalaemia or high serum potassium level (&gt;5.5 mmol/L) in POP users. <a href="#">327</a></p> <p>For further detail please see Supplementary Evidence Tables (Topic 10).</p>
<b>GASTROINTESTINAL CONDITIONS</b>				
<b>Gallbladder disease</b>				
a) Symptomatic				
(i) Treated by cholecystectomy	2	2	2	
(ii) Medically treated	2	2	2	
(iii) Current	2	2	2	
b) Asymptomatic	2	2	2	
<b>History of cholestasis*</b>				
a) Pregnancy related	1	1	1	
b) Past-COC related	2	2	2	
<b>Viral hepatitis*</b>				
a) Acute or flare	1	1	1	
b) Carrier	1	1	1	
c) Chronic	1	1	1	
<b>Cirrhosis*</b>				
a) Mild (compensated without complications)	1	1	1	<p><b>Clarification:</b> Severe (decompensated) cirrhosis: development of major complications (ascites, jaundice, encephalopathy or gastrointestinal haemorrhage). <a href="#">180</a></p>
b) Severe (decompensated)	3	3	3	
<b>Liver tumours*</b>				
a) Benign				<p><b>Evidence:</b> There is limited direct evidence that hormonal contraception use does not influence either progression or regression of liver lesions among women</p>
(i) Focal nodular hyperplasia	2	2	2	

## Progestogen-only contraception (POC)

Progestogen-only pill (POP); Progestogen-only injectable: depot medroxyprogesterone acetate (DMPA); Progestogen-only implant (IMP)

CONDITION	CATEGORY I = Initiation, C = Continuation			CLARIFICATION/EVIDENCE
	IMP	DMPA	POP	
*See additional comments at end of section				
(ii) Hepatocellular adenoma	3	3	3	with focal nodular hyperplasia. <a href="#">328–330</a> A small observational study found a greater reduction in size of adenoma with POC compared to no hormonal contraception. <a href="#">331</a>
b) Malignant (hepatocellular carcinoma)	3	3	3	
<b>Inflammatory bowel disease (IBD)*</b> (including Crohn's disease and ulcerative colitis)	1	2	2	<p><b>Clarification:</b> Women with IBD are at higher risk than unaffected women for VTE.<a href="#">181</a> Observational studies show a potential increased fracture risk<a href="#">213</a> and a small reduction in BMD<a href="#">332,333</a> among DMPA users in the general population. Oral methods may be less reliable if there is significant malabsorption or small bowel resection.</p> <p><b>Evidence:</b> Risk for disease relapse among women with IBD using oral contraception (most studies do not specify whether it is POP or COC) does not increase significantly from that for non-users.<a href="#">334–338</a></p>
<b>ANAEMIAS</b>				
Thalassaemia	1	1	1	
Sickle cell disease	1	2	1	<p><b>Clarification:</b> Most episodes of VTE occur during a sickle cell crisis. Limited evidence suggests that DMPA reduces the risk of sickle cell crisis. There is also evidence that suggests DMPA may increase the risk of VTE in the general population compared to no HC,<a href="#">80,214–217</a> so users of DMPA should be counselled about this risk.</p> <p><b>Evidence:</b> A randomised trial found that the number of individuals with bone pain during 30-week follow-up was lower among the DMPA users compared to no HC; however, the severity of the pain did not differ substantially.<a href="#">339</a></p> <p>The observational studies found no evidence suggesting a difference in the discontinuation due to adverse events (AE) in users of DMPA compared to POP<a href="#">340</a> and no evidence of VTE risk between DMPA and LNG-IUD.<a href="#">182</a></p>

## Progestogen-only contraception (POC)

Progestogen-only pill (POP); Progestogen-only injectable: depot medroxyprogesterone acetate (DMPA);  
Progestogen-only implant (IMP)

CONDITION	CATEGORY I = Initiation, C = Continuation			CLARIFICATION/EVIDENCE
	IMP	DMPA	POP	
*See additional comments at end of section				For further detail please see Supplementary Evidence Tables (Topic 12.1).
Sickle cell trait (SCT)	There is insufficient evidence to give MEC ratings for SCT. There is a small increase in the risk of VTE with SCT <sup>183</sup> therefore alternatives to CHC should be prioritised. For further detail please see Supplementary Evidence Tables (Topic 12.2).			
Iron deficiency anaemia	1	1	1	
<b>RHEUMATIC DISEASES</b>				
Rheumatoid arthritis (RA)	2	2	2	<p><b>Clarification:</b> Risk of CVD is increased among women with rheumatoid arthritis<sup>341</sup> and that is reflected in the categories given. There is no evidence that POC is associated with reduced BMD or fragility fractures in women with rheumatoid arthritis. However, observational studies show a potential increased fracture risk<sup>213</sup> and a small reduction in BMD<sup>332,333</sup> among DMPA users in the general population.</p> <p>Given the increased risk of osteoporosis in people with RA, the use of DMPA should be carefully considered due to its potential negative impact on bone health in this population.</p> <p><b>Evidence:</b> Limited evidence shows no consistent pattern of improvement or worsening of rheumatoid arthritis with use of oral contraception<sup>342-349</sup> (most studies do not specify whether it is POP or COC).</p>

## Progestogen-only contraception (POC)

Progestogen-only pill (POP); Progestogen-only injectable: depot medroxyprogesterone acetate (DMPA);  
Progestogen-only implant (IMP)

CONDITION	CATEGORY I = Initiation, C = Continuation			CLARIFICATION/EVIDENCE
	IMP	DMPA	POP	
*See additional comments at end of section				
<b>Systemic lupus erythematosus (SLE)</b> No antiphospholipid antibodies	2	2	2	<p><b>Clarification:</b> Women with SLE are at an increased risk of ischaemic heart disease, stroke and VTE and this is reflected in the categories given. <a href="#">188-190,192,194,200,201</a></p> <p>Available evidence indicates that many women with SLE, particularly those with low disease activity and lacking positive antiphospholipid antibodies (aPL), can be considered good candidates for most methods of contraception, including hormonal contraception. <a href="#">83,184-202</a></p> <p><b>Clarification:</b> Positive antiphospholipid antibodies (aPL) is not itself a disease state and in the absence of manifestations of the antiphospholipid syndrome a stratification of risk with specialist advice, if necessary, is recommended. In particular, persistence of aPL positivity, high titre of aPL, lupus anticoagulant (LA) positivity, triple positivity for anticardiolipin antibodies (aCL), anti-β2-glycoprotein I (βgPI) and LA and moderate/high titre immunoglobulin G (IgG) aPL have greater risk for future events. <a href="#">203-206</a></p> <p><b>Evidence:</b> Five observational studies found evidence of an increased risk of VTE with DMPA use compared to no HC. <a href="#">80,214-217</a> If an individual has additional risk factors for VTE, follow guidance for 'multiple risk factors for VTE'.</p>
<b>Positive antiphospholipid antibodies</b>	2	3	2	
<b>DRUG INTERACTIONS*</b>				
<b>Taking medication</b>	Refer to FSRH guideline Drug Interactions with Hormonal Contraception. <a href="#">7</a> See Drug interactions with hormonal contraception in Section A: Introduction for further resources including drug interaction checkers.			

## 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.

## Additional comments

### **HYPERTENSION**

If BP is increased, it should be re-assessed and monitored according to current guidelines.

### **CARDIOVASCULAR DISEASE, ISCHAEMIC HEART DISEASE AND STROKE**

There is concern regarding hypoestrogenic effects and reduced HDL levels among users of DMPA. However, there is little concern about these effects regarding POP or IMP. The effects of DMPA may persist for some time after discontinuation.

### **VALVULAR AND CONGENITAL HEART DISEASE, CARDIOMYOPATHY AND CARDIAC ARRHYTHMIAS**

Stasis, endothelial injury and hyperviscosity (Virchow's triad) increase the risk of clot formation. Impaired cardiac function and/or dilated heart chambers or arrhythmia increase the risk of stasis. Closure of a cardiac defect within the last six months or presence of a mechanical heart valve increase the risk of thrombus formation. Cyanotic defects are associated with hyperviscosity because of erythrocytosis.

### **UNEXPLAINED VAGINAL BLEEDING**

POC may cause irregular bleeding patterns which may mask symptoms of underlying pathology. The effects of DMPA may persist for some time after discontinuation.

### **CERVICAL, ENDOMETRIAL AND OVARIAN CANCER**

While awaiting treatment, women with gynaecological cancers may use POC since the period of waiting is likely to be brief and pregnancy would be contraindicated.

### **CERVICAL CANCER**

There is some theoretical concern that POC use could affect prognosis of cervical cancer.

### **HIV**

People at high risk of HIV acquisition should be informed about and have access to HIV preventive measures, including male and female condoms.

### **DIABETES**

There is concern regarding hypoestrogenic effects and reduced HDL levels among users of DMPA. The effects of DMPA may persist for some time after discontinuation.

### **HISTORY OF CHOLESTASIS**

Theoretically, a history of COC-related cholestasis may predict subsequent cholestasis with POC use.

### **VIRAL HEPATITIS AND CIRRHOSIS**

POC are metabolised by the liver and their use may adversely affect women whose liver function is compromised. The concern with POC is similar to, but less than, that with COC.

### **LIVER TUMOURS**

Progestogens are metabolised by the liver and use may adversely affect women whose liver function is compromised.

## **INFLAMMATORY BOWEL DISEASE (IBD)**

Risk of VTE may increase if a woman is unwell, bed-bound or undergoing acute surgery, or with major surgery and prolonged immobilisation. Under these circumstances, POC can be continued.

Oral methods may be less reliable if there is significant malabsorption or small bowel resection (particularly with Crohn's disease). Oral methods are unaffected by colectomy and ileostomy.

## **DRUG INTERACTIONS**

Generally, the safety of using POC is unaffected. Nevertheless, use of liver enzyme inducers may reduce contraception efficacy of POP and IMP, increasing the risk of unintended pregnancy. DMPA is unaffected by liver enzyme inducing drugs and injection intervals need not be reduced. Contraception choice may depend on the likely duration of use of concurrent medications and need for additional or alternative methods.

## Combined hormonal contraception (CHC)

The section on combined hormonal contraception (CHC) includes the following types:

- Combined oral contraception (COC)
- Combined contraception transdermal patches
- Combined contraception vaginal rings

FSRH guidance on CHC<sup>350</sup> is available on the CoSRH website.

### Combined oral contraception (COC)

The recommendations in the UKMEC refer to low dose combined oral contraception (COC) containing  $\leq 35$   $\mu\text{g}$  ethinylestradiol (EE) or estetrol (E4) combined with a progestogen. Data relating to newer COCs containing estradiol and estetrol are limited. UKMEC recommendations for these preparations are as for EE-containing COC. Recommendations in the UKMEC are the same for all COC formulations, irrespective of their progestogen content.

Venous thromboembolism (VTE) is rare among women of reproductive age. All COC are associated with an increased risk for VTE compared to non-use. Studies have found differences in risk for VTE associated with COC containing different progestogens. Current evidence suggests that COC containing LNG, NET and norgestimate are associated with the lowest risk. The absolute differences, however, are very small.<sup>351</sup>

CHC does not protect against sexually transmitted infections (STIs) including HIV. If there is a risk of STI/HIV (including during pregnancy or postpartum), the correct and consistent use of condoms is recommended, either alone or with another contraception method. Condoms reduce the risk of STI/HIV.

### Combined contraceptive transdermal patch and vaginal rings

Limited evidence is available on the short and long-term safety of these methods among women with specific medical conditions. Most of the available studies received support from the manufacturers of these methods.

After reviewing the available limited evidence, the UKMEC Guideline Development Group (GDG) considers the evidence available for COC to be applicable to the combined contraceptive patch and ring and therefore should have the same categories as COC. This is presented in the UKMEC tables as the method 'CHC'.

### 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.

**Table 6: Combined hormonal contraception (CHC)**

<b>Combined hormonal contraception (CHC)</b> which includes Combined oral contraceptive pill, transdermal patch and vaginal ring		
<b>CONDITION</b> *See additional comments at end of section	<b>CATEGORY</b> I = Initiation C = Continuation	<b>CLARIFICATION/EVIDENCE</b> Most evidence available relates to COC use. However, this evidence is also applied to use of the contraceptive patch and ring.
<b>PERSONAL CHARACTERISTICS AND REPRODUCTIVE HISTORY</b>		
<b>Pregnancy</b>	NA	<b>Clarification:</b> There is no known harm to the woman, the course of pregnancy or the foetus if CHC is accidentally used during pregnancy.
<b>Age</b>		
a) Menarche to <40 years	1	
b) ≥40 – 50 years	2	<b>Clarification:</b> Guidance from the CoSRH supports use of CHC up to age 50 years if there are no medical contraindications to use. <a href="#">351</a>
<b>Parity</b>		
a) Nulliparous	1	
b) Parous	1	
<b>Postpartum</b>		<b>Clarification:</b> This includes any births, including stillbirths from 24 weeks gestation.
a) 0 to <3 weeks		<b>Clarification:</b> In the presence of other risk factors for VTE, such as immobility, transfusion at delivery, BMI ≥30 kg/m <sup>2</sup> , postpartum haemorrhage, immediately post-caesarean delivery, pre-eclampsia or smoking, use of CHC may pose an additional increased risk for VTE.  <b>Evidence:</b> VTE risk is elevated during pregnancy and the postpartum period; this risk is most pronounced in the first 3 weeks after delivery, declining to near baseline levels by 42 days postpartum. <a href="#">352–356</a> Use of CHC, which increase the risk of VTE in women of reproductive age, may pose an additional risk if used during this time. <a href="#">357</a> Risk of pregnancy during the first 21 days postpartum is very low, but increases after that time in non-breastfeeding women; ovulation before first menses is common. <a href="#">358–362</a>
(i) With other risk factors for VTE	4	
(ii) Without other risk factors	3	
b) 3 to <6 weeks		
(i) With other risk factors for VTE	3	
(ii) Without other risk factors	2	
c) ≥6 weeks	1	
<b>Breastfeeding</b>		
a) 0 to <6 weeks	4	<b>Evidence:</b> One systematic review reports that the impact of COC on breastfeeding duration and success is inconsistent. Results are conflicting on whether early initiation of COC affects infant outcomes but generally find no negative impact on infant outcomes with later initiation of COC. <a href="#">363</a>
b) ≥6 weeks to <6 months (primarily breastfeeding)	2	
c) ≥6 months	1	

## Combined hormonal contraception (CHC)

which includes  
Combined oral contraceptive pill, transdermal patch and vaginal ring

CONDITION	CATEGORY	CLARIFICATION/EVIDENCE
*See additional comments at end of section	I = Initiation C = Continuation	Most evidence available relates to COC use. However, this evidence is also applied to use of the contraceptive patch and ring.
<b>Post-abortion</b>		
a) First trimester	1	<p><b>Clarification:</b> Includes induced abortions and spontaneous miscarriage &lt;24 weeks gestation.</p> <p><b>Clarification:</b> CHC may be started immediately post-abortion.</p> <p><b>Evidence:</b> Women who start taking COC immediately after first-trimester medical or surgical abortion do not experience more side effects, adverse vaginal bleeding outcomes or clinically significant changes in coagulation parameters compared with women who use a placebo, an intrauterine device (IUD), a non-hormonal contraception method or delayed COC initiation.<sup>362,364–370</sup> Limited evidence on women using the contraceptive ring immediately after first-trimester medical or surgical abortion suggests no serious adverse events and no infection related to use of the contraceptive ring during three cycles of follow-up post-abortion.<sup>371</sup></p>
b) Second trimester	1	
c) Post-abortion sepsis	1	
<b>Past ectopic pregnancy</b>	1	
<b>History of pelvic surgery</b>	1	
<b>Smoking</b>		
a) Age <35 years	2	<p><b>Clarification:</b> UKMEC does not include the use of e-cigarettes as there is insufficient evidence to establish associated risks. However, given the unknown long term cardiovascular risks with e-cigarettes alternatives to CHC should be prioritised.</p> <p><b>Evidence:</b> COC users who smoke are at an increased risk of cardiovascular disease (CVD), especially myocardial infarction (MI), compared with those who do not smoke. Studies also show an increased risk of MI with an increasing number of cigarettes smoked per day.<sup>372–383</sup></p> <p>The 35-year age cut off is identified because any excess mortality associated with smoking becomes apparent from this age.<sup>67</sup> The mortality rate from all causes (including cancers) decreases to that of a non-smoker within 20 years of smoking cessation. The CVD risk associated with smoking decreases within 1 to 5 years of smoking cessation.<sup>67–69</sup></p>
b) Age ≥35 years		
(i) <15 cigarettes/day	3	
(ii) ≥15 cigarettes/day	4	
(iii) Stopped smoking <1 year	3	
(iv) Stopped smoking ≥1 year	2	
<b>Obesity</b>		
a) BMI ≥30–34.9 kg/m <sup>2</sup>	2	

## Combined hormonal contraception (CHC)

which includes  
Combined oral contraceptive pill, transdermal patch and vaginal ring

CONDITION	CATEGORY	CLARIFICATION/EVIDENCE
*See additional comments at end of section	I = Initiation C = Continuation	Most evidence available relates to COC use. However, this evidence is also applied to use of the contraceptive patch and ring.
b) BMI $\geq 35$ kg/m <sup>2</sup>	3	<p><b>Clarification:</b> The absolute risk of VTE in women of reproductive age is low. The relative risk of VTE increases with CHC use. Nevertheless, the absolute risk of VTE in CHC users is still low.</p> <p>The risk of VTE rises as BMI increases over 30 and rises further with BMI over 35.<sup>265</sup> Use of CHC raises this inherent increased risk further.<sup>377,383–387</sup></p> <p>Limited evidence suggests that obese women who use COC do not have a higher risk of acute MI or stroke than obese non-users.<sup>383,388–390</sup></p>
<b>History of bariatric surgery</b>		<p><b>Comment:</b> UKMEC categories relate to safety of use. Bariatric surgical procedures involving a malabsorptive component have the potential to decrease oral contraception effectiveness, perhaps further decreased by postoperative complications such as long-term diarrhoea and/or vomiting.</p> <p><b>Evidence:</b> Limited evidence demonstrates no substantial decrease in effectiveness of oral contraception among women who undergo laparoscopic placement of an adjustable gastric band or biliopancreatic diversion.<sup>266,267</sup> However, evidence from pharmacokinetic studies report conflicting results of oral contraception effectiveness among women who undergo a jejunioileal bypass.<sup>268,269</sup></p>
a) With BMI <30 kg/m <sup>2</sup>	1	
b) With BMI $\geq 30$ –34.9 kg/m <sup>2</sup>	2	
c) With BMI $\geq 35$ kg/m <sup>2</sup>	3	
<b>Organ transplant</b>		<p><b>Clarification:</b> Women with Budd-Chiari syndrome should not use CHC because of the increased risk of thrombosis and graft rejection.</p> <p>Also see 'major surgery' section.</p> <p><b>Evidence:</b> One study reports discontinuation of COC use in 2/26 (8%) women as a result of serious medical complications, and one case report recounts a woman developing cholestasis associated with high-dose COC use.<sup>391–394</sup></p>
a) Complicated: graft failure (acute or chronic), rejection, cardiac allograft vasculopathy	3	
b) Uncomplicated	2	
<b>CARDIOVASCULAR DISEASE (CVD)</b>		
<b>Multiple risk factors for CVD</b> (such as smoking, diabetes, hypertension, obesity and dyslipidaemias)	3	<p><b>Clarification:</b> When a woman has multiple major risk factors, any of which alone would substantially increase the risk of CVD, use of CHC may increase her risk to an unacceptable level. Where more than one risk factor is present, clinical judgement must be applied.</p>

## Combined hormonal contraception (CHC)

which includes  
Combined oral contraceptive pill, transdermal patch and vaginal ring

CONDITION	CATEGORY	CLARIFICATION/EVIDENCE
*See additional comments at end of section	I = Initiation C = Continuation	Most evidence available relates to COC use. However, this evidence is also applied to use of the contraceptive patch and ring.
<b>Hypertension*</b>		<p><b>Good practice points in obtaining blood pressure measurements</b><sup>74</sup></p> <p>If blood pressure measured in the clinic is 140/90 mmHg or higher</p> <ul style="list-style-type: none"> <li>• Take a second measurement during the consultation.</li> <li>• If the second measurement is substantially different from the first, take a third measurement.</li> <li>• Record the lower of the last two measurements as the clinic blood pressure.</li> </ul> <p><b>Ambulatory blood pressure monitoring (ABPM):</b> Follow threshold for home readings.</p> <p>For all categories of hypertension, classifications assume that no other risk factor for CVD exists. When multiple risk factors do exist, the risk of CVD may increase substantially. Follow guidance for 'multiple risk factors for CVD'.</p> <p><b>Evidence:</b> Discontinuation of CHC in women with hypertension may improve BP control.<sup>395</sup></p> <p><b>Clarification:</b> This includes coronary heart disease presenting with angina, peripheral vascular disease presenting with intermittent claudication, hypertensive retinopathy and transient ischaemic attack (TIA).</p> <p><b>Evidence:</b> COC users with a history of high BP in pregnancy have an increased risk of MI and VTE, compared with COC users who do not have a history of high BP during pregnancy. The absolute risks of acute MI and VTE in this population remained small.<sup>263,383,396-404</sup></p>
a) Controlled hypertension	3	
b) Consistently elevated blood pressure (BP) levels (properly taken measurements)		
(i) Stage 1 hypertension	3	
<u>Clinic</u> Systolic 140 – 159 and/or Diastolic 90 – 99  <u>Home</u> Systolic 135 – 149 and/or Diastolic 85 - 94		
(ii) Stage 2 or 3 hypertension	4	
<u>Clinic</u> Systolic ≥ 160 and/or Diastolic ≥ 100  <u>Home</u> Systolic ≥ 150 and/or Diastolic ≥ 95		
c) Vascular disease	4	
<b>History of high BP during pregnancy</b>	2	
<b>Current and history of ischaemic heart disease*</b>	4	
<b>Stroke and transient ischaemic attack (TIA)*</b> (includes arterial thrombosis, venous thrombosis and intracerebral haemorrhage)	4	<p><b>Evidence:</b> A systematic review of observational studies found evidence of an association between the use of CHC and increased risk of ischaemic stroke, but not haemorrhagic.<sup>405</sup> For further detail please see Supplementary Evidence Tables (Topic 4).</p>

## Combined hormonal contraception (CHC)

which includes  
Combined oral contraceptive pill, transdermal patch and vaginal ring

CONDITION	CATEGORY	CLARIFICATION/EVIDENCE
*See additional comments at end of section	I = Initiation C = Continuation	Most evidence available relates to COC use. However, this evidence is also applied to use of the contraceptive patch and ring.
<b>Known dyslipidaemias</b>	2	<p><b>Clarification:</b> Routine screening for these genetic mutations is not cost effective.</p> <p>Increased levels of total cholesterol, low-density lipoprotein (LDL) and triglycerides, as well as decreased levels of high-density lipoprotein (HDL), are known risk factors for CVD. Women with known, severe, genetic lipid disorders are at a much higher lifetime risk for CVD and may warrant further clinical consideration.</p>
<b>Venous thromboembolism (VTE)</b>		
History of VTE or current VTE (on anticoagulants)	4	<p><b>Clarification:</b> VTE includes deep vein thrombosis (DVT) and pulmonary embolism (PE).</p> <p>In specialist settings and in discussion with a haematologist, continuation of CHC may be considered, whilst the individual is anticoagulated and in specific circumstances (e.g. risk of pregnancy from stopping CHC suddenly).</p>
<b>Risk factors for VTE</b>		
a) Family history of VTE (first degree relative)	3	<p><b>Clarification:</b> VTE includes DVT and PE.</p> <p>Family history of VTE may alert clinicians to women who may have an increased risk but alone cannot identify with certainty an underlying thrombophilia.</p>
b) Major surgery	4	<p><b>Clarification:</b></p> <p><b>Major surgery:</b> CHC should preferably be discontinued (and adequate alternative contraception arrangements made) 4 weeks before major elective surgery (&gt;30 minutes duration) and all surgery on the legs or surgery which involves prolonged immobilisation of a lower limb. CHC should normally be restarted at least 2 weeks after full mobilisation. POC may be offered as an alternative and the CHC restarted after mobilisation.</p> <p><b>OR</b></p> <p>When discontinuation of CHC is not possible (e.g. after trauma or if a patient is admitted for an elective procedure and still using CHC), thromboprophylaxis (with low molecular weight heparin and intermittent pneumatic compression) is advised.<sup>274</sup></p> <p>These recommendations do not apply to minor surgery with a short duration of anaesthesia (e.g. dilation and curettage (D&amp;C) or tooth extraction).</p>
c) Immobility (e.g. wheelchair use, chronic conditions)	3	

## Combined hormonal contraception (CHC)

which includes  
Combined oral contraceptive pill, transdermal patch and vaginal ring

CONDITION	CATEGORY	CLARIFICATION/EVIDENCE
*See additional comments at end of section	I = Initiation C = Continuation	Most evidence available relates to COC use. However, this evidence is also applied to use of the contraceptive patch and ring.
<b>Multiple risk factors for VTE</b> (additional examples include cancer, high BMI, thrombotic or inflammatory disorders)	4	<b>Clarification:</b> Where more than one risk factor is present, clinical judgement must be applied.  See NICE guidance for a full list of <a href="#">DVT<sup>2</sup></a> and <a href="#">PE<sup>3</sup></a> risk factors.
<b>Superficial venous thrombosis*</b>		
a) Varicose veins	1	<b>Evidence:</b> One study suggests that among women with varicose veins, the rate of VTE and superficial venous thrombosis is higher in COC users compared with non- users, however statistical significance is not reported and the number of events in this study is small. <a href="#">406</a>
b) Superficial venous thrombosis	2	<b>Clarification:</b> Superficial venous thrombosis may be associated with an increased risk of VTE.  <b>Evidence:</b> Among women with superficial venous thrombosis, the risk of VTE is higher in COC users compared with non-users. <a href="#">407</a>
<b>Known thrombogenic mutations</b> (e.g. factor V Leiden, prothrombin mutation, protein S, protein C and antithrombin deficiencies)	4	<b>Clarification:</b> Routine screening for these genetic mutations is not cost effective. <a href="#">86-88</a>  <b>Evidence:</b> Among women with thrombogenic mutations, COC users have a two- to twenty-fold higher risk of thrombosis than non-users. <a href="#">78,89-105,387,408-412</a>
<b>Valvular and congenital heart disease*</b>		
a) Uncomplicated	2	<b>Clarification:</b> Uncomplicated cases could be considered as (i) no requirement for cardiac medication, (ii) the woman is asymptomatic and (iii) a cardiology review is required annually or less. If in doubt, discussion with a specialist cardiologist is advised.  <i>Valvular heart disease:</i> Occurs when any of the heart valves are stenotic and/or incompetent (e.g. aortic stenosis, mitral regurgitation, tricuspid valve abnormalities, pulmonary stenosis). <a href="#">106</a>  <i>Congenital heart disease:</i> Aortic stenosis, atrial septal defects, atrioventricular septal defect, cardiomyopathy (hypertrophic or dilated), coarctation of the aorta, complex transposition of the great arteries; Ebstein's anomaly, Eisenmenger syndrome, patent ductus arteriosus, pulmonary atresia, pulmonary stenosis, tetralogy of Fallot, total anomalous pulmonary venous connection, tricuspid atresia, truncus arteriosus, ventricular septal defect. <a href="#">106</a>
b) Complicated (e.g. pulmonary hypertension, history of subacute bacterial endocarditis)	4	

## Combined hormonal contraception (CHC)

which includes  
Combined oral contraceptive pill, transdermal patch and vaginal ring

CONDITION <small>*See additional comments at end of section</small>	CATEGORY I = Initiation C = Continuation	CLARIFICATION/EVIDENCE				
<b>Cardiomyopathy*</b>		<p><b>Clarification:</b> A woman who is not on cardiac medication can be considered as having normal cardiac function.</p> <p>COC may increase fluid retention that may worsen heart failure in women with cardiomyopathy. Women with cardiomyopathy have a high incidence of cardiac arrhythmias which may be increased with CHC use.</p>				
a) Normal cardiac function	2					
b) Impaired cardiac function	4					
<b>Cardiac arrhythmias*</b>						
a) Atrial fibrillation	4					
b) Known long QT syndrome	2					
<b>NEUROLOGICAL CONDITIONS</b>						
<b>Headaches</b>		<p><b>Clarification:</b> Headache is a common condition affecting women of reproductive age.</p> <p><b>Evidence:</b> Among women with migraine, women who also have aura are at a higher risk of stroke than those without aura.<sup>413,414</sup> Women with a history of migraine who use COC are about two to four times as likely to have an ischaemic stroke as non-users with a history of migraine.<sup>272,372,388,415-418</sup></p> <p>Classification depends on making an accurate diagnosis of migraines and, in addition, those complicated by aura.<sup>110-112</sup></p> <p>Useful resources for making a migraine diagnosis include the Mayo clinic video (<a href="#">Migraine aura - Mayo Clinic</a>)<sup>113</sup> and the international classification of headache disorders 3<sup>rd</sup> edition (ICHD-3) (<a href="#">1. Migraine - ICHD-3</a>).<sup>114</sup></p>				
a) Non-migrainous (mild or severe)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 50%; text-align: center;">I</th> <th style="width: 50%; text-align: center;">C</th> </tr> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> </table>		I	C	1	2
I	C					
1	2					
b) Migraine without aura, at any age	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 50%; text-align: center;">I</th> <th style="width: 50%; text-align: center;">C</th> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> </tr> </table>		I	C	2	3
I	C					
2	3					
c) Migraine with aura, at any age	4					
d) History (≥5 years ago) of migraine with aura, any age	3					
<b>Idiopathic intracranial hypertension (IIH)</b>	2					
<b>Epilepsy</b>	1					
Taking anti-epileptic drugs		<p>Certain anti-epileptic drugs have the potential to affect the bioavailability of steroid hormones in hormonal contraception. In addition, hormonal contraception may affect the levels of certain anti-epileptic drugs with potential adverse effects.</p> <p>For up-to-date information on the potential drug interactions between hormonal contraception and anti-epileptic drugs, please refer to the online drug interaction checker available on Stockley's Interaction Checker website.<sup>10</sup></p>				

## Combined hormonal contraception (CHC)

which includes

Combined oral contraceptive pill, transdermal patch and vaginal ring

<b>CONDITION</b> *See additional comments at end of section	<b>CATEGORY</b> I = Initiation C = Continuation	<b>CLARIFICATION/EVIDENCE</b> Most evidence available relates to COC use. However, this evidence is also applied to use of the contraceptive patch and ring.
<b>Multiple Sclerosis (MS)</b>		
MS with prolonged immobility	3	<b>Clarification:</b> The main safety concerns for hormonal contraception in individuals with MS relate to bone health and VTE risk.
MS without prolonged immobility	1	<b>Clarification:</b> No data exists that evaluates the increased risk for VTE among individuals with MS using CHCs.  Some evidence exists that individuals with MS are at higher risk of VTE than those without MS. <sup>115</sup> This is likely due mostly to immobility. There is therefore the need to differentiate individuals with MS with prolonged immobility from those without.  <b>Evidence:</b> A systematic review of observational studies suggests that use of CHC (evidence limited to COC) compared to no use of HC in individuals with multiple sclerosis does not worsen the clinical course of disease. <sup>115</sup>  For further detail please see Supplementary Evidence Tables (Topic 15).
<b>MENTAL HEALTH CONDITIONS</b>		
<b>Anxiety and mood disorders</b>		There is not consistent evidence that hormonal contraceptives (HCs) worsen or improve anxiety or mood (affective) disorders in those with pre-existing conditions. When starting hormonal contraception, clinicians should provide individualised counselling and advise patients to monitor their mood, seeking follow-up with their healthcare provider if they notice a deterioration. See CoSRH statement. <sup>15</sup>
<b>BREAST AND REPRODUCTIVE TRACT CONDITIONS</b>		
<b>Vaginal bleeding patterns*</b>		
a) Irregular pattern without heavy bleeding	1	<b>Clarification:</b> Abnormal menstrual bleeding should raise suspicion of a serious underlying condition and should be investigated appropriately. <sup>116-119</sup>
b) Heavy or prolonged bleeding (includes regular and irregular patterns)	1	<b>Evidence:</b> COC is shown to be effective treatment in heavy menstrual bleeding (HMB). <sup>419-421</sup>
<b>Unexplained vaginal bleeding*</b> (suspicious for serious condition) before evaluation	2	<b>Clarification:</b> If pregnancy or an underlying pathological condition (such as pelvic malignancy) is suspected, it must be evaluated and the category adjusted after evaluation.
<b>Endometriosis*</b>	1	
<b>Benign ovarian tumours</b> (including cysts)	1	

## Combined hormonal contraception (CHC)

which includes  
Combined oral contraceptive pill, transdermal patch and vaginal ring

CONDITION <small>*See additional comments at end of section</small>	CATEGORY I = Initiation C = Continuation	CLARIFICATION/EVIDENCE  Most evidence available relates to COC use. However, this evidence is also applied to use of the contraceptive patch and ring.				
<b>Severe dysmenorrhoea</b>	1	<b>Evidence:</b> There is no increased risk of side effects with COC use among women with dysmenorrhoea compared with women not using COC. Some COC users experience a reduction in pain and bleeding. <a href="#">118,119</a>				
<b>Gestational trophoblastic disease (GTD)</b>		<b>Clarification:</b> Includes hydatidiform mole (complete and partial) and gestational trophoblastic neoplasia.  <b>Evidence:</b> Following molar pregnancy evacuation, the balance of evidence finds COC use does not increase the risk of gestational trophoblastic neoplasia, and some COC users experience a more rapid regression in hCG levels compared with non-users. <a href="#">133-136,280,422-425</a> Limited evidence suggests that use of COC during chemotherapeutic treatment does not significantly affect the regression or treatment of gestational trophoblastic neoplasia compared with women who use a non-hormonal contraception method or DMPA during chemotherapeutic treatment. <a href="#">426</a>				
a) Undetectable human chorionic gonadotrophin (hCG) levels	1					
b) Decreasing hCG levels	1					
c) Persistently elevated hCG levels or malignant disease	1					
<b>Cervical ectropion*</b>	1					
<b>Cervical intraepithelial neoplasia (CIN)</b>	2	<b>Clarification:</b> Includes individuals with high-risk human papillomavirus (HPV).  <b>Evidence:</b> Observational studies comparing CHC (evidence limited to COC) to no HC, showed no significant difference in high risk HPV acquisition or detection, but decreased clearance in those using CHC. <a href="#">281,282</a>  For further detail please see Supplementary Evidence Tables (Topic 6).				
<b>Cervical cancer*</b>						
a) Awaiting treatment	2					
b) Radical trachelectomy	2					
<b>Breast conditions*</b>		<b>Clarification:</b> Breast awareness and reporting changes early should be encouraged.  In those with high-risk benign change i.e. atypical hyperplasia and lobular carcinoma in situ (LCIS), hormonal contraception should be used with caution.  If a breast cancer is diagnosed, hormonal contraception should be discontinued and non-hormonal contraception discussed. Breast malignancy				
a) Undiagnosed mass/breast symptoms	<table border="1" style="margin: auto;"> <tr> <td style="background-color: #cccccc;">I</td> <td style="background-color: #cccccc;">C</td> </tr> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">2</td> </tr> </table>		I	C	3	2
I	C					
3	2					
b) Benign breast conditions	1					
c) Family history of breast cancer	1					

## Combined hormonal contraception (CHC)

which includes  
Combined oral contraceptive pill, transdermal patch and vaginal ring

CONDITION	CATEGORY	CLARIFICATION/EVIDENCE
*See additional comments at end of section	I = Initiation C = Continuation	Most evidence available relates to COC use. However, this evidence is also applied to use of the contraceptive patch and ring.
d) Carriers of high-risk gene mutations associated with breast cancer (e.g. BRCA1/BRCA2)	3	<p>can be hormone sensitive (ER+ve) or hormone insensitive (ER-ve). However, hormonal contraception should generally be avoided after any breast cancer regardless of hormone receptor status.</p> <p>Currently being treated for breast cancer includes patients receiving any current systemic treatment for breast cancer including tamoxifen and aromatase inhibitors.</p>
e) Breast cancer		For further information, please see the FSRH clinical Guideline: Contraceptive choices for individuals who have or have had breast cancer. <sup>140</sup>
(i) Currently being treated for breast cancer	4	
(ii) Completed treatment for breast cancer	3	<p><b>Evidence:</b> Evidence suggests that CHC and progestogen-only contraception (POC), including LNG-IUD could have a similar effect on breast cancer risk in the general population.<sup>141</sup></p> <p><b>BRCA mutation</b></p> <p><b>Clarification:</b> Individuals with BRCA should have discussions with a specialist as the balance between increased risk of breast cancer and reduced risk of ovarian and endometrial cancer needs careful consideration.</p> <p><b>Evidence:</b> Systematic reviews of observational studies<sup>284</sup> found oral contraception, compared to no HC, potentially increases the risk of breast cancer in BRCA carriers.</p> <p>For further detail please see Supplementary Evidence Tables (Topic 7).</p>
<b>Ovarian cancer (epithelial)*</b>	2	<p><b>Clarification:</b> Ovarian cancer refers to epithelial ovarian cancer. Other types of ovarian cancer should be discussed with a specialist.</p> <p>For BRCA carriers, see the BRCA section.</p> <p>Both CHC and the presence of ovarian cancer<sup>142,143</sup> are associated with an increased risk of VTE. For further detail please see Supplementary Evidence Tables (Topic 5.3).</p>
<b>Endometrial cancer*</b>	2	Both CHC and the presence of endometrial cancer <sup>143</sup> are associated with an increased risk of VTE. For further detail please see Supplementary Evidence Tables (Topic 5.3).
<b>Uterine fibroids*</b>		
a) Without distortion of the uterine cavity	1	

## Combined hormonal contraception (CHC)

which includes  
Combined oral contraceptive pill, transdermal patch and vaginal ring

CONDITION	CATEGORY	CLARIFICATION/EVIDENCE
*See additional comments at end of section	I = Initiation C = Continuation	Most evidence available relates to COC use. However, this evidence is also applied to use of the contraceptive patch and ring.
b) With distortion of the uterine cavity	1	
<b>Pelvic inflammatory disease (PID)</b>		
a) Past PID (assuming no current risk factors for STIs)	1	
b) Current PID	1	
<b>Sexually transmitted infections (STIs)</b>		
a) Chlamydia, gonorrhoea or mycoplasma genitalium* (current infection)		<p><b>Clarifications</b></p> <p>* M Gen testing is only recommended in certain circumstances, see BASHH guidelines.<a href="#">16</a></p> <p>**Clinical symptoms and signs of infection include cervicitis, purulent discharge, lower abdominal pain, post-coital bleeding and/or systemic manifestations. PID is covered above.</p> <p><b>Evidence:</b> There is a lack of evidence about the effect of hormonal contraception on STI prognosis.</p> <p>Limited evidence suggests that hormonal contraception does not increase viral shedding or frequency of lesions in those with herpes simplex virus (HSV)<sup>r14</sup> and neither increases nor decreases the risk of TV acquisition.<a href="#">287,288,427</a></p> <p>For other STIs, there is either evidence of no association between DMPA use and STI acquisition or evidence that is too limited to draw any conclusions.<a href="#">10,112,428-432</a></p> <p>For further detail please see Supplementary Evidence Tables (Topic 9).</p>
(i) Clinical symptoms/signs of infection**	1	
(ii) No clinical symptoms/signs of infection	1	
b) Other current STIs (excluding HIV and hepatitis)	1	
c) Current vaginitis, including trichomonas vaginalis (TV) and bacterial vaginosis (BV)	1	
<b>Human Immunodeficiency Virus (HIV)</b>		
a) High risk for HIV	1	<p><b>Evidence:</b> Data from observational and trial studies and meta-analysis<sup>433</sup> suggested no association between CHC use and HIV acquisition.<a href="#">297,303,434-440</a></p> <p>No studies of the patch or ring were identified.</p>
b) Living with HIV		
(i) Living with HIV Clinically well, on treatment	1	<p><b>Evidence:</b> Seven studies suggest no association between use of COC and progression of HIV, as</p>

## Combined hormonal contraception (CHC)

which includes

Combined oral contraceptive pill, transdermal patch and vaginal ring

CONDITION	CATEGORY	CLARIFICATION/EVIDENCE
*See additional comments at end of section	I = Initiation C = Continuation	Most evidence available relates to COC use. However, this evidence is also applied to use of the contraceptive patch and ring.
(ii) Living with HIV Clinically unwell and not on treatment	1	measured by CD4 count <200 cells/mm <sup>3</sup> , initiation of antiretroviral therapy (ART) or mortality. <a href="#">298-300,302,441-443</a> One randomised trial shows an increased risk of a composite outcome of declining CD4 count or death among oral contraceptive users (COC and POP) when compared with users of Cu-IUDs but has significant confounders limiting its interpretation. <a href="#">171,302</a>  The majority of indirect studies measuring whether various hormonal contraception methods affect plasma HIV viral load find no effect. <a href="#">165,168,297,301,303-315</a>
c) Taking HIV medications (for treatment or prophylaxis)	Certain HIV drugs have the potential to affect the bioavailability of steroid hormones in hormonal contraception. Drug interactions are not presented in the UKMEC as MEC categories relate to safety of contraceptive use, not effectiveness. For up-to-date recommendations and information, see FSRH CEU Guidance on drug interactions between HIV antiretroviral therapy and contraception <sup>17</sup> and the University of Liverpool HIV drug interactions checker. <a href="#">11</a>	
<b>OTHER INFECTIONS</b>		
<b>Tuberculosis</b>		
a) Non-pelvic	1	
b) Pelvic	1	
<b>ENDOCRINE CONDITIONS</b>		
<b>Diabetes*</b>		
a) History of gestational disease	1	<b>Evidence:</b> The development of non-insulin dependent diabetes in women with a history of gestational diabetes is not increased by the use of COC. <a href="#">318,320,444-449</a> Likewise, lipid levels appear to be unaffected by COC use. <a href="#">317,450,451</a>
b) Non-vascular disease		<b>Evidence:</b> Among women with insulin or non- insulin-dependent diabetes, COC use has limited effect on daily insulin requirements and no effect on long-term diabetes control (e.g. HbA1c levels) or progression to retinopathy. Changes in lipid profile and haemostatic markers are limited, and most changes remain within normal values. <a href="#">176,322,324,325,452-457</a>
(i) Non-insulin dependent	2	
(ii) Insulin-dependent	2	
c) Nephropathy/retinopathy/ neuropathy	3	<b>Clarification:</b> The category should be assessed according to the severity of the condition.
d) Other vascular disease	3	
<b>Thyroid disorders</b>		
a) Simple goitre	1	
b) Hyperthyroid	1	

## Combined hormonal contraception (CHC)

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CONDITION <small>*See additional comments at end of section</small>	CATEGORY I = Initiation C = Continuation	CLARIFICATION/EVIDENCE				
c) Hypothyroid	1	<p>Most evidence available relates to COC use. However, this evidence is also applied to use of the contraceptive patch and ring.</p> <p><b>Clarification:</b> Due to the increased risk of thromboembolic events among individuals with CKD, especially in nephrotic syndrome combined hormonal contraceptives are not a suitable option. For further detail please see Supplementary Evidence Tables (Topic 10).</p>				
<b>Chronic kidney disease (CKD)</b>						
a) Current nephrotic syndrome	4					
b) Haemodialysis	4					
c) Peritoneal dialysis	4					
<b>GASTROINTESTINAL CONDITIONS</b>						
<b>Gallbladder disease*</b>						
a) Symptomatic						
(i) Treated by cholecystectomy	2					
(ii) Medically treated	3					
(iii) Current	3					
b) Asymptomatic	2					
<b>History of cholestasis*</b>						
a) Pregnancy related	2					
b) Past combined oral contraception (COC) related	3					
<b>Viral hepatitis*</b>		<p><b>Clarification:</b> <i>Acute or flare:</i> this category should be assessed on the severity of the condition.</p> <p><b>Evidence:</b> Data suggest that in women with chronic hepatitis, COC use does not increase the rate or severity of cirrhotic fibrosis, nor does it increase the risk of hepatocellular carcinoma.<sup>458,459</sup> For women who are carriers, COC use does not appear to trigger liver failure or severe dysfunction.<sup>460–462</sup> Evidence is limited for COC use during active hepatitis.<sup>463,464</sup></p>				
a) Acute or flare	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; text-align: center;">I</th> <th style="width: 50%; text-align: center;">C</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">2</td> </tr> </tbody> </table>		I	C	3	2
I	C					
3	2					
b) Carrier	1					
c) Chronic	1					
<b>Cirrhosis*</b>		<p><b>Clarification:</b> <i>Severe (decompensated) cirrhosis:</i> development of major complications (such as ascites, jaundice, encephalopathy or gastrointestinal haemorrhage).<sup>180</sup></p>				
a) Mild (compensated without complications)	1					
b) Severe (decompensated)	4					

## Combined hormonal contraception (CHC)

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Combined oral contraceptive pill, transdermal patch and vaginal ring

CONDITION	CATEGORY	CLARIFICATION/EVIDENCE
*See additional comments at end of section	I = Initiation C = Continuation	Most evidence available relates to COC use. However, this evidence is also applied to use of the contraceptive patch and ring.
<b>Liver tumours*</b>		<p><b>Evidence:</b> There is limited direct evidence that hormonal contraception has any effect, positive or negative, on the progression or regression of liver lesions in women with focal nodular hyperplasia (FNH). <a href="#">328–330</a></p> <p>Findings from an observation study found that in women with hepatocellular adenoma (HCA), greater cumulative oestrogen exposure in the past (defined by longer use of oestrogen-based contraceptives and higher BMI) was significantly associated with tumour regression after stopping oestrogen. <a href="#">465</a></p>
a) Benign		
(i) Focal nodular hyperplasia	2	
(ii) Hepatocellular adenoma	4	
b) Malignant (hepatocellular carcinoma)	4	
<b>Inflammatory bowel disease (IBD)*</b> (including Crohn's disease and ulcerative colitis)	2	<p><b>Clarification:</b> Women with IBD are at higher risk than unaffected women for VTE. <a href="#">181</a></p> <p>Continuation may need to be reviewed if the woman has an acute exacerbation, acute surgery or prolonged immobilisation (see section on VTE).</p> <p><b>Evidence:</b> Risk for disease relapse is not significantly higher among women with IBD using oral contraception (most studies do not specify whether it is POP or COC) than among non-users. <a href="#">335–338,466</a></p> <p>Absorption of COC among women with mild ulcerative colitis and no or small ileal resections is similar to the absorption among healthy women. <a href="#">181,467</a> Findings may not apply to women with Crohn's disease or more extensive bowel resections.</p> <p>No data exist that evaluate the increased risk for VTE among women with IBD using CHC. However, women with IBD are at higher risk than unaffected women for VTE. <a href="#">181</a></p>
<b>ANAEMIAS</b>		
<b>Thalassaemia*</b>	1	
<b>Sickle cell disease</b>	2	<p><b>Clarification:</b> Most episodes of VTE occur during a sickle cell crisis.</p> <p><b>Evidence:</b> Observational studies found no evidence of a difference in the risk of incidence of vascular events (VTE, pulmonary and arterial hypertension), need for blood transfusion or sickle cell crisis among CHC users compared to no HC. <a href="#">468–470</a> Furthermore, there was no evidence of a difference in the risk of incidence</p>

## Combined hormonal contraception (CHC)

which includes  
Combined oral contraceptive pill, transdermal patch and vaginal ring

CONDITION	CATEGORY	CLARIFICATION/EVIDENCE
*See additional comments at end of section	I = Initiation C = Continuation	Most evidence available relates to COC use. However, this evidence is also applied to use of the contraceptive patch and ring.
		of VTE, discontinuation due to adverse events or increase in sickle cell crisis between users of CHC and POP. <a href="#">340,468</a> For further detail please see Supplementary Evidence Tables (Topic 12.1).
<b>Sickle cell trait (SCT)</b>		There is insufficient evidence to give MEC ratings for sickle cell trait (SCT). There is a small increase in the risk of VTE with SCT <a href="#">183</a> therefore alternatives to CHC should be prioritised.  For additional detail see Supplementary Evidence Tables (Topic 12.2).
<b>Iron deficiency anaemia*</b>	1	
<b>RHEUMATIC DISEASES</b>		
<b>Rheumatoid arthritis</b>	2	<b>Clarification:</b> Risk of CVD is increased among women with rheumatoid arthritis <a href="#">341</a> and that is reflected in the categories given.  <b>Evidence:</b> Limited evidence shows no consistent pattern of improvement or worsening of rheumatoid arthritis with use of oral contraception. <a href="#">341–349</a>
<b>Systemic lupus erythematosus (SLE)</b> No antiphospholipid antibodies	2	<b>Clarification:</b> People with SLE are at an increased risk of ischaemic heart disease, stroke and VTE and this is reflected in the categories given. There is no evidence that use of CHC causes disease flares.  CHC is contraindicated in people with SLE who have positive antiphospholipid antibodies.  Available evidence indicates that many women with SLE, particularly those with low disease activity and lacking positive antiphospholipid antibodies (aPL), can be considered good candidates for most methods of contraception, including hormonal contraception. <a href="#">83,184–191,191–195,195–199,199–202</a>  <b>Clarification:</b> In particular, persistence of antiphospholipid antibodies (aPL) positivity, high titre of aPL, lupus anticoagulant (LA) positivity, triple positivity for anticardiolipin antibodies (aCL), anti-β <sub>2</sub> -glycoprotein I (β <sub>2</sub> GP1) and LA and moderate/high titre immunoglobulin G (IgG) aPL have greater risk for future events. <a href="#">203–206</a>
<b>Positive antiphospholipid antibodies</b>	4	
<b>DRUG INTERACTIONS*</b>		
<b>Taking medication</b>		Refer to FSRH guideline Drug Interactions with Hormonal Contraception. <a href="#">7</a>  See Drug interactions with hormonal contraception in Section A: Introduction for further resources including drug interaction checkers.

**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.

## **Additional comments**

### **HYPERTENSION, CURRENT AND HISTORY OF ISCHAEMIC HEART DISEASE, STROKE**

If BP is increased, it should be reassessed and monitored according to current guidelines.

### **SUPERFICIAL VENOUS THROMBOSIS**

Varicose vein: Varicose veins are not a risk factor for VTE.

### **VALVULAR AND CONGENITAL HEART DISEASE, CARDIOMYOPATHY AND CARDIAC ARRHYTHMIAS**

Stasis, endothelial injury and hyperviscosity (Virchow's triad) increase the risk of clot formation. Impaired cardiac function and/or dilated heart chambers or arrhythmia increase the risk of stasis. Closure of a cardiac defect within the last six months or presence of a mechanical heart valve increases the risk of thrombus formation. Cyanotic defects are associated with hyperviscosity because of increased erythrocytosis.

Congenital heart disease: Surgical correction, co-existing complications and degree of cardiac disability will vary between individuals and should be taken into account when considering contraception use.

### **UNEXPLAINED VAGINAL BLEEDING**

There are no conditions that cause vaginal bleeding that will be worsened in the short term by use of CHC.

### **ENDOMETRIOSIS**

CHC does not worsen, and may alleviate, the symptoms of endometriosis.

### **CERVICAL ECTROPION**

Cervical ectropion is not a risk factor for cervical cancer and there is no need for restriction of CHC.

### **CERVICAL CANCER**

Awaiting treatment: There is some theoretical concern that CHC use may affect prognosis of the existing disease. While awaiting treatment, women may use CHC since the period of waiting is likely to be brief and pregnancy would be contraindicated.

### **ENDOMETRIAL AND OVARIAN CANCER**

COC use reduces the risk of developing endometrial cancer. While awaiting treatment, women may use COC.

### **UTERINE FIBROIDS**

There is no evidence that CHC affects growth of fibroids.

### **DIABETES**

Although carbohydrate tolerance may change with CHC use, the major concerns are vascular disease due to diabetes and additional risk of arterial thrombosis due to use of CHC.

### **GALLBLADDER DISEASE**

COC may cause a small increased risk of gallbladder disease. There is also concern that COC may worsen existing gallbladder disease.

## **HISTORY OF CHOLESTASIS**

Pregnancy-related: History of pregnancy-related cholestasis may predict an increased risk of developing COC-associated cholestasis.

Past COC-related: History of COC-related cholestasis predicts an increased risk with subsequent COC use.

## **VIRAL HEPATITIS, CIRRHOSIS AND LIVER TUMOURS**

COC are metabolised by the liver, and their use may adversely affect women whose liver function is compromised.

## **INFLAMMATORY BOWEL DISEASE (IBD)**

Risk of VTE may increase if unwell, bed-bound or undergoing acute surgery or with major surgery and prolonged immobilisation. Under these circumstances the use of combined methods should be avoided and alternative methods used.

## **THALASSAEMIA**

There is anecdotal evidence from countries where thalassaemia is prevalent that COC use does not worsen the condition.

## **IRON-DEFICIENCY ANAEMIA**

CHC use may decrease menstrual blood loss.

## **DRUG INTERACTIONS**

Generally, the safety of using combined hormonal methods is unaffected. Nevertheless, use of liver enzyme inducing medication may reduce contraception efficacy, increasing risk of unintended pregnancy. Contraception choice may depend on the likely duration of use of concurrent medications and need for additional or alternative methods.

## Emergency contraception (EC)

Emergency contraception (EC) provides women of all reproductive ages with a means of preventing unintended pregnancy following any unprotected sexual intercourse (UPSI).

The section on emergency contraception includes the following types:

- Copper intrauterine device (Cu-IUD)
- Oral emergency contraception (EC)

FSRH guidance on EC<sup>471</sup> and IUD<sup>472</sup> is available on the CoSRH website.

It is important to note that EC does not protect against sexually transmitted infections (STI) including human immunodeficiency virus (HIV). If there is a risk of STI/HIV (including during pregnancy or postpartum), the correct and consistent use of condoms is recommended, either alone or with another contraception method. Condoms reduce the risk of STI/HIV.

### Copper IUD (Cu-IUD) for emergency contraception

The Cu-IUD is the most effective form of EC. All eligible women presenting between 0 and 120 hours of UPSI or within 5 days of expected ovulation (Day 19 in a regular 28-day cycle) should be offered a Cu-IUD because of the low documented failure rate.

The eligibility criteria for interval Cu-IUD insertion also apply for the insertion of the Cu-IUD as EC. However, the risk-benefit ratio will be different for the use of the Cu-IUD as EC compared to when it is used for routine contraception.

### Oral emergency contraception

Two methods of oral EC are available in the UK.

Ulipristal acetate (UPA) is a progesterone receptor modulator that is a synthetic steroid derived from 19-norprogesterone and is licensed for use within 120 hours of UPSI.

Oral progestogen-only EC containing levonorgestrel (LNG) 1.5 mg is licensed to be given up to 72 hours after UPSI or contraceptive failure. There is some evidence of reduced efficacy with use after 72 hours.<sup>473,474</sup>

### 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.

**Table 7: Emergency contraception**

<b>EMERGENCY CONTRACEPTION (EC)</b>				
<b>Copper intrauterine device (Cu-IUD), Ulipristal acetate (UPA), Levonorgestrel (LNG)</b>				
<b>CONDITION</b> <small>*See additional comments at end of section</small>	<b>CATEGORY</b>			<b>CLARIFICATION/EVIDENCE</b>
	Cu-IUD	UPA	LNG	
<b>Pregnancy</b>	NA	NA	NA	<p><b>Clarification:</b> There is no known harm to the woman, the course of her pregnancy or the foetus if UPA or LNG is accidentally used.</p> <p>Cu-IUD can be inserted up to 5 days after the <i>first episode</i> of UPSI or if necessary, up to 5 days after the <i>expected date of ovulation</i> (Day 19 in a regular 28-day cycle).<a href="#">472</a></p>
<b>Postpartum</b> (in breastfeeding or non-breastfeeding women)				<p><b>Clarification:</b> EC is not required if UPSI or barrier method failure occurs &lt;3 weeks postpartum. UPA and LNG are indicated from 3 weeks postpartum. Emergency Cu-IUD is indicated from 4 weeks postpartum.</p> <p><b>Clarification:</b> No interruption of breastfeeding is necessary following a single dose of ulipristal acetate or levonorgestrel when given for emergency contraception.<a href="#">475</a></p>
a) <3 weeks	NA	NA	NA	
b) 3 to <4 weeks	3	1	1	
c) ≥4 weeks	1	1	1	
<b>Past ectopic pregnancy</b>	1	1	1	<p><b>Clarification:</b> Women using contraception have a lower risk of ectopic pregnancy overall compared to women not using contraception. There does not appear to be an increased risk of ectopic pregnancy following use of Cu-IUD as EC,<a href="#">476</a> UPA<a href="#">477</a> or LNG.<a href="#">478</a></p>
<b>Smoking</b>	1	1	1	
<b>Obesity</b>	1	1	1	<p><b>Evidence:</b> A review by the European Medicines Agency determines that data available is too limited and not robust enough to conclude with any certainty that contraceptive effect is reduced with increased body weight. The Agency's Committee for Medicinal Products for Human Use recommends that LNG and UPA could continue to be used in women of all weights as the benefits are considered to outweigh the risk.<a href="#">479</a></p>
<b>Hypertension</b>	1	1	1	
<b>Known dyslipidaemias</b>	1	1	1	
<b>Venous thromboembolism (VTE)*</b> Current VTE (on anticoagulants)	1	2	2	<p><b>Clarification:</b> VTE includes deep vein thrombosis (DVT) and pulmonary embolism (PE).</p>
<b>History of severe cardiovascular disease (CVD) complications</b> (Includes ischaemic heart disease, cerebrovascular event, or other thromboembolic conditions)	1	1	1	<p><b>Clarification:</b> There is no evidence that UPA or LNG increases the risk of CVD.</p>

## EMERGENCY CONTRACEPTION (EC)

Copper intrauterine device (Cu-IUD), Ulipristal acetate (UPA), Levonorgestrel (LNG)

CONDITION <small>*See additional comments at end of section</small>	CATEGORY			CLARIFICATION/EVIDENCE
	Cu-IUD	UPA	LNG	
<b>Headaches</b>	1	1	1	<b>Clarification:</b> Headache is a common condition affecting women of reproductive age.
<b>Gestational trophoblastic disease (GTD)</b>				
a) Undetectable human chorionic gonadotropin (hCG) levels	1	1	1	<b>Clarification:</b> Includes hydatidiform mole (complete and partial) and gestational trophoblastic neoplasia.
b) Decreasing hCG levels	3	1	1	
c) Persistently elevated hCG levels or malignant disease	4	1	1	
<b>Breast conditions</b>				
Breast cancer				<b>Clarification:</b> Although the prognosis of women with breast cancer may be affected by hormonal methods of contraception, the benefit of oral EC is considered to outweigh risks.
a) Current breast cancer	1	2	2	
b) Past breast cancer	1	2	2	
<b>Uterine fibroids*</b>				
a) Without distortion of the uterine cavity	1	1	1	
b) With distortion of the uterine cavity	3	1	1	
<b>Anatomical abnormalities*</b>				
a) Distorted uterine cavity	3	1	1	<b>Clarification:</b> Includes any congenital or acquired uterine abnormality distorting the uterine cavity in a manner that is incompatible with IUD insertion.
b) Other abnormalities	2	1	1	<b>Clarification:</b> Includes cervical stenosis or cervical lacerations not distorting the uterine cavity or interfering with IUD insertion.
<b>Chronic kidney disease (CKD)</b>				
a) Current nephrotic syndrome	2	2	2	<b>Clarification:</b> In individuals with CKD there is a theoretically increased risk of bleeding and infection (in those who are immunosuppressed).
b) Haemodialysis	2	2	2	
c) Peritoneal dialysis	2	2	2	
<b>Inflammatory bowel disease (including Crohn's disease and ulcerative colitis)</b>	1	2	2	<b>Clarification:</b> Oral methods may be less reliable if there is significant malabsorption or small bowel resection (particularly with Crohn's disease). Oral methods are unaffected by colectomy and ileostomy.
<b>Severe liver disease* (including jaundice)</b>	1	1	1	

## EMERGENCY CONTRACEPTION (EC)

Copper intrauterine device (Cu-IUD), Ulipristal acetate (UPA), Levonorgestrel (LNG)

CONDITION  *See additional comments at end of section	CATEGORY			CLARIFICATION/EVIDENCE
	Cu-IUD	UPA	LNG	
<b>Acute intermittent porphyria*</b>	1	2	2	<p><b>Clarification:</b> Acute intermittent porphyria is a rare disorder characterised by acute attacks often precipitated by drugs. Estrogen and progestogen have been implicated. Around 1% of acute attacks are fatal. In one population study, almost half of women with porphyria used hormonal contraception but only 4.5% had associated acute attacks.<sup>480</sup> Combined hormonal contraception is shown to reduce attacks for some women.<sup>481</sup> Natural fluctuations in estrogen and progesterone appear to be associated with acute attacks more often than exogenous hormones.</p> <p>Women may use UPA or LNG following discussion of the risks and benefits and with clinical judgement.<sup>482-484</sup></p>
<b>Repeated use of UPA or LNG (in the same cycle)</b>	NA	1	1	<p><b>Clarification:</b> Recurrent use of EC is an indication that the woman requires further discussion about other contraceptive options. UPA or LNG can be used more than once in a cycle if clinically indicated.<sup>471</sup> Alternatively, a Cu-IUD can be inserted if repeated UPSI occurs up to 5 days after the first episode of unprotected sex or up to 5 days after expected date of ovulation.</p> <p>Frequently repeated UPA and LNG use may be harmful for women with conditions classified as Category 2, 3 or 4 for combined hormonal contraception (CHC) or progestogen-only contraception POC use.</p>
<b>Risk of sexually transmitted infections (STIs)</b>	1	1	1	<p><b>Clarification:</b> Women thought to be at higher risk of STIs from their sexual history (aged &lt;25 years, or with a change in sexual partner or two or more partners in the last year) should be offered testing for STI.</p> <p>For emergency IUD see IUD section.</p> <p>In a woman with asymptomatic untreated chlamydia in an emergency (i.e. emergency contraception), the Cu-IUD could be inserted on the same day as treatment is instituted.<sup>472</sup></p>
<b>DRUG INTERACTIONS</b>				
<b>Taking medication*</b>	<p>Refer to FSRH guideline Drug Interactions with Hormonal Contraception.<sup>7</sup></p> <p>See Drug interactions with hormonal contraception in Section A: Introduction for further resources including drug interaction checkers.</p>			

## 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.

## Additional comments

### POSTPARTUM

**Breastfeeding:** Although women who are fully or nearly fully breastfeeding, amenorrhoeic and <6 months postpartum can rely on lactational amenorrhoea method (LAM) as an effective method of contraception, if breastfeeding frequency decreases or menstruation recurs EC may be indicated.

### VENOUS THROMBOEMBOLISM (VTE)

Care should be taken when fitting a Cu-IUD in those taking anticoagulants as there may be an increased risk of bleeding.

### UTERINE FIBROIDS AND ANATOMICAL ABNORMALITIES (distorted uterine cavity)

The decision to insert an IUD in an individual with uterine cavity distortion should be made on an individualised basis, considering the degree of distortion, uterine cavity size and the accuracy of imaging available.<sup>472</sup>

### SEVERE LIVER DISEASE

The duration of use of UPA or LNG is less than that of regular use of the progestogen-only pill (POP) and thus would be expected to have less clinical impact.

### ACUTE INTERMITTENT PORPHYRIA

Cyclical symptoms have been found in relation to the menstrual cycle but seldom lead to acute attacks.

### RISK OF SEXUALLY TRANSMITTED INFECTIONS (STIs)

Women who are thought to be at higher risk for STI based on a sexual history (age <25 years or age >25 years with a change in sexual partner or two or more partners in the last year) can be offered testing for STIs and should be given prophylactic antibiotics to prevent *Chlamydia trachomatis* at the time of Cu-IUD insertion.

### DRUG INTERACTIONS

Current FSRH guidance recommends that women using liver enzyme inducers should be advised to use a Cu-IUD. If progestogen-only EC is to be used it should be given as soon as possible and within 72 hours of UPSI. In women using liver enzyme inducing drugs, two 1.5 mg LNG tablets should be taken (3 mg) as a single dose. The efficacy of LNG is not reduced by non-liver enzyme inducing antibiotics.



**COSRH**

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Reproductive Healthcare

# UK MEDICAL ELIGIBILITY CRITERIA

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FOR CONTRACEPTIVE USE | UKMEC 2025

**SUMMARY TABLES**

## Important information about using the UKMEC

### 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.

### The UKMEC relates to safety and not efficacy

The UKMEC offers guidance regarding who can use contraceptive methods safely. The recommendations do not indicate the best method for an individual, nor do they consider efficacy (including drug interactions or malabsorption).

### Absence of a condition or characteristic in the UKMEC does not always mean that it is safe to use contraceptive methods

For uncommon conditions, there is rarely sufficient evidence to make clinical recommendations, and in these circumstances, clinical judgement and/or advice from a specialist may be appropriate.

### Recommendations made in the UKMEC are for contraceptive purposes only

Where a method of contraception is used for a non-contraceptive indication the risk/benefit profile and eligibility criteria may differ.

### UKMEC recommendations and off-label use

Recommendations made in the UKMEC are evidence-based and may fall outside of the product licence (i.e. be off-label).

### Multiple UKMEC 2 categories may indicate a cumulative risk

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. Multiple risk factors are defined as more than one risk factor. Where more than one risk factor is present, clinical judgement must be applied.

### Multiple UKMEC 3 categories may pose an unacceptable health risk

When an individual has multiple conditions, scoring UKMEC 3 for a method, use of this method may pose an unacceptable risk; clinical judgement should be used in each individual case.

### Where multiple risk factors exist, a method may not be suitable

Multiple risk factors are included in the UKMEC for cardiovascular disease and venous thromboembolism (VTE). The Guideline Development Group (GDG) have agreed that multiple risk factors can be defined as **more than one risk factor**. Where more than one risk factor is present, clinical judgement must be applied.

Examples of VTE risk factors include previous VTE, cancer, recent major surgery, recent trauma, significant immobility, high BMI, pregnancy and the postnatal period, inflammatory disorders, antiphospholipid antibody syndrome and other thrombotic disorders. For a full list of [DVT<sup>2</sup>](#) and [PE<sup>3</sup>](#) risk factors risk please see NICE guidance.

A family history of unprovoked VTE (i.e. no precipitating factors) is a stronger risk factor for VTE than a family history of provoked VTE. Provoked VTE includes major surgery, hospital admission with acute infection or inflammatory state (e.g. sepsis), temporary significant reduction in mobility (e.g. bed or sofa bound >3 days), long-haul flight.

### Drug interactions should be considered separately

Health professionals providing hormonal contraception should ask individuals about current and previous drug use including prescription, over the counter, on-line, herbal, recreational drugs, and dietary supplements.

**For further guidance and resources regarding specific drug interactions, please refer to:**

- CoSRH guidance on drug interactions with hormonal contraception, available on the CoSRH website.<sup>7</sup>
- The British National Formulary (BNF) publications and website.<sup>8</sup>
- Summary of product characteristics (SPC), available on electronic Medicine Compendium (eMC) website.<sup>9</sup>
- Stockley's Drug Interactions website (which requires a log-in).<sup>10</sup>
- For interactions between hormonal contraception and antiretroviral (ARV) drugs, please refer to the online human immunodeficiency virus (HIV) drugs interaction checker.<sup>11</sup>

**Table 8: UKMEC summary table – hormonal and intrauterine contraception**

<p align="center"><b>UKMEC SUMMARY TABLE</b>  <b>HORMONAL AND INTRAUTERINE CONTRACEPTION</b>                      Cu-IUD = Copper intrauterine device; LNG-IUD = Levonorgestrel-releasing intrauterine device.                      IMP = Progestogen-only implant.                      DMPA = Progestogen-only injectable: depot medroxyprogesterone acetate.                      POP = Progestogen-only pill; CHC = Combined hormonal contraception</p>						
CONDITION	Cu-IUD	LNG-IUD	IMP	DMPA	POP	CHC
*See additional comments at end of section	I = Initiation, C = Continuation					
PERSONAL CHARACTERISTICS AND REPRODUCTIVE HISTORY						
Pregnancy	NA	NA	NA	NA	NA	NA
Age	Menarche to <20=2, ≥20=1	Menarche to <20=2, ≥20=1	After menarche =1	Menarche to <18=2, 18-45=1, >45=2	After menarche =1	Menarche to <40=1, 40 to 50=2
Parity						
a) Nulliparous	1	1	1	1	1	1
b) Parous	1	1	1	1	1	1
Postpartum						
a) 0 to <3 weeks						
(i) With other risk factors for venous thromboembolism (VTE)	See below		1	3	1	4
(ii) Without other risk factors			1	2	1	3
b) 3 to <6 weeks						
(i) With other risk factors for VTE	See below		1	3	1	3
(ii) Without other risk factors			1	1	1	2
c) ≥6 weeks			1	1	1	1
Postpartum (in breastfeeding or non-breastfeeding women, including post- caesarean section)						
a) 0 to ≤ 48 hours	1	1	See above			
b) 48 hours to 4 weeks	3	3				
c) ≥4 weeks	1	1				
d) Postpartum sepsis	4	4				
Breastfeeding						
a) 0 to <6 weeks postpartum	See above		1	2	1	4
b) ≥6 weeks to <6 months (primarily breastfeeding)			1	1	1	2
c) ≥6 months postpartum			1	1	1	1

## UKMEC SUMMARY TABLE HORMONAL AND INTRAUTERINE CONTRACEPTION

Cu-IUD = Copper intrauterine device; LNG-IUD = Levonorgestrel-releasing intrauterine device.

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CONDITION	Cu-IUD	LNG-IUD	IMP	DMPA	POP	CHC
*See additional comments at end of section	<b>I = Initiation, C = Continuation</b>					
<b>Post-abortion</b>						
a) First trimester	1	1	1	1	1	1
b) Second trimester	2	2	1	1	1	1
c) Post-abortion sepsis	4	4	1	1	1	1
<b>Past ectopic pregnancy</b>	1	1	1	1	1	1
<b>History of pelvic surgery</b>	1	1	1	1	1	1
<b>Smoking</b>	UKMEC does not include use of e-cigarettes as there is insufficient evidence to establish associated risks. However, given the unknown long term cardiovascular risks with e-cigarettes alternatives to CHC should be prioritised.					
a) Age <35 years	1	1	1	1	1	2
b) Age ≥35 years						
(i) <15 cigarettes/day	1	1	1	1	1	3
(ii) ≥15 cigarettes/day	1	1	1	1	1	4
(iii) Stopped smoking <1 year	1	1	1	1	1	3
(iv) Stopped smoking ≥1 year	1	1	1	1	1	2
<b>Obesity</b>						
a) BMI ≥30–34.9 kg/m <sup>2</sup>	1	1	1	1	1	2
b) BMI ≥35 kg/m <sup>2</sup>	1	1	1	2	1	3
<b>History of bariatric surgery</b>						
a) With BMI <30 kg/m <sup>2</sup>	1	1	1	1	1	1
b) With BMI ≥30–34.9 kg/m <sup>2</sup>	1	1	1	1	1	2
c) With BMI ≥35 kg/m <sup>2</sup>	1	1	1	2	1	3
<b>Organ transplant</b>						
a) Complicated: graft failure (acute or chronic), rejection, cardiac allograft vasculopathy	I	C	I	C		
	3	2	3	2	2	3
b) Uncomplicated	2	2	2	2	2	2

## UKMEC SUMMARY TABLE

### HORMONAL AND INTRAUTERINE CONTRACEPTION

Cu-IUD = Copper intrauterine device; LNG-IUD = Levonorgestrel-releasing intrauterine device.  
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CONDITION	Cu-IUD	LNG-IUD	IMP	DMPA	POP	CHC			
*See additional comments at end of section	I = Initiation, C = Continuation								
<b>CARDIOVASCULAR DISEASE (CVD)</b>									
<b>Multiple risk factors for CVD</b> (e.g., smoking, diabetes, hypertension, obesity, dyslipidemias) Where more than one risk factor is present, clinical judgement must be applied.	1	2	2	3	2	3			
<b>Hypertension</b>									
a) Controlled hypertension	1	1	1	2	1	3			
b) Consistently elevated blood pressure (BP) levels (properly taken measurements)									
(i) Stage 1 hypertension <u>Clinic</u> Systolic 140 – 159 and/or Diastolic 90 – 99  <u>Home</u> Systolic 135 – 149 and/or Diastolic 85 – 94	1	1	1	2	1	3			
(ii) Stage 2 or 3 hypertension <u>Clinic</u> Systolic ≥ 160 and/or Diastolic ≥ 100  <u>Home</u> Systolic ≥ 150 and/or Diastolic ≥ 95	1	1	1	2	1	4			
c) Vascular disease	1	2	2	3	2	4			
<b>History of high BP during pregnancy</b>	1	1	1	1	1	2			
<b>Current and history of ischaemic heart disease</b>	1	I 2	C 3	I 2	C 3	3	I 2	C 3	4
<b>Stroke and transient ischemic attack*</b> (includes arterial thrombosis, venous thrombosis and intracerebral haemorrhage)	1	2		I 2	C 3	3	I 2	C 3	4
<b>Known dyslipidaemias</b>	1	2	2		2	2	2	2	

## UKMEC SUMMARY TABLE HORMONAL AND INTRAUTERINE CONTRACEPTION

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CONDITION	Cu-IUD	LNG-IUD	IMP	DMPA	POP	CHC
*See additional comments at end of section	I = Initiation, C = Continuation					
<b>Venous thromboembolism (VTE)</b>						
History of VTE or current VTE (on anticoagulants)	1	2	2	3	2	4
<b>Risk factors for VTE</b>						
a) Family history of VTE (first degree relative)	1	1	1	2	1	3
b) Major surgery	1	1	2	I 3	C 2	2 4
c) Immobility (e.g. wheelchair use, chronic conditions)	1	1	1	2	1	3
<b>Multiple risk factors for VTE</b> (additional examples include cancer, high BMI, thrombotic or inflammatory disorders) Where more than one risk factor is present, clinical judgement must be applied	1	1	1	3	1	4
<b>Superficial venous thrombosis</b>						
a) Varicose veins	1	1	1	1	1	1
b) Superficial venous thrombosis	1	1	1	2	1	2
<b>Known thrombogenic mutations</b> (e.g. factor V Leiden, prothrombin mutation, protein S, protein C and antithrombin deficiencies)	1	2	2	3	2	4
<b>Valvular and congenital heart disease</b>						
a) Uncomplicated	1	1	1	1	1	2
b) Complicated (e.g. pulmonary hypertension, history of subacute bacterial endocarditis)	2	2	1	1	1	4
<b>Cardiomyopathy</b>						
a) Normal cardiac function	1	1	1	1	1	2
b) Impaired cardiac function	2	2	2	2	2	4

## UKMEC SUMMARY TABLE

### HORMONAL AND INTRAUTERINE CONTRACEPTION

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POP = Progestogen-only pill; CHC = Combined hormonal contraception

CONDITION	Cu-IUD	LNG-IUD	IMP	DMPA	POP	CHC
*See additional comments at end of section	I = Initiation, C = Continuation					
<b>Cardiac arrhythmias</b>						
a) Atrial fibrillation	1	2	2	2	2	4
b) Known long QT syndrome	I	C	1	2	1	2
	3	1				
<b>NEUROLOGICAL CONDITIONS</b>						
<b>Headaches</b>						
a) Non-migrainous (mild or severe)	1	1	1	1	1	I
						1
b) Migraine without aura, at any age	1	2	2	2	I	C
					1	2
c) Migraine with aura, at any age	1	2	2	2	2	4
d) History (≥5 years ago) of migraine with aura, any age	1	2	2	2	2	3
<b>Idiopathic intracranial hypertension (IIH)</b>	1	1	1	1	1	2
<b>Epilepsy</b>	1	1	1	1	1	1
Taking anti-epileptic drugs	<p>Certain anti-epileptic drugs have the potential to affect the bioavailability of steroid hormones in hormonal contraception.</p> <p>For up-to-date information on the potential drug interactions between hormonal contraception and anti-epileptic drugs, please refer to the online drug interaction checker available on Stockley's Interaction Checker website.<a href="#">10</a></p>					
<b>Multiple sclerosis (MS)</b>						
a) MS with prolonged immobility	1	1	1	2	1	3
b) MS without prolonged immobility	1	1	1	2	1	1
<b>MENTAL HEALTH CONDITIONS</b>						
<b>Anxiety and mood disorders</b>	<p>There is not consistent evidence that hormonal contraceptives (HCs) worsen or improve anxiety or mood (affective) disorders in those with pre-existing conditions. When starting hormonal contraception, clinicians should provide individualised counselling and advise patients to monitor their mood, seeking follow-up with their healthcare provider if they notice a deterioration. See CoSRH statement.<a href="#">15</a></p>					

# UKMEC SUMMARY TABLE

## HORMONAL AND INTRAUTERINE CONTRACEPTION

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POP = Progestogen-only pill; CHC = Combined hormonal contraception

CONDITION	Cu-IUD	LNG-IUD		IMP	DMPA	POP	CHC	
*See additional comments at end of section	I = Initiation, C = Continuation							
<b>BREAST AND REPRODUCTIVE TRACT CONDITIONS</b>								
<b>Vaginal bleeding patterns</b>								
a) Irregular pattern without heavy bleeding	1	1		2	2	2	1	
b) Heavy or prolonged bleeding (includes regular and irregular patterns)	2	I	C	2	2	2	1	
		1	2					
Unexplained vaginal bleeding (suspicious for serious condition) before evaluation	I	C	I	C	3	3	2	2
	4	2	4	2				
<b>Endometriosis</b>	2	1		1	1	1	1	
<b>Benign ovarian tumours (including cysts)</b>	1	1		1	1	1	1	
<b>Severe dysmenorrhoea</b>	2	1		1	1	1	1	
<b>Gestational trophoblastic disease (GTD)</b>								
a) Undetectable human chorionic gonadotropin (hCG) levels	1	1		1	1	1	1	
b) Decreasing hCG levels	3	3		1	1	1	1	
c) Persistently elevated hCG levels or malignant disease	4	4		1	1	1	1	
<b>Cervical ectropion</b>	1	1		1	1	1	1	
<b>Cervical intraepithelial neoplasia (CIN)</b> Includes individuals with high-risk human papillomavirus (HR-HPV)	1	2		1	2	1	2	
<b>Cervical cancer</b>								
a) Awaiting treatment	I	C	I	C	2	2	1	2
	4	2	4	2				
b) Radical trachelectomy	3	3		2	2	1	2	
<b>Breast conditions</b>								
a) Undiagnosed mass/breast symptoms	1	2	2	2	2	2	I	C
							3	2
b) Benign breast conditions	1	1		1	1	1	1	

## UKMEC SUMMARY TABLE

### HORMONAL AND INTRAUTERINE CONTRACEPTION

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CONDITION	Cu-IUD	LNG-IUD	IMP	DMPA	POP	CHC
*See additional comments at end of section	I = Initiation, C = Continuation					
c) Family history of breast cancer	1	1	1	1	1	1
d) Carriers of high-risk gene mutations associated with breast cancer (e.g. BRCA1/BRCA2)	1	2	2	2	2	3
e) Breast cancer						
(i) Currently being treated for breast cancer	1	4	4	4	4	4
(ii) Completed treatment for breast cancer	1	3	3	3	3	3
<b>Ovarian cancer (epithelial)</b> BRCA carriers – see above	1	1	1	2	1	2
<b>Endometrial cancer</b>	I	C	I	C	1	2
	4	2	4	2		
<b>Uterine fibroids</b>						
a) Without distortion of the uterine cavity	1	1	1	1	1	1
b) With distortion of the uterine cavity	3	3	1	1	1	1
<b>Anatomical abnormalities</b>						
a) Distorted uterine cavity	3	3				
b) Other abnormalities	2	2				
<b>Pelvic inflammatory disease (PID)</b>						
a) Past PID (assuming no current risk factor for STIs)	1	1	1	1	1	1
b) Current PID	I	C	I	C	1	1
	4	2	4	2		
<b>Sexually transmitted infections (STIs)</b>						
a) Chlamydia, gonorrhoea or mycoplasma genitalium* (current infection)	I	C	I	C		
	4	2	4	2	1	1
	3	2	3	2	1	1
(i) Clinical symptoms/signs of infection**	4	2	4	2	1	1
(ii) No clinical symptoms/signs of	3	2	3	2	1	1

## UKMEC SUMMARY TABLE

### HORMONAL AND INTRAUTERINE CONTRACEPTION

Cu-IUD = Copper intrauterine device; LNG-IUD = Levonorgestrel-releasing intrauterine device.

IMP = Progestogen-only implant.

DMPA = Progestogen-only injectable: depot medroxyprogesterone acetate.

POP = Progestogen-only pill; CHC = Combined hormonal contraception

CONDITION	Cu-IUD		LNG-IUD		IMP	DMPA	POP	CHC
*See additional comments at end of section	<b>I = Initiation, C = Continuation</b>							
infection								
b) Other current STIs (excluding HIV & hepatitis)	2		2		1	1	1	1
c) Current vaginitis, including trichomonas vaginalis (TV) and bacterial vaginosis (BV)	2		2		1	1	1	1
*M Gen testing is only recommended in certain circumstances, see BASHH guidelines. <sup>16</sup>								
**Clinical symptoms and signs of infection include cervicitis, purulent discharge, lower abdominal pain, post-coital bleeding and/or systemic manifestations. PID is covered above.								
<b>Human Immunodeficiency Virus (HIV)</b>								
a) High risk for HIV	1	1	1	1	1	1	1	1
b) Living with HIV								
(i) Living with HIV Clinically well, on treatment	2		2		1	1	1	1
(ii) Living with HIV Clinically unwell and not on treatment	<b>I</b>	<b>C</b>	<b>I</b>	<b>C</b>	1	1	1	1
	3	2	3	2				
c) Taking HIV medications (for treatment or prophylaxis)	<p>Certain HIV drugs have the potential to affect the bioavailability of steroid hormones in hormonal contraception. Drug interactions are not presented in the UKMEC as MEC categories relate to safety of contraceptive use, not effectiveness. For current recommendations, clinicians should refer to the FSRH Clinical Effectiveness Unit (CEU) Guidance: Drug Interactions Between HIV Antiretroviral Therapy and Contraception<sup>17</sup> and the University of Liverpool HIV Drug Interactions Checker.<sup>11</sup></p> <p>Note, there may be specific bone mineral density considerations around coadministration of tenofovir disoproxil (TDF) when used for HIV pre-exposure prophylaxis (PrEP) or treatment and DMPA.</p>							
<b>OTHER INFECTIONS</b>								
<b>Tuberculosis</b>								
a) Non-pelvic	1	1	1	1	1	1	1	1
b) Pelvic	<b>I</b>	<b>C</b>	<b>I</b>	<b>C</b>	1	1	1	1
	4	3	4	3				
<b>ENDOCRINE CONDITIONS</b>								
<b>Diabetes</b>								
a) History of gestational disease	1	1	1	1	1	1	1	1

## UKMEC SUMMARY TABLE HORMONAL AND INTRAUTERINE CONTRACEPTION

Cu-IUD = Copper intrauterine device; LNG-IUD = Levonorgestrel-releasing intrauterine device.  
IMP = Progestogen-only implant.

DMPA = Progestogen-only injectable: depot medroxyprogesterone acetate.  
POP = Progestogen-only pill; CHC = Combined hormonal contraception

CONDITION	Cu-IUD	LNG-IUD	IMP	DMPA	POP	CHC
*See additional comments at end of section	I = Initiation, C = Continuation					
<b>Non-vascular disease</b>						
b) Non-vascular disease						
(i) Non-insulin dependent	1	2	2	2	2	2
(ii) Insulin dependent	1	2	2	2	2	2
c) Nephropathy/retinopathy/neuropathy	1	2	2	2	2	3
d) Other vascular disease	1	2	2	2	2	3
<b>Thyroid disorders</b>						
a) Simple goitre	1	1	1	1	1	1
b) Hyperthyroid	1	1	1	1	1	1
c) Hypothyroid	1	1	1	1	1	1
<b>Chronic kidney disease</b>						
a) Current nephrotic syndrome	2	2	2	3	2*	4
b) Haemodialysis	2	2	2	3	2*	4
c) Peritoneal dialysis	2	2	2	3	2*	4
*POP: excluding drospirenone (DRSP), which should not be used in individuals with severe renal insufficiency or acute renal failure and should be used with caution in individuals at risk of hyperkalaemia. <sup>18</sup> See FSRH Clinical Guideline: Progestogen-only pills. <sup>19</sup>						
<b>GASTROINTESTINAL CONDITIONS</b>						
<b>Gallbladder disease</b>						
a) Symptomatic						
(i) Treated by cholecystectomy	1	2	2	2	2	2
(ii) Medically treated	1	2	2	2	2	3
(iii) Current	1	2	2	2	2	3
b) Asymptomatic	1	2	2	2	2	2
<b>History of cholestasis</b>						
a) Pregnancy related	1	1	1	1	1	2
b) Past combined oral contraception (COC) related	1	2	2	2	2	3
<b>Viral hepatitis</b>						
a) Acute or flare	1	1	1	1	1	I 3    C 2
b) Carrier	1	1	1	1	1	1

## UKMEC SUMMARY TABLE HORMONAL AND INTRAUTERINE CONTRACEPTION

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POP = Progestogen-only pill; CHC = Combined hormonal contraception

CONDITION	Cu-IUD	LNG-IUD	IMP	DMPA	POP	CHC
*See additional comments at end of section	I = Initiation, C = Continuation					
c) Chronic	1	1	1	1	1	1
<b>Cirrhosis</b>						
a) Mild (compensated without complications)	1	1	1	1	1	1
b) Severe (decompensated)	1	3	3	3	3	4
<b>Liver tumours</b>						
a) Benign						
(i) Focal nodular hyperplasia	1	2	2	2	2	2
(ii) Hepatocellular adenoma	1	3	3	3	3	4
b) Malignant (hepatocellular carcinoma)	1	3	3	3	3	4
<b>Inflammatory bowel disease</b> (including Crohn's disease and ulcerative colitis)	1	1	1	2	2	2
<b>ANAEMIAS</b>						
<b>Thalassaemia</b>	2	1	1	1	1	1
<b>Sickle cell disease</b>	2	1	1	2	1	2
<b>Sickle cell trait (SCT)</b>	There is insufficient evidence to give MEC ratings for SCT. There is a small increase in the risk of VTE with SCT, therefore alternatives to CHC should be prioritised.					
<b>Iron deficiency anaemia</b>	2	1	1	1	1	1
<b>RHEUMATIC DISEASES</b>						
<b>Rheumatoid arthritis</b>	1	2	2	2	2	2
<b>Systemic lupus erythematosus (SLE)</b> No antiphospholipid antibodies	1	2	2	2	2	2
<b>Positive antiphospholipid antibodies</b>	1	2	2	3	2	4
<b>DRUG INTERACTIONS</b>						
<b>Taking medication</b>	Refer to FSRH guideline Drug Interactions with Hormonal Contraception. <sup>7</sup>  See Drug interactions with hormonal contraception in Section A: Introduction (full UKMEC only) for further resources including drug interaction checkers.					

## Definitions of UKMEC categories

UKMEC	DEFINITION OF CATEGORY
<b>Category 1</b>	A condition for which there is no restriction for the use of the method.
<b>Category 2</b>	A condition where the advantages of using the method generally outweigh the theoretical or proven risks.
<b>Category 3</b>	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.
<b>Category 4</b>	A condition which represents an unacceptable health risk if the method is used.

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## SECTION C: APPENDICES

### Appendix 1: UKMEC Development Process

A Guideline Steering Group (GSG), comprising the Clinical Effectiveness Unit (CEU) (Chalmers Centre) secretariat and members with expertise in contraception, was established to define the scope of the 2025 update of the UKMEC.

The GSG met to review the topics proposed by a scoping review exercise carried out by the CEU (Chalmers Centre) and to approve the scope of the UKMEC update. Priority was given to highly debated topics or those in which new evidence had emerged. The scoping exercise included liaison with both WHO MEC and US MEC teams, scoping reviews of the evidence and intelligence gathered from CoSRH member enquiries. From January 2024, the work transferred to a new CEU team within the CoSRH. The CEU (CoSRH team) subsequently established a Guideline Development Group (GDG) consisting of five of the six original steering group members and members recruited through open advertisement. Additional topic specific experts were recruited via the relevant specialist societies or by invitation to advise the GDG on a number of the conditions covered by the 2025 update (see Appendix 2 for details of the membership of these groups). All members and invited experts were asked to declare any conflicts of interest on appointment and at each meeting in line with CoSRH policy. There were no declared interests that were deemed to preclude any individual from participating in the process.

Areas to be reviewed in the 2025 update included:

- Chronic kidney disease (new)
- Osteoporosis/BMD loss (new)
- Multiple sclerosis
- Drospirenone (DRSP) POP (new)
- Estetrol (E4) +DRSP COC (new)
- Conditions with increased risk of thrombosis
- and POC
- Stroke
- Postpartum IUC
- High risk HPV
- E-cigarettes
- Depressive disorders
- Liver disease
- Sickle cell disease and trait
- Hypertension
- Breast cancer
- High risk of HIV
- STIs
- Ovarian cancer
- PID

The GDG meetings took place in the last quarter of 2024 and the first two quarters of 2025 to review the new evidence. The evidence was identified through a systematic review of the most recent literature guided by a prospectively specified research question in PICO (patient or population, intervention, comparison, outcome) format. The original searches were defined and conducted in 2023 by the CEU (Chalmers Centre) and updated searches carried out during 2024/25 by the current CEU (CoSRH team). Studies meeting the eligibility criteria were critically appraised for their quality using appropriate tools as recommended by the National Institute for Health and Care Excellence (NICE). The certainty of the most relevant evidence was assessed as per the GRADE (Grading of Recommendations, Assessment, Development and Evaluation) Working Group framework and presented to GDG members. These evidence summaries are available on the CoSRH website.

For some topics, the CEU team carried out a technical consultation with UK-based experts in the relevant clinical area (Appendix 2). For changes to be made to the UKMEC 2016 (amended 2019) categories, we followed a similar process used by the WHOMEK, which required sufficiently strong evidence of a lack of undesirable or harmful effects of evaluated contraceptive methods in

each population to merit any changes to MEC categories. Recommendations were made following discussion and a consensus process. Each meeting was recorded and a summary of the evidence, GDG discussions, considerations and conclusions was sent to the GDG for approval after each meeting. These summaries were used in writing the first draft of the UKMEC.

The 2025 version of the UKMEC was based on the recommendations agreed by the GDG members either at the meeting or through voting via email.

A total of 21 topics were reviewed as part of the UKMEC revision. The ratings for the methods and conditions not indicated as reviewed were left unchanged. A summary of changes from the UKMEC 2016 can be found in Section A.

The first draft of the 2025 UKMEC was produced in July 2025. This was reviewed by the GDG. A second (consultation) draft was sent to key UK stakeholder groups for review and published on the CoSRH website for consultation with the membership of the CoSRH in September 2025. We received 23 responses and a list of the organisations that participated is set out in Appendix 2.

Following the consultation and further discussion with the GDG, the following UKMEC ratings were changed:

#### **History of VTE**

- DMPA changed to a MEC 3 (increased)
- CHC changed to MEC 4 (increased)

#### **Major surgery (in VTE risk factors section)**

- LNG-IUD changed to a MEC 1 (decreased)
- DMPA changed to 3 for initiation and 2 for continuation (decreased for continuation only)

#### **Known thrombogenic mutations**

- DMPA changed to MEC 3 (increased)

#### **Antiphospholipid antibodies**

- DMPA changed to MEC 3 (increased)

All of the above are increased ratings compared with those in the consultation draft except for major surgery (VTE risk factors) where LNG-IUD has been lowered (from 2 to 1). DMPA has been separated into initiation and continuation.

In response to the review and consultation a third draft was developed following discussion and agreement with the GDG. A quality assurance and sign-off process in line with the AGREEII framework (Appraisal of Guidelines for Research and Evaluation) took place within the Quality Assurance and Surveillance Committee at CoSRH prior to publication. Final ratification for publication sat with the Clinical Quality Board of Council of the CoSRH.

## Appendix 2: List of contributors

The scope of the review of the UKMEC was agreed by a Guideline Steering Group (GSG) comprising six external members, supported by the former CEU Secretariat from the Chalmers Centre, NHS Lothian. The update of the UKMEC was subsequently guided by the UKMEC Guideline Development Group (GDG), supported by the current CEU development team. Additional advice was provided to the GDG by topic experts for some of the topics under review.

### Guideline Development Group

Professor Deborah Bateson*	Professor of Practice Sydney Medical School, Faculty of Medicine and Health, The University of Sydney <i>Steering Group member only</i>
Professor Sharon Cameron*	Consultant in Gynaecology and Sexual and Reproductive Health NHS Lothian and Centre for Regeneration and Repair and Usher Institute, University of Edinburgh, Editor-in - Chief, BMJ Sexual and Reproductive Health
Dr Kathryn Curtis*	Health Scientist Division of Reproductive Health, Centers for Disease Control and Prevention, Atlanta, USA <i>Steering Group member and first GDG meeting only</i>
Professor Anna Glasier*	Honorary Professor Centre for Reproductive Health, Edinburgh University Women's Health Champion for Scotland
Professor Philip Hannaford*	Emeritus Professor of Primary Care University of Aberdeen
Dr Diana Mansour*	Consultant Community Gynaecology and Reproductive Healthcare, Newcastle Hospitals NHS Foundation Trust, Newcastle upon Tyne
Professor Kirsten Black	Professor of Sexual and Reproductive Health Director of Career Academic Development Sydney Medical School, The University of Sydney
Ms Bekki Burbidge	Family Planning Association
Dr Kimberley Forbes	Consultant in Sexual Health and HIV Directorate Service Lead Chelsea & Westminster Foundation Trust
Ms Portia Jackson	Lead Pharmacist Cambridgeshire Community Services NHS Trust
Dr Ramona Malek	Consultant in Sexual Health and HIV Clinical Director of Sexual Health Buckinghamshire Healthcare NHS Trust

Ms Zoe McGlynn	Lecturer in Adult Nursing University of Central Lancashire, School of Nursing and Midwifery
Dr Sudarmathi Rajamanickam	Clinical Director of Portsmouth Primary Care Alliance GP partner, Island City Practice, Portsmouth
Dr Rebecca Strauss - Chair	CEU Clinical Director Associate Specialist and Contraception Lead, Locala Sexual Health, Dewsbury
Dr Annette Thwaites	Consultant in Sexual and Reproductive Health Guy's and St Thomas' NHS Foundation Trust Honorary Research Fellow, Institute for Women's Health, University College London

\* Denotes member of the initial Steering Group

### Contributing Topic Experts

Dr Hannah Beckwith	Clinical Lecturer, Department of Women and Children's Health, Kings College London Consultant Nephrologist, Kings College Hospital
Dr Michelle Cooper	Consultant in Gynaecology & Sexual Health, NHS Lothian NRS Clinician & Honorary Senior Clinical Lecturer, University of Edinburgh
Professor Ian Giles	Professor of Rheumatology, Centre for Ageing, Rheumatology and Regenerative Medicine, University College London & Honorary Consultant Rheumatologist, University College London Hospitals
Dr Tom Hughes	Consultant Neurologist, University Hospital of Wales Honorary Senior Lecturer, Cardiff University
Professor Beverley Hunt	Consultant in Thrombosis and Haemostasis Professor of Thrombosis and Haemostasis, King's College London
Dr Vikas Kapil	Senior Lecturer & Consultant, Clinical Pharmacology & Cardiovascular Medicine William Harvey Research Institute, Queen Mary University of London
Dr Rachel Kesse-Adu	Consultant Haematologist Guy's and St Thomas' NHS Foundation Trust

Miss Jo Marsden	Consultant Breast Surgeon (retired)
Dr Jo Morrison	King's College Hospital NHS Foundation Trust Consultant Gynaecological Oncologist Somerset NHS Foundation Trust Honorary Senior Lecturer University of Exeter
Dr Kate Petheram	Consultant Neurologist South Tyneside and Sunderland NHS Foundation Trust
Dr Mussarat Rahim	Consultant Hepatologist St George's University Hospitals NHS Foundation Trust
Dr Francesca Reeder	Haematology Specialist Registrar Clinical Fellow on Haemostasis and Thrombosis Guy's and St Thomas' NHS Foundation Trust
Dr Sonia Wolf	Consultant Haematologist Barts Health NHS Trust

### CoSRH CEU Development Team (from January 2024)

Dr Rebecca Strauss	Clinical Director
Dr Anna Kelly	Clinical Fellow
Dr Luveon Tang	Clinical Fellow
Dr Lucy Fagan	Clinical Fellow
Dr Jacqueline Quinn	Clinical Fellow
Ewelina Rogozińska, PhD	Systematic Reviewer
Andrea Takeda, PhD	Systematic Reviewer (to January 2025)
Alexandra-Andreea Ciritel, PhD	Systematic Reviewer (from June 2025)
Benjamin Boxer, PhD	Systematic Reviewer (from August 2025)
Sarah Willett	Director for Clinical Quality
Joanne Cruse	Senior Coordinator

### CoSRH CEU Secretariat – Chalmers Centre, NHS Lothian (March 2023-January 2024)

Dr Katie Boog	Co-Director
Dr Sarah Hardman	Co-Director
Professor Chelsea Morroni	Co-Director
Claire Nicol	Deputy Director
Zhong Eric Chen, PhD	Senior Researcher (non-Clinical)
Dr Cat Carver	Researcher (Clinical)
Dr Ashley Jefferies	Clinical Fellow
Dr Ellen Adams	Clinical Fellow

## Consultation respondents

We received 23 responses to the consultation by the specified deadline, of which 10 were from individuals. The following organisations submitted responses:

Association of Surgeons in Primary Care  
Befriend Your Boobs  
Blackpool Teaching Hospitals NHS Foundation Trust  
British HIV Association  
Family Planning Australia  
Leeds Community Healthcare NHS Trusts  
Locala Sexual Health and Community Gynaecology  
Medicines and Healthcare products Regulatory Agency  
NHS Lothian, former members of the CEU (Chalmers team)  
The Rotherham NHS Foundation Trust  
Royal College of Nursing  
UK Kidney Association  
World Health Organization

The CoSRH CEU team would like to express its sincere gratitude to the GDG members, and to the individual topic experts and their specialist associations, for their invaluable support throughout the process of reviewing and updating the UKMEC. We would also like to extend our thanks to all those who responded to our consultation.

## Appendix 3: Commonly used abbreviations

<b>AIDS</b>	Acquired immune deficiency syndrome	<b>IMP</b>	Progestogen-only implant
<b>ART</b>	Antiretroviral therapy	<b>IUD</b>	Intrauterine device
<b>aPL</b>	Antiphospholipid antibodies	<b>LAM</b>	Lactational amenorrhoea method
<b>ARV</b>	Antiretroviral	<b>LARC</b>	Long-acting reversible contraception
<b>BMD</b>	Bone mineral density	<b>LDL</b>	Low-density lipoprotein
<b>BMI</b>	Body mass index	<b>LNG</b>	Levonorgestrel
<b>BNF</b>	British National Formulary	<b>LNG-IUD</b>	Levonorgestrel-releasing intrauterine device
<b>BRCA</b>	Breast Cancer gene		
<b>BP</b>	Blood pressure	<b>MI</b>	Myocardial infarction
<b>CEU</b>	Clinical Effectiveness Unit	<b>NET</b>	Norethisterone
<b>CHC</b>	Combined hormonal contraception	<b>NET-EN</b>	Norethisterone enantate
<b>CIN</b>	Cervical intraepithelial neoplasia	<b>PE</b>	Pulmonary embolism
<b>COC</b>	Combined oral contraception	<b>PID</b>	Pelvic inflammatory disease
<b>CoSRH</b>	College of Sexual and Reproductive Healthcare	<b>POC</b>	Progestogen-only contraception
<b>Cu-IUD</b>	Copper-bearing intrauterine device	<b>POP</b>	Progestogen-only pill
<b>CVD</b>	Cardiovascular disease	<b>PrEP</b>	Pre exposure prophylaxis
<b>DMPA</b>	Depot medroxyprogesterone acetate	<b>RA</b>	Rheumatoid arthritis
<b>DRSP</b>	Drospirenone Progestogen-only pill	<b>SC</b>	Subcutaneous
<b>DSG</b>	Desogestrel	<b>SCT</b>	Sickle cell trait
<b>DVT</b>	Deep vein thrombosis	<b>SLE</b>	Systemic lupus erythematosus
<b>EC</b>	Emergency contraception	<b>STI</b>	Sexually transmitted infection
<b>EE</b>	Ethinylestradiol	<b>TIA</b>	Transient ischaemic attack
<b>E4</b>	Estetrol		
<b>GDG</b>	Guideline Development Group	<b>UKMEC</b>	UK Medical Eligibility Criteria for Contraceptive Use
<b>GTD</b>	Gestational trophoblastic disease	<b>UPA</b>	Ulipristal acetate
<b>hCG</b>	Human chorionic gonadotrophin	<b>UPSI</b>	Unprotected sexual intercourse
<b>HDL</b>	High-density lipoprotein	<b>VTE</b>	Venous thromboembolism
<b>HIV</b>	Human immunodeficiency virus	<b>WHO</b>	World Health Organization
<b>HMB</b>	Heavy menstrual bleeding		
<b>HPV</b>	Human papillomavirus		
<b>IBD</b>	Inflammatory bowel disease		
<b>IIH</b>	Idiopathic intracranial hypertension		
<b>IM</b>	Intramuscular		

