

UK MEDICAL ELIGIBILITY CRITERIA FOR CONTRACEPTIVE USE

(UKMEC 2005/2006)

The Department of Health (England) provided funding to the Clinical Effectiveness Unit of the Faculty of Family Planning and Reproductive Heath Care to assist them in the production of this guidance, the UK Medical Eligibility for Contraceptive Use (2005).

Published by the Faculty of Family Planning and Reproductive Health Care.

Registered in England No. 2804213 and Registered Charity No. 1019969

UKMEC first published in July 2006

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Distribution of paper copies was funded by the Department of Health (England) and the Scottish Executive.

The CEU would also like to acknowledge the Sexual and Reproductive Health Department of the World Health Organization for allowing access to the literature searches up to 2004.

Table of contents

SECTION A	A: Introduction	
	Contraceptive choice	3
	What are Medical Eligibility Criteria?	3
	The consensus process	5
	How to use this document	7
	Commonly used abbreviations	10
	Summary of changes from WHOMEC	11
	Summary Table of Changes	13
	References	18
SECTION E	3: Tables of contraceptive methods	
Table 1.0	Combined hormonal methods (pills, patch and vaginal ring)	21
Table 2.0	Progestogen-only methods (pills, injectables and implant)	49
Table 3.0	Intrauterine methods (copper IUD and levonorgestrel IUD)	73
Table 4.0	Male and female sterilisation	93
Table 5.0	Emergency contraception (progestogen-only and copper IUD)	111
Table 6.0	Barrier methods (male and female condoms, diaphragm and cervical caps)	121
Table 7.0	Fertility awareness based methods (cervical mucus and fertility monitoring devices)	131
Table 8.0	Lactational amenorrhoea method	137
SECTION (: Summary table	
Table 9.0	Common reversible contraceptive methods	141
SECTION E	D: Annex	
Annex 1.	Combined hormonal methods and antiretroviral therapies	149

SECTION A: Introduction

Contraceptive choice

Many factors determine the method of contraception a couple chooses to use. Provided a woman or man is medically eligible to use a particular method, she or he should be free to choose the method which is most acceptable. To be effective, contraception must be used correctly and consistently; and for the long acting methods (such as intrauterine devices) to be cost-effective, continuation rates must be high. Effective and continued use of a method is directly related to its acceptability to the user.

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

What are the Medical Eligibility Criteria?

Most contraceptive users are medically fit and can use any available contraceptive method safely. However, some medical conditions are associated with theoretical increased health risks when certain contraceptives are used, either because the method adversely affects the condition or because the condition, or its treatment, affects the contraceptive. For example the combined oral contraceptive pill may increase the risk of a woman with diabetes developing cardiovascular complications, while some anti-convulsants interfere with the efficacy of oral contraceptives. Since most trials of new contraceptive methods deliberately exclude subjects with chronic medical conditions, there is little direct evidence on which to base sound prescribing advice.

In 1994, the World Health Organization (WHO) developed a set of internationally agreed norms for providing contraception to women and men with a range of medical conditions which may contraindicate one or more contraceptive methods. These norms are the so-called WHO *Medical Eligibility Criteria for Contraceptive Use* (WHOMEC). A third edition of WHOMEC was published in 2004.¹ New evidence is regularly reviewed and available on the WHO website (www.who.int/en/)

Using evidence-based systematic reviews and expert opinion, the recommendations classify conditions into one of four categories (Table A). Category 1 includes conditions for which there is *no restriction for the use* of the method while category 4 includes conditions which represent an *unacceptable health risk* if the contraceptive method is used (absolutely contraindicated). Classification of a condition as category 2 indicates that the method may generally be used but that more careful follow-up is required. Category 3 conditions are those for which the risks of use generally outweighs the benefits (relatively contraindicated). Provision of a method to a woman with a category 3 condition requires expert clinical judgement since use of that method is not usually recommended unless other more appropriate methods are not available or not acceptable.¹

Table A: WHOMEC categories for use of hormonal contraception, intrauterine devices and barrier methods.¹

WHOMEC Category	Definition of category
1	A condition for which there is no restriction for the use of the contraceptive method.
2	A condition where the advantages of using the method generally outweigh the theoretical or proven risks.
3	A condition where the theoretical or proven risks usually outweigh the advantages of using the method.
4	A condition which represents an unacceptable health risk if the contraceptive method is used.

WHO updates and adds to the recommendations of the MEC through expert Working Group meetings every three to four years and, in between those meetings, through input from its family planning Guidelines Steering Group on an as-needed basis. The recommendations, together with the updates, are made available on the WHO web site (www.who.int/reproductive-health). The web site also provides additional information determined by WHO to be relevant to these recommendations, pending the next formal consensus Working Group meeting. Such updates may be particularly warranted for issues where the evidence base may change rapidly.

WHO recognises that contraceptive provision varies greatly around the world and that it is inappropriate to set firm international guidelines on contraceptive use. Rather the WHO expects the Medical Eligibility Criteria for Contraceptive Use to be used by organisations for updating or in developing their own contraceptive guidelines in the light of their national health policies, needs, priorities and resources.

The consensus process

In 2005, a Steering Group led by the Clinical Effectiveness Unit of the Faculty of Family Planning and Reproductive Health Care (FFPRHC) began a formal process of adapting WHOMEC to reflect UK practice. A series of meetings was held culminating in a formal Consensus Meeting of a multidisciplinary group of UK experts and stakeholders. The final UK Medical Eligibility Criteria (UKMEC) is being widely disseminated in paper format and is available on the FFPRHC website (www.ffprhc.org.uk). The document will not be updated as living guidance. This work was supported by a grant from the Department of Health in England.

Consensus methods have been described as 'a process for making policy decisions, rather than a scientific method for creating new knowledge.' The consensus process aims to make the best use of available information, be that scientific data or collective wisdom of the participants, and aims to provide authority, rationality, and scientific credibility to the UKMEC.

Using a consensus process, the extent to which group members agree (or disagree) about an issue is identified. Agreement takes two forms: the extent to which each participant agrees with an issue; and the extent to which participants agree with each other, the consensus element. The consensus method used in the process of adapting the WHOMEC for UK use is a nominal group technique (the RAND consensus method). A similar method was used by the FFPRHC in adapting another WHO document, the *Selected Practice Recommendations for Contraceptive Use.* The RAND method involves a number of steps: mailed questionnaires; private decision-making and scoring; formal feedback of group choices; face-to-face discussion of evidence with structured interaction; further private decision-making and scoring; and an explicit aggregation method.

Consensus was deemed to be achieved if nine out of the eleven Consensus participants scored agreement or disagreement within a 3-point band on a 9-point Likert Scale. A change to a WHO category was only made if consensus was achieved. Where consensus was not achieved, the WHO categories were upheld.

With Consensus there may be occasions when individual participants do not agree with a UK category given. However, in order for a UK category to be changed from the existing WHO category at least nine of the eleven participants had to agree to the change.

Steering Group

Expert Consensus Group

Dr Susan Brechin (Chair)
Ms Toni Belfield
Professor Anna Glasier
Dr Gillian Penney
Dr Joanne Protheroe
Dr Connie Smith

Ms Gillian Stephen

Dr Alyson Elliman Professor Phil Hannaford Dr Meera Kishen Dr Ali Kubba Dr Diana Mansour Ms Shelley Mehigan Dr Gillian Penney

Dr Anne Szarewski Ms Sue Ward Dr Anne Webb

Ms Toni Belfield

Observers at the consensus meeting: Ms Janet Nooney and Mr Toni Isaacs (Medicines and Healthcare products Regulatory Agency); Kathy French (Sexual health adviser, Royal college

6 Introduction

of Nursing).

During the development of the UKMEC, feedback was obtained on the usability of the existing WHOMEC document from clinicians throughout the UK currently working in general practice or family planning and reproductive healthcare settings. This feedback was taken into account in developing this final UKMEC document.

How to use this document

The tables in this document (Section B) list the UK categories given for all methods of contraception currently or soon to be available in the UK. The classification system (categories 1 to 4) is used for all hormonal methods, intrauterine devices (copper IUD and levonorgestrel IUD) and barrier methods (Table B). This classification system refers to contraceptive methods being used for contraceptive purposes. The classification system does not consider the use of contraceptive methods in the management of other medical conditions where eligibility criteria may differ.

Table B: Definitions of UK categories for use of hormonal contraception, intrauterine devices and barrier methods

UK Category	Definition of category
1	A condition for which there is no restriction for the use of the contraceptive method
2	A condition where the advantages of using the method generally outweigh the theoretical or proven risks
3	A condition where the theoretical or proven risks usually outweigh the advantages of using the method
4	A condition, which represents an unacceptable health risk if the contraceptive method is used

UK Category 1 includes conditions for which there is no restriction for use and Category 4 includes conditions which represent an unacceptable health risk if the method is used.

UK Category 2 indicates that a method can generally be used, but more careful follow-up may be required. The provision of a method with a conditions given a UK Category 3 requires **expert clinical judgement and/or referral to a specialist contraceptive provider**, since use of the method is not usually recommended unless other methods are not available or not acceptable.

Fertility-awareness based methods (Table C) and male and female sterilisation (Table D) are classified differently. This is based on: whether it is acceptable to use the method (A); whether extra precautions, preparations or counselling are required (C); or whether use of the method should be delayed until circumstances change, for example until breastfeeding stops (D). For sterilisation a fourth category (S) denotes that special arrangements should be made for the procedure.

Table C: Definitions of UK categories for Fertility awareness based methods

UK Category		Fertility awareness based methods (FAB)
A	Accept	There is no medical reason to deny the particular FAB method to a woman in this circumstance.
С	Caution	The method is normally provided in a routine setting, but with extra preparation and precautions. For FAB methods, this usually means that special counselling may be needed to ensure correct use of the method by a woman in this circumstance.
D	Delay	Use of the method should be delayed until the condition is evaluated or changes. Alternative temporary methods of contraception should be offered.

Table D: Definitions of UK categories for Male and Female Sterilisation

UK Category		Sterilisation
A	Accept	There is no medical reason to deny sterilisation to a person with this condition.
С	Caution	The procedure is normally conducted in a routine setting, but with extra preparation, precautions and counselling.
D	Delay	The procedure is delayed until the condition is evaluated, treated and / or changes. Alternative temporary methods of contraception should be provided.
S	Special	The procedure should be undertaken in a setting with an experienced surgeon and staff, equipment needed to provide general anaesthesia, and other back-up medical support. For these conditions, the capacity to decide on the most appropriate procedure and anaesthesia method is also needed. Alternative temporary methods of contraception should be provided, if referral is required or there is otherwise any delay.

Section B includes individual tables (1 to 8) of UK categories for groups of contraceptives: combined hormonal methods (combined oral contraceptive pill, patch and vaginal ring); progestogen-only methods (pills, injectables and implants); intrauterine devices (copper IUD and levonorgestrel IUD); sterilisation (male and female); emergency contraception (progestogen-only and copper IUD); barrier methods (male and female condoms, diaphragms and cervical caps); and fertility awareness based methods (cervical mucus assessment method and devices for measuring hormones).

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

The second column classifies the condition into one of the four **CATEGORIES** (1 to 4, or A,D,C or S). In some cases **initiation** of a contraceptive method (I) and **continuation** of the method (C) are distinguished and classified differently (Table E).

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

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

For some conditions the third column is used to provide **CLARIFICATION** or to make comment on the **EVIDENCE** for the recommendation (Table F).

At the end of each method section additional comments can be found and the references from both the **WHOMEC** and **UKMEC** used to generate the evidence are listed.

Table F: Example of Tables in UKMEC

	TYPE OF CONTRACEPTIVE						
CONDITION	CATEGORY I =Initiation or C =Continuation	CLARIFICATIONS / EVIDENCE					
eg Diabetes	Category 1,2 3 or 4 Category A,C,D and S	Clarifications and evidence regarding the classification					
	NA (not applicable) denotes a condition for which a ranking was not given but for which clarifications have been provided.						

The summary table (Table 9.0) at the end of the document is just that, a summary of the most common reversible methods of contraception, conditions and categories, and can be used as a quick reference in the clinic setting. In addition, Table 9 and UK Category definitions are reproduced in a pull out section which can be used for photocopying and distribution in your own clinical setting.

Commonly used abbreviations

AIDS BMI CHC	acquired immune deficiency syndrome body mass index combined hormonal contraception	NET-EN PE PID	norethisterone enanthate pulmonary embolism pelvic inflammatory
Cu-IUD	copper intrauterine device		disease
DMPA	depot medroxyprogesterone acetate	POC	progestogen-only
DVT	deep vein thrombosis		contraception
EE	ethinylestradiol	POEC	progestogen-only
HAART	highly active anti-retroviral therapy		emergency contraception
HIV	human immunodeficiency virus	POP	progestogen-only pill
IMP	implant (progestogen-only)	STI	sexually transmitted infection
LNG-IUD	levonorgestrel releasing intrauterine device	VTE	venous thromboembolism

Summary of changes from WHOMEC

In the UKMEC some **NEW MEDICAL CONDITIONS** have been added:

Inflammatory bowel disease (Crohn's disease and Ulcerative Colitis)

Raynaud's Disease

Congenital heart disease

In the UKMEC there are **NEW SUBHEADINGS** given under existing conditions:

After smoking cessation in women aged > 35 years

BMI ≥30-34, 35-39 and ≥40

Hypertension (>140-159mmHg systolic and/or >90-94 mmHg diastolic)

Current VTE and using anticoagulants

Family history of VTE in first degree relatives aged < 45 years

Immobility unrelated to surgery

Past history of migraine with aura

Gestational trophoblastic neoplasia

Carriers of known gene mutations associated with breast cancer risk (eg BRCA1)

Some subheadings have been removed as they were felt to be inappropriate or not applicable to UK clinical practice: when BP measurement is unavailable; insertion of intrauterine contraception within 48 hours of delivery; and immediate postpartum sterilisation following vaginal delivery.

Some chapters have been altered: emergency contraception (Table 5) now includes both progestogen-only emergency contraception and Cu-IUD; fertility awareness based methods (Table 7) include either the assessment of cervical mucus or the use of devices which measure hormones; and barrier methods (Table 6) no longer includes the use of spermicide alone. The chapter on coitus interuptus has been removed.

Definitions have been added for breastfeeding; vascular disease; congenital heart disease and valvular heart disease; hyperlipidaemias; and gestational trophoblastic neoplasia. Sections on potential drug interactions (with liver enzyme inducers, including anti-retrovirals and antibiotics) have been adapted to reflect existing UK guidance.^{5,6}

The specific changes to the WHO categories in the UKMEC are summarised at the end of this section. These changes included alterations to categories on use of combined hormonal contraception for women who are breastfeeding (between 6 weeks and 6 months postpartum); the use of progestogen-only contraception (POC) by women with hypertension; the use of POC and intrauterine methods by women with current venous thromboembolism (VTE); nulliparity and intrauterine methods or sterilisation; and postpartum sterilisation.

COMMON REVERSIBLE METHODS						
CONDITION	CHC	POP	DMPA/ NET-EN	IMP	Cu-IUD	LNG-IUD
I = Initiation, C = Continuation						

PERSONAL CHARACTERIST	ICS AND R	EPRODUC	TIVE HIST	ORY		
PREGNANCY	NA	NA	NA	NA	4	4
AGE	Menarche to <40=1 >40=2	Menarche to <18=1 18-45=1 >45=1	Menarche to <18=2 18-45=1 >45=2	Menarche to <18=1 18-45=1 >45=1	Menarche to <20=2 >20=1	Menarche to <20=2 >20=1
PARITY						
a) Nulliparous	1	1	1	1	1	1
b) Parous	1	1	1	1	1	1
BREASTFEEDING						
a) < 6 weeks postpartumb) 6 weeks to < 6 months (fully or	4 3	1 1	2 1	1 1		
almost fully breastfeeding) c) ≥ 6 weeks to < 6 months postpartum (partial breastfeeding	2	1	1	1		
medium to low)						
d) ≥ 6 months postpartum POSTPARTUM (non-breastfeeding women)	1	1	1	1		
a) < 21 days	3	1	1	1		
b) ≥ 21 days	1	1	1	1		
POSTPARTUM (breastfeeding or non- breastfeeding women, including post- caesarean section)						
a) 48 hours to < 4 weeks					3	3
b) ≥ 4 weeks c) Puerperal sepsis					4	4
POST-ABORTION					7	7
a) First trimester	1	1	1	1	1	1
b) Second trimester	1	1	1	1	2	2
c) Immediate post-septic abortion	1	1	1	1	4	4
PAST ECTOPIC PREGNANCY	1	1	1	1	1	1
HISTORY OF PELVIC SURGERY (including caesarean section) (see also postpartum section)	1	1	1	1	1	1
SMOKING						
a) Age < 35 years b) Age ≥ 35 years	2	1	1	1	1	1
(i) < 15 cigarettes / day	3	1	1	1	1	1
(ii) ≥ 15 cigarettes / day	4	1	1	1	1	1
(iii) Stopped smoking < 1 year ago (iv) Stopped smoking ≥ 1 year ago	3 2	1	1	1	1	1
OBESITY a) Body mass index ≥ 30 - 34 kg/m²	2	1	1	1	1	1
a) body mass maex 2 50 - 54 kg/m	2			'		'
b) Body mass index 35 – 39 kg/m²	3	1	1	1	1	1
c) Body mass index ≥ 40 kg/m²	4	1	1	1	1	1
CARDIOVASCULAR DISEASE						
MULTIPLE RISK FACTORS FOR ARTERIAL CARDIOVASCULAR DISEASE	3/4	2	3	2	1	2
(such as older age, smoking, diabetes and hypertension)						

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

COMMON REVERSIBLE METHODS						
CONDITION	СНС	POP	DMPA/ NET-EN	IMP	Cu-IUD	LNG-IUD
I = Initiation, C = Continuation						

HYPERTENSION a) Adequately controlled hypertension b) Consistently elevated blood pressure levels (properly taken measurements) (i) systolic >140 to 159mmHg or diastolic > 90 to 94mmHg (ii) systolic ≥160 or diastolic ≥ 95 mmHg c) Vascular disease HISTORY OF HIGH BLOOD PRESSURE DURING PREGNANCY (where current blood pressure is	1 1 2
a) Adequately controlled hypertension b) Consistently elevated blood pressure levels (properly taken measurements) (i) systolic >140 to 159mmHg or diastolic > 90 to 94mmHg (ii) systolic ≥160 or diastolic ≥ 95 mmHg c) Vascular disease HISTORY OF HIGH BLOOD PRESSURE DURING PREGNANCY 3 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1
b) Consistently elevated blood pressure levels (properly taken measurements) (i) systolic >140 to 159mmHg or diastolic > 90 to 94mmHg (ii) systolic ≥160 or diastolic ≥ 95 mmHg c) Vascular disease HISTORY OF HIGH BLOOD PRESSURE DURING PREGNANCY 2 1 1 1 1 1 1 1 1 1 1 1 1	1
measurements (i) systolic >140 to 159mmHg or diastolic > 90 to 94mmHg 1	1
(i) systolic >140 to 159mmHg or diastolic > 90 to 94mmHg (ii) systolic ≥160 or diastolic ≥ 95 mmHg (iii) systolic ≥160 or diastolic ≥ 95 mmHg c) Vascular disease HISTORY OF HIGH BLOOD PRESSURE DURING PREGNANCY 2 1 1 1 1 1	1
diastolic > 90 to 94mmHg (ii) systolic ≥160 or diastolic ≥ 95 mmHg 4 1 2 1 1 c) Vascular disease 4 2 3 2 1 HISTORY OF HIGH BLOOD PRESSURE DURING PREGNANCY 2 1 1 1 1	1
diastolic > 90 to 94mmHg 4 1 2 1 1 (ii) systolic ≥160 or diastolic ≥ 95 mmHg 4 1 2 1 1 c) Vascular disease 4 2 3 2 1 HISTORY OF HIGH BLOOD PRESSURE DURING PREGNANCY 2 1 1 1 1	-
c) Vascular disease 4 2 3 2 1 HISTORY OF HIGH BLOOD PRESSURE DURING PREGNANCY 2 1 1 1 1	-
HISTORY OF HIGH BLOOD PRESSURE DURING PREGNANCY 2 1 1 1 1	2
PRESSURE DURING PREGNANCY 2 1 1 1 1	
(where current blood pressure is	1
normal)	
VENOUS THROMBO-EMBOLISM	
(VTE) (includes deep vein thrombosis	
and pulmonary embolism)	
a) History of VTE 4 2 2 1	2
b) Current VTE (on anticoagulants) 4 2 3 3	3
c) Family history of VTE	
(i) First degree relative aged < 45 years 1 1 1 1	1
(ii) First degree relative aged ≥ 45 years 2 1 1 1 1	1
d) Major surgery	
(i) With prolonged immobilisation 4 2 2 1	2
(ii) Without prolonged immobilisation 2 1 1 1 1	1
e) Minor surgery <i>without</i>	1
immobilisation	
f) Immobility (unrelated to surgery) 3 1 1 1	1
e.g wheelchair use, debilitating	
illness	
KNOWN THROMBOGENIC	
MUTATIONS 4 2 2 2 1	2
(e.g. Factor V Leiden; Prothrombin	
mutation; Protein S, Protein C and	
Antithrombin deficiencies)	
SUPERFICIAL VENOUS	
THROMBOSIS	
a) Varicose veins 1 1 1 1	1
b) Superficial thrombophlebitis 2 1 1 1 1	1
CURRENT AND HISTORY OF I C I	C
ISCHAEMIC HEART DISEASE	
	2 3
(history of cerebrovascular accident)	2
7 2 0 0 2 0 1	
	2
(screening is NOT necessary for safe	
use of contraceptive methods)	
VALVULAR AND CONGENITAL	
HEART DISEASE	,
a) Uncomplicated 2 1 1 1 1 1 1 1 1 1 1 1 1 2	1
b) complicated	2
(eg. With pulmonary hypertension,	
atrial fibrillation, or a history of subacute bacterial endocarditis)	
Subacute Dacterial endocarditis)	

UKMEC	DEFINITION OF CATEGORY
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CATEGORY 4	A condition which represents an unacceptable health risk if the contraceptive method is used

COMMON REVERSIBLE METHODS						
CONDITION	СНС	POP	DMPA/ NET-EN	IMP	Cu-IUD	LNG-IUD
I = Initiation, C = Continuation						

NEUROLOGIC CONDITIONS						
HEADACHES						
a) Non-migrainous (mild or severe)	I C	I C	I C	I C	1	I C
b) Migraine					·	
(i) Without aura, age < 35 years	1 C	I C	1 C 2	1 C 2 2	1	1 C
(ii) Without aura, age ≥ 35 years	I C 3 4	I C	I C 2	I C 2	1	I C 2
(iii) With aura, at any age	I C 4	1 C 2 3	I C 3	1 C 2 3	1	1 C
c) Past history of migraine with aura at any age	3	2	2	2	1	2
EPILEPSY	1	1	1	1	1	1
DEPRESSIVE DISORDERS						
DEPRESSIVE DISORDERS	1	1	1	1	1	1
REPRODUCTIVE TRACT INFO	CTIONS A	ND DISOR	DERS			
VAGINAL BLEEDING PATTERS						
a) Irregular pattern <i>without</i> heavy						I C
bleeding	1	2	2	2	1	1 1
j –						I C
b) Heavy or prolonged bleeding (includes regular and irregular patterns)	1	2	2	2	2	1 2
,						
UNEXPLAINED VAGINAL BLEEDING					1 C	1 C 4 2
(suspicious for serious condition)	2	2	3	3	4 2	4 2
Before evaluation						
ENDOMETRIOSIS	1	1	1	1	2	1
BENIGN OVARIAN TUMOURS			-	-		-
(including cysts)	1	1	1	1	1	1
SEVERE DYSMENORRHOEA	1	1	1	1	2	1
GESTATIONAL TROPHOBLASTIC						
NEOPLASIA (GTN)						
(includes hydatidiform mole, invasive						
mole, placental site trophoblastic						
tumour)		4	4	4		4
a) hCG normal	1 4	1	1	1	1 4	1 4
b) hCG abnormal CERVICAL ECTROPION	1	3 1	3 1	<u>3</u>	1	1
CERVICAL ECTROPION CERVICAL INTRAEPITHELIAL	2	1	2	1	1	2
NEOPLASIA (CIN)	_	'	_	1	'	-
CERVICAL CANCER					I C	I C
(awaiting treatment)	2	1	2	2	4 2	4 2

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

COMMON REVERSIBLE METHODS						
CONDITION	СНС	POP	DMPA/ NET-EN	IMP	Cu-IUD	LNG-IUD
I = Initiation, C = Continuation						

DDEAST DISEASE						
BREAST DISEASE	I C					
a) Undiagnosed mass	1 C 3 2	0	_			
b) Davies becaut discuss		2	2	2	1	2
b) Benign breast disease	1 1	1	1	1	1	1
c) Family history of cancer	1	1	1	1	1	1
d) Carriers of known gene mutations	3	2	2	2	1	2
associated with breast cancer (eg.						
BRCA1)						
e) Breast cancer						
(i) Current	4	4	4	4	1	4
(ii) Past and no evidence of current	3	3	3	3	1	3
disease for 5 years						
ENDOMETRIAL CANCER					I C	I C
	1	1	1	1	4 2	4 2
OVARIAN CANCER					I C	I C
	1	1	1	1	3 2	3 2
UTERINE FIBROIDS						
a) Without distortion of the uterine	1 1	1	1	1	1	1
cavity		•				,
b) With distortion of the uterine cavity	1 1	1	1	1	4	4
ANATOMICAL ABNORMALITIES						
a) Distorted uterine cavity (any					4	4
congenital or acquired uterine						7
abnormality distorting the uterine						
cavity in a manner that is						
incompatible with IUD insertion)						
						_
b) Other abnormalities (including					2	2
cervical stenosis or cervical						
lacerations) not distorting the						
uterine cavity or interfering with						
IUD insertion						
PELVIC INFLAMMATORY DISEASE						
a) Dant DID (annuming an annument viels						
a) Past PID (assuming no current risk						- 1 -
factors of STIs)		_		_	I C	I C
(i) With subsequent pregnancy	1 1	1	1	1	1 1	1 1
(m)					I C	I C
(ii) Without subsequent pregnancy	1 1	1	1	1	2 2	2 2
					I C	I C
b) PID – current	1	1	1	1	4 2	4 2
STIs					l	
a) Current purulent cervicitis or					I C	I C
chlamydial infection or	1 1	1	1	1	4 2	4 2
gonorrhoea						
_					I C	1 C 2
b) Other STIs (excluding HIV and	1	1	1	1	2 2	2 2
hepatitis)						
, ,						
c) Vaginitis (including trichomonas					I C	I C
vaginalis and bacterial vaginosis)	1	1	1	1		2 2
					2 2 I C	ī Ç
d) Increased risk of STIs	1	1	1	1	2/3 2	2/3 2
1 -,	1		I	I	I [_

UKMEC	DEFINITION OF CATEGORY
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CATEGORY 4	A condition which represents an unacceptable health risk if the contraceptive method is used

g.mg.mg.	COMMON R	EVERSIB	LE METHO	DS		
CONDITION	СНС	POP	DMPA/ NET-EN	IMP	Cu-IUD	LNG-IUD
I = Initiation, C = Continuation						

HIV / AIDS						
HIGH RISK OF HIV					1 C 2 2	1 C
LIN/INFECTED	1	1	1	1	2 2	2 2
HIV INFECTED					. _	
a) Not using anti-retroviral therapy	_				1 C 2	1 C 2
	1	1	1	1		
b) Using anti-retroviral therapy				_	I C	I C
	2	2	1	2	2 2	2 2
AIDS and using HAART					I C	1 C 2
	2	2	2	2	2 2	2 2
OTHER INFECTIONS						
SCHISTOSOMIASIS						
a) Uncomplicated	1	1	1	1	1	1
b) Fibrosis of the liver	1	;	1	1	1	1
TUBERCULOSIS		'			·	
a) Non-pelvic					I C	I C
a, item perme	1	1	1	1		1 1
b) Known pelvic	•	'			1 1 C	i ċ
b) raiowii poivio	1	4	1	1	4 3	4 3
MALARIA	1	1	1	1	1	1
ENDOCRINE CONDITIONS	•					
		l e		l		
DIABETES						
a) History of gestational disease	1	1	1	1	1	1
b) Non-vascular disease						
(i) non-insulin dependent	2	2	2	2	1	2
(ii) insulin dependent	2	2	2	2	1	2
c) Nephropathy/ retinopathy/	3/4	2	3	2	1	2
neuropathy						
d) Other vascular disease or diabetes	3/4	2	3	2	1	2
of >20 years' duration						
THYROID DISORDERS						
a) Simple goitre	1	1	1	1	1	1
b) Hyperthyroid	1	1	1	1	1	1
c) Hypothyroid	1	i	1	1	1	1
GASTROINTESTINAL CONDI	ZIONS	·				
GALL BLADDER DISEASE	TIONS					
a) Symptomatic	0			_	4	
(i) treated by cholecystectomy	2	2	2	2	1	2
(ii) medically treated	3	2	2	2	1	2
(iii) current	3	2	2	2	1 1	2
b) Asymptomatic	2	2	2	2	1	2
HISTORY OF CHOLESTASIS				_		
a) Pregnancy related	2	1	1	1	1 1	1
b) Past COC-related	3	2	2	2	1	2
VIRAL HEPATITIS						
a) Active	4	3	3	3	1	3
b) Carrier	1	1	1	1	1	1
CIRRHOSIS						
a) Mild (compensated)	3	2	2	2	1	2
b) Severe (decompensated)	4	3	3	3	1	3
LIVER TUMOURS						
a) Benign (adenoma)	4	3	3	3	1	3
b) Malignant (hepatoma)	4	3	3	3	1	3
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CATEGORY 3	A condition where the theoretical or proven risks usually outweigh the advantages of using the method			
CATEGORY 4	A condition which represents an unacceptable health risk if the contraceptive method is used			

Conditions for which there was a classification change for one or more methods or a major modification to the condition description are highlighted.

COMMON REVERSIBLE METHODS					
CONDITION CHC POP DMPA/ NET-EN IMP Cu-IUD LNG-IUD					
I = Initiation, C = Continuation					

INFLAMMATORY BOWEL DISEASE (includes Crohn's disease, Ulcerative colitis)	2	2	1	1	1	1
ANAEMIAS						
THALASSAEMIA	1	1	1	1	2	1
SICKLE CELL DISEASE	2	1	1	1	2	1
IRON DEFICIENCY ANAEMIA	1	1	1	1	2	1
RAYNAUD'S DISEASE						
a) Primary	1	1	1	1	1	1
b) Secondary						
(i) without lupus anticoagulant	2	1	1	1	1	1
(ii) with lupus anticoagulant	4	2	2	2	1	2
DRUG INTERACTIONS						
DRUGS WHICH AFFECT LIVER ENZYMES						
For example Rifampicin, Rifabutin, St John's Wort, Griseofulvin, certain anticonvulsants (phenytoin,	3	3	1	3	1	1
carmazepine, barbiturates, primidone, topiramate, oxcarbazepine)						
NON-LIVER ENZYME INDUCING ANTIBIOTICS	2	1	1	1	1	1
HIGHLY ACTIVE ANTIRETROVIRAL THERAPY (HAART)	2	2	2	2	I C 2/3 2	I

References

- 1. World Health Organization. Medical Eligibility Criteria for Contraceptive Use. Third edition. 2004. World Health Organisation. Geneva. www.who.int/reproductive-health/publications/mec/index.htm
- 2. Murphy MK, Black NA, Lamping DL, McKee CM, Sanderson CFB, Askham J *et al.* Consensus Development Methods, and their use in Clinical Guideline Development. *Health Technology Assessment* 1998;**2**.
- 3. Faculty of Family Planning and Reproductive Health Care. *UK Selected Practice Recommendations for Contraceptive Use.* 2002. http://www.ffprhc.org.uk
- 4. Glasier A, Brechin S, Raine R, Penney G. A consensus process to adapt the World Health Organization Selected Practice Recommendations for UK use. *Contraception* 2003;**68**:327-33.
- 5. World Health Organization Selected Practice Recommendations for Contraceptive Use. First edition. 2002. http://www.who.int/reproductive-health/publications/mec/spr/
- 6. Faculty of Family Planning and Reproductive Health Care Clinical Effectiveness Unit. Drug Interactions with Hormonal Contraception. *Journal of Family Planning and Reproductive Health Care* 2005;**31**:139-50.
- 7. Faculty of Family Planning and Reproductive Health Care Clinical Effectiveness Unit. The use of contraception outside the terms of the product licence. *Journal of Family Planning and Reproductive Health Care* 2005;**31**:225-41.

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CATEGORY 4	EGORY 4 A condition which represents an unacceptable health risk if the contraceptive method is used	

SECTION B: Tables of contraceptive methods

Table 1.0	Combined hormonal methods (pills, patch and vaginal ring)	21
Table 2.0	Progestogen-only methods (pills, injectables and implant)	49
Table 3.0	Intrauterine methods (copper IUD and levonorgestrel IUD)	73
Table 4.0	Male and female sterilisation	93
Table 5.0	Emergency contraception (progestogen-only and copper IUD)	111
Table 6.0	Barrier methods (male and female condoms, diaphragm and cervical caps)	121
Table 7.0	Fertility awareness based methods (cervical mucus and fertility monitoring devices)	131
Table 8.0	Lactational amenorrhoea method	137

Table of contents Combined hormonal contraceptives (CHCs)

PE	RSONAL CHARACTERISTICS AND REPRODUCTIVE HISTORY	23
	Pregnancy	23
	Age	23
	Parity	23
	Breastfeeding	23
	Postpartum	23
	Post-abortion Post-abortion	24
	Past ectopic pregnancy	24
	History of pelvic surgery	24
	Smoking	24
	Obesity	24
C/		24
	Multiple risk factors for arterial cardiovascular disease	24
	Hypertension	25
	History of high blood pressure during pregnancy	25
	Venous thromboembolism (VTE)	26
	Known thrombogenic mutations	26
	Superficial venous throbosis	26
	Current and history of ischaemic heart disease	26
	Stroke	27
	Known hyperlipidaemias	27
	Valvular and congenital heart disease	27
NF	UROLOGICAL CONDITIONS	28
	Headaches	28
	Epilepsy	28
DF		28
	Depressive disorders	28
RE		28
•	Vaginal bleeding patterns	28
	Unexplained vaginal bleeding	29
	Endometriosis	29
	Benign ovarian tumours	29
	Severe dysmenorrhoea	29
	Gestational trophoblastic neoplasia	29
	Cervical ectropion	29
	Cervical intraepithelial neoplasia (CIN)	29
	Cervical ancer	29
	Breast disease	29
	Endometrial cancer	29
	Ovarian cancer	30
	Uterine fibroids	30
	Pelvic inflammatory disease (PID)	30
	STIs	30
НΙ		30
• • • •	High risk of HIV	30
	HIV-infected	31
	AIDS and using HAART	31
∩ 1		31
J	Schistosomiasis	31
	Tuberculosis	31
	Malaria	31
		32
⊏ 1\	Diabetes	
		32
	Thyroid disorders	32

GASTROINTESTINAL CONDITIONS	32
Gall-bladder disease	32
History of cholestasis	32
· · · · · · · · · · · · · · · · · · ·	32
	32
Liver tumours	33
Inflammatory bowel disease (Crohn's and Ulcerative Colitis)	33
	33
Thalassaemia	33
Sickle cell disease	33
Iron-deficiency anaemia	33
Raynaud's disease	33
DRUG INTERACTIONS	33
Drugs which affect liver enzymes	33
Non-liver enzyme inducing antibiotics	33
Highly Active Antiretroviral Therapy	34
Additional Comments	35
References for combined hormonal contraceptives	37

Please note: References used for the development of this UK version are numbered in **red**. The original WHO references are numbered in **black**.

COMBINED HORMONAL CONTRACEPTIVES (CHCs) Combined oral contraception (COC); combined transdermal patch; and vaginal ring	These methods do not protect against STI/HIV. If there is risk of STI/HIV (including during pregnancy or postpartum), the correct and consistent use of condoms is recommended, either alone or with another contraceptive method. Male condoms reduce the risk of STI/HIV.	
CONDITION	CATEGORY I=Initiation C=Continuation	CLARIFICATIONS/EVIDENCE- Most evidence available relates to COC use. However, this evidence is also applied to patch and ring use.

PERSONAL CHARAC	TERISTICS A	ND REPRODUCTIVE HISTORY
PREGNANCY	NA	Clarification: Use is not required. There is no known harm to the woman, the course of her pregnancy, or the fetus if accidentally used during pregnancy.
a)Menarche to < 40 years b)≥ 40 years	1 2	Clarification: Guidance from the FFPRHC supports use of CHC up to age 50 years if there are no medical contraindications to use.
PARITY		
a)Nulliparous b)Parous	1 1	
BREASTFEEDING* a) < 6 weeks postpartum b) ≥ 6 weeks to	3	Clarification: Use of combined hormonal methods < 6 weeks postpartum has a detrimental effect on breastmilk volume. ² Evidence on the effect of combined hormonal contraception on breastmilk quality or quantity >6 weeks postpartum is poor but there appears to be no effect on infant growth. Combined hormonal methods can be used safely but are unlikely to be required if women are fully or almost fully breastfeeding, amenorrhoeic and < 6 months postpartum. ² Women who are fully or almost fully breastfeeding, amenorrhoeic and < 6 months
< 6 months postpartum (fully or almost fully breastfeeding)		postpartum can rely on lactational amenorrhoea method (LAM) for contraception unless breastfeeding reduces in frequency or menstruation returns. ³ Definition: Full and almost fully breastfeeding includes exclusive with no other liquids or solids given; almost exclusive: vitamins, water or juice given infrequently in addition to breastfeeds; or partial breastfeeding where the vast majority of feeds are
c) ≥ 6 weeks to < 6 months postpartum (partial breastfeeding medium to minimal)	2	breastfeeds. Partial or token breastfeeding: Medium - about half feeds are breastfeeds; Low - vast majority of feeds are not breastfeeds; Minimal - occasional irregular breastfeeds cannot be relied upon as a contraceptive method. ³
d) ≥ 6 months postpartum POSTPARTUM* (in non-breastfeeding women)	1	Clarification: This includes any births, including stillbirths from
a) < 21 days b) ≥ 21 days	3 1	24 weeks gestation

^{*}See also additional comments at end of table

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CONDITION	CATEGORY I=Initiation C=Continuation	CLARIFICATIONS/EVIDENCE- Most evidence available relates to COC use. However, this evidence is also applied to patch and ring use.

POST-ABORTION		Clarification: includes induced and spontaneous abortion at <24 weeks gestation.
a) First trimester	1	Combined hormonal methods may be started immediately following surgical abortion and immediately after the second part
b) Second trimester	1	of a medical abortion.
c) Immediate post-septic abortion	1	
PAST ECTOPIC PREGNANCY*	1	
HISTORY OF PELVIC SURGERY	1	
SMOKING		
a) Age < 35 years	2	Evidence: COC users who smoked were at increased risk of cardiovascular diseases, especially myocardial infarction, compared with those who did not smoke. Studies also showed an
b) Age ≥ 35 years(i) <15 cigarettes/day	3	increased risk of myocardial infarction (MI) with increasing number of cigarettes smoked per day. ⁴
(ii) ≥15 cigarettes/day	4	
(iii) stopped smoking < 1	3	Excess mortality from cigarette smoking is apparent from age 35 years. COC use had some adverse effects on ischaemic heart
year ago (iv) stopped smoking ≥ 1 year ago	2	disease in women who smoke ≥ 15 cigarettes per day. ⁴
		For those who stop smoking there is a rapid decrease in risk of cardiovascular disease, by as much as 50% after 1 year. However, it may take up to 10 years to reach the risk levels of those who have never smoked. A population-based case control study confirmed a three-fold reduction in the risk of MI one year after smoking cessation and the excess risk was gone 4 – 6 years after stopping. ⁵
OBESITY		
a) ≥ 30 - 34 kg/m2 body mass index (BMI)	2	Evidence: Obese women who used COCs were at increased risk of VTE compared with non-users. The absolute risk of VTE remained small. Data are limited regarding the impact of obesity
b) 35 – 39 kg/m2 body mass index (BMI)	3	on COC effectiveness. 6, 13, 14 Risk of VTE increases with increasing BMI and almost doubles with BMI > 30. COC use further increases VTE risk. 6,7
c) ≥ 40 kg/m2 body mass index (BMI)	4	
CARDIOVASCULAR DIS		
MULTIPLE RISK FACTORS FOR ARTERIAL CARDIOVASCULAR DISEASE (such as older age, smoking, diabetes and hypertension)	3/4	Clarification: The addition of categories (eg. a combination of two risk factors assigned a category 2) may not necessarily warrant a higher category.

hypertension)
*See also additional comments at end of table

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HYPERTENSION*

For all categories of hypertension, classifications are based on the assumption that **no other risk factors for cardiovascular disease exist**. When multiple risk factors do exist, risk of cardiovascular disease may increase substantially. A single reading of blood pressure level is not sufficient to classify a woman as hypertensive. If elevated the BP should be re-assessed at the end of the consultation. If blood pressure is increased it should be re-assessed on at least two subsequent clinic visits at monthly intervals.^{8,9}

	•	•
a) Adequately controlled hypertension b) Consistently elevated blood pressure levels (properly taken measurements) (i) systolic >140 to 159	3	Clarification: Women adequately treated for hypertension are at reduced risk of acute myocardial infarction and stroke compared to untreated women. Although there are no data, COC users with adequately controlled and monitored hypertension should be at reduced risk of acute myocardial infarction and stroke compared with untreated hypertensive COC users. Guidelines from the British Hypertension Society suggest that although estrogencontaining contraception may be used for women with adequately
mmHg or diastolic > 90 to 94mmHg (ii) systolic ≥ 160 or	4	controlled BP other methods may be more suitable.8 Evidence: Among women with hypertension, COC users were at increased risk of stroke, acute myocardial infarction, and
diastolic ≥ 95 mmHg	4	peripheral arterial disease compared with non-users. 1, 3, 9-11, 15-31
		Clarification: Anti-hypertensive therapy may be initiated when the BP is consistently 160/100 mmHg or greater. Decisions about the initiation or continued use of combined hormonal contraception should be made at lower BP levels, and alternative contraception may be advised.
c) Vascular disease	4	Clarification: Vascular disease includes: coronary heart disease presenting with angina; peripheral vascular disease presenting with intermittent claudication; hypertensive retinopathy; and transient ischaemic attacks.
HISTORY OF HIGH BLOOD PRESSURE DURING PREGNANCY (where current blood pressure normal) *See also additional comments at end of table	2	Evidence: Women who had a history of high blood pressure in pregnancy, who also used COCs, had an increased risk of myocardial infarction and venous thromboembolism, compared with COC users who did not have a history of high blood pressure during pregnancy. The absolute risks of acute myocardial infarction and venous thromboembolism in this population remained small. ^{11, 17-19, 21, 32-37}

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VENOUS THROMBOEMBOLISM (VTE)*		Clarification: VTE Includes deep vein thrombosis (DVT) and pulmonary embolism (PE)
a) History of VTE	4	
b) Current VTE (on anticoagulants)	4	Current VTE refers to disease for which anti-coagulants are being used
c) Family history of VTE		Family history may alert clinicians to women who may have an increased risk themselves but alone cannot identify with any
(i) first-degree relative age < 45 years	3	certainty an underlying thrombophilia. Even when a genetic thrombophilia is identified not every woman will go on to develop
(ii) first-degree relative age ≥ 45 years	2	a VTE. Exposure to risk factors (eg. CHC) may increase the risk for some women. Young women may not yet have a first-degree relative aged 45 years. A thrombophilia screen may be considered with expert clinical judgement with family history of VTE in a first degree relative aged < 45 years. A negative screen does not alter the category given. Use of CHC is not usually recommended. 10
d) Major surgery (i) with prolonged immobilisation	4	Major Surgery includes operations of > 30 minutes duration. Procedures with high risk of VTE include: general or orthopaedic surgery, trauma, neurosurgery. CHC should be discontinued at
(ii) without prolonged immobilisation	2	least 4 weeks prior to major elective surgery and advice given on appropriate alternative methods.
e) Minor surgery without immobilisation	1	<i>Minor surgery</i> includes operations lasting < 30 minutes (eg laparoscopic sterilisation), procedures such as knee arthroscopy. Varicose vein surgery has a low risk for VTE. ¹¹
f) Immobility (unrelated to surgery) e.g. wheelchair use, debilitating illness	3	Immobility: due to hospitalisation for acute trauma, acute illness, or paralysis, is associated with a high risk of VTE. Continuation of CHC should be reconsidered and alternative methods used until mobile.
KNOWN THROMBOGENIC MUTATIONS (e.g., Factor V Leiden; Prothrombin mutation; Protein S, Protein C, and Antithrombin deficiencies) SUPERFICIAL VENOUS	4	Clarification: Routine screening is not appropriate because of the rarity of the conditions and the high cost of screening. Evidence: Among women with thrombogenic mutations, COC users had a two to twenty-fold higher risk of thrombosis than non-users. 38-51
THROMBOSIS*		
a) Varicose veins	1	
b) Superficial thrombophlebitis	2	
CURRENT AND HISTORY OF ISCHAEMIC HEART DISEASE*	4	

^{*}See also additional comments at end of table

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STROKE* (history of cerebrovascular accident)	4	
KNOWN HYPERLIPIDAEMIAS*	2/3	Clarification: Routine screening is not appropriate because of the rarity of the conditions and the high cost of screening. While some types of hyperlipidaemias are risk factors for vascular disease, the category should be assessed according to the type, its severity, and the presence of other cardiovascular risk factors. Lipid levels alone are poor predictors of risk of coronary heart disease (CHD). In the UK screening and treatment is aimed towards those at greatest risk of CHD, and this may also influence hormonal contraceptive use. Risk categories will vary depending on risk of premature coronary heart disease and the presence of other risk factors. Common hypercholesterolaemia and Familial combined hyperlipidaemia are associated with an increased risk of CHD but usually this occurs over the age of 60 years. Familial hypercholesterolaemia (autosomal dominant) has a prevalence of about 1 in 500. People with this condition have a four-fold increase in the risk of premature CHD.
VALVULAR AND CONGENITAL HEART DISEASE*		
a) Uncomplicated	2	Clarification: Valvular heart disease occurs when any of the four
b) Complicated (eg. with pulmonary hypertension,atrial fibrillation, history of subacute bacterial endocarditis)	4	heart valves are stenotic and/or incompetent (eg. aortic stenosis, mitral regurgitation; tricuspid valve abnormalities; pulmonary stenosis). **Congenital heart disease* includes Aortic stenosis; Atrial septal defects; Atrio-ventricular septal defect; Cardiomyopathy; (hypertrophic or dilated); Co-arctation of the Aorta; Complex Transposition of the Great Arteries; Ebstein's Anomaly; Eisenmenger Syndrome: Persistent Ductus Arteriosus; Pulmonary Atresia; Pulmonary Stenosis; Tetralogy of Fallot; Total Anomalous Pulmonary Venous Connection; Tricuspid Atresia; Truncus Arteriosus; Ventricular Septal Defect. **Surgical correction and ongoing cardiac problems should be considered when considering contraceptive use.**

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NEUROLOGIC CONDITIONS				
HEADACHES*	I	С	Clarification: Classification depends on accurate diagnosis of those severe headaches that are migrainous and those that are	
a) Non-migrainous (mild or severe)	1	2	not. Definitions: <i>Non-migrainous headaches</i> include tension-type, cluster or rebound headaches. Migraine headaches are associated with <i>aura</i> (focal symptoms) which indicate ischaemia.	
b) Migraine (i) without aura Age < 35	2	3	Aura includes: homonymous hemianopia, unilateral paraesthesia and/or numbness; unilateral weakness; and aphasia or unclassifiable speech disorder. Visual symptoms progress from	
(ii) without aura Age ≥ 35	3	4	fortification spectra (a star shaped figure near the point of fixation with scintillating edges) to scotoma (a bright shape which gradually	
(iii) <i>with</i> aura, at any age	4	4	increases in size). Flashing lights are not classified as aura. 16 Aura occurs before the onset of headache. Evidence: Among women with migraine, those who had aura had	
c) Past history of migraine with aura at any age		3	a higher risk of stroke than those without aura. 52-54 Among women with migraine, those who used COCs had a 2 to 4-fold increased risk of stroke compared with women who did not use COCs. 52-54 Risk of stroke increases with age, hypertension and smoking. I migraine with aura develops as a <i>new symptom</i> in women usin combined hormonal contraception the risks and benefits of <i>continuing</i> these methods should be discussed.	
EPILEPSY	1		Clarification: If a woman is taking liver enzyme inducing anticonvulsants, refer to the section on drug interactions. Certain anticonvulsants lower COC effectiveness.	
DEPRESSIVE DISORI	DERS			
DEPRESSIVE DISORDERS	1		Clarification: The classification is based on data for women with selected depressive disorders. No data on bipolar disorder or postpartum depression were available. There is a potential for drug interactions between certain antidepressant medications and hormonal contraceptives. Evidence: COC use did not increase depressive symptoms in women with depression compared to baseline or to non-users with depression. 59-61	
	CT INF	ECTIC	ONS AND DISORDERS	
vaginal Bleeding Patterns* a) Irregular pattern without heavy bleeding b) Heavy or prolonged bleeding (includes regular and irregular patterns)		1	Clarification: Unusually heavy bleeding should raise the suspicion of a serious underlying condition. ^{17, 18}	

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CONDITION	CATEGORY I=Initiation C=Continuation	CLARIFICATIONS/EVIDENCE- Most evidence available relates to COC use. However, this evidence is also applied to patch and ring use.

UNEXPLAINED VAGINAL BLEEDING* (suspicious for serious condition) Before evaluation ENDOMETRIOSIS* BENIGN OVARIAN TUMOURS (including cysts) SEVERE	1 1 1	Clarification: If pregnancy or an underlying pathological condition (such as pelvic malignancy) is suspected, it must be evaluated and the category adjusted after evaluation. Evidence: There was no increased risk of side-effects with COC
DYSMENORRHOEA		use among women with dysmenorrhoea compared to women not using COCs. Some COC users had a reduction in pain and bleeding. ^{62, 63}
GESTATIONAL TROPHOBLASTIC NEOPLASIA (GTN) (includes hydatidiform mole, invasive mole & placental tumour) a) hCG normal b) hCG abnormal	1 4	Clarification: GTN includes hydatidiform mole, invasive mole and placental site trophoblastic tumour Evidence: Among women with GTN there was no difference in mean times to hCG normalisation or incidence of postmolar trophoblastic disease for COC users compared to non-hormonal users. 64-71 In the UK management includes assessment of serum hCG concentrations. The need for chemotherapy is based on serum hCG concentrations during follow up. 19 The safety of using hormonal contraceptives is based on measurement of serum hCG.
CERVICAL ECTROPION*	1	
CERVICAL INTRAEPITHELIAL NEOPLASIA (CIN)	2	Evidence: Among women with persistent HPV infection, longterm COC use (≥ 5 years) may increase the risk of carcinoma in situ and invasive carcinoma. ⁷²
CERVICAL CANCER* (awaiting treatment)	2	
BREAST DISEASE*	1 C	Clariffications Fuglishing should be assessed as a subsection of the control of t
a) Undiagnosed mass	3 2	Clarification: Evaluation should be pursued as early as possible.
b) Benign breast disease	1	
c) Family history of cancer	1	Evidence: Among COC users with a family history of breast cancer, there was no increased risk of breast cancer compared
d) Carriers of known gene mutations associated with breast cancer (eg. BRCA 1)	3	with non-COC users with a family history of breast cancer. ⁷³⁻⁸⁰ Among women with BRCA1 mutations, COC users may have a small increased risk of breast cancer compared with non-users. ⁸¹⁻⁸³
e) Breast cancer (i) current (ii) past and no evidence of current disease for 5 years	4 3	

*See also additional comments at end of table

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CONDITION	CATEGORY I=Initiation C=Continuation	CLARIFICATIONS/EVIDENCE- Most evidence available relates to COC use. However, this evidence is also applied to patch and ring use.	

ENDOMETRIAL CANCERS	4		
ENDOMETRIAL CANCER*	1 1		
OVARIAN CANCER*	l		
UTERINE FIBROIDS*			
a) Without distortion of the	1		
uterine cavity	-		
b) With distortion of the	1		
uterine cavity			
PELVIC INFLAMMATORY			
DISEASE (PID)*			
a) Past PID (assuming no			
current risk factors for			
STIs)			
(i) with subsequent	1		
pregnancy			
(ii) without subsequent	j.		
pregnancy	1		
b) PID - current	1		
·	ı		
STIs*			
a) Current purulent	1	Evidence: Evidence suggests that there may be an increased	
cervicitis or chlamydial	•	risk of chlamydial cervicitis among COC users at high risk of	
infection or gonorrhoea		STIs. For other STIs, there is either evidence of no association	
linection of genomicea		between COC use and STI acquisition or limited evidence which	
b) Other STIs (excluding	1	is insufficient to draw any conclusions. ⁸⁴⁻¹⁶⁰	
HIV and hepatitis)			
c) Vaginitis (including	1		
Trichomonas vaginalis			
and Bacterial			
vaginosis)			
	4		
d) Increased risk of STIs	1		
HIV/AIDS			
HIGH RISK OF HIV*	1	Evidence: Overall, evidence is inconsistent regarding whether	
		there is any increased risk of HIV acquisition among COC users	
		compared with non-users.	

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CONDITION	CATEGORY I=Initiation C=Continuation	CLARIFICATIONS/EVIDENCE- Most evidence available relates to COC use. However, this evidence is also applied to patch and ring use.

a) Not using anti-retroviral therapy	1	Evidence: Limited evidence suggests no association between COC use and changes in RNA levels or CD4 counts among HIV-infected women. There is also limited evidence showing no association between COC use and female to male HIV transmission, and mixed results regarding increased risk of HIV
b) Using interacting anti- retroviral therapy	2	and herpes simplex virus (HSV) shedding among HIV-infected women using hormonal contraception. 161, 199-204 Highly active anti-retroviral therapy (HAART) includes some anti-retrovirals, which can induce liver enzymes and thus potentially reduce the efficacy of combined hormonal methods. These methods may still be used safely in women using HAART, but additional contraceptive protection such as condoms should be advised. 20 (see Annex 1)
AIDS and using HAART	2	Clarification: Highly active anti-retroviral therapy (HAART) includes some anti-retrovirals, which may induce liver enzymes and potentially reduce the efficacy of combined hormonal methods. 20 (see drug interactions)
OTHER INFECTIONS		
SCHISTOSOMIASIS		
a) Uncomplicated	1	Evidence: Among women with uncomplicated schistosomiasis, COC use had no adverse effects on liver function. ²⁰⁵⁻²¹¹
b) Fibrosis of liver	1	
(if severe, see cirrhosis)	·	
TUBERCULOSIS	·	
TUBERCULOSIS a) Non-pelvic	1	Clarification: If a woman is taking rifampicin, refer to the section
TUBERCULOSIS	·	Clarification: If a woman is taking rifampicin, refer to the section on drug interactions. Rifampicin is likely to decrease CHC effectiveness.

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ENDOCRINE CONDIT	IONS	
DIABETES*		
a) History of gestational disease	1	
b) Non-vascular disease		
(i) non-insulin dependent	2	
(ii) insulin dependent	2	
c) Nephropathy/ retinopathy/ neuropathy	3/4	Clarification: The category should be assessed according to the severity of the condition.
d) Other vascular disease or diabetes of > 20 years' duration	3/4	
THYROID DISORDERS		
a) Simple goitre	1	
b) Hyperthyroid	1	
c) Hypothyroid	1	
GASTROINTESTINA	L CONDITION	ONS
GALL-BLADDER		
DISEASE*		
a) Symptomatic	0	
(i) treated by cholecystectomy	2	
(ii) medically treated	3	
(iii) current	3	
b) Asymptomatic	2	
HISTORY OF CHOLESTASIS*		
a) Pregnancy-related	2	
b) Past COC-related	3	
VIRAL HEPATITIS*		
a) Active	4	
b) Carrier	1	
CIRRHOSIS*		Clarification:
a) Mild (compensated)	3	Mild (compensated) cirrhosis: without complications
b) Severe (decompensated)	4	Severe (decompensated) cirrhosis: development of major complications (such as ascites, jaundice, encephalopathy, or gastrointestinal haemorrhage). ²³

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LIVER TUMOURS*		
a) Benign (adenoma)	4	
b) Malignant (hepatoma)	4	
INFLAMMATORY BOWEL DISEASE (includes Crohn's disease and ulcerative colitis)	2	Clarification: includes Crohn's disease, Ulcerative colitis. Continuation may need to be reviewed if the woman has an acute exacerbation, acute surgery or prolonged immobilisation (see section on VTE). ²⁴ Absorption of oral contraception may be reduced if severe malabsorption due to small bowel involvement, but is unaffected by colectomy and ileostomy.
ANAEMIAS		
THALASSAEMIA*	1	
SICKLE CELL DISEASE	2	
IRON-DEFICIENCY	1	
ANAEMIA*		
RAYNAUD'S DISEASE*		
a) Primary b) Secondary (i) without lupus anticoagulant (ii) with lupus anticoagulant	1 2 4	Clarification: Primary Raynaud's is not a contraindication to use of combined hormonal contraception. Secondary Raynaud's has an underlying cause such as scleroderma, rheumatoid arthritis, systemic lupus erythematosus. Systemic lupus erythematosus causes a tendency for increased coagulation if lupus anticoagulant is present. 1: 25-29
DRUG INTERACTIONS	S*	
DRUGS WHICH AFFECT LIVER ENZYMES For example Rifampicin, Rifabutin, St John's Wort, Griseofulvin, certain anticonvulsants (phenytoin, carbamazepine, barbiturates, primidone, topiramate, oxcarbazepine)	3	Clarification: Although the interaction of rifampicin and rifabutin or certain anticonvulsants with COCs does not affect safety of CHC use, and is not harmful to women, it is likely to reduce the contraceptive effectiveness. Use of contraceptives which are unaffected by liver enzyme inducers should be encouraged for women who are long-term users of these drugs. For short-term use additional contraception is advised such as condoms while using the liver enzyme inducer and for 4 weeks after cessation. ²¹ Evidence: Use of rifampicin and certain anticonvulsants may decrease the contraceptive effectiveness of COCs. ²¹²⁻²³⁷ St John's Wort and griseofulvin are liver enzyme inducers, but are less potent than rifampicin. ²¹
NON-LIVER ENZYME INDUCING ANTIBIOTICS	2	Evidence: The contraceptive effectiveness of COCs may not be affected by co-administration of antibiotics. ²³⁸⁻²⁹⁰ The FFPRHC advise that women taking a short course (<3 weeks) of non-liver enzyme inducing antibiotics should be advised to use additional contraceptive protection such as condoms during the treatment and for 7 days after the antibiotic is stopped, due to the risks of unintended pregnancy. ²¹

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CONDITION	CATEGORY I=Initiation C=Continuation	CLARIFICATIONS/EVIDENCE- Most evidence available relates to COC use. However, this evidence is also applied to patch and ring use.

HIGHLY ACTIVE ANTIRETROVIRAL THERAPY (HAART)	2	Clarification: It is important to note that antiretroviral drugs (ARV) have the potential to either decrease or increase the bioavailability of steroid hormones in hormonal contraceptives. The limited data available (outlined in Annex 1) suggest that potential drug interactions between many ARVs (particularly some non-nucleoside reverse transcriptase inhibitors (NNRTIs) and protease inhibitors (PIs) and hormonal contraceptives may alter safety and effectiveness of both the hormonal contraceptives and the ARVs. Thus, if a woman on ARV treatment decides to initiate or continue hormonal contraceptive use, the consistent use of condoms is recommended for preventing HIV transmission and may also compensate for any possible reduction in the effectiveness of the hormonal contraceptive. (Evidence: See Annex 1.)
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Additional comments

AGE

Menarche to < 40 years: Theoretical concerns about the use of combined hormonal contraceptives among young adolescents have not been substantiated.

≥ 40 years: The risk of cardiovascular disease increases with age and may also increase with combined hormonal contraceptive use. In the absence of other adverse clinical conditions, combined hormonal contraceptives can be used until menopause. FFPRHC Guidance suggests women can use combined methods until age 50 years if they have no other medical contraindications. ²⁶

BREASTEEDING

- < 6 weeks postpartum: There is some theoretical concern that the neonate may be at risk due to exposure to steroid hormones during the first 6 weeks postpartum. FFPRHC Guidance suggest avoiding combined methods < 6 weeks postpartum.¹
- ≥ 6 weeks to < 6 months: Evidence that use of COCs during breastfeeding diminishes the quantity of breast milk, decreases the duration of lactation, and may thereby adversely affect the growth of the infant is limited. FFPRHC Guidance suggests combined hormonal methods may be used from 6 weeks postpartum if other methods are unacceptable.¹

POSTPARTUM

< 21 days: There is some theoretical concern regarding the association between combined hormonal contraceptive use up to 3 weeks postpartum and risk of thrombosis in the mother. Blood coagulation and fibrinolysis are essentially normalized by 3 weeks postpartum.

PAST ECTOPIC PREGNANCY

The risk of future ectopic pregnancy is increased among women who have had an ectopic pregnancy in the past. Combined hormonal contraceptives provide protection against pregnancy in general, including ectopic gestation.

HYPERTENSION

Vascular disease: Among women with underlying vascular disease, the increased risk of arterial thrombosis associated with combined hormonal contraceptive use should be avoided.

VENOUS THROMBOEMBOLISM (VTE)

Family history of VTE (first-degree relatives): Some conditions which increase the risk of VTE are heritable. Some women considering combined hormonal contraceptive use may not have first degree relatives yet who have reached age 45 years.

Major surgery: The degree of risk of VTE associated with major surgery varies depending on the length of time that a woman is immobilised. There is no need to stop combined hormonal contraceptives prior to female surgical sterilisation. Immobilisation due to non-surgical causes may increase risk of VTE.

SUPERFICIAL VENOUS THROMBOSIS

Varicose veins: Varicose veins are not risk factors for VTE.

CURRENT AND HISTORY OF ISCHAEMIC HEART DISEASE

Among women with underlying vascular disease, the increased risk of arterial thrombosis associated with combined hormonal contraceptive use should be avoided.

STROKE

Among women with underlying vascular disease, the increased risk of arterial thrombosis associated with combined hormonal contraceptive use should be avoided.

KNOWN HYPERLIPIDAEMIAS

Lipid levels alone are poor predictors of risk coronary heart disease (CHD).

VALVULAR HEART DISEASE

Among women with valvular heart disease, combined hormonal contraceptive use may further increase the risk of arterial thrombosis; women with complicated valvular heart disease are at greatest risk.

CONGENITAL HEART DISEASE

Surgical correction, co-existing complications, and degree of cardiac disability will vary and should be taken into account when considering contraceptive use.

HEADACHES

Aura is a specific focal neurologic symptom. For more information on this and other diagnostic criteria, see: Headache Classification Subcommittee of the International Headache Society. The International Classification of Headache Disorders, 2nd Edition. Cephalalgia. 2004; 24 (Suppl 1): 1- 150. http://216.25.100.131/ihscommon/guidelines/pdfs/ihc_II_main_no_print.pdf

VAGINAL BLEEDING PATTERNS

Irregular menstrual bleeding patterns are common among healthy women.

UNEXPLAINED VAGINAL BLEEDING

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

ENDOMETRIOSIS

Combined hormonal contraceptives do 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 combined hormonal contraceptive use.

CERVICAL CANCER (awaiting treatment)

There is some theoretical concern that combined hormonal contraceptive use may affect prognosis of the existing disease. While awaiting treatment, women may use combined hormonal contraceptives. In general, treatment of this condition renders a woman sterile.

BREAST DISEASE

Family history of breast cancer: Women with BRCA1 or BRCA2 mutations have a much higher baseline risk of breast cancer than women who do not have these mutations. Most women with a family history of breast cancer do not have these mutations. Known carriers may consider use of combined hormonal contraception.

Breast cancer: Breast cancer is a hormonally sensitive tumour, and the prognosis of women with current or recent breast cancer may worsen with combined hormonal contraceptive use.

ENDOMETRIAL CANCER

COC use reduces the risk of developing endometrial cancer. While awaiting treatment, women may use COCs. In general, treatment of this condition renders a woman sterile.

OVARIAN CANCER

COC use reduces the risk of developing ovarian cancer. While awaiting treatment, women may use COCs. In general, treatment of this condition renders a woman sterile.

UTERINE FIBROIDS

COCs do not appear to cause growth of uterine fibroids.

PELVIC INFLAMMATORY DISEASE (PID)

COCs may reduce the risk of PID among women with STIs, but do not protect against HIV or lower genital tract STIs.

STIs

COCs may reduce the risk of PID among women with STIs, but do not protect against HIV or lower genital tract STIs.

HIGH RISK OF HIV

COCs may reduce the risk of PID among women with STIs, but do not protect against HIV or lower genital tract STIs

DIABETES

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

GALL-BLADDER DISEASE

COCs may cause a small increased risk of gall-bladder disease. There is also concern that COCs may worsen existing gall-bladder 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

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

CIRRHOSIS

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

LIVER TUMOURS

COCs are metabolised by the liver and their use may adversely affect women whose liver function is compromised. In addition, COC use may enhance the growth of tumours.

INFLAMMATORY BOWEL DISEASE (IBD)

There is no evidence that women with IBD have an inherent increased risk of VTE. Risk of VTE may increase if unwell, bedbound 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

Combined hormonal contraceptive use may decrease menstrual blood loss.

RAYNAUD'S DISEASE

Combined hormonal methods may be used in 'Primary' disease but underlying cause of secondary disease may influence safety of use.

DRUG INTERACTIONS

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

References for combined hormonal contraceptives

UK REFERENCES

- 1. Faculty of Family Planning and Reproductive Healthcare Clinical Effectiveness Unit. Contraception for Women Aged over 40 Years. *Journal of Family Planning and Reproductive Health Care* 2005;**31**:51-64.
- 2. Faculty of Family Planning and Reproductive Health Care Clinical Effectiveness Unit. Contraceptive Choices for Breastfeeding Women. *Journal of Family Planning and Reproductive Health Care* 2004;**30**:181-9.
- 3. Knight J, Pyper C. Postnatal contraception: what are the choices? *Nursing in Practice* 2002; May: 23-5.
- Vessey M, Painter R, Yeates D. Mortality in relation to oral contraceptive use and cigarette smoking. Lancet 2003;362:185-91.
- 5. McElduff P, Dobson A, Beaglehole R, Jackson R. Rapid reduction in coronary risk for those who quit cigarette smoking. *Australian and New Zealand Journal of Public Health* 1998;**22**:787-91.
- 6. Nightingale AL, Lawrenson RA, Simpson EL, Williams TJ, MacRae KD, Farmer RDT. The effects of age, body mass index, smoking and general health on the risk of venous thromboembolism in users of combined oral contraceptives. *The European Journal of Contraception and Reproductive Health Care* 2000;**5**:265-74.
- 7. Lidegaard O, Edstrom B, Kreiner S. Oral contraceptives and venous thromboembolism. A case-control study. *Contraception* 1998;**57**:291-301.
- 8. Williams B, Poulter N, Brown MJ, Davies M, McInnes GT, Potter JP et al. The BHS Guidelines Working Party Guidelines for Management of Hypertension: Report of the Fourth Working Party of the British Hypertension Society, 2004 BHS IV. *Journal of Human Hypertension* 2004;**18**:139-85.
- 9. National Institute for Clinical Excellence. Hypertension. Management of hypertension in adults in primary care. 18. 2004. London, National Institute for Clinical Excellence.
- 10. Tanis B, Vandebosch MKJ. Oral contraceptives and the risk of myocardial infarction. New England Journal of Medicine 2001;345:1787-93.
- 11. Scottish Intercollegiate Guidelines Network Secretariat. Prophylaxis of venous thromboembolism. 62, 1-47, 2003.
- 12. Department of Health. Prodigy Guidance- Hyperlipidaemia. 2004. http://www.prodigy.nhs.uk/hyperlipidaemia
- 13. British Heart Foundation. What is Valvular Heart Disease? 2005. http://www.bhf.org.uk/hearthealth/index.asp?secID=1&secondlevel=77&thirdlevel=478
- 14. British Heart Foundation. Living with Congenital Heart Disease. 2005. http://www.bhf.org.uk/hearthealth/index.asp?secID=1&secondlevel=77&thirdlevel=362
- 15. American Council for Headache Education. How headaches differ. 2004. http://www.achenet.org/understanding/differ.php
- 16. The International Headache Society Task Force on Combined Oral Contraceptives and Hormone replacement Therapy. Recommendations on the risk of ischaemic stroke associated with use of combined oral contraceptives and hormone replacement therapy in women with migraine. *Cephalagia* 2000; **20**:155-6.
- 17. Royal College of Obstetricians and Gynaecologists. The Initial Management of Menorrhagia. National Evidence-Based Clinical Guidelines. 1998.
- 18. Royal College of Obstetricians and Gynaecologists. The Management of Menorrhagia in Secondary Care. National Evidence-Based Clinical Guidelines. 1999.
- 19. Royal College of Obstetricians and Gynaecologists. The Management of Gestational Trophoblastic Neoplasia. 2004.
- 20. BHIVA Writing Committee on behalf of the BHIVA Executive Committee. British HIV Association (BHIVA) guidelines for the treatment of HIV-infected adults with antiretroviral therapy. 2003.
- 21. Faculty of Family Planning and Reproductive Health Care Clinical Effectiveness Unit. Drug Interactions with Hormonal Contraception. *Journal of Family Planning and Reproductive Health Care* 2005;**31**:139-50.

- 22. Neely JL, Abate M, Swinker M, D'Angio R. The effect of doxycycline on serum levels of ethinyl estradiol, norethindrone, and endogenous progesterone. *Obstetrics and Gynaecology* 1991;**77**:416-20.
- 23. Gines, P., Quintero, E., Arroyo, V., Teres, J., Bruguera, M., Rimola, A., Caballeria, J., Rodes, J., and Rozman, C. Compensated cirrhosis: natural history and prognostic factors. Hepatology 7(1), 122-128, 1987.
- 24. Faculty of Family Planning and Reproductive Health Care Clinical Effectiveness Unit. Contraceptive choices for women with inflammatory bowel disease. *The Journal of Family Planning and Reproductive Health Care* 2003;**29**:127-34.
- 25. Department of Health. PRODIGY Guidance Raynaud's phenomenon. 2002. http://www.prodigy.nhs.uk/raynaud's-phenomenon
- 26. Eastcott H.H. Raynaud's disease and the oral contraceptive pill [Letter]. British Medical Journal 2, 477, 1976.
- 27. Altura BM. Sex and oestrogens and responsiveness of terminal arterioles to neurohypophyseal hormones and catecholamines. *Pharmacology and Experimental Therapeutics* 1975;**193**:403-12.
- 28. Greenstein D., Jeffcote N., Ilsley D., Kester R.C. The menstrual cycle and Raynaud's phenomenon. *Angiology* 1996;**47**:427-36.
- 29. Bartelink M.L, Wollersheim H., Vemer H, Thomas C.M., de Boo T., Thien T. The effects of single oral doses of 17 beta-oestradiol and progesterone on finger circulation in healthy women and in women with primary Raynaud's phenomenon. *European Journal of Clinical Pharmacology* 1994;**46**:557-60.

WHO REFERENCES

- 1. Gillum LA, Mamidipudi SK, Johnston SC. Ischemic stroke risk with oral contraceptives: a meta-analysis. *JAMA*, 2000, 284:72-8.
- 2. Jick SS et al. Oral contraceptives and breast cancer. British Journal of Cancer, 1989, 59:618-21.
- 3. Khader YS et al. Oral contraceptives use and the risk of myocardial infarction: a meta-analysis. *Contraception*, 2003, 68:11-7.
- 4. Lawson DH, Davidson JF, Jick H. Oral contraceptive use and venous thromboembolism: absence of an effect of smoking. *BMJ*, 1977, 2:729-30.
- 5. Lidegaard O, Edstrom B, Kreiner S. Oral contraceptives and venous thromboembolism. A case-control study. *Contraception*, 1998, 57:291-301.
- 6. Nightingale AL et al. The effects of age, body mass index, smoking and general health on the risk of venous thromboembolism in users of combined oral contraceptives. *European Journal of Contraception & Reproductive Health Care*, 2000, 5:265-74.
- 7. Petitti DB et al. Risk of vascular disease in women. Smoking, oral contraceptives, noncontraceptive estrogens, and other factors. *JAMA*, 1979, 242:1150-4.
- 8. Straneva P et al. Smoking, oral contraceptives, and cardiovascular reactivity to stress. *Obstetrics & Gynecology,* 2000, 95:78-83.
- 9. Tanis BC et al. Oral contraceptives and the risk of myocardial infarction. *New England Journal of Medicine*, 2001, 345:1787-93.
- 10. Van den bosch MA et al. The RATIO study: oral contraceptives and the risk of peripheral arterial disease in young women. *Journal of Thrombosis and Haemostasis*, 2003, 1:439-44.
- 11. WHO. Venous thromboembolic disease and combined oral contraceptives: results of international multicentre case-control study. World Health Organization Collaborative Study of Cardiovascular Disease and Steroid Hormone Contraception. *Lancet*, 1995, 346:1575-82.
- 12. Rosenberg L et al. Low-dose oral contraceptive use and the risk of myocardial infarction. *Archives of Internal Medicine*, 2001, 161:1065-70.
- 13. Abdollahi MC. Obesity: risk of venous thrombosis and the interaction with coagulation factor levels and oral contraceptive use. *Thrombosis & Haemostasis*, 2003, 89:493-8.
- 14. Holt VL, Cushing-Haugen KL, Daling JR. Body weight and risk of oral contraceptive failure. *Obstetrics & Gynecology*, 2002, 99:820-7.
- 15. Heinemann LA et al. Thromboembolic stroke in young women. A European case-control study on oral contraceptives. Transnational Research Group on Oral Contraceptives and the Health of Young Women. *Contraception*, 1998, 57:29-37.
- 16. Lewis MA et al. The use of oral contraceptives and the occurrence of acute myocardial infarction in young women. Results from the Transnational Study on Oral Contraceptives and the Health of Young Women. *Contraception*, 1997, 56:129-40.
- 17. WHO. Haemorrhagic stroke, overall stroke risk, and combined oral contraceptives: results of an international, multicentre, case-control study. WHO Collaborative Study of Cardiovascular Disease and Steroid Hormone Contraception. *Lancet*, 1996, 348:505-10.
- 18. WHO. Ischaemic stroke and combined oral contraceptives: results of an international, multicentre, case-control study. WHO Collaborative Study of Cardiovascular Disease and Steroid Hormone Contraception. *Lancet*, 1996, 348:498-505.

- 19. WHO. Acute myocardial infarction and combined oral contraceptives: results of an international multicentre case-control study. WHO Collaborative Study of Cardiovascular Disease and Steroid Hormone Contraception. *Lancet*, 1997, 349:1202-9.
- 20. Collaborative Group for the Study of Stroke in Young Women. Oral contraceptives and stroke in young women: associated risk factors. *JAMA*, 1975, 231:718-22.
- 21. Croft P, Hannaford PC. Risk factors for acute myocardial infarction in women: evidence from the Royal College of General Practitioners' Oral Contraception Study. *BMJ*, 1989, 298:165-8.
- 22. D'Avanzo B et al. Oral contraceptive use and risk of myocardial infarction: an Italian case-control study. *Journal of Epidemiology and Community Health*, 1994, 48:324-5.
- 23. Dunn NR et al. Risk of myocardial infarction in young female smokers. *Heart (British Cardiac Society)*, 1999, 82:581-3.
- 24. Hannaford PC, Croft PR, Kay CR. Oral contraception and stroke. Evidence from the Royal College of General Practitioners' Oral Contraception Study. *Stroke*, 1994, 25:935-42.
- 25. Kemmeren JM et al. Risk of Arterial Thrombosis in Relation to Oral Contraceptives (RATIO) study: oral contraceptives and the risk of ischemic stroke. *Stroke*, 2002, 33:1202-8.
- 26. Lidegaard O. Oral contraception and risk of a cerebral thromboembolic attack: results of a case-control study. *BMJ*, 1993, 306:956-63.
- 27. Lidegaard O. Oral contraceptives, pregnancy and the risk of cerebral thromboembolism: the influence of diabetes, hypertension, migraine and previous thrombotic disease. *British Journal of Obstetrics & Gynaecology*, 1995, 102:153-9.
- 28. Lidegaard O, Kreiner S. Contraceptives and cerebral thrombosis: a five-year national case-control study. *Contraception*, 2002, 65:197-205.
- 29. Lubianca JN, Faccin CS, Fuchs FD. Oral contraceptives: a risk factor for uncontrolled blood pressure among hypertensive women. *Contraception*, 2003, 67:19-24.
- 30. Narkiewicz K et al. Ambulatory blood pressure in mild hypertensive women taking oral contraceptives. A case-control study. *American Journal of Hypertension*, 1995, 8:249-53.
- 31. Siritho S et al. Risk of ischemic stroke among users of the oral contraceptive pill: The Melbourne Risk Factor Study (MERFS) Group, *Stroke*, 2003, 34:1575-80.
- 32. Aberg H, Karlsson L, Melander S. Studies on toxaemia of pregnancy with special reference to blood pressure. II. Results after 6-11 years' follow-up. *Upsala Journal of Medical Sciences*, 1978, 83:97-102.
- 33. Carmichael SM, Taylor MM, Ayers CR. Oral contraceptives, hypertension, and toxemia. *Obstetrics & Gynecology*, 1970, 35:371-6.
- 34. Meinel H, Ihle R, Laschinski M. [Effect of hormonal contraceptives on blood pressure following pregnancy-induced hypertension]. [German]. *Zentralblatt für Gynäkologie*, 1987, 109:527-31.
- 35. Pritchard JA, Pritchard SA. Blood pressure response to estrogen-progestin oral contraceptive after pregnancy-induced hypertension. *American Journal of Obstetrics & Gynecology*, 1977, 129:733-9.
- 36. Sibai BM et al. Maternal-perinatal outcome associated with the syndrome of hemolysis, elevated liver enzymes, and low platelets in severe preeclampsia-eclampsia. *American Journal of Obstetrics & Gynecology*, 1986, 155:501-9.
- 37. Sibai BM et al. Pregnancies complicated by HELLP syndrome (hemolysis, elevated liver enzymes, and low platelets): subsequent pregnancy outcome and long-term prognosis. *American Journal of Obstetrics & Gynecology*, 1995, 172:125-9.
- 38. Andersen BS et al. Third generation oral contraceptives and heritable thrombophilia as risk factors of non-fatal venous thromboembolism. *Thrombosis & Haemostasis*, 1998, 79:28-31.
- 39. Andersen BS, Olsen J. Oral contraception and factor V Leiden mutation in relation to localization of deep vein thrombosis. *Thrombosis Research*, 1998, 90:191-4.
- 40. Bloemenkamp KW et al. Enhancement by factor V Leiden mutation of risk of deep-vein thrombosis associated with oral contraceptives containing a third-generation progestagen. *Lancet*, 1995, 346:1593-6.
- 41. Bloemenkamp KW et al. Higher risk of venous thrombosis during early use of oral contraceptives in women with inherited clotting defects. *Archives of Internal Medicine*, 2000, 160:49-52.
- 42. de Bruijn SF et al. Case-control study of risk of cerebral sinus thrombosis in oral contraceptive users and in [correction of who are] carriers of hereditary prothrombotic conditions. The Cerebral Venous Sinus Thrombosis Study Group.[erratum appears in BMJ 1998 Mar 14;316(7134):822]. BMJ, 1998, 316:589-92.
- 43. Emmerich J et al. Combined effect of factor V Leiden and prothrombin 20210A on the risk of venous thromboembolism—pooled analysis of 8 case-control studies including 2310 cases and 3204 controls. Study Group for Pooled-Analysis in Venous Thromboembolism.[erratum appears in Thromb Haemost 2001 Dec;86(6):1598]. *Thrombosis & Haemostasis*, 2001, 86:809-16.
- 44. Legnani C et al. Venous thromboembolism in young women; role of thrombophilic mutations and oral contraceptive use. *European Heart Journal*, 2002, 23:984-90.
- 45. Martinelli I et al. High risk of cerebral-vein thrombosis in carriers of a prothrombin-gene mutation and in users of oral contraceptives. *New England Journal of Medicine*, 1998, 338:1793-7.
- 46. Martinelli I et al. Interaction between the G20210A mutation of the prothrombin gene and oral contraceptive use in deep vein thrombosis. *Arteriosclerosis, Thrombosis & Vascular Biology,* 1999, 19:700-3.
- 47. Middeldorp S et al. A prospective study of asymptomatic carriers of the factor V Leiden mutation to determine the incidence of venous thromboembolism. *Annals of Internal Medicine*, 2001, 135:322-7.

- 48. Santamaria A et al. Risk of thrombosis associated with oral contraceptives of women from 97 families with inherited thrombophilia: high risk of thrombosis in carriers of the G20210A mutation of the prothrombin gene. *Haematologica*, 2001, 86:965-71.
- 49. Spannagl M, Heinemann LA, Schramm W. Are factor V Leiden carriers who use oral contraceptives at extreme risk for venous thromboembolism? *European Journal of Contraception & Reproductive Health Care*, 2000, 5:105-12.
- 50. Vandenbroucke JP et al. Increased risk of venous thrombosis in oral-contraceptive users who are carriers of factor V Leiden mutation. *Lancet*, 1994, 344:1453-7.
- 51. Vaya AM. Prothrombin G20210A mutation and oral contraceptive use increase upper-extremity deep vein thrombotic risk. *Thrombosis & Haemostasis*, 2003, 89:452-7.
- 52. Carolei A, Marini C, De Matteis G. History of migraine and risk of cerebral ischaemia in young adults. The Italian National Research Council Study Group on Stroke in the Young. *Lancet*, 1996, 347:1503-6.
- 53. Chang CL, Donaghy M, Poulter N. Migraine and stroke in young women: case-control study. The World Health Organisation Collaborative Study of Cardiovascular Disease and Steroid Hormone Contraception. *BMJ*, 1999, 318:13-8.
- 54. Tzourio C et al. Case-control study of migraine and risk of ischaemic stroke in young women. *BMJ*, 1995, 310:830-3.
- 55. Donaghy M, Chang CL, Poulter N. Duration, frequency, recency, and type of migraine and the risk of ischaemic stroke in women of childbearing age. *Journal of Neurology, Neurosurgery, and Psychiatry,* 2002, 73:747-50.
- 56. Lidegaard O. Oral contraceptives, pregnancy and the risk of cerebral thromboembolism: the influence of diabetes, hypertension, migraine and previous thrombotic disease (Letter). *British Journal of Obstetrics & Gynaecology*, 1996, 103:94.
- 57. MacGregor EA, Guillebaud J. Combined oral contraceptives, migraine and ischaemic stroke. Clinical and Scientific Committee of the Faculty of Family Planning and Reproductive Health Care and the Family Planning Association. *British Journal of Family Planning*, 1998, 24:55-60.
- 58. Schwartz SM et al. Stroke and use of low-dose oral contraceptives in young women: a pooled analysis of two US studies. *Stroke*, 1998, 29:2277-84.
- 59. Cromer BA et al. A prospective study of adolescents who choose among levonorgestrel implant (Norplant), medroxyprogesterone acetate (Depo-Provera), or the combined oral contraceptive pill as contraception. *Pediatrics*, 1994, 94:687-94.
- 60. Deijen JB et al. Use of a monophasic, low-dose oral contraceptive in relation to mental functioning. *Contraception*, 1992, 46:359-67.
- 61. Herzberg BN et al. Oral contraceptives, depression, and libido. BMJ, 1971, 3:495-500.
- 62. Hendrix SL, Alexander NJ. Primary dysmenorrhea treatment with a desogestrel-containing low-dose oral contraceptive. *Contraception*, 2002, 66:393-9.
- 63. Proctor ML, Roberts H, Farquhar CM. Combined oral contraceptive pill (OCP) as treatment for primary dysmenorrhoea. *Cochrane Database of Systematic Reviews*, 2001, CD002120.
- 64. Berkowitz RS et al. Oral contraceptives and postmolar trophoblastic disease. *Obstetrics & Gynecology*, 1981, 58:474-7.
- 65. Curry SL et al. Hormonal contraception and trophoblastic sequelae after hydatidiform mole (a Gynecologic Oncology Group Study) *American Journal of Obstetrics & Gynecology*, 1989, 160:805-9.
- 66. Deicas RE et al. The role of contraception in the development of postmolar gestational trophoblastic tumor. *Obstetrics & Gynecology,* 1991, 78:221-6.
- 67. Eddy GL et al. Postmolar trophoblastic disease in women using hormonal contraception with and without estrogen. *Obstetrics & Gynecology,* 1983, 62:736-40.
- 68. Goldberg GL et al. Medroxyprogesterone acetate in non-metastatic gestational trophoblastic disease. British Journal of Obstetrics & Gynaecology, 1987, 94:22-5.
- 69. Morrow P et al. The influence of oral contraceptives on the postmolar human chorionic gonadotropin regression curve. *American Journal of Obstetrics & Gynecology,* 1985, 151:906-14.
- 70. Stone M et al. Relationship of oral contraception to development of trophoblastic tumour after evacuation of a hydatidiform mole. *British Journal of Obstetrics & Gynaecology*, 1976, 83:913-6.
- 71. Ho Yuen B, Burch P. Relationship of oral contraceptives and the intrauterine contraceptive devices to the regression of concentrations of the beta subunit of human chorionic gonadotropin and invasive complications after molar pregnancy. *American Journal of Obstetrics & Gynecology*, 1983, 145:214-7.
- 72. Smith JS et al. Cervical cancer and use of hormonal contraceptives: a systematic review. *Lancet*, 2003, 361:1159-67.
- 73. Breast cancer and hormonal contraceptives: collaborative reanalysis of individual data on 53 297 women with breast cancer and 100 239 women without breast cancer from 54 epidemiological studies. Collaborative Group on Hormonal Factors in Breast Cancer. *Lancet*, 1996, 347:1713-27.
- 74. Brinton LA et al. Modification of oral contraceptive relationships on breast cancer risk by selected factors among younger women. *Contraception*, 1997, 55:197-203.
- 75. Colditz GA, Rosner BA, Speizer FE for the Nurses' Health Study Research Group. Risk factors for breast cancer according to family history of breast cancer. *Journal of the National Cancer Institute,* 1996, 88:365-71.

- 76. Egan KM et al. Risk factors for breast cancer in women with a breast cancer family history. *Cancer Epidemiology, Biomarkers & Prevention*, 1998, 7:359-64.
- 77. Grabrick DM et al. Risk of breast cancer with oral contraceptive use in women with a family history of breast cancer. *JAMA*, 2000, 284:1791-8.
- 78. Harris RE, Zang EA, Wynder EL. Oral contraceptives and breast cancer risk: a case-control study. *International Journal of Epidemiology*, 1990, 19:240-6.
- 79. Marchbanks PA et al. Oral contraceptives and the risk of breast cancer. *New England Journal of Medicine*, 2002, 346:2025-32.
- 80. Rosenberg L et al. Case-control study of oral contraceptive use and risk of breast cancer. *American Journal of Epidemiology*, 1996, 143:25-37.
- 81. Heimdal K, Skovlund E, Moller P. Oral contraceptives and risk of familial breast cancer. *Cancer Detection & Prevention*, 2002, 26:23-7.
- 82. Narod SA et al. Oral contraceptives and the risk of breast cancer in BRCA1 and BRCA2 mutation carriers. *Journal of the National Cancer Institute*, 2002, 94:1773-9.
- 83. Ursin G et al. Does oral contraceptive use increase the risk of breast cancer in women with BRCA1/BRCA2 mutations more than in other women? *Cancer Research*, 1997, 57:3678-81.
- 84. The Italian MEGIC Group. Determinants of cervical Chlamydia trachomatis infection in Italy. *Genitourinary Medicine*, 1993, 69:123-5.
- 85. Ackers JP et al. Antitrichomonal antibody in the vaginal secretions of women infected with T. vaginalis. British Journal of Venereal Diseases, 1975, 51:319-23.
- 86. Acosta-Cazares B, Ruiz-Maya L, Escobedo de la Pena J. Prevalence and risk factors for Chlamydia trachomatis infection in low-income rural and suburban populations of Mexico. *Sexually Transmitted Diseases*, 1996, 23:283-8.
- 87. Addiss DG et al. Selective screening for Chlamydia trachomatis infection in nonurban family planning clinics in Wisconsin. *Family Planning Perspectives*, 1987, 19:252-6.
- 88. Arya OP, Mallinson H, Goddard AD. Epidemiological and clinical correlates of chlamydial infection of the cervix. *British Journal of Venereal Diseases*, 1981, 57:118-24.
- 89. Austin H, Louv WC, Alexander WJ. A case-control study of spermicides and gonorrhea. *JAMA*, 1984, 251:2822-4.
- 90. Avonts D et al. Incidence of uncomplicated genital infections in women using oral contraception or an intrauterine device: a prospective study. *Sexually Transmitted Diseases*, 1990, 17:23-9.
- 91. Baeten JM et al. Hormonal contraception and risk of sexually transmitted disease acquisition: results from a prospective study. *American Journal of Obstetrics & Gynecology*, 2001, 185:380-5.
- 92. Barbone F et al. A follow-up study of methods of contraception, sexual activity, and rates of trichomoniasis, candidiasis, and bacterial vaginosis. *American Journal of Obstetrics & Gynecology,* 1990, 163:510-4.
- 93. Barnes RC et al. Quantitative culture of endocervical Chlamydia trachomatis. *Journal of Clinical Microbiology*, 1990, 28:774-80.
- 94. Berger GS, Keith L, Moss W. Prevalence of gonorrhoea among women using various methods of contraception. *British Journal of Venereal Diseases*, 1975, 51:307-9.
- 95. Bhattacharyya MN, Jephcott AE. Diagnosis of gonorrhea in women—Influence of the contraceptive pill. Journal of the American Venereal Disease Association, 1976, 2:21-4.
- 96. Blum M, Pery J, Kitai E. The link between contraceptive methods and Chlamydia trachomatis infection. *Advances in Contraception*, 1988, 4:233-9.
- 97. Bontis J et al. Detection of Chlamydia trachomatis in asymptomatic women: relationship to history, contraception, and cervicitis. *Advances in Contraception*, 1994, 10:309-15.
- 98. Bramley M, Kinghorn G. Do oral contraceptives inhibit Trichomonas vaginalis? *Sexually Transmitted Diseases*, 1979, 6:261-3.
- 99. Bro F, Juul S. Predictors of Chlamydia trachomatis infection in women in general practice. *Family Practice*, 1990, 7:138-43.
- 100. Burns DC et al. Isolation of Chlamydia from women attending a clinic for sexually transmitted disease. British Journal of Venereal Diseases, 1975, 51:314-8.
- 101. Ceruti M et al. Methods of contraception and rates of genital infections. *Clinical & Experimental Obstetrics & Gynecology*, 1994, 21:119-23.
- 102. Chacko MR, Lovchik JC. Chlamydia trachomatis infection in sexually active adolescents: prevalence and risk factors. *Pediatrics*, 1984, 73:836-40.
- 103. Cottingham J, Hunter D. Chlamydia trachomatis and oral contraceptive use: a quantitative review. *Genitourinary Medicine*, 1992, 68:209-16.
- 104. Crowley T et al. Hormonal factors and the laboratory detection of Chlamydia trachomatis in women: implications for screening? *International Journal of STD & AIDS*, 1997, 8:25-31.
- 105. Edwards D, Phillips D, Stancombe S. Chlamydia trachomatis infection at a family planning clinic. *New Zealand Medical Journal*, 1985, 98:333-5.
- 106. Evans BA et al. Predictors of seropositivity to herpes simplex virus type 2 in women. *International Journal of STD & AIDS*, 2003, 14:30-6.

- 107. Evans DL et al. Detection of Chlamydia trachomatis in adolescent females using direct immunofluorescence. *Clinical Pediatrics*, 1988, 27:223-8.
- 108. Fish AN et al. Chlamydia trachomatis infection in a gynaecology clinic population: identification of high-risk groups and the value of contact tracing. *European Journal of Obstetrics, Gynecology, & Reproductive Biology,* 1989, 31:67-74.
- 109. Fouts AC, Kraus SJ. Trichomonas vaginalis: reevaluation of its clinical presentation and laboratory diagnosis. *Journal of Infectious Diseases*, 1980, 141:137-43.
- 110. Fraser JJ, Jr., Rettig PJ, Kaplan DW. Prevalence of cervical Chlamydia trachomatis and Neisseria gonorrhoeae in female adolescents. *Pediatrics*, 1983, 71:333-6.
- 111. Gertig DM et al. Risk factors for sexually transmitted diseases among women attending family planning clinics in Dar-es-Salaam, Tanzania. *Genitourinary Medicine*, 1997, 73:39-43.
- Green J. Human papillomavirus infection and use of oral contraceptives. British Journal of Cancer, 2003, 88:1713-20.
- 113. Griffiths M, Hindley D. Gonococcal pelvic inflammatory disease, oral contraceptives, and cervical mucus. *Genitourinary Medicine*, 1985, 61:67.
- 114. Han Y et al. Risk profile for Chlamydia infection in women from public health clinics in New York State. *Journal of Community Health*, 1993, 18:1-9.
- 115. Handsfield HH et al. Criteria for selective screening for Chlamydia trachomatis infection in women attending family planning clinics. *JAMA*, 1986, 255:1730-4.
- 116. Hanna NF et al. The relation between vaginal pH and the microbiological status in vaginitis. *British Journal of Obstetrics & Gynaecology*, 1985, 92:1267-71.
- 117. Harrison HR et al. Cervical Chlamydia trachomatis infection in university women: relationship to history, contraception, ectopy, and cervicitis. *American Journal of Obstetrics & Gynecology*, 1985, 153:244-51.
- 118. Hart G. Factors associated with genital chlamydial and gonococcal infection in females. *Genitourinary Medicine*, 1992, 68:217-20.
- 119. Herrmann B et al. Genital chlamydial infection among women in Nicaragua: validity of direct fluorescent antibody testing, prevalence, risk factors and clinical manifestations. *Genitourinary Medicine*, 1996, 72:20-6.
- 120. Hewitt AB. Oral contraception among special clinic patients. With particular reference to the diagnosis of gonorrhoea. *British Journal of Venereal Diseases*, 1970, 46:106-7.
- 121. Hilton AL et al. Chlamydia A in the female genital tract. British Journal of Venereal Diseases, 1974, 50:1-10.
- 122. Hiltunen-Back E et al. A nationwide sentinel clinic survey of chlamydia trachomatis infection in Finland. Sexually Transmitted Diseases, 2001, 28:252-8.
- 123. Jacobson DL et al. Relationship of hormonal contraception and cervical ectopy as measured by computerized planimetry to chlamydial infection in adolescents. Sexually Transmitted Diseases, 2000, 27:313-9.
- 124. Jaffe LR et al. Chlamydia trachomatis detection in adolescents. A comparison of direct specimen and tissue culture methods. *Journal of Adolescent Health Care*, 1986, 7:401-4.
- 125. Jick H et al. Vaginal spermicides and gonorrhea. JAMA, 1982, 248:1619-21.
- 126. Johannisson G, Karamustafa A, Brorson J. Influence of copper salts on gonococci. *British Journal of Venereal Diseases*, 1976, 52:176-7.
- 127. Keith L, Berer GS, Moss W. Cervical gonorrhea in women using different methods of contraception. *Journal of the American Venereal Disease Association*, 1976, 3:17-9.
- 128. Kinghorn GR, Waugh MA. Oral contraceptive use and prevalence of infection with Chlamydia trachomatis in women. *British Journal of Venereal Diseases*, 1981, 57:187-90.
- 129. Lavreys L et al. Human herpesvirus 8: seroprevalence and correlates in prostitutes in Mombasa, Kenya. *Journal of Infectious Diseases*, 2003, 187:359-63.
- 130. Lefevre JC et al. Lower genital tract infections in women: comparison of clinical and epidemiologic findings with microbiology. *Sexually Transmitted Diseases*, 1988, 15:110-3.
- 131. Louv WC et al. Oral contraceptive use and the risk of chlamydial and gonococcal infections. *American Journal of Obstetrics & Gynecology*, 1989, 160:396-402.
- 132. Lowe TL, Kraus SJ. Quantitation of Neisseria gonorrhoeae from women with gonorrhea. *Journal of Infectious Diseases*, 1976, 133:621-6.
- 133. Lycke E et al. The risk of transmission of genital Chlamydia trachomatis infection is less than that of genital Neisseria gonorrhoeae infection. *Sexually Transmitted Diseases*, 1980, 7:6-10.
- 134. Macaulay ME et al. A prospective study of genital infections in a family-planning clinic. 2. Chlamydia infection—the identification of a high-risk group. *Epidemiology & Infection*, 1990, 104:55-61.
- 135. Magder LS et al. Factors related to genital Chlamydia trachomatis and its diagnosis by culture in a sexually transmitted disease clinic. *American Journal of Epidemiology,* 1988, 128:298-308.
- 136. Magder LS et al. Effect of patient characteristics on performance of an enzyme immunoassay for detecting cervical Chlamydia trachomatis infection. *Journal of Clinical Microbiology*, 1990, 28:781-4.
- 137. Masse R et al. Chlamydia trachomatis cervical infection: prevalence and determinants among women presenting for routine gynecologic examination. *CMAJ Canadian Medical Association Journal*, 1991, 145:953-61.

- 138. McCormack WM, Reynolds GH. Effect of menstrual cycle and method of contraception on recovery of Neisseria gonorrhoeae. *JAMA*, 1982, 247:1292-4.
- 139. Nayyar KC et al. Isolation of Chlamydia trachomatis from women attending a clinic for sexually transmitted diseases. *British Journal of Venereal Diseases*, 1976, 52:396-8.
- 140. Oh MK et al. Chlamydia trachomatis cervical infection and oral contraceptive use among adolescent girls. *Journal of Adolescent Health Care*, 1989, 10:376-81.
- 141. Oriel JD et al. Infection of the uterine cervix with Chlamydia trachomatis. *Journal of Infectious Diseases*, 1978, 137:443-51.
- 142. Paavonen J, Vesterinen E. Chlamydia trachomatis in cervicitis and urethritis in women. *Scandinavian Journal of Infectious Diseases Supplementum*, 1982, 32:45-54.
- 143. Park BJ et al. Contraceptive methods and the risk of Chlamydia trachomatis infection in young women. American Journal of Epidemiology, 1995, 142:771-8.
- 144. Pereira LH et al. Cytomegalovirus infection among women attending a sexually transmitted disease clinic: association with clinical symptoms and other sexually transmitted diseases. *American Journal of Epidemiology*, 1990, 131:683-92.
- 145. Reed BD, Huck W, Zazove P. Differentiation of Gardnerella vaginalis, Candida albicans, and Trichomonas vaginalis infections of the vagina. *Journal of Family Practice*, 1989, 28:673-80.
- 146. Ripa KT et al. Chlamydia trachomatis cervicitis in gynecologic outpatients. *Obstetrics & Gynecology,* 1978, 52:698-702.
- 147. Ruijs GJ et al. Direct immunofluorescence for Chlamydia trachomatis on urogenital smears for epidemiological purposes. *European Journal of Obstetrics, Gynecology & Reproductive Biology,* 1988, 27:289-97.
- 148. Schachter J, Stoner E, Moncada J. Screening for chlamydial infections in women attending family planning clinics. *Western Journal of Medicine*, 1983, 138:375-9.
- 149. Sellors JW et al. Incidence, clearance and predictors of human papillomavirus infection in women. *CMAJ Canadian Medical Association Journal*, 2003, 168:421-5.
- 150. Sessa R et al. Epidemiology of urogenital infections caused by Chlamydia trachomatis and outline of characteristic features of patients at risk. *Journal of Medical Microbiology*, 1994, 41:168-72.
- 151. Shafer MA et al. Chlamydia trachomatis: important relationships to race, contraception, lower genital tract infection, and Papanicolaou smear. *Journal of Pediatrics*, 1984, 104:141-6.
- 152. Smith JS et al. Prevalence and risk factors for herpes simplex virus type 2 infection among middle-age women in Brazil and the Philippines. *Sexually Transmitted Diseases*, 2001, 28:187-94.
- 153. Staerfelt F et al. A survey of genital infections in patients attending a clinic for sexually transmitted diseases. Scandinavian Journal of Infectious Diseases - Supplementum, 1983, 40:53-7.
- 154. Svensson L, Westrom L, Mardh PA. Chlamydia trachomatis in women attending a gynaecological outpatient clinic with lower genital tract infection. *British Journal of Venereal Diseases*, 1981, 57:259-62.
- 155. Tait IA et al. Chlamydial infection of the cervix in contacts of men with nongonococcal urethritis. *British Journal of Venereal Diseases*, 1980, 56:37-45.
- 156. Willmott FE, Mair HJ. Genital herpesvirus infection in women attending a venereal diseases clinic. *British Journal of Venereal Diseases*, 1978, 54:341-3.
- 157. Winer RL et al. Genital human papillomavirus infection: incidence and risk factors in a cohort of female university students.[erratum appears in Am J Epidemiol. 2003 May 1;157(9):858]. *American Journal of Epidemiology*, 2003, 157:218-26.
- 158. Winter L, Goldy AS, Baer C. Prevalence and epidemiologic correlates of Chlamydia trachomatis in rural and urban populations. *Sexually Transmitted Diseases*, 1990, 17:30-6.
- 159. Wolinska WH, Melamed MR. Herpes genitalis in women attending Planned Parenthood of New York City. *Acta Cytologica*, 1970, 14:239-42.
- 160. Woolfitt JM, Watt L. Chlamydial infection of the urogenital tract in promiscuous and non-promiscuous women. *British Journal of Venereal Diseases*, 1977, 53:93-5.
- 161. European Study Group on Heterosexual Transmission of HIV. Comparison of female to male and male to female transmission of HIV in 563 stable couples. *BMJ*, 1992, 304:809-13.
- Aklilu M et al. Factors associated with HIV-1 infection among sex workers of Addis Ababa, Ethiopia. AIDS, 2001, 15:87-96.
- 163. Allen S et al. Pregnancy and contraception use among urban Rwandan women after HIV testing and counseling. *American Journal of Public Health*, 1993, 83:705-10.
- Carael M et al. Human immunodeficiency virus transmission among heterosexual couples in Central Africa. AIDS, 1988, 2:201-5.
- 165. Chao A et al. National University of Rwanda-Johns Hopkins University AIDS Research Team. Risk factors associated with prevalent HIV-1 infection among pregnant women in Rwanda. *International Journal of Epidemiology*, 1994, 23:371-80.
- 166. Cohen E, Navaline H, Metzger D. High-risk behaviors for HIV: a comparison between crack-abusing and opioid-abusing African-American women. *Journal of Psychoactive Drugs*, 1994, 26:233-41.
- 167. de Vincenzi I. European Study Group on Heterosexual Transmission of HIV. A longitudinal study of human immunodeficiency virus transmission by heterosexual partners. *New England Journal of Medicine,* 1994, 331:341-6.

- 168. Ellerbrock TV et al. Heterosexually transmitted human immunodeficiency virus infection among pregnant women in a rural Florida community. *New England Journal of Medicine*, 1992, 327:1704-9.
- 169. Gray JA et al. HIV-1 infection among female commercial sex workers in rural Thailand. *AIDS*, 1997, 11:89-94.
- 170. Guimaraes MD et al. Rio de Janeiro Heterosexual Study Group. HIV infection among female partners of seropositive men in Brazil. *American Journal of Epidemiology*, 1995, 142:538-47.
- 171. Hira SK et al. Oral contraceptive use and HIV infection. International Journal of STD & AIDS, 1990, 1:447-8.
- 172. Kapiga SH et al. Risk factors for HIV infection among women in Dar-es-Salaam, Tanzania. *Journal of Acquired Immune Deficiency Syndromes*, 1994, 7:301-9.
- 173. Kapiga SH et al. The incidence of HIV infection among women using family planning methods in Dar es Salaam, Tanzania. *AIDS*, 1998, 12:75-84.
- 174. Kiddugavu M et al. Hormonal contraceptive use and HIV-1 infection in a population-based cohort in Rakai, Uganda. *AIDS*, 2003, 17:233-40.
- 175. Kunanusont C et al. HIV-1 subtypes and male-to-female transmission in Thailand. *Lancet,* 1995, 345:1078-83
- 176. Laga M et al. Non-ulcerative sexually transmitted diseases as risk factors for HIV-1 transmission in women: results from a cohort study. *AIDS*, 1993, 7:95-102.
- 177. Latif AS et al. Genital ulcers and transmission of HIV among couples in Zimbabwe. AIDS, 1989, 3:519-23.
- 178. Limpakarnjanarat K et al. HIV-1 and other sexually transmitted infections in a cohort of female sex workers in Chiang Rai, Thailand. *Sexually Transmitted Infections*, 1999, 75:30-5.
- 179. Martin HL, Jr. et al. Hormonal contraception, sexually transmitted diseases, and risk of heterosexual transmission of human immunodeficiency virus type 1. *Journal of Infectious Diseases*, 1998, 178:1053-9.
- 180. Mati JK et al. Contraceptive use and the risk of HIV infection in Nairobi, Kenya. *International Journal of Gynaecology & Obstetrics*, 1995, 48:61-7.
- 181. Moss GB et al. Association of cervical ectopy with heterosexual transmission of human immunodeficiency virus: results of a study of couples in Nairobi, Kenya. *Journal of Infectious Diseases*, 1991, 164:588-91.
- 182. Nagachinta T et al. Risk factors for HIV-1 transmission from HIV-seropositive male blood donors to their regular female partners in northern Thailand. *AIDS*, 1997, 11:1765-72.
- 183. Nicolosi A et al. Italian Study Group on HIV Heterosexual Transmission. The efficiency of male-to-female and female-to-male sexual transmission of the human immunodeficiency virus: a study of 730 stable couples. *Epidemiology*, 1994, 5:570-5.
- 184. Nzila N et al. HIV and other sexually transmitted diseases among female prostitutes in Kinshasa. *AIDS*, 1991, 5:715-21.
- 185. Pineda JA et al. HIV-1 infection among non-intravenous drug user female prostitutes in Spain. No evidence of evolution to pattern II. *AIDS*, 1992, 6:1365-9.
- 186. Plourde PJ et al. Human immunodeficiency virus type 1 infection in women attending a sexually transmitted diseases clinic in Kenya. *Journal of Infectious Diseases*, 1992, 166:86-92.
- 187. Plummer FA et al. Cofactors in male-female sexual transmission of human immunodeficiency virus type 1. *Journal of Infectious Diseases*, 1991, 163:233-9.
- 188. Rehle T et al. Risk factors of HIV-1 infection among female prostitutes in Khon Kaen, Northeast Thailand. *Infection*, 1992, 20:328-31.
- 189. Saracco A et al. Man-to-woman sexual transmission of HIV: longitudinal study of 343 steady partners of infected men. *Journal of Acquired Immune Deficiency Syndromes*, 1993, 6:497-502.
- Simonsen JN et al. HIV infection among lower socioeconomic strata prostitutes in Nairobi. AIDS, 1990, 4:139-44.
- 191. Sinei SK et al. Contraceptive use and HIV infection in Kenyan family planning clinic attenders. *International Journal of STD & AIDS*, 1996, 7:65-70.
- 192. Siraprapasiri T et al. Risk factors for HIV among prostitutes in Chiangmai, Thailand. AIDS, 1991, 5:579-82.
- 193. Spence MR et al. Seroprevalence of human immunodeficiency virus type I (HIV-1) antibodies in a family-planning population. *Sexually Transmitted Diseases*, 1991, 18:143-5.
- 194. Stephenson JM. Systematic review of hormonal contraception and risk of HIV transmission: when to resist meta-analysis. *AIDS*, 1998, 12:545-53.
- 195. Taneepanichskul S, Phuapradit W, Chaturachinda K. Association of contraceptives and HIV-1 infection in Thai female commercial sex workers. Australian & New Zealand Journal of Obstetrics & Gynaecology, 1997, 37:86-8.
- 196. Temmerman M et al. Maternal human immunodeficiency virus-1 infection and pregnancy outcome. *Obstetrics & Gynecology,* 1994, 83:495-501.
- 197. Ungchusak K et al. Determinants of HIV infection among female commercial sex workers in northeastern Thailand: results from a longitudinal study.[erratum appears in J Acquir Immune Defic Syndr Hum Retrovirol 1998 Jun 1;18(2):192]. Journal of Acquired Immune Deficiency Syndromes & Human Retrovirology, 1996, 12:500-7.
- 198. Wang CC, Reilly M, Kreiss JK. Risk of HIV infection in oral contraceptive pill users: a meta-analysis.[erratum appears in J Acquir Immune Defic Syndr 1999 Aug 15;21(5):428]. *Journal of Acquired Immune Deficiency Syndromes: JAIDS*, 1999, 21:51-8.

- 199. Cejtin HEJ. Effect of hormonal contraceptive use on plasma HIV-1-RNA levels among HIV-infected women. *AIDS*, 2003, 17:1702-4.
- 200. Clemetson DB et al. Detection of HIV DNA in cervical and vaginal secretions. Prevalence and correlates among women in Nairobi, Kenya. *JAMA*, 1993, 269:2860-4.
- 201. Kreiss J et al. Association between cervical inflammation and cervical shedding of human immunodeficiency virus DNA. *Journal of Infectious Diseases*, 1994, 170:1597-601.
- 202. McClelland RS et al. A prospective study of hormonal contraceptive use and cervical shedding of herpes simplex virus in human immunodeficiency virus type 1-seropositive women. *Journal of Infectious Diseases*, 2002, 185:1822-5.
- 203. Mostad SB et al. Hormonal contraception, vitamin A deficiency, and other risk factors for shedding of HIV-1 infected cells from the cervix and vagina. *Lancet*, 1997, 350:922-7.
- 204. Mostad SB et al. Cervical shedding of herpes simplex virus in human immunodeficiency virus-infected women: effects of hormonal contraception, pregnancy, and vitamin A deficiency. *Journal of Infectious Diseases*, 2000, 181:58-63.
- 205. el Raghy I et al. Contraceptive steroid concentrations in women with early active schistosomiasis: lack of effect of antischistosomal drugs. *Contraception*, 1986, 33:373-7.
- 206. Gad-el-Mawla N, Abdallah A. Liver function in bilharzial females receiving contraceptive pills. *Acta Hepato-Splenologica*, 1969, 16:308-10.
- 207. Gad-el-Mawla N et al. Plasma lipids and lipoproteins in bilharzial females during oral contraceptive therapy. Journal of the Egyptian Medical Association, 1972, 55:137-47.
- 208. Shaaban MM et al. Effects of oral contraception on liver function tests and serum proteins in women with active schistosomiasis. *Contraception*, 1982, 26:75-82.
- 209. Shaaban MM et al. Effect of oral contraception on serum bile acid. *International Journal of Gynaecology & Obstetrics*, 1984, 22:111-5.
- 210. Sy FS et al. Effect of oral contraceptive on liver function tests of women with schistosomiasis in the Philippines. *Contraception*, 1986, 34:283-94.
- 211. Tagy AH et al. The effect of low-dose combined oral contraceptive pills versus injectable contraceptive (Depot Provera) on liver function tests of women with compensated bilharzial liver fibrosis. Contraception, 2001, 64:173-6.
- 212. Back DJ et al. The effect of rifampicin on norethisterone pharmacokinetics. *European Journal of Clinical Pharmacology*, 1979, 15:193-7.
- 213. Back DJ et al. The effect of rifampicin on the pharmacokinetics of ethynylestradiol in women. *Contraception*, 1980, 21:135-43.
- 214. Barditch-Crovo P et al. The effects of rifampin and rifabutin on the pharmacokinetics and pharmacodynamics of a combination oral contraceptive. *Clinical Pharmacology & Therapeutics*, 1999, 65:428-38.
- Bessot JC et al. [Rifampicin interference with oral contraceptives]. Journal de Médicine de Strasbourg, 1977, 8:131-3.
- 216. Bolt HM, Bolt M, Kappus H. Interaction of rifampicin treatment with pharmacokinetics and metabolism of ethinyloestradiol in man. *Acta Endocrinologica*, 1977, 85:189-97.
- 217. Gelbke HP, Gethmann U, Knuppen R. Influence of rifampicin treatment on the metabolic fate of [4-14C] mestranol in women. *Hormone and Metabolic Research*, 1977, 9:415-9.
- 218. Gupta KC, Ali MY. Failure of oral contraceptive with rifampicin. Medical Journal of Zambia, 1980, 15:23.
- 219. Hirsch A. [Letter: Sleeping pills]. [French]. Nouvelle Presse Médicale, 1973, 2:2957.
- 220. Hirsch A, Tillement JP, Chretien J. Effets contrariants de la rifampicine sur les contraceptifs oraux: à propos de trois grossesses non desirées chez trois malades. Revue Française des Maladies Respiratoires, 1975, 2:174-82.
- 221. Joshi JV et al. A study of interaction of a low-dose combination oral contraceptive with anti-tubercular drugs. *Contraception*, 1980, 21:617-29.
- 222. Kropp R. [Rifampicin and oral contraceptives (author's transl)]. [German]. *Praxis der Pneumologie vereinigt mit der Tuberkulosearzt*, 1974, 28:270-2.
- 223. LeBel M et al. Effects of rifabutin and rifampicin on the pharmacokinetics of ethinylestradiol and norethindrone. *Journal of Clinical Pharmacology,* 1998, 38:1042-50.
- 224. Meyer B et al. A model to detect interactions between roxithromycin and oral contraceptives. *Clinical Pharmacology & Therapeutics*, 1990, 47:671-4.
- Nocke-Finck L, Breuer H, Reimers D. [Effects of rifampicin on the menstrual cycle and on oestrogen excretion in patients taking oral contraceptives]. [German]. Deutsche Medizinische Wochenschrift, 1973, 98:1521-3.
- 226. Piguet B, Muglioni JF, Chaline G. [Letter: Oral contraception and rifampicin]. [French]. *Nouvelle Presse Médicale*, 1975, 4:115-6.
- 227. Reimers D, Jezek A. [The simultaneous use of rifampicin and other antitubercular agents with oral contraceptives]. [German]. *Praxis der Pneumologie vereinigt mit der Tuberkulosearzt*, 1971, 25:255-62.
- 228. Skolnick JL et al. Rifampin, oral contraceptives, and pregnancy. JAMA, 1976, 236:1382.
- 229. Szoka PR, Edgren RA. Drug interactions with oral contraceptives: compilation and analysis of an adverse experience report database. *Fertility & Sterility*, 1988, 49:31S-8S.

- 230. Back DJ et al. The interaction of phenobarbital and other anticonvulsants with oral contraceptive steroid therapy. *Contraception*, 1980, 22:495-503.
- 231. Bartoli A et al. A double-blind, placebo-controlled study on the effect of vigabatrin on in vivo parameters of hepatic microsomal enzyme induction and on the kinetics of steroid oral contraceptives in healthy female volunteers. *Epilepsia*, 1997, 38:702-7.
- 232. Crawford P et al. The lack of effect of sodium valproate on the pharmacokinetics of oral contraceptive steroids. *Contraception*, 1986, 33:23-9.
- 233. Eldon MA et al. Gabapentin does not interact with a contraceptive regimen of norethindrone acetate and ethinyl estradiol. *Neurology*, 1998, 50:1146-8.
- 234. Fattore C et al. Induction of ethinylestradiol and levonorgestrel metabolism by oxcarbazepine in healthy women. *Epilepsia*, 1999, 40:783-7.
- 235. Ragueneau-Majlessi I, Levy RH, Janik F. Levetiracetam does not alter the pharmacokinetics of an oral contraceptive in healthy women. *Epilepsia*, 2002, 43:697-702.
- 236. Rosenfeld WE et al. Effect of topiramate on the pharmacokinetics of an oral contraceptive containing norethindrone and ethinyl estradiol in patients with epilepsy. *Epilepsia*, 1997, 38:317-23.
- 237. Sabers A et al. Lamotrigine plasma levels reduced by oral contraceptives. *Epilepsy Research*, 2001, 47:151-4.
- 238. Back DJ et al. The effects of ampicillin oral contraceptive steroids in women. *British Journal of Clinical Pharmacology*, 1982, 14:43-8.
- 239. Back DJ et al. Pharmacokinetics of oral contraceptive steroids following the administration of the antimalarial drugs primaquine and chloroquine. *Contraception*, 1984, 30:289-95.
- 240. Back DJ et al. Evaluation of Committee on Safety of Medicines yellow card reports on oral contraceptive-drug interactions with anticonvulsants and antibiotics. *British Journal of Clinical Pharmacology,* 1988, 25:527-32.
- 241. Back DJ et al. The lack of interaction between temafloxacin and combined oral contraceptive steroids. *Contraception*, 1991, 43:317-23.
- 242. Bacon JF, Shenfield GM. Pregnancy attributable to interaction between tetracycline and oral contraceptives. *BMJ*, 1980, 280:293.
- 243. Bainton R. Interaction between antibiotic therapy and contraceptive medication. *Oral Surgery, Oral Medicine, Oral Pathology,* 1986, 61:453-5.
- 244. Biron CR. Questions surface over whether antibiotics neutralized 'the pill,' resulting in pregnancy. *RDH*, 1996, 16:34-6.
- 245. Bollen M. Use of antibiotics when taking the oral contraceptive pill. *Australian Family Physician*, 1995, 24:928-9.
- 246. Bromham DR, Cartmill RS. Knowledge and use of secondary contraception among patients requesting termination of pregnancy. *BMJ*, 1993, 306:556-7.
- 247. Cote J. Interaction of griseofulvin and oral contraceptives. *Journal of the American Academy of Dermatology,* 1990, 22:124-5.
- 248. Csemiczky G, Alvendal C, Landgren BM. Risk for ovulation in women taking a low-dose oral contraceptive (Microgynon) when receiving antibacterial treatment with a fluoroquinolone (ofloxacin). *Advances in Contraception*, 1996, 12:101-9.
- 249. de Groot AC, Eshuis H, Stricker BH. [Inefficacy of oral contraception during use of minocycline]. *Nederlands Tijdschrift voor Geneeskunde*, 1990, 134:1227-9.
- 250. DeSano EA, Hurley SC. Possible interactions of antihistamines and antibiotics with oral contraceptive effectiveness. *Fertility & Sterility*, 1982, 37:853-4.
- 251. Devenport MH et al. Metabolic effects of low-dose fluconazole in healthy female users and non-users of oral contraceptives. *British Journal of Clinical Pharmacology,* 1989, 27:851-9.
- 252. Donley TG, Smith RF, Roy B. Reduced oral contraceptive effectiveness with concurrent antibiotic use: a protocol for prescribing antibiotics to women of childbearing age. *Compendium*, 1990, 11:392-6.
- 253. Dosseter J. Drug interaction with oral contraceptives. BMJ, 1984, 4:467-8.
- 254. Driver J. Use of antibiotics during pregnancy. British Dental Journal, 1982, 153:48.
- el-Raghy I et al. Contraceptive steroid concentrations in women with early active schistosomiasis: lack of effect of antischistosomal drugs. *Contraception*, 1986, 33:373-7.
- 256. Friedman CI et al. The effect of ampicillin on oral contraceptive effectiveness. *Obstetrics & Gynecology*, 1980, 55:33-7.
- 257. Grimmer SF et al. The effect of cotrimoxazole on oral contraceptive steroids in women. *Contraception*, 1983, 28:53-9.
- 258. Helms SE et al. Oral contraceptive failure rates and oral antibiotics. *Journal of the American Academy of Dermatology*, 1997, 36:705-10.
- 259. Hempel E et al. [Enzyme induction by drugs and hormonal contraception]. [German]. Zentralblatt für Gynäkologie, 1973, 95:1451-7.
- 260. Hempel E, Zorn C, Graf K. [Effect of chemotherapy agents and antibiotics on hormonal contraception]. [German]. Zeitschrift für Arztliche Fortbildung (Jena), 1978, 72:924-6.
- 261. Hetenyi G. Possible interactions between antibiotics and oral contraceptives. *Therapia Hungarica*, 1989, 37:86-9.

- 262. Hilbert J et al. Evaluation of interaction between fluconazole and an oral contraceptive in healthy women. Obstetrics & Gynecology, 2001, 98:218-23.
- 263. Hughes BR, Cunliffe WJ. Interactions between the oral contraceptive pill and antibiotics. *British Journal of Dermatology*, 1990, 122:717-8.
- 264. Joshi JV et al. A study of interaction of low-dose combination oral contraceptive with ampicillin and metronidazole. *Contraception*, 1980, 22:643-52.
- 265. Kakouris H, Kovacs GT. How common are predisposing factors to pill failure among pill users? *British Journal of Family Planning*, 1994, 20:33-5.
- 266. Kakouris H, Kovacs GT. Pill failure and nonuse of secondary precautions. *British Journal of Family Planning*, 1992, 18:41-4.
- 267. Kovacs GT et al. Inadvertent pregnancies in oral contraceptive users. *Medical Journal of Australia*, 1989, 150:549-51.
- 268. Kovacs I, Somos P, Hamori M. Examination of the potential interaction between ketoconazole (Nizoral) and oral contraceptives with special regard to products of low hormone content (Rigevidon, Anteovin). *Therapia Hungarica*, 1986, 34:167-70.
- Lequeux A. [Pregnancy under oral contraceptives after treatment with tetracycline]. Louvain Médical, 1980, 99:413-4.
- 270. London BM, Lookingbill DP. Frequency of pregnancy in acne patients taking oral antibiotics and oral contraceptives. *Archives of Dermatology*, 1994, 130:392-3.
- 271. Lunell NO et al. Evaluation of the possible interaction of the antifungal triazole SCH 39304 with oral contraceptives in normal healthy women. *Gynecologic & Obstetric Investigation*, 1991, 32:91-7.
- 272. Maggiolo F et al. The effects of ciprofloxacin on oral contraceptive steroid treatments. *Drugs under Experimental and Clinical Research*, 1991, 17:451-4.
- 273. McDaniel PA, Caldroney RD. Oral contraceptives and griseofulvin interactions. *Drug Intelligence & Clinical Pharmacy*, 1986, 20:384.
- 274. Meyboom RH et al. Disturbance of withdrawal bleeding during concomitant use of itraconazole and oral contraceptives. *New Zealand Medical Journal*, 1997, 110:300.
- 275. Murphy AA et al. The effect of tetracycline on levels of oral contraceptives. *American Journal of Obstetrics and Gynecology,* 1991, 164:28-33.
- 276. Neely JL et al. The effect of doxycycline on serum levels of ethinyl estradiol, norethindrone, and endogenous progesterone. *Obstetrics & Gynecology*, 1991, 77:416-20.
- 277. Organon. Nuvaring prescribing information. 2001.
- Pillans PI, Sparrow MJ. Pregnancy associated with a combined oral contraceptive and itraconazole. New Zealand Medical Journal, 1993, 106:436.
- 279. Rieth H, Sauerbrey N. [Interaction studies with fluconazole, a new triazole antifungal drug]. [German]. Wiener Medizinische Wochenschrift, 1989, 139:370-4.
- 280. Scholten PC et al. No interaction between ciprofloxacin and an oral contraceptive. *Antimicrobial Agents & Chemotherapy,* 1998, 42:3266-8.
- 281. Silber TJ. Apparent oral contraceptive failure associated with antibiotic administration. *Journal of Adolescent Health Care*, 1983, 4:287-9.
- 282. Sinofsky FE, Pasquale SA. The effect of fluconazole on circulating ethinyl estradiol levels in women taking oral contraceptives. *American Journal of Obstetrics & Gynecology,* 1998, 178:300-4.
- 283. Sparrow MJ. Pill method failures. New Zealand Medical Journal, 1987, 100:102-5.
- 284. Sparrow MJ. Pregnancies in reliable pill takers. New Zealand Medical Journal, 1989, 102:575-7.
- 285. Sparrow MJ. Pill method failures in women seeking abortion: fourteen years experience. *New Zealand Medical Journal*, 1998, 111:386-8.
- 286. van Dijke CP, Weber JC. Interaction between oral contraceptives and griseofulvin. *British Medical Journal Clinical Research Edition*, 1984, 288:1125-6.
- 287. van Puijenbroek EP, Feenstra J, Meyboom RH. [Pill cycle disturbance in simultaneous use of itraconazole and oral contraceptives]. [Dutch]. *Nederlands Tijdschrift voor Geneeskunde*, 1998, 142:146-9.
- 288. van Puijenbroek EP et al. Signalling possible drug-drug interactions in a spontaneous reporting system: delay of withdrawal bleeding during concomitant use of oral contraceptives and itraconazole. *British Journal of Clinical Pharmacology*, 1999, 47:689-93.
- 289. Wermeling DP et al. Dirithromycin increases ethinyl estradiol clearance without allowing ovulation. Obstetrics & Gynecology, 1995, 86:78-84.
- 290. Young LK et al. The contraceptive practices of women seeking termination of pregnancy in an Auckland clinic. *New Zealand Medical Journal*, 1994, 107:189-92.

Table of contents

Progestogen-only contraceptives

PERSONAL CHARACTERISTICS AND REPRODUCTIVE HISTORY	51
	51
	51
	51
Breastfeeding	52
Postpartum	52
Post-abortion	52
Past ectopic pregnancy	53
History of pelvic surgery	53
Smoking !	53
Obesity !	53
CARDIOVASCULAR DISEASE	54
Multiple risk factors for arterial cardiovascular disease	54
Hypertension	54
History of high blood pressure during pregnancy	54
Venous thromboembolism (VTE)	55
	55
Superficial venous thrombosis	55
Current and history of ischaemic heart disease	56
Stroke	56
Known hyperlipidaemias	56
	57
	58
Headaches	58
Epilepsy !	58
DEPRESSIVE DISORDERS	58
Depressive disorders	58
REPRODUCTIVE TRACT INFECTIONS AND DISORDERS	59
Vaginal bleeding patterns	59
Unexplained vaginal bleeding	59
Endometriosis	59
Benign ovarian tumours	59
Severe dysmenorrhoea	59
Gestational trophoblastic neoplasia	59
Cervical ectropion	59
Cervical intraepithelial neoplasia (CIN)	59
	59
Breast disease	60
Endometrial cancer	60
Ovarian cancer	60
Uterine fibroids	60
Pelvic inflammatory disease (PID)	60
STIs	61
HIV/AIDS	61
High risk of HIV	61
HIV-infected (61
	61
OTHER INFECTIONS	61
Schistosomiasis	61
Tuberculosis	61
Malaria	61
ENDOCRINE CONDITIONS	62
Diabetes	62
Thyroid disorders	62

GASTROINTESTINAL CONDITIONS	62
Gall-bladder disease	62
History of cholestasis	62
Viral hepatitis	62
·	63
	63
Inflammatory bowel disease (Crohn's and Ulcerative Colitis)	63
	63
Thalassaemia	63
Sickle cell disease	63
Iron-deficiency anaemia	63
	63
\cdot	64
Drugs which affect liver enzymes	64
Non-liver enzyme inducing antibiotics	64
Highly Active Antiretroviral Therapy	65
Additional Comments	66
References for progestogen-only contraceptives	67

Please note: References used for the development of this UK version are numbered in **red**. The original WHO references are numbered in **black**.

PROGESTOGEN-ONLY These methods do not protect against STI/HIV. If there is risk of STI/HIV CONTRACEPTIVES (including during pregnancy or postpartum), the correct and consistent (POCs) Includes use of condoms is recommended, either alone or with another progestogen-only pills contraceptive method. Male condoms reduce the risk of STI/HIV. (POP); progestogen-only injectables(depot medroxyprogesterone acetate [DMPA] and norethisterone enanthate [NET-EN]); and progestogen-only implants (IMP) CONDITION CATEGORY **CLARIFICATIONS/EVIDENCE** I=Initiation, C=Continuation POP IMP DMPA/ NET-EN

PERSONAL CHARAC	PERSONAL CHARACTERISTICS AND REPRODUCTIVE HISTORY					
PREGNANCY	NA	NA	NA	Clarification: Use of POCs is not required. There is no known harm to the woman, the course of her pregnancy, or the fetus if POCs are accidentally used during pregnancy. However, the relationship between DMPA use during pregnancy and its effects on the fetus remains unclear.		
AGE* a) Menarche to < 18 years	1	2	1	Evidence: Limited evidence shows decreased bone mineral density over time among adolescent DMPA users, but not among levonorgestrel implant users. ¹⁻¹⁰ ¹⁻⁵ The FFPRHC support the use of DMPA by adolescents if after counselling about potential effects on bone density other methods are not acceptable. ¹¹		
b) 18 to 45 years	1	1	1	Evidence: In general, current DMPA users had decreased bone mineral density compared with non-users; this decrease was usually within one standard deviation of normal values. ⁶ Results for current Norplant users were mixed. ⁶ One study of Implanon users showed no change in bone mineral density over two years. ⁷		
c) > 45 years	1	2	1	Evidence: Older DMPA users had decreased bone mineral density compared with non-users. However, limited evidence found that women gained bone mass following discontinuation of DMPA prior to menopause. Further, among postmenopausal women, there was no difference in bone mineral density between former DMPA users and never users. 1,45,12-14 8-13		
PARITY						
a) Nulliparous b) Parous	1 1	1 1	1 1			

^{*}See also additional comments at end of table

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

(IMP)				
CONDITION	CATEGORY I=Initiation, C=Continuation		=	CLARIFICATIONS/EVIDENCE
	POP	DMPA/ NET-EN	IMP	

BREASTFEEDING*				Evidence: There is no evidence that POCs
a) < 6 weeks postpartum	1	2	1	have a detrimental effect on breast milk or infant
				growth. FFPRHC suggest use before 6 weeks,
				but ideally delay until Day 21.15
b) ≥ 6 weeks to < 6	1	1	1	Women who are fully or almost fully
months postpartum				breastfeeding, amenorrhoeic and < 6 months
(fully or almost fully				postpartum can rely on lactational amenorrhoea
breastfeeding)				method (LAM) for contraception unless breast
				feeding reduces or menstruation returns.
				Definition: Fully and almost fully breastfeeding
				includes exclusive with no other liquids or solids
				given; almost exclusive: vitamins, water or juice given infrequently in addition to breastfeeds;
				partial (high) where the vast majority of feeds
				are breastfeeds.
				are predenous.
c) ≥ 6 weeks to < 6	1	1	1	Definition: Partial or token breastfeeding:
months postpartum				Medium – about half feeds are breastfeeds;
(partial breastfeeding				Low- vast majority of feeds are not breastfeeds;
medium to low)				Minimal- occasional irregular breastfeeds. 15
d) ≥ 6 months postpartum	1	1	1	
POSTPARTUM*				Clarification: This includes any births, including
(in non-breastfeeding				stillbirths from 24 weeks gestation
women)				Stillbil tils Hoffi 24 weeks gestation
a) < 21 days	1	1	1	
b) ≥ 28 days	1	1	1	
POST-ABORTION				
a) First trimester	1	1	1	Clarification: Includes spontaneous or induced
b) Second trimester	1	1	1	abortion < 24 weeks gestation. POCs can be
c) Immediate post-septic	1	1	1	commenced immediately following surgical
abortion				abortion or following the second part of medical
				abortion. ¹⁶
				Evidence: Limited evidence suggests that there
				are no adverse side effects when Norplant or
				NET-EN are initiated after a first trimester
				abortion. ³⁹⁻⁴²

^{*}See also additional comments at end of table

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

(IMP)				
CONDITION	CATEGORY I=Initiation, C=Continuation			CLARIFICATIONS/EVIDENCE
	POP	DMPA/ NET-EN	IMP	

PAST ECTOPIC PREGNANCY*	1	1	1	Clarification: The risk of ectopic pregnancy is lower with POC than for women not using contraception. Methods which inhibit ovulation will prevent extrauterine and intrauterine pregnancies.
HISTORY OF PELVIC SURGERY	1	1	1	
SMOKING				
a) Age < 35 years b) Age ≥ 35 years	1	1	1	Evidence: Myocardial infarction (MI) is rare in women of reproductive age. Smoking is an
(i) < 15 cigarettes per day	1	1	1	important risk factor for cardiovascular disease. Overall mortality is strongly related to smoking.
(ii) ≥ 15 cigarettes per day	1	1	1	
(iii) stopped smoking < 1 year ago	1	1	1	Excess mortality in heavy smokers is apparent from age 35 years. ¹⁷ Risk of MI increases as the number of cigarettes smoked per day increases.
(iv) stopped smoking ≥ 1 year ago	1	1	1	Progestogen-only methods do not appear to increase the risk of cardiovascular disease.
				For those who stop smoking there is a rapid decrease in risk of cardiovascular disease, by as much as 50% after 1 year. However, it may take up to 10 years to reach the risk levels of those who have never smoked. A population-based case control study confirmed a three-fold reduction in the risk of MI one year after smoking cessation and the excess risk was gone 4 – 6 years after stopping. ¹⁸
OBESITY a) ≥ 30 – 34 kg/m² body mass index (BMI)	1	1	1	Evidence: Studies provide conflicting evidence regarding whether obese women are at
 b) 35 – 39 kg/m² body mass index (BMI) c) ≥ 40 kg/m² body mass 	1	1	1	increased risk of weight gain and bleeding problems with DMPA use relative to non-obese women with DMPA use. 43-45
index (BMI)	1	1	1	WOTTON WILL DIVIL A USE.

^{*}See also additional comments at end of table

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These methods do not protect against STI/HIV. If there is risk of STI/HIV (including during pregnancy or postpartum), the correct and consistent use of condoms is recommended, either alone or with another contraceptive method. Male condoms reduce the risk of STI/HIV.

(IIVII)				
CONDITION	CATEGORY			CLARIFICATIONS/EVIDENCE
	I=Initiation, C=Continuation			
	POP DMPA/ IMP		IMP	
		NET-EN		

ARTERIAL CARDIOVASCULAR DISEASE (such as older age, smoking, diabetes and substantially. The effects of DMPA and NET-EN may persist for some time after discontinuation. Evidence suggests that there are alterations in lipids with all progestogen only contraceptives with injectables and oral methods having more of	CARDIOVASCULAR I	DISEASE			
an onest than matatement methods.	FACTORS FOR ARTERIAL CARDIOVASCULAR DISEASE (such as older age,	2	3	2	exist, risk of cardiovascular disease may increase substantially. The effects of DMPA and NET-EN may persist for some time after discontinuation. Evidence suggests that there are alterations in

HYPERTENSION

For all categories of hypertension, classifications are based on the assumption **that no other risk factors for cardiovascular disease exist**. When multiple risk factors do exist, risk of cardiovascular disease may increase substantially. A single reading of blood pressure level is not sufficient to classify a woman as hypertensive. If elevated, the BP should be re-assessed at the end of the consultation. If blood pressure is increased it should be re-assessed on at least two subsequent clinic visits at monthly intervals. ^{19,20}

a) Adequately controlled hypertension b) Consistently elevated blood pressure levels (properly taken measurements)	1	2	1	Clarification: Women adequately treated for hypertension are at reduced risk of acute myocardial infarction and stroke as compared with untreated women. Although there are no data, POC users with adequately controlled and monitored hypertension should be at reduced
(i) systolic > 140- 159 mmHg or diastolic > 90-94 mmHg	1	1	1	risk of acute myocardial infarction and stroke compared with untreated hypertensive POC users. Anti-hypertensive therapy may be
(ii) systolic > 160 or diastolic > 95 mmHg	1	2	1	initiated when the BP is consistently of 160/100 mmHg or greater. ²⁰ Evidence: Limited evidence suggests that among women with hypertension, those who used POPs or progestogen-only injectables had a small increased risk of cardiovascular events compared with women who did not use these methods. ⁴⁹
c) Vascular disease*	2	3	2	Clarification: Vascular disease includes: coronary heart disease presenting with angina; peripheral vascular disease presenting with intermittent claudication; hypertensive retinopathy; and transient ischaemic attacks.
HISTORY OF HIGH BLOOD PRESSURE DURING PREGNANCY (where current blood pressure is normal)	1	1	1	

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	POP	DMPA/ NET-EN	IMP	

VENOUS THROMBO- EMBOLISM (VTE)*				Clarification: VTE includes deep vein thrombosis (DVT) and pulmonary embolism (PE)
a) History of VTE	2	2	2	
b) Current VTE (on anticoagulants)	2	3	3	Current VTE refers to disease for which anti- coagulants are still being used. Initiating injectables or implants in women using anti- coagulants may increase the risk of haematoma, but they may be used with clinical judgement and may need appropriate specialist referal. Women using POC when VTE is diagnosed may
c) Family history of VTE (i) first degree relative	1	1	1	continue use with advice, counselling and clinical judgement.
age < 45 years (ii) first degree relative age ≥ 45 years	1	1	1	Evidence is limited on the risk of VTE with POCs, however existing evidence is reassuring. ²¹
d) Major surgery (i) with prolonged immobilisation	2	2	2	<i>Major Surgery</i> includes operations of > 30 minutes duration. Procedures with high risk of VTE include: general or orthopaedic surgery,
(ii) without prolonged immobilisation	1	1	1	trauma, neurosurgery. ²²
e) Minor surgery without immobilisation	1	1	1	Minor surgery includes operations lasting < 30 minutes (eg laparoscopic sterilisation), procedures such as knee arthroscopy. Varicose vein surgery has a low risk for VTE.
f) Immobility (unrelated to surgery) e.g. wheelchair use, debilitating illness	1	1	1	Immobility due to hospitalisation for acute trauma, acute illness, paralysis is associated with a high risk of VTE.
KNOWN THROMBOGENIC MUTATIONS (e.g., Factor V Leiden; Prothrombin mutation; Protein S, Protein C, and Antithrombin deficiencies)	2	2	2	Clarification: Routine screening is not appropriate because of the rarity of the conditions and the high cost of screening.
SUPERFICIAL VENOUS THROMBOSIS				
a) Varicose veins b) Superficial thrombophlebitis	1 1	1	1 1	

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	POP	DMPA/ NET-EN	IMP	

CURRENT AND HISTORY	ı	С			С	
OF ISCHAEMIC HEART DISEASE*	2	3	3	2	3	
STROKE*	ı	С		ı	С	
(history of cerebrovascular accident)	2	3	3	2	3	
KNOWN HYPERLIPIDAEMIAS	2	2	2	2	2	Clarification: Routine screening is not appropriate because of the rarity of the conditions and the high cost of screening. While some types of hyperlipidaemias are risk factors for vascular disease, the category should be assessed according to the type, its severity, and the presence of other cardiovascular risk factors. Lipid levels alone are poor predictors of risk coronary heat disease (CHD). In the UK screening and treatment is aimed towards those at greatest risk of CHD, and this may also influence hormonal contraceptive use. Risk categories will vary depending on risk of premature coronary heart disease and the presence of other risk factors. Common hypercholesterolaemia and Familial combined hyperlipidaemia are associated with an increased risk of CHD but usually this occurs over the age of 60 years. Familial hypercholesterolaemia (autosomal dominant) has a prevalence of about 1 in 500. People with this condition have a four-fold increase in the risk of premature CHD.

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VALVULAR AND CONGENITAL HEART DISEASE				
a) Uncomplicated b) Complicated (eq.	1 1	1	1 1	Clarification: Valvular heart disease occurs when any heart valves are stenotic and/or
Pulmonary hypertension, atrial fibrillation, history of subacute bacterial endocarditis)	1	ı	ı	incompetent (eg. Aortic stenosis, mitral regurgitation; tricuspid valve abnormalities; pulmonary stenosis). Acric stenosis; Atrial septal defects; Atrioventricular septal defect; Cardiomyopathy; (hypertrophic or dilated); Co-arctation of the Aorta; Complex Transposition of the Great Arteries; Ebstein's Anomaly; Eisenmenger Syndrome: Persistent Ductus Arteriosus; Pulmonary Atresia; Pulmonary Stenosis; Tetralogy of Fallot; Total Anomalous Pulmonary Venous Connection; Tricuspid Atresia; Truncus Arteriosus; Ventricular Septal Defect. Surgical correction and ongoing cardiac problems should be considered.

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NET-EN

NEUROLOGIC COND	ITIO	NS					
HEADACHES*	ı	С	ı	С	ı	С	
a) Non-migrainous (mild or severe)	1	1	1	1	1	1	Clarification: Classification depends on accurate diagnosis of those severe headaches that are migrainous and those that are not.
b)Migraine (i) without aura Age < 35	1	2	2	2	2	2	Non-migrainous headaches include tension- type, cluster or rebound headaches. ²⁵
(ii) without aura Age ≥ 35 (iii) with aura, at any age	1 2	3	2 2	2 3	2 2	3	Aura (focal symptoms) indicates ischaemia: homonymous hemianopia, unilateral paraesthesia and /or numbness, unilateral weakness; and aphasia or unclassifiable speech disorder. Visual symptoms progress from fortification spectra (a star shaped figure near the point of fixation with scintillating edges) to scotoma (a bright shape which gradually increases in size). Flashing lights are not focal symptoms. ²⁷ Aura occurs before the onset of headache.
c) Past history of migraine with aura at any age		2		2		2	Any new headaches or marked changes in headaches should be evaluated. Classification is for women without any other risk factors for stroke. Risk of stroke increases with age, hypertension, and smoking.
EPILEPSY		1	-	1		1	Clarification: If a woman is taking liver enzyme inducing anticonvulsants, refer to the section on drug interactions. Certain anticonvulsants lower efficacy of POP and implant.
DEPRESSIVE DISOR	DER	S					
DEPRESSIVE DISORDERS		1	_	1		1	Clarification: The classification is based on data for women with selected depressive disorders. No data on bipolar disorder or postpartum depression were available. There is a potential for drug interactions between certain antidepressant medications and hormonal contraceptives. Evidence: POCs did not increase depressive symptoms in women with depression compared to baseline. 50-53

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REPRODUCTIVE TRA	ACT INFE	CTIONS A	AND DIS	ORDERS
VAGINAL BLEEDING PATTERNS*				
a)Irregular pattern without heavy bleeding	2	2	2	
b)Heavy or prolonged bleeding (includes regular and irregular patterns)	2	2	2	Clarification: Unusually heavy bleeding should raise the suspicion of a serious underlying condition. 28;29
UNEXPLAINED VAGINAL BLEEDING* (suspicious for serious underlying condition)				Clarification: If pregnancy or an underlying pathological condition (such as pelvic malignancy) is suspected, it must be evaluated and the category adjusted after evaluation.
Before evaluation	2	3	3	
ENDOMETRIOSIS BENIGN OVARIAN	1	1	1	
TUMOURS	'	'	'	
(including cysts)				
SEVERE DYSMENORRHOEA	1	1	1	
GESTATIONAL TROPHOBLASTIC NEOPLASIA (GTN) (includes hydatidiform mole, invasive mole, placental site trophoblastic tumour)				Clarification: In the UK management depends on serum hCG concentrations and need for chemotherapy identified by measuring hCG concentrations. POC can be used if hCG is abnormal, but discussion with family planning specialist and national centres, and clinical judgement is necessary.
a)hCG normal b)hCG abnormal	1 3	1 3	1 3	
CERVICAL ECTROPION	1	1	1	
CERVICAL INTRAEPITHELIAL NEOPLASIA (CIN)	1	2	1	Evidence: Among women with persistent HPV infection, long-term DMPA use (≥ 5 years) may increase the risk of carcinoma in situ and invasive carcinoma. ⁵⁴
CERVICAL CANCER (awaiting treatment)*	1	2	2	

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· · · · · · ·				
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	I=Initiati	on, C=Con	tinuation	
	POP	DMPA/	IMP	
		NET-EN		

BREAST DISEASE*				
a) Undiagnosed mass	2	2	2	Clarification: Evaluation should be pursued as
b) Benign breast disease	1	1	1	early as possible.
c) Family history of breast	1	1	1	
cancer				
d) Carriers of known	2	2	2	
gene mutations				
associated with				
breast cancer (eg. BRCA1)				
e)Breast cancer				
(i) current	4	4	4	
(ii) past and no evidence	3	3	3	
of current disease	_			
for 5 years				
ENDOMETRIAL				
CANCER*	1	1	1	
OVARIAN CANCER*	1	1	1	
UTERINE FIBROIDS*				
a) Without distortion of the	1	1	1	
uterine cavity				
b) With distortion of the	1	1	1	
uterine cavity				
PELVIC INFLAMMATORY				
,			_	
	1]]] 1	
	1	1	1	
	ı	'	'	
b) PID - current	1	1	1	
a) Past PID (assuming no current risk factors for STIs) (i) with subsequent pregnancy (ii) without subsequent pregnancy b) PID - current	1 1 1	1 1 1	1 1 1	

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CONDITION		CATEGORY on, C=Cont	=	CLARIFICATIONS/EVIDENCE
	POP	DMPA/ NET-EN	IMP	

a) Current purulent cervicitis or chlamydial	1	1	1	Evidence: Limited evidence suggests that there may be an increased risk of chlamydial cervicitis
infection or gonorrhoea b) Other STIs (excluding HIV and hepatitis)	1	1	1	among DMPA users at high risk of STIs. For other STIs, there is either evidence of no association between DMPA use and STI
c) Vaginitis (including trichomonas vaginalis and bacterial vaginosis)	1	1	1	acquisition or too limited evidence to draw any conclusions. There is no evidence for other POCs. 55-61
d) Increased risk of STIs	1	1	1	FOCS.
HIV/AIDS		<u>'</u>	'	
HIGH RISK OF HIV*	1	1	1	Evidence: Overall, evidence is inconsistent regarding whether there is any increased risk of HIV acquisition among POC users compared with non-users. ⁶²⁻⁷⁸
HIV-INFECTED				Evidence: Studies are conflicting regarding
a) Not using anti- retroviral therapy	1	1	1	whether there is an increased risk of HIV and herpes simplex virus (HSV) shedding among HIV-infected women using DMPA. ⁷⁹⁻⁸¹
b) Using interacting anti-retroviral therapy	2	1	2	The modica women doing Dim 7.
AIDS and using HAART	2	2	2	Clarification: If a woman is using highly active antiretroviral therapy (HAART) there may be drug interactions (refer to section on drug interactions).
OTHER INFECTIONS				
SCHISTOSOMIASIS				
a) Uncomplicated	1 1	1	1	Evidence: Among women with uncomplicated schistosomiasis, limited evidence showed that
b) Fibrosis of liver (if severe, see cirrhosis)	·	'		DMPA use had no adverse effects on liver function.82
TUBERCULOSIS				
a) Non-pelvic	1	1	1	Clarification: If a woman is taking rifampicin,
b) Known pelvic	1	1	1	refer to the section on drug interactions. Rifampicin is likely to decrease POC effectiveness.
MALARIA	1	1	1	Clarification: Doxycycline is increasingly used in the treatment and prevention of malaria ³² There is no interaction with POC.

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	l=Initiat	ion, C=Con	tinuation	
	POP	DMPA/	IMP	
		NET-EN		

ENDOCRINE CONDIT	ΓIONS		
DIABETES*			
a) History of gestational disease	1	1	1
b) Non-vascular disease			
(i) non-insulin dependent	2	2	2
(ii) insulin dependent	2	2	2
c) Nephropathy/	2	3	2
retinopathy/			
neuropathy			
d) Other vascular	2	3	2
disease or diabetes of			
>20 years' duration			
THYROID DISORDERS			
a) Simple goitre	1	1	1
b) Hyperthyroid	1	1	1
c) Hypothyroid	1	1	1
GASTROINTESTINAL		TIONS	
GALL-BLADDER DISEASE			
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
HISTORY OF			
CHOLESTASIS*			
a) Pregnancy-relatedb) Past COC-related	1 2	1 2	1 2
VIRAL HEPATITIS*			
a) Active	3	3	3
b) Carrier	1	1	1

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		NET-EN		

CIRRHOSIS*				Clarification:
a) Mild	2	2	2	Mild (compensated) cirrhosis without
(compensated)				complications.
b) Severe	3	3	3	Severe (decompensated) cirrhosis: development
(decompensated)				of major complications (ascites, jaundice,
				encephalopathy, or gastrointestinal
				haemorrhage). 33
LIVER TUMOURS*				
a) Benign (adenoma)	3	3	3	
b) Malignant (hepatoma)	3	3	3	
INFLAMMATORY	2	1	1	Clarification: Oral methods may be less reliable
BOWEL DISEASE*	_	'	'	if there is significant malabsorption or small
(Includes Crohn's				bowel resection (particularly with Crohn's
disease, ulcerative				disease). Oral methods are unaffected by
colitis)				colectomy and ileostomy.
<u> </u>				selectomy and headterny.
ANAEMIAS		li e		
THALASSAEMIA	1	1	1	
SICKLE CELL DISEASE	1	1	1	Evidence: Among women with sickle cell
				disease, POC use did not have adverse effects
				on haematological parameters and, in some
				studies, was beneficial with respect to clinical
				symptoms.83-90
IRON-DEFICIENCY	1	1	1	
ANAEMIA*				
RAYNAUD'S DISEASE				
a) Primary	1	1	1	Clarification: Secondary Raynaud's usually has
b) Secondary	-			an underlying disease such as scleroderma,
(i) without lupus	1	1	1	rheumatoid arthiritis, systemic lupus
anticoagulant				erythematosis. Progesterone has little effect but
(ii) with lupus	2	2	2	no studies have suggested an association with
(II) WILIT IUPUS		_	_	progestogens and Raynaud's. 34-38

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DRUG INTERACTIONS*				
DRUGS WHICH AFFECT LIVER ENZYMES For example Rifampicin, Rifabutin, St John's Wort, Griseofulvin, Certain anticonvulsants (phenytoin, carmazepine, barbiturates, primidone, topiramate, oxcarbazepine)	3	1	3	Clarification: Although the interaction of rifampicin or certain anticonvulsants with POPs and LNG/ENG implants is not harmful to women, it is likely to reduce the effectiveness of POPs and LNG/ETG implants. Use of other contraceptives should be encouraged for women who are long-term users of any of these drugs. Whether increasing the hormone dose of POPs alleviates this concern remains unclear. Injectable progestogen-only contraception is unaffected by liver enzyme inducing drugs, and no reduction in injection interval is required. Evidence: Use of certain anticonvulsants decreased the contraceptive effectiveness of some POCs. 91-93 St John's Wort and griseofulvin are liver enzyme inducers, but are less potent than rifampicin. 32
NON-LIVER ENZYME INDUCING ANTIBIOTICS	1	1	1	

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HIGHLY ACTIVE 2 2 Clarification: It is important	to note that
HIGHLY ACTIVE ANTIRETROVIRAL THERAPY (HART) 2 2 2 2 3 3 4 6 Clarification: It is important antiretroviral drugs (ARV) have either decrease or increase it steroid hormones in hormones. The limited data available (ousuggest that potential drug in many ARVs (particularly som reverse transcriptase inhibitors (Pls)) and contraceptives and the ARVs whether the contraceptives and the ARVs whether the contraceptive eff progestogen-only injectable of (such as depot medroxyprogiand norethisterone enantate) compromised, as these metholood hormone levels than of only hormonal contraceptives underway to evaluate potentiable tween depot medroxyprogiand selected PI and NNRTI woman on ARV treatment decontinue hormonal contraceptives consistent use of condoms is preventing HIV transmission as preventing HIV transmission as preventing HIV transmission as the selected PI and NNRTI continue hormonal contraceptives consistent use of condoms is preventing HIV transmission as the selected PI and NNRTI continue hormonal contraceptives consistent use of condoms is preventing HIV transmission as the selected PI and NNRTI continue hormonal contraceptives consistent use of condoms is preventing HIV transmission as the selected PI and NNRTI continue hormonal contraceptives consistent use of condoms is preventing HIV transmission as the selected PI and NNRTI continue hormonal contraceptives consistent use of condoms is preventing HIV transmission as the selected PI and NNRTI continue hormonal contraceptives consistent use of condoms is preventing HIV transmission as the selected PI and NNRTI continue hormonal contraceptives consistent use of condoms is preventing HIV transmission as the selected PI and NNRTI continue hormonal contraceptives continu	re the potential to the bioavailability of all contraceptives. Itlined in Annex 1) teractions between the non-nucleoside rs (NNRTIs) and hormonal ty and monal and the iteractions between the programme of the pr

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CATEGORY 2	A condition where the advantages of using the method generally outweigh the the theoretical or proven risks				
CATEGORY 3	A condition where the theoretical or proven risks usually outweigh the advantages of using the method				
CATEGORY 4	A condition which represents an unacceptable health risk if the contraceptive method is used				

Additional comments

AGF

Menarche to < 18 years: For women under 18 years of age, there are theoretical concerns regarding the hypoestrogenic effects of DMPA use, including whether these women will achieve their appropriate peak bone mass. **45 years:** DMPA can be continued to age 50 years and then stopped and a suitable alternative contraceptive used. ³⁹

BREASTFEEDING

< 6 weeks postpartum: There is limited theoretical concern that the neonate may be at risk due to exposure to steroid hormones during the first 6 weeks postpartum. If used < 6 weeks delay until Day 21. 16:40

POSTPARTUM

< 21 days: POCs may be safely used by non-breastfeeding women immediately postpartum, although they are not required for contraception until Day 21.

PAST ECTOPIC PREGNANCY

All POCs reduce the risk of ectopic pregnancy. Methods which inhibit ovulation are most effective in preventing intrauterine and extrauterine pregnancies.

HYPERTENSION No evidence that POCs affect blood pressure.

Vascular disease: There is concern regarding hypo-estrogenic effects and reduced HDL levels, particularly among users of DMPA and NET-EN. However, there is little concern about these effects with regard to POPs or LNG/ETG implants. The effects of DMPA and NET-EN may persist for some time after discontinuation.

VENOUS THROMBOEMBOLISM (VTE)

No evidence that POCs increase the risk of venous thromboembolism.

CURRENT AND HISTORY OF ISCHAEMIC HEART DISEASE

There is concern regarding hypo-estrogenic effects and reduced HDL levels, particularly among users of DMPA and NET-EN. However, there is little concern about these effects with regard to POPs or LNG/ETG implants. The effects of DMPA and NET-EN may persist for some time after discontinuation.

STROKE

There is concern regarding hypo-estrogenic effects and reduced HDL levels, particularly among users of DMPA and NET-EN. However, there is little concern about these effects with regard to POPs or LNG/ETG implants. The effects of DMPA and NET-EN may persist for some time after discontinuation.

HEADACHES

Aura is a specific focal neurologic symptom. For more information on this and other diagnostic criteria, see: Headache Classification Subcommittee of the International Headache Society. The International Classification of Headache Disorders, 2nd Edition. Cephalalgia. 2004; 24 (Suppl 1): 1- 150. http://216.25.100.131/ihscommon/guidelines/pdfs/ihc_II_main_no_print.pdf

There is concern that severe headaches may increase with use of NET-EN, DMPA and implants. The effects of NET-EN and DMPA may persist for some time after discontinuation.

VAGINAL BLEEDING PATTERNS

Irregular menstrual bleeding patterns are common among healthy women. POC use frequently induces an irregular bleeding pattern. Implant use may induce irregular bleeding patterns, especially during the first 3-6 months, but these patterns may persist longer. ETG users are more likely than LNG users to develop amenorrhoea.

UNEXPLAINED VAGINAL BLEEDING

POCs may cause irregular bleeding patterns which may mask symptoms of underlying pathology. The effects of DMPA and NET-EN may persist for some time after discontinuation.

CERVICAL CANCER (awaiting treatment)

There is some theoretical concern that POC use may affect prognosis of the existing disease. While awaiting treatment, women may use POCs. In general, treatment of this condition renders a woman sterile.

BREAST DISEASE

Breast cancer: Breast cancer is a hormonally sensitive tumour, and the prognosis of women with current or recent breast cancer may worsen with POC use.

ENDOMETRIAL CANCER

While awaiting treatment, women may use POCs. In general, the treatment of this condition renders a woman sterile.

OVARIAN CANCER

While awaiting treatment, women may use POCs. In general, the treatment of this condition renders a woman sterile

UTERINE FIBROIDS

POCs do not appear to cause growth of uterine fibroids.

PELVIC INFLAMMATORY DISEASE (PID)

Whether POCs, like COCs, reduce the risk of PID among women with STIs is unknown, but they do not protect against HIV or lower genital tract STI.

STIs

Whether POCs, like COCs, reduce the risk of PID among women with STIs is unknown, but they do not protect against HIV or lower genital tract STI.

HIGH RISK OF HIV

Whether POCs, like COCs, reduce the risk of PID among women with STIs is unknown, but they do not protect against HIV or lower genital tract STI.

DIABETES

Non-vascular disease: POCs may alter carbohydrate metabolism, but evidence limited.

Nephropathy, retinopathy, neuropathy: There is concern regarding hypo-estrogenic effects and reduced HDL levels, particularly among users of DMPA and NET-EN. The effects of DMPA and NET-EN may persist for some time after discontinuation. Some POCs may increase the risk of thrombosis, although this increase is substantially less than with COCs.

Other vascular disease or diabetes of > 20 years' duration: There is concern regarding hypo-estrogenic effects and reduced HDL levels, particularly among users of DMPA and NET-EN. The effects of DMPA and NET-EN may persist for some time after discontinuation. Some POCs may increase the risk of thrombosis, although this increase is substantially less than with COCs.

HISTORY OF CHOLESTASIS

Theoretically, a history of COC-related cholestasis may predict subsequent cholestasis with POC use. However, this has not been documented.

VIRAL HEPATITIS

Active: POCs are metabolized by the liver and their use may adversely affect women whose liver function is compromised. This concern is similar to, but less than, that with COCs.

CIRRHOSIS

POCs are metabolized by the liver and their use may adversely affect women whose liver function is compromised. This concern is similar to, but less than, that with COCs.

LIVER TUMOURS

POCs are metabolized by the liver and their use may adversely affect women whose liver function is compromised. In addition, POC use may enhance the growth of tumours. This concern is similar to, but less than, that with COCs.

INFLAMMATORY BOWEL DISEASE

There is no evidence that women with IBD have an inherent increased risk of VTE. 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 POC can be continued. Absorption of oral methods may be reduced with malabsorption.

IRON-DEFICIENCY ANAEMIA

Changes in the menstrual pattern associated with POC use have little effect on haemoglobin levels.

DRUG INTERACTIONS

Generally safety of using progestogen-only contraception is unaffected. Nevertheless use of liver enzyme inducers or antibiotics may reduce contraceptive efficacy, increasing risk of unintended pregnancy. Contraceptive choice may depend on the likely duration of use of concurrent medications and need for additional or alternative methods. Progestogen-only injectables are unaffected by liver enzyme inducing drugs and injection intervals need not be reduced. POCs are unaffected by use of non-liver enzyme inducing antibiotics.

UK REFERENCES

- 1. Banks E, Berrington A, Casabonne D. Overview of the relationship between use of progestogen-only contraceptives and bone mineral density. *British Journal of Obstetrics and Gynaecology: an International Journal of Obstetrics & Gynaecology* 2001;**108**:1214-21.
- 2. Gbolade BA. Depo-Provera and bone density Faculty Aid to CPD Topics (FACT). *Journal of Family Planning and Reproductive Health Care* 2002;**28**:7-11.
- 3. Scholes D, Lacroix AZ, Ott SM, Ichikawa LE, Barlow WE. Bone mineral density in women using depot medroxyprogesterone acetate for contraception. *Obstetrics and Gynecology* 1999;**93**:233-8.
- 4. Cundy T, Cornish J, Evans MC, Roberts H, Reid IR. Recovery of bone density in women who stop using medroxyprogesterone acetate. *British Medical Journal* 1994;**308**:247-8.
- 5. Cundy, T., Evans M, Roberts H, Wattie, D, Ames, R, and Reid, Lynne. Bone density in women receiving depot medroxyprogesterone acetate for contraception(correction appears in BMJ 199; 303;202). *British Medical Journal* 303, 13-16. 1991.
- 6. Busen NH, Britt RB, Rianon N. Bone mineral density in a cohort of adolescent women using depot medroxyprogesterone acetate for one to two years. *Journal of Adolescent Health* 2003;**32**:257-9.
- 7. Tharnprisarn W,.Taneepanichskul S. Bone mineral density in adolescent and young Thai girls receiving oral contraceptives compared with depot medroxyprogesterone acetate: A cross sectional study in young Thai women. *Contraception* 2002;**66**:101-3.

- 8. Cromer BA, McArdle Blair J, Mahan JD, Zibners L, Naumovski Z. A prospective comparison of bone density in adolescent girls receiving depot medroxyprogesterone acetate (Depo-provera), levonorgestrel (Norplant), or oral contraceptives. *Journal of Pediatrics* 1996;**129**:671-6.
- 9. Edwards CP, Hertweck SP, Perlman SE, Goldsmith LJ, Sanfilippo JS. A prospective study evaluating the effects of depo provera on bone mineral density in adolescent females: A preliminary report. *Journal of Pediatric and Adolescent Gynecology* 1998;11:201-10.
- 10. Scholes D, LaCroix AZ, Ichikawa L E, et al. Injectable hormone contraception and bone density: results from a prospective study. *Epidemiology* 2002;**13**:581-7.
- 11. Faculty of Family Planning and Reproductive Health Care Clinical Effectiveness Unit. Contraceptive Choices for Young People. *Journal of Family Planning and Reproductive Health Care* 2004;**30**:237-51.
- 12. Mishell DRJ, Kharma KM, Thorneycroft IH, Nakamura RM. Estrogenic activity in women receiving an injectable progestogen for contraception. *American Journal of Obstetrics and Gynaecology* 1972;**113**:372-6.
- 13. Merki-Field GS, Neff M, Keller PJ. A prospective study on the effects of depot medroxyprogesterone acetate on trabecular and cortical bone after attainment of peak bone mass. *British Journal of Obstetrics and Gynaecology* 2000;**107**:863-9.
- 14. Gbolade, B. A., Ellis, S., Murby, B., Randall, S., and Kirkman, R. Bone density in long term users of depot medroxyprogesterone acetate. *British Journal of Obstetrics and Gynaecology* 105(7), 790-794. 1998.
- 15. Knight J., Pyper C. Postnatal contraception: what are the choices? Nursing in Practice 2002; May: 23-5.
- 16. Faculty of Family Planning and Reproductive Health Care Clinical Effectiveness Unit. The use of contraception outside the terms of the product licence. *Journal of Family Planning and Reproductive Health Care* 2005;**31**:225-41.
- 17. Vessey M, Painter R, Yeates D. Mortality in relation to oral contraceptive use and cigarette smoking. *Lancet* 2003;**362**:185-91.
- 18. McElduff P, Dobson A, Beaglehole R, Jackson R. Rapid reduction in coronary risk for those who quit cigarette smoking. *Australian and New Zealand Journal of Public Health* 1998;**22**:787-91.
- 19. Williams B, Poulter N, Brown MJ, Davies M, McInnes GT, Potter JP *et al.* The BHS Guidelines Working Party Guidelines for Management of Hypertension: Report of the Fourth Working Party of the British Hypertension Society, 2004 BHS IV. *Journal of Human Hypertension* 2004;**18**:139-85.
- 20. National Institute for Clinical Excellence. Hypertension. Management of hypertension in adults in primary care. 18. 2004. London, National Institute for Clinical Excellence.
- 21. World Health Organization. Cardiovascular disease and use of oral and injectable progestagen only contraceptives and combine injectable contraceptives. Results of an international, multicentre, case control study. *Contraception* 1998;**57**:315-24.
- 22. Scottish Intercollegiate Guidelines Network Secretariat. Prophylaxis of venous thromboembolism. 62, 1-47. 2003.
- 23. Department of Health. Prodigy Guidance- Hyperlipidaemia. 2004. http://www.prodigy.nhs.uk/hyperlipidaemia
- 24. British Heart Foundation. What is Valvular Heart Disease? 2005. http://www.bhf.org.uk/hearthealth/index.asp?secID=1&secondlevel=77&thirdlevel=478
- 25. British Heart Foundation. Living with Congenital Heart Disease. 2005. http://www.bhf.org.uk/hearthealth/index.asp?secID=1&secondlevel=77&thirdlevel=362
- 26. American Council for Headache Education. How headaches differ. 2004. http://www.achenet.org/understanding/differ.php
- 27. The International Headache Society Task Force on Combined Oral Contraceptives and Hormone replacement Therapy. Recommendations on the risk of ischaemic stroke associated with use of combined oral contraceptives and hormone replacement therapy in women with migraine. *Cephalagia* 2000;**20**:155-6.
- 28. Royal College of Obstetricians and Gynaecologists. The Initial Management of Menorrhagia. National Evidence-Based Clinical Guidelines. 1998.
- 29. Royal College of Obstetricians and Gynaecologists. The Management of Menorrhagia in Secondary Care. National Evidence-Based Clinical Guidelines. 1999.
- 30. Royal College of Obstetricians and Gynaecologists. The Management of Gestational Trophoblastic Neoplasia. 2004.
- 31. BHIVA Writing Committee on behalf of the BHIVA Executive Committee. British HIV Association (BHIVA) guidelines for the treatment of HIV-infected adults with antiretroviral therapy. 2003.
- 32. Faculty of Family Planning and Reproductive Health Care Clinical Effectiveness Unit. Drug Interactions with Hormonal Contraception. *Journal of Family Planning and Reproductive Health Care* 2005;**31**:139-50.
- 33. Gines, P., Quintero, E., Arroyo, V., Teres, J., Bruguera, M., Rimola, A., Caballeria, J., Rodes, J., and Rozman, C. Compensated cirrhosis: natural history and prognostic factors. *Hepatology* 7(1), 122-128. 1987.
- 34. Department of Health. PRODIGY Guidance Raynaud's phenomenon. 2002. http://www.prodigy.nhs.uk/raynaud's-phenomenon
- 35. Eastcott H.H. Raynaud's disease and the oral contraceptive pill [Letter]. British Medical Journal 2, 477. 1976.
- 36. Altura BM. Sex and oestrogens and responsiveness of terminal arterioles to neurohypophyseal hormones and catecholamines. *Pharmacology and Experimental Therapeutics* 1975;**193**:403-12.
- 37. Greenstein D., Jeffcote N., Ilsley D., Kester R.C. The menstrual cycle and Raynaud's phenomenon. *Angiology* 1996;**47**:427-36.

- 38. Bartelink M.L, Wollersheim H., Vemer H, Thomas C.M., de Boo T., Thien T. The effects of single oral doses of 17 beta-oestradiol and progesterone on finger circulation in healthy women and in women with primary Raynaud's phenomenon. *European Journal of Clinical Pharmacology* 1994;**46**:557-60.
- 39. Faculty of Family Planning and Reproductive Healthcare Clinical Effectiveness Unit. Contraception for Women Aged over 40 Years. *Journal of Family Planning and Reproductive Health Care* 2005;**31**:51-64.
- 40. Faculty of Family Planning and Reproductive Health Care Clinical Effectiveness Unit. Contraceptive Choices for Breastfeeding Women. *Journal of Family Planning and Reproductive Health Care* 2004;**30**:181-9.

WHO REFERENCES

- 1. Busen NH, Britt RB, Rianon N. Bone mineral density in a cohort of adolescent women using depot medroxyprogesterone acetate for one to two years. *Journal of Adolescent Health*, 2003, 32:257-9.
- 2. Cromer BA et al. A prospective comparison of bone density in adolescent girls receiving depot medroxyprogesterone acetate (Depo-Provera), levonorgestrel (Norplant), or oral contraceptives. *Journal of Pediatrics*, 1996, 129:671-6.
- 3. Cundy T et al. Spinal bone density in women using depot medroxyprogesterone contraception. *Obstetrics & Gynecology,* 1998, 92:569-73.
- 4. Lappe JM, Stegman MR, Recker RR. The impact of lifestyle factors on stress fractures in female army recruits. *Osteoporosis International*, 2001, 12:35-42.
- 5. Tharnprisarn W, Taneepanichskul S. Bone mineral density in adolescent and young Thai girls receiving oral contraceptives compared with depot medroxyprogesterone acetate: a cross-sectional study in young Thai women. *Contraception*, 2002, 66:101-3.
- 6. Banks E, Berrington A, Casabonne D. Overview of the relationship between use of progestogen-only contraceptives and bone mineral density. *British Journal of Obstetrics and Gynaecology*, 2001, 108:1214-21.
- 7. Beerthuizen R et al. Bone mineral density during long-term use of the progestagen contraceptive implant Implanon compared to a non-hormonal method of contraception. *Human Reproduction*, 2000, 15:118-22.
- Cundy T et al. Recovery of bone density in women who stop using medroxyprogesterone acetate. BMJ, 1994, 308:247-8.
- 9. Cundy T, Reid I. Depot medroxyprogesterone and bone density. BMJ, 1994, 308:1567-8.
- 10. Cundy T et al. Menopausal bone loss in long-term users of depot medroxyprogesterone acetate contraception. *American Journal of Obstetrics & Gynecology*, 2002, 186:978-83.
- 11. Gbolade B et al. Bone density in long term users of depot medroxyprogesterone acetate. *British Journal of Obstetrics & Gynaecology*, 1998, 105:790-4.
- 12. Orr-Walker BJ et al. The effect of past use of the injectable contraceptive depot medroxyprogesterone acetate on bone mineral density in normal post-menopausal women. *Clinical Endocrinology,* 1998, 49:615-8.
- 13. Tang OS et al. Further evaluation on long-term depot-medroxyprogesterone acetate use and bone mineral density: a longitudinal cohort study. *Contraception*, 2000, 62:161-4.
- 14. Abdel-Aleem H et al. The use of nomegestrol acetate subdermal contraceptive implant, Uniplant, during lactation. *Contraception*, 1996, 54:281-6.
- 15. Abdulla KA et al. Effect of early postpartum use of the contraceptive implants, Norplant, on the serum levels of immunoglobulins of the mothers and their breastfed infants. *Contraception*, 1985, 32:261-6.
- 16. Bjarnadottir RI et al. Comparative study of the effects of a progestogen-only pill containing desogestrel and an intrauterine contraceptive device in lactating women. *British Journal of Obstetrics and Gynecology,* 2001, 108:1174-80.
- 17. Croxatto HB et al. Fertility regulation in nursing women. Comparative performance of progesterone implants versus placebo and copper T. *American Journal of Obstetrics & Gynecology,* 1982, 144:201-8.
- 18. Diaz S et al. Fertility regulation in nursing women. VI. Contraceptive effectiveness of a subdermal progesterone implant. *Contraception*, 1984, 30:311-25.
- 19. Halderman LD, Nelson AL. Impact of early postpartum administration of progestin-only hormonal contraceptives compared with nonhormonal contraceptives on short-term breast-feeding patterns. *American Journal of Obstetrics & Gynecology*, 2002, 186:1250-6.
- 20. Hannon PR et al. The influence of medroxyprogesterone on the duration of breast-feeding in mothers in an urban community. *Archives of Pediatrics & Adolescent Medicine*, 1997, 151:490-6.
- 21. Jimenez J et al. Long-term follow-up of children breast-fed by mothers receiving depot-medroxyprogesterone acetate. *Contraception*, 1984, 30:523-33.
- 22. Kamal I et al. Clinical, biochemical, and experimental studies on lactation: clinical effects of steroids on the initiation of lactation. *American Journal of Obstetrics & Gynecology*, 1970, 108:655-8.
- 23. Karim M et al. Injected progestogen and lactation. British Medical Journal, 1971, 1:200-3.
- 24. Massai R et al. Preregistration study on the safety and contraceptive efficacy of a progesterone-releasing vaginal ring in Chilean nursing women. *Contraception*, 1999, 60:9-14.
- 25. McCann MF et al. The effects of a progestin-only oral contraceptive (levonorgestrel 0.03 mg) on breast-feeding. *Contraception*, 1989, 40:635-48.

- McEwan JA et al. Early experience in contraception with a new progestogen. Contraception, 1977, 16:339-50
- 27. Melis GB et al. Norethisterone enanthate as an injectable contraceptive in puerperal and non-puerperal women. *Contraception*, 1981, 23:77-88.
- 28. Moggia AV et al. A comparative study of a progestin-only oral contraceptive versus non-hormonal methods in lactating women in Buenos Aires, Argentina.[Erratum appears in *Contraception*, 1991 Sep; 44(3):339]. *Contraception*, 1991, 44:31-43.
- 29. Narducci U, Piatti N. [Use of Depo-Provera as a contraceptive during the puerperium]. *Minerva Ginecologica*, 1973, 107-11.
- 30. Seth U et al. Effect of a subdermal silastic implant containing norethindrone acetate on human lactation. *Contraception*, 1977, 16:383-98.
- 31. Shaaban MM, Salem HT, Abdullah KA. Influence of levonorgestrel contraceptive implants, Norplant, initiated early postpartum upon lactation and infant growth. *Contraception*, 1985, 32:623-35.
- 32. Shaaban MM. Contraception with progestogens and progesterone during lactation. *Journal of Steroid Biochemistry & Molecular Biology*, 1991, 40:705-10.
- 33. Shikary ZK et al. Pharmacodynamic effects of levonorgestrel (LNG) administered either orally or subdermally to early postpartum lactating mothers on the urinary levels of follicle stimulating hormone (FSH), luteinizing hormone (LH) and testosterone (T) in their breast-fed male infants. *Contraception*, 1986, 34:403-12.
- 34. Sivin I et al. Contraceptives for lactating women: a comparative trial of a progesterone-releasing vaginal ring and the copper t 380a iud. *Contraception*, 1997, 55:225-32.
- 35. Velasquez J et al. [Effect of daily oral administration of 0.350 mg of norethindrone on lactation and chemical composition of milk]. *Ginecologia y Obstetricia de Mexico*, 1976, 40(237):31-9.
- 36. West CP. The acceptability of a progestagen-only contraceptive during breast-feeding. *Contraception*, 1983, 27:563-9.
- 37. Zanartu J, Aguilera E, Munoz-Pinto G. Maintenance of lactation by means of continuous low-dose progestogen given post-partum as a contraceptive. *Contraception*, 1976, 13:313-8.
- 38. Reinprayoon D et al. Effects of the etonogestrel-releasing contraceptive implant (Implanon on parameters of breastfeeding compared to those of an intrauterine device. *Contraception*, 2000, 62:239-46.
- 39. Kurunmaki H. Contraception with levonorgestrel-releasing subdermal capsules, Norplant, after pregnancy termination. *Contraception*, 1983, 27:473-82.
- 40. Kurunmaki H et al. Immediate postabortal contraception with Norplant: levonorgestrel, gonadotropin, estradiol, and progesterone levels over two postabortal months and return of fertility after removal of Norplant capsules. *Contraception*, 1984, 30:431-42.
- 41. Lahteenmaki P, Toivonen J, Lahteenmaki PL. Postabortal contraception with norethisterone enanthate injections. *Contraception*, 1983, 27:553-62.
- 42. Ortayli N et al. Immediate postabortal contraception with the levonorgestrel intrauterine device, Norplant, and traditional methods. *Contraception*, 2001, 63:309-14.
- 43. Connor PD et al. Determining risk between Depo-Provera use and increased uterine bleeding in obese and overweight women. *Journal of the American Board of Family Practice*, 2002, 15:7-10.
- 44. Leiman G. Depo-medroxyprogesterone acetate as a contraceptive agent: its effect on weight and blood pressure. *American Journal of Obstetrics & Gynecology*, 1972, 114:97-102.
- 45. Mangan SA, Larsen PG, Hudson S. Overweight teens at increased risk for weight gain while using depot medroxyprogesterone acetate. *Journal of Pediatric & Adolescent Gynecology*, 2002, 15:79-82.
- 46. Sivin I et al. Contraception with two levonorgestrel rod implants. A 5-year study in the United States and Dominican Republic. *Contraception*, 1998, 58:275-82.
- 47. Sivin I et al. Prolonged effectiveness of Norplant(R) capsule implants: a 7-year study. *Contraception*, 2000, 61:187-94.
- 48. Sivin I et al. Levonorgestrel concentrations during 7 years of continuous use of Jadelle contraceptive implants. *Contraception*, 2001, 64:43-9.
- 49. World Health Organization Collaborative Study of Cardiovascular Disease and Steroid Hormone Contraception. Cardiovascular disease and use of oral and injectable progestogen-only contraceptives and combined injectable contraceptives. Results of an international, multicenter, case-control study. *Contraception*, 1998, 57:315-24.
- 50. Cromer BA et al. A prospective study of adolescents who choose among levonorgestrel implant (Norplant), medroxyprogesterone acetate (Depo-Provera), or the combined oral contraceptive pill as contraception. *Pediatrics*, 1994, 94:687-94.
- 51. Gupta N et al. Mood changes in adolescents using depot-medroxyprogesterone acetate for contraception: a prospective study. *Journal of Pediatric & Adolescent Gynecology*, 2001, 14:71-6.
- 52. Westhoff C et al. Depressive symptoms and Norplant contraceptive implants. Contraception, 1998, 57:241-5.
- 53. Westhoff C et al. Depressive symptoms and Depo-Provera. Contraception, 1998, 57:237-40.
- 54. Smith JS et al. Cervical cancer and use of hormonal contraceptives: a systematic review. *Lancet,* 2003, 361:1159-67.
- 55. Baeten JM et al. Hormonal contraception and risk of sexually transmitted disease acquisition: results from a prospective study. *American Journal of Obstetrics & Gynecology*, 2001, 185:380-5.

- 56. Giuliano AR et al. Human papillomavirus infection at the United States-Mexico border: implications for cervical cancer prevention and control. *Cancer Epidemiology, Biomarkers & Prevention*, 2001, 10:1129-36.
- 57. Jacobson DL et al. Relationship of hormonal contraception and cervical ectopy as measured by computerized planimetry to chlamydial infection in adolescents. *Sexually Transmitted Diseases*, 2000, 27:313-9.
- 58. Lavreys L et al. Human herpesvirus 8: seroprevalence and correlates in prostitutes in Mombasa, Kenya. *Journal of Infectious Diseases*, 2003, 187:359-63.
- 59. Moscicki AB et al. Risks for incident human papillomavirus infection and low-grade squamous intraepithelial lesion development in young females. *JAMA*, 2001, 285:2995-3002.
- 60. Nsofor BI, Bello CS, Ekwempu CC. Sexually transmitted disease among women attending a family planning clinic in Zaria, Nigeria. *International Journal of Gynaecology & Obstetrics*, 1989, 28:365-7.
- 61. Ruijs GJ et al. Direct immunofluorescence for Chlamydia trachomatis on urogenital smears for epidemiological purposes. *European Journal of Obstetrics, Gynecology & Reproductive Biology,* 1988, 27:289-97.
- 62. Aklilu M et al. Factors associated with HIV-1 infection among sex workers of Addis Ababa, Ethiopia. *AIDS*, 2001, 15:87-96.
- 63. Allen S et al. Pregnancy and contraception use among urban Rwandan women after HIV testing and counseling. *American Journal of Public Health*, 1993, 83:705-10.
- 64. Carael M et al. Human immunodeficiency virus transmission among heterosexual couples in Central Africa. *AIDS*, 1988, 2:201-5.
- 65. Cohen E, Navaline H, Metzger D. High-risk behaviors for HIV: a comparison between crack-abusing and opioid-abusing African-American women. *Journal of Psychoactive Drugs*, 1994, 26:233-41.
- 66. Kapiga SH et al. Risk factors for HIV infection among women in Dar-es-Salaam, Tanzania. *Journal of Acquired Immune Deficiency Syndromes*, 1994, 7:301-9.
- 67. Kapiga SH et al. The incidence of HIV infection among women using family planning methods in Dar es Salaam, Tanzania. *AIDS*, 1998, 12:75-84.
- 68. Kiddugavu M et al. Hormonal contraceptive use and HIV-1 infection in a population-based cohort in Rakai, Uganda. *AIDS*, 2003, 17:233-40.
- 69. Limpakarnjanarat K et al. HIV-1 and other sexually transmitted infections in a cohort of female sex workers in Chiang Rai, Thailand. *Sexually Transmitted Infections*, 1999, 75:30-5.
- 70. Martin HL, Jr. et al. Hormonal contraception, sexually transmitted diseases, and risk of heterosexual transmission of human immunodeficiency virus type 1. *Journal of Infectious Diseases*, 1998, 178:1053-9.
- 71. Mati JK et al. Contraceptive use and the risk of HIV infection in Nairobi, Kenya. *International Journal of Gynaecology & Obstetrics*, 1995, 48:61-7.
- 72. Nagachinta T et al. Risk factors for HIV-1 transmission from HIV-seropositive male blood donors to their regular female partners in northern Thailand. *AIDS*, 1997, 11:1765-72.
- 73. Nzila N et al. HIV and other sexually transmitted diseases among female prostitutes in Kinshasa. *AIDS*, 1991, 5:715-21.
- 74. Plourde PJ et al. Human immunodeficiency virus type 1 infection in women attending a sexually transmitted diseases clinic in Kenya. *Journal of Infectious Diseases*, 1992, 166:86-92.
- 75. Rehle T et al. Risk factors of HIV-1 infection among female prostitutes in Khon Kaen, Northeast Thailand. *Infection*, 1992, 20:328-31.
- 76. Siraprapasiri T et al. Risk factors for HIV among prostitutes in Chiangmai, Thailand. AIDS, 1991, 5:579-82.
- 77. Taneepanichskul S, Phuapradit W, Chaturachinda K. Association of contraceptives and HIV-1 infection in Thai female commercial sex workers. *Australian & New Zealand Journal of Obstetrics & Gynaecology,* 1997, 37:86-8.
- 78. Ungchusak K et al. Determinants of HIV infection among female commercial sex workers in northeastern Thailand: results from a longitudinal study.[erratum appears in J Acquir Immune Defic Syndr Hum Retrovirol 1998 Jun 1;18(2):192]. *Journal of Acquired Immune Deficiency Syndromes & Human Retrovirology,* 1996, 12:500-7.
- 79. McClelland RS et al. A prospective study of hormonal contraceptive use and cervical shedding of herpes simplex virus in human immunodeficiency virus type 1-seropositive women. *Journal of Infectious Diseases*, 2002, 185:1822-5.
- 80. Mostad SB et al. Hormonal contraception, vitamin A deficiency, and other risk factors for shedding of HIV-1 infected cells from the cervix and vagina. *Lancet*, 1997, 350:922-7.
- 81. Mostad SB et al. Cervical shedding of herpes simplex virus in human immunodeficiency virus-infected women: effects of hormonal contraception, pregnancy, and vitamin A deficiency. *Journal of Infectious Diseases*, 2000, 181:58-63.
- 82. Tagy AH et al. The effect of low-dose combined oral contraceptive pills versus injectable contraceptive (Depot Provera) on liver function tests of women with compensated bilharzial liver fibrosis. *Contraception*, 2001, 64:173-6.
- 83. Adadevoh BK, Isaacs WA. The effect of megestrol acetate on sickling. *American Journal of the Medical Sciences*, 1973, 265:367-70.
- 84. Barbosa IC et al. Carbohydrate Metabolism in Sickle Cell Patients Using a Subdermal Implant Containing Nomegestrol Acetate (Uniplant). *Contraception*, 2001, 63:263-5.

- 85. de Abood M et al. Effects of Depo-Provera or Microgynon on the Painful Crises of Sickle Cell Anemia Patients. *Contraception*, 1997, 56:313-6.
- 86. De Ceulaer K et al. Medroxyprogesterone acetate and homozygous sickle-cell disease. *Lancet*, 1982, 2:229-31.
- 87. Howard RJ, Lillis C, Tuck SM. Contraceptives, Counselling, and Pregnancy in Women with Sickle Cell Disease. *BMJ*, 1993, 306:1735-7.
- 88. Ladipo OA et al. Norplant use by women with sickle cell disease. *International Journal of Gynaecology and Obstetrics*, 1993, 41:85-7.
- 89. Nascimento ML, Ladipo OA, Coutinho E. Nomegestrol acetate contraceptive implant use by women with sickle cell disease. *Clinical Pharmacology and Therapeutics*, 1998, 64:433-8.
- 90. Yoong WC, Tuck SM, Yardumian A. Red cell deformability in oral contraceptive pill users with sickle cell anaemia. *British Journal of Haematology,* 1999, 104:868-70.
- 91. Haukkamaa M. Contraception by Norplant subdermal capsules is not reliable in epileptic patients on anticonvulsant treatment. *Contraception*, 1986, 33:559-65.
- 92. Odlind V, Olsson SE. Enhanced metabolism of levonorgestrel during phenytoin treatment in a woman with Norplant implants. *Contraception*, 1986, 33:257-61.
- 93. Shane-McWhorter L et al. Enhanced metabolism of levonorgestrel during phenobarbital treatment and resultant pregnancy. *Pharmacotherapy*, 1998, 18:1360-4.

Table of contents

Intrauterine devices

PERSONAL CHARACTERISTICS AND REPRODUCTIVE HISTORY	75
Pregnancy	75
Age	75
Parity	75
Postpartum	75
Post-abortion	75
Past ectopic pregnancy	75
History of pelvic surgery	76
Smoking	76
Obesity	76
CARDIOVASCULAR DISEASE	
Multiple risk factors for arterial cardiovascular disease	76
Hypertension	77
History of high blood pressure during pregnancy	77
Venous thromboembolism (VTE)	78
Known thrombogenic mutations	78
Superficial venous thrombosis	78
Current and history of ischaemic heart disease	79
Stroke	79
Known hyperlipidaemias	79
Valvular and congenital heart disease	79
	. 80
Headaches	80
Epilepsy DEPRESSIVE DISORDERS	80
Depressive disorders REPRODUCTIVE TRACT INFECTIONS AND DISORDERS	80
	. o c 80
Vaginal bleeding patterns Unexplained vaginal bleeding	81
Endometriosis	81
Benign ovarian tumours	81
Severe dysmenorrhoea	81
Gestational trophoblastic neoplasia	81
Cervical ectropion	81
Cervical intraepithelial neoplasia (CIN)	81
Cervical cancer	81
Breast disease	81
Endometrial cancer	81
Ovarian cancer	81
Uterine fibroids	82
Anatomical abnormalities	82
Pelvic inflammatory disease (PID)	82
STIs	83
HIV/AIDS	. 83
High risk of HIV	83
HIV-infected	83
AIDS and using HAART	83
OTHER INFECTIONS	84
Schistosomiasis	84
Tuberculosis	84
Malaria	84
ENDOCRINE CONDITIONS	. 84
Diabetes	84
Thyroid disorders	84

GASTROINTESTINAL CONDITIONS	84
Gall-bladder disease	84
History of cholestasis	84
Viral hepatitis	84
·	84
Liver tumours	85
Inflammatory bowel disease (Crohn's and Ulcerative Colitis)	85
	85
Thalassaemia	85
Sickle cell disease	85
Iron-deficiency anaemia	85
Raynaud's disease	85
DRUG INTERACTIONS	85
Drugs which affect liver enzymes	85
Non-liver enzyme inducing antibiotics	85
Highly Active Antiretroviral Therapy	85
Additional Comments	86
References for intrauterine devices	87

Please note: References used for the development of this UK version are numbered in **red**. The original WHO references are numbered in **black**.

INTRAUTERINE DEVICES (IUDs) Copper-bearing IUD (Cu-IUD) Levonorgestrel-releasing IUD (LNG-IUD)	(including condoms	the postpa	ngainst STI/HIV. If there is risk of STI/HIV artum period), the correct and consistent use of ended, either alone or with another contraceptive ms reduce the risk of STI/HIV.
CONDITION	CATEGORY I=Initiation, C=Continuation Cu-IUD LNG-IUD		CLARIFICATIONS/EVIDENCE

PERSONAL CHARACT	ERISTICS	AND REF	PRODUCTIVE HISTORY
PREGNANCY	4	4	Clarification: Intrauterine methods are not indicated during pregnancy.
			Most pregnancies occurring in women using intrauterine contraception will be intrauterine, but ectopic pregnancy must be excluded. Women who become pregnant whilst using intrauterine contraception should be informed of 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 intrauterine contraception <i>in situ</i> , and who wish to continue with the pregnancy, should be informed that, when possible, device removal would reduce adverse outcomes. However, removal itself carries a small risk of miscarriage. Whether or not the intrauterine method is removed, pregnant women should be advised to seek medical care if she develops heavy bleeding, cramping pain, abnormal vaginal discharge or fever. ^{1,2}
AGE*			
a) Menarche to < 20 years b) ≥ 20 years	2 1	2 1	
PARITY*			
a) Nulliparous b) Parous	1 1	1 1	Clarification: There is no reduction in fertility associated with previous intrauterine method use. Risk of STI influences fertility and sexual history taking is important. 3:4
POSTPARTUM* (breastfeeding or non-breastfeeding, including post-caesarean section)			Clarification: This includes all deliveries including stillbirth from 24 weeks gestation.
a) 48 hours to < 4 weeks	3	3	Due to increased risk of perforation insertion should be
b) > 4 weeks	1	1	delayed until 4 weeks post partum. Little LNG is
c) Puerperal sepsis	4	4	absorbed systemically. No evidence was identified to suggest effects on breast milk.
POST-ABORTION*			A.
a) First trimester	1	1	Clarification: Includes all induced or spontaneous
b) Second trimester c) Septic abortion	2 4	2 4	abortions <24 weeks gestation. An IUD can be inserted immediately following surgical abortion or after the second part of medical abortion < 24 weeks. ^{1,5}
PAST ECTOPIC PREGNANCY*	1	1	

^{*}See also additional comments at end of table

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

INTRAUTERINE DEVICES (IUDs) Copper-bearing IUD (Cu-IUD) Levonorgestrel-releasing IUD (LNG-IUD) CONDITION	CATEGORY CLARIFICATIONS/EVIDENCE		
		iation, tinuation	
	Cu-IUD	LNG-IUD	
HISTORY OF PELVIC	1	1	
SURGERY (see postpartum, including caesarean section)	•	·	
smoking a) Age < 35 years	1	1	
b) Age ≥ 35 years	-		
(i) < 15 cigarettes/day(ii) ≥ 15 cigarettes/day	1	1 1	
(iii) stopped smoking	1	1	
< 1year ago (iv) stopped smoking	1	4	
≥ 1 year ago	ı	1	
OBESITY a) ≥ 30 - 34 kg/m2 body	1	1	
mass index (BMI) b) 35 – 39 kg/m2 body mass index (BMI)	1	1	
c) ≥ 40 kg/m2 body mass index (BMI)	1	1	
CARDIOVASCULAR DIS	SEASE		
MULTIPLE RISK FACTORS FOR ARTERIAL CARDIOVASCULAR DISEASE (such as older age, smoking, diabetes and hypertension)	1	2	

^{*}See also additional comments at end of table

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

INTRAUTERINE DEVICES (IUDs) Copper-bearing IUD (Cu-IUD) Levonorgestrel-releasing IUD (LNG-IUD)	(including condoms	the postpa	ngainst STI/HIV. If there is risk of STI/HIV irtum period), the correct and consistent use of ended, either alone or with another contraceptive ms reduce the risk of STI/HIV.
CONDITION	CATEGORY I=Initiation, C=Continuation Cu-IUD LNG-IUD		CLARIFICATIONS/EVIDENCE

HYPERTENSION*

For all categories of hypertension, classifications are based on the assumption that **no other risk factors for cardiovascular disease exist**. When multiple risk factors do exist, risk of cardiovascular disease may increase substantially. A single reading of blood pressure level is not sufficient to classify a woman as hypertensive. If elevated the BP should be re-assessed at the end of the consultation. If blood pressure is increased it should be re-assessed on at least two subsequent clinic visits at monthly intervals.⁸⁹

a) Adequately controlled hypertension b) Consistently elevated blood pressure levels (properly taken measurements)	1	1	
(i) systolic > 140-159 mmHg or diastolic > 90-94 mmHg	1	1	
(ii) systolic ≥ 160 or diastolic ≥ 95 mmHg	1	1	
c) Vascular disease	1	2	Clarification: Vascular disease includes: coronary heart disease presenting with angina; peripheral vascular disease presenting with intermittent claudication; hypertensive retinopathy; and transient ischaemic attacks)
HISTORY OF HIGH BLOOD PRESSURE DURING PREGNANCY			
(where current blood pressure is normal)	1	1	

^{*}See also additional comments at end of table

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

INTRAUTERINE DEVICES (IUDs) Copper-bearing IUD (Cu-IUD) Levonorgestrel-releasing IUD (LNG-IUD)	(including condoms	the postpa	against STI/HIV. If there is risk of STI/HIV artum period), the correct and consistent use of ended, either alone or with another contraceptive ms reduce the risk of STI/HIV.
CONDITION	CATEGORY I=Initiation, C=Continuation Cu-IUD LNG-IUD		CLARIFICATIONS/EVIDENCE

VENOUS THROMBOEMBOLISM (VTE)*			Clarification: VTE includes deep vein thrombosis (DVT) and pulmonary embolism (PE).
a) History of VTE b) Current VTE (on anticoagulants)	1 3	2 3	Current VTE refers to disease for which anti- coagulants are still being used. Systemic absorption of LNG from the LNG-IUD is low is unlikely to be associated with an increased risk of VTE. Women who have current VTE may consider use of LNG-IUD or Cu-IUD but perhaps consider delaying insertion until anti-coagulants have stopped due to potential risk of bleeding during the insertion procedure. Women who develop a VTE while using the LNG-IUD may need to consider removal but risks and benefits
c) Family history of VTE (i) first-degree relative	1	1	and lack of evidence and risks of pregnancy must be discussed. Women may wish to continue with this
aged < 45 years (ii) first-degree relative aged ≥ 45 years	1	1	method.
d) Major surgery (i) with prolonged immobilisation	1	2	Major Surgery includes operations of > 30 minutes duration. Procedures with high risk of VTE include: general or orthopaedic surgery, trauma, neurosurgery. ¹⁰
(ii) without prolonged immobilisation	1	1	
e) Minor surgery without immobilisation	1	1	Minor surgery includes operations lasting < 30 minutes (eg laparoscopic sterilisation), procedures such as knee arthroscopy. Varicose vein surgery has a
f) Immobility (unrelated to surgery) e.g. wheelchair use, debilitating illness	1	1	low risk for VTE. Immobility due to hospitalisation for acute trauma, acute illness, paralysis is associated with a high risk of VTE.
KNOWN THROMBOGENIC MUTATIONS (e.g., Factor V Leiden; Prothrombin mutation; Protein S, Protein C, and Antithrombin deficiencies)	1	2	Clarification: Routine screening is not appropriate because of the rarity of the conditions and the high cost of screening.
SUPERFICIAL VENOUS THROMBOSIS			
a) Varicose veins b) Superficial thrombophlebitis	1 1	1 1	

^{*}See also additional comments at end of table

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CATEGORY 4	A condition which represents an unacceptable health risk if the contraceptive method is used

IINTRAUTERINE DEVICES IUDs do not protect against STI/HIV. If there is risk of STI/HIV (IUDs) (including the postpartum period), the correct and consistent use of Copper-bearing IUD (Cu-IUD) condoms is recommended, either alone or with another contraceptive method. Male condoms reduce the risk of STI/HIV. Levonorgestrel-releasing IUD (LNG-IŬD) CONDITION **CLARIFICATIONS/EVIDENCE CATEGORY** I=Initiation. C=Continuation Cu-IUD **LNG-IUD CURRENT AND HISTORY** Clarification: The method may be continued if women С OF ISCHAEMIC HEART 2 develop IHD while using the LNG-IUD. Clinical 1 3 **DISEASE*** judgement and assessment of pregnancy risk and other factors required. STROKE* 1 2 (history of cerebrovascular accident) **KNOWN** Clarification: Routine screening is not appropriate 1 2 **HYPERLIPIDAEMIAS** because of the rarity of the conditions and the high cost of screening. While some types of hyperlipidaemias are risk factors for vascular disease, the category should be assessed according to the type, its severity, and the presence of other cardiovascular risk factors. Lipid levels alone are poor predictors of risk of coronary heat disease (CHD). In the UK screening and treatment is aimed towards those at greatest risk of CHD. Risk categories will vary depending on risk of premature coronary heart disease and the presence of other risk factors.1 Common hypercholesterolaemia and Familial combined hyperlipidaemia are associated with an increased risk of CHD but usually this occurs over the age of 60 years.1 Familial hypercholesterolaemia (autosomal dominant) has a prevalence of about 1 in 500. People with this condition have a four-fold increase in the risk of premature CHD.1 **VALVULAR AND CONGENTIAL HEART DISEASE** a) Uncomplicated Clarification: Valvular heart disease occurs when any b) Complicated (pulmonary of the heart valves are stenotic and/or incompetent (eg. 2 2 hypertension, atrial aortic stenosis, mitral regurgitation; tricuspid valve fibrillation, history of abnormalities; pulmonary stenosis).12 subacute bacterial Congenital heart disease: Aortic stenosis: Atrial septal endocarditis) defects; Atrio-ventricular septal defect; Cardiomyopathy; (hypertrophic or dilated); Co-arctation of the Aorta; Complex Transposition of the Great Arteries; Ebstein's Anomaly; Eisenmenger Syndrome: Persistent Ductus Arteriosus; Pulmonary Atresia; Pulmonary Stenosis; Tetralogy of Fallot; Total Anomalous Pulmonary Venous Connection; Tricuspid Atresia; Truncus Arteriosus; Ventricular Septal Defect. 13 Prophylaxis against bacterial endocarditis is indicated for women with artificial heart valves or previous

*See also additional comments at end of table

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CATEGORY 4	A condition which represents an unacceptable health risk if the contraceptive method is used

centre.1

endocarditis when inserting of removing Cu-IUD or LNG-IUD, and this may require referral to a specialist

INTRAUTERINE DEVICES (IUDs) Copper-bearing IUD (Cu-IUD) Levonorgestrel-releasing IUD (LNG-IUD)	(including condoms	the postpa	against STI/HIV. If there is risk of STI/HIV artum period), the correct and consistent use of ended, either alone or with another contraceptive ms reduce the risk of STI/HIV.
CONDITION	CATEGORY I=Initiation, C=Continuation Cu-IUD LNG-IUD		CLARIFICATIONS/EVIDENCE

NEUROLOGIC CONDIT	IONS		
HEADACHES*		I C	Clarification: Classification depends on accurate
a) Non-migrainous (mild or severe)	1	1 1	diagnosis of those severe headaches that are migrainous and those that are not.
b) Migraine (i) without aura Age < 35		2 2	Definition: <i>Non-migrainous headaches</i> include tension-type, cluster or rebound headaches. ¹⁴
(ii) without aura Age < 35	1 1	2 2	Aura (focal symptoms) indicate ischaemia:
(iii) with aura, at any age	1	2 3	homonymous hemianopia, unilateral paraesthesia and /or numbness, unilateral weakness; and aphasia or unclassifiable speech disorder. Visual symptoms
c) Past history of migraine with aura at any age	1	2	progress from fortification spectra (a star shaped figure near the point of fixation with scintillating edges to scotoma (a bright shape which gradually increases in size). Flashing lights are not focal symptoms. Aura occurs before the onset of headache. Any new headaches or marked changes in headaches should be evaluated. Classification is for women without any other risk factors for stroke. Risk of stroke increases with age, hypertension, and smoking.
EPILEPSY	1	1	Clarification: If a woman is taking liver enzyme inducing anticonvulsants, refer to the section on drug interactions.
DEPRESSIVE DISORDI	ERS		
DEPRESSIVE DISORDERS	1	1	Clarification: The classification is based on data for women with selected depressive disorders. No data on bipolar disorder or postpartum depression were available. There is a potential for drug interactions between certain antidepressant medications and hormonal contraceptives.
REPRODUCTIVE TRAC	T INFECT	IONS AND	DISORDERS
VAGINAL BLEEDING PATTERNS*		I C	
a) Irregular pattern without heavy bleeding	1	1 1	
b) Heavy or prolonged bleeding (includes regular and irregular patterns)	2	1 2	Clarification: Unusually heavy bleeding should raise the suspicion of a serious underlying condition. ^{17;18} Evidence: Among women with heavy or prolonged bleeding, LNG-IUDs were beneficial in treating menorrhagia. ^{31-35, 5}

^{*}See also additional comments at end of table

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CONDITION	CATEGORY I=Initiation, C=Continuation Cu-IUD LNG-IUD		CLARIFICATIONS/EVIDENCE
	Cu lob Litte lob		

UNEXPLAINED VAGINAL BLEEDING (suspicion for serious condition) Before evaluation 4 2 4 2 ENDOMETRIOSIS* 2 1 1 Evidence: LNG-IUD use among women with endometriosis decreased dysmenorrhoea and pelvic pain. **2.37 ENDOMETRIOSIS* 2 1 1 Evidence: LNG-IUD use among women with endometriosis decreased dysmenorrhoea and pelvic pain. **2.37 ENDOMETRIOSIS* 2 1 1 Evidence: LNG-IUD use among women with endometriosis decreased dysmenorrhoea and pelvic pain. **2.37 ENDOMETRIOSIS* 2 1 1 Clarification: In the UK management depends on serum hCG concentrations and need for chemotherapy identified by measuring hCG concentrations. ** Clarification: In the UK management depends on serum hCG concentrations and need for chemotherapy identified by measuring hCG concentrations. ** Clarification: In the UK management depends on serum hCG concentrations and need for chemotherapy identified by measuring hCG concentrations. ** Clarification: Avoid use due to possible risks of perforation and irregular bleeding CERVICAL ECTROPION 1 1 1 CERVICAL ECTROPION 1 1 1 CERVICAL CANCER* (a) Undiagnosed mass b) Benign breast disease 1 1 1 1 2 BREAST DISEASE* a) Undiagnosed mass b) Benign breast disease 1 1 1 1 2 BREAST DISEASE* a) Undiagnosed mass b) Benign breast disease 1 1 1 1 2 1 2 BREAST DISEASE* a) Undiagnosed mass b) Benign breast disease 1 1 1 1 2 1 2 BREAST DISEASE* a) Undiagnosed mass b) Benign breast disease 1 1 1 1 2 1 2 BREAST DISEASE* a) Undiagnosed mass b) Benign breast disease 1 1 1 1 2 1 2 BREAST DISEASE* a) Undiagnosed mass b) Benign breast disease 1 1 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2						
Before evaluation 4 2 4 2 the IUD before evaluation. ENDOMETRIOSIS* 2 1 Evidence: LNG-IUD use among women with endometriosis decreased dysmenorrhoea and pelvic pain. **** ENDOMETRIOSIS* BENIGN OVARIAN TUMOURS (Including cysts) SEVERE DYSMENORRHOEA' GESTATIONAL TROPHOBLASTIC NEOPLASIA (GTN)* (Includes hydatidiform mole, invasive mole, placental site trophoblastic tumour) a) hCG normal b) hCG abnormal b) hCG abnormal cervical EctroPion CERVICAL ECTROPION CERVICAL ECTROPION CERVICAL CANCER* (I C I C (awaiting treatment) BENIGN OVARIAN TIME TO THE LIAL NEOPLASIA (CIN)* CERVICAL CANCER* (awaiting treatment) BENIGN OVARIAN TIME TO THE USE AND THE US	BLEEDING (suspicion for serious	ı	С	ı	С	pathological condition (such as pelvic malignancy) is suspected, it must be evaluated and the category
BENIGN OVARIAN TUMOURS (Including cysts) SEVERE DYSMENORRHOEA* GESTATIONAL TROPHOBLASTIC NEOPLASIA (GTN)* (Includes hydatidiform mole, invasive mole, placental site trophoblastic tumour) a) hCG normal b) hCG abnormal 1 1 2 Clarification: In the UK management depends on serum hCG concentrations and need for chemotherapy identified by measuring hCG concentrations. ¹⁹ CERVICAL ECTROPION 1 1 2 INTRAEPITHELIAL NEOPLASIA (CIN)* CERVICAL CANCER* (awaiting treatment) BREAST DISEASE* a) Undiagnosed mass b) Benign breast disease c) Family history of cancer d) Carriers of known gene mutations associated with breast cancer (eg. BRCA1) e) Breast cancer: (i) current (ii) past and no evidence of current disease for 5 years ENDOMETRIAL CANCER* I C I C 4 2 4 2 Clarification: Avoid use due to possible risks of perforation and irregular bleeding Clarification: Avoid use due to possible risks of perforation and irregular bleeding Clarification: Avoid use due to possible risks of perforation and irregular bleeding Clarification: Avoid use due to possible risks of perforation and irregular bleeding Clarification: Avoid use due to possible risks of perforation and irregular bleeding Clarification: Avoid use due to possible risks of perforation and irregular bleeding Clarification: Avoid use due to possible risks of perforation and irregular bleeding Clarification: Avoid use due to possible risks of perforation and irregular bleeding Clarification: LNG-IUD is protective against endometrial hyperplasia especially for tamoxifen users. **System Use can be considered if non-hormonal methods are unnacceptable.		4	2	4	2	
TUMOURS (including cysts) SEVERE DYSMENORRHOEA* GESTATIONAL TROPHOBLASTIC NEOPLASIA (GTN)* (includes hydatidiform mole, invasive mole, placental site trophoblastic tumour) a) hCG normal b) hCG abnormal CERVICAL ECTROPION CERVICAL ECTROPION CERVICAL CANCER* a) Undiagnosed mass b) Benign breast disease c) Family history of cancer d) Carriers of known gene mutations associated with breast cancer (ic) current (ii) past and no evidence of current disease for 5 years ENDOMETRIAL CANCER* I C I C 4 2 4 2 Clarification: In the UK management depends on serum hCG concentrations and need for chemotherapy identified by measuring hCG concentrations.¹¹ Clarification: Avoid use due to possible risks of perforation and irregular bleeding Clarification: Avoid use due to possible risks of perforation and irregular bleeding Clarification: Avoid use due to possible risks of perforation and irregular bleeding Clarification: Avoid use due to possible risks of perforation and irregular bleeding Clarification: Avoid use due to possible risks of perforation and irregular bleeding Clarification: Avoid use due to possible risks of perforation and irregular bleeding Clarification: Avoid use due to possible risks of perforation and irregular bleeding Clarification: Avoid use due to possible risks of perforation and irregular bleeding Clarification: LNG-IUD is protective against endometrial hyperplasia especially for tamoxifen users. **Single Page 1** Clarification: LNG-IUD is protective against endometrial hyperplasia especially for tamoxifen users. **Single Page 2** Clarification: LNG-IUD is protective against endometrial hyperplasia especially for tamoxifen users. **Single Page 2** Clarification: LNG-IUD is protective against endometrial hyperplasia especially for tamoxifen users. **Single Page 2** Clarification: Avoid use due to possible risks of perforation and irregular hyperplasia endometrial hyperplasia especially to tamoxifen users. **Single Page 2** Clarification: Avoid use due to possible risks of perforation and	ENDOMETRIOSIS*	2		1		endometriosis decreased dysmenorrhoea and pelvic
DYSMENORRHOEA* GESTATIONAL TROPHOBLASTIC NEOPLASIA (GTN)* (includes hydatidiform mole, invasive mole, placental site trophoblastic tumour) a) hCG normal b) hCG abnormal CERVICAL ECTROPION CERVICAL INTRAEPITHELIAL NEOPLASIA (GIN)* CERVICAL CANCER* a) Undiagnosed mass b) Benign breast disease c) Family history of cancer d) Carriers of known gene mutations associated with breast cancer (eg. BRCA1) e) Breast cancer (i) current (ii) past and no evidence of current disease for 5 years ENDOMETRIAL CANCER* I C I C 4 2 4 2 Clarification: In the UK management depends on serum hCG concentrations.¹¹ Clarification: Avoid use due to possible risks of perforation and irregular bleeding Clarification: Avoid use due to possible risks of perforation and irregular bleeding Clarification: LNG-IUD is protective against endometrial hyperplasia especially for tamoxifen users.** Clarification: LNG-IUD is protective against endometrial hyperplasia especially for tamoxifen users.** Clarification: LNG-IUD is protective against endometrial hyperplasia especially for tamoxifen users.** Clarification: LNG-IUD is protective against endometrial hyperplasia especially for tamoxifen users.** Clarification: LNG-IUD is protective against endometrial hyperplasia especially for tamoxifen users.** Clarification: LNG-IUD is protective against endometrial hyperplasia especially for tamoxifen users.** Clarification: LNG-IUD is protective against endometrial hyperplasia especially for tamoxifen users.** Clarification: LNG-IUD is protective against endometrial hyperplasia especially for tamoxifen users.** Clarification: LNG-IUD is protective against endometrial hyperplasia especially for tamoxifen users.** Clarification: Notice and the considered if non-hormonal methods are unnacceptable.	TUMOURS	-	1		1	
TROPHOBLASTIC NEOPLASIA (GTN)* (includes hydatidiform mole, invasive mole, placental site trophoblastic tumour) a) hCG normal b) hCG abnormal CERVICAL ECTROPION 1 1 2 NEOPLASIA (CIN)* CERVICAL (awaiting treatment) BREAST DISEASE* a) Undiagnosed mass 1 2 4 2 BREAST DISEASE* a) Undiagnosed mass 1 2 5 Benign breast disease c) Family history of cancer d) Carriers of known gene mutations associated with breast cancer: (i) current (ii) past and no evidence of current disease for 5 years ENDOMETRIAL CANCER* I C I C 4 2 4 2 Clarification: Avoid use due to possible risks of perforation and irregular bleeding Clarification: Avoid use due to possible risks of perforation and irregular bleeding Clarification: Avoid use due to possible risks of perforation and irregular bleeding Clarification: Avoid use due to possible risks of perforation and irregular bleeding Clarification: Avoid use due to possible risks of perforation and irregular bleeding Clarification: Avoid use due to possible risks of perforation and irregular bleeding Clarification: Avoid use due to possible risks of perforation and irregular bleeding Clarification: Avoid use due to possible risks of perforation and irregular bleeding Clarification: Avoid use due to possible risks of perforation and irregular bleeding Clarification: Avoid use due to possible risks of perforation and irregular bleeding Clarification: Avoid use due to possible risks of perforation and irregular bleeding Clarification: Avoid use due to possible risks of perforation and irregular bleeding Clarification: Avoid use due to possible risks of perforation and irregular bleeding Clarification: Avoid use due to possible risks of perforation and irregular bleeding Clarification: Avoid use due to possible risks of perforation and irregular bleeding Clarification: Avoid use due to possible risks of perforation and irregular bleeding Clarification: Avoid use due to possible risks of perforation and irregular bleeding Clarification: Avoid use due to possible risks of perfora		2	2		1	
a) hCG normal b) hCG abnormal CERVICAL ECTROPION CERVICAL INTRAEPITHELIAL NEOPLASIA (CIN)* CERVICAL CANCER* a) Undiagnosed mass b) Benign breast disease c) Family history of cancer d) Carriers of known gene mutations associated with breast cancer (eg. BRCA1) e) Breast cancer (i) current (ii) past and no evidence of current disease for 5 years ENDOMETRIAL CANCER* 1	TROPHOBLASTIC NEOPLASIA (GTN)* (includes hydatidiform mole, invasive mole, placental site					serum hCG concentrations and need for chemotherapy
CERVICAL INTRAEPITHELIAL NEOPLASIA (CIN)* CERVICAL CANCER* (awaiting treatment) BREAST DISEASE* a) Undiagnosed mass b 1 2 2 5 5 Benign breast disease c) Family history of cancer d) Carriers of known gene mutations associated with breast cancer (eg. BRCA1) e) Breast cancer: (i) current (ii) past and no evidence of current disease for 5 years ENDOMETRIAL CANCER* 1	a) hCG normal					
INTRAEPITHELIAL NEOPLASIA (CIN)* CERVICAL CANCER* (awaiting treatment) BREAST DISEASE* a) Undiagnosed mass b) Benign breast disease c) Family history of cancer d) Carriers of known gene mutations associated with breast cancer (eg. BRCA1) e) Breast cancer: (i) current (ii) past and no evidence of current disease for 5 years ENDOMETRIAL CANCER* I C I C 4 2 4 2	CERVICAL ECTROPION	-	1		1	
(awaiting treatment) 4 2 4 2 BREAST DISEASE* a) Undiagnosed mass b) Benign breast disease c) Family history of cancer d) Carriers of known gene mutations associated with breast cancer (eg. BRCA1) e) Breast cancer: (i) current (ii) past and no evidence of current disease for 5 years ENDOMETRIAL CANCER* 4 2 4 2 Clarification: LNG-IUD is protective against endometrial hyperplasia especially for tamoxifen users. 5:19.20 Use can be considered if non-hormonal methods are unnacceptable.	INTRAEPITHELIAL	-	1	:	2	
BREAST DISEASE* a) Undiagnosed mass b) Benign breast disease c) Family history of cancer d) Carriers of known gene mutations associated with breast cancer (eg. BRCA1) e) Breast cancer: (i) current (ii) past and no evidence of current disease for 5 years ENDOMETRIAL CANCER* 1	CERVICAL CANCER*	ı	С	I	С	
a) Undiagnosed mass b) Benign breast disease c) Family history of cancer d) Carriers of known gene mutations associated with breast cancer (eg. BRCA1) e) Breast cancer: (i) current (ii) past and no evidence of current disease for 5 years ENDOMETRIAL CANCER* I C I C 4 2 4 2 4 2	(awaiting treatment)	4	2	4	2	
(ii) past and no evidence of current disease for 5 years I C I C I C 4 2 4 2 4 2	a) Undiagnosed mass b) Benign breast disease c) Family history of cancer d) Carriers of known gene mutations associated with breast cancer (eg. BRCA1)	-	1		1 1	
1 C I C 4 2 4 2	(i) current (ii) past and no evidence of current disease for			1		endometrial hyperplasia especially for tamoxifen users. 5,19,20 Use can be considered if non-hormonal
4 2 4 2	ENDOMETRIAL CANCER*		C	,	C	
				_		
See also additional comments at end of table	OVARIAN CANCER	3	2	3	2	

OVARIAN CANCER*

*See also additional comments at end of table

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

INTRAUTERINE DEVICES (IUDs) Copper-bearing IUD (Cu-IUD) Levonorgestrel-releasing IUD (LNG-IUD)	(incl	uding doms	the p	ostpa omm	against STI/HIV. If there is risk of STI/HIV artum period), the correct and consistent use of ended, either alone or with another contraceptive ms reduce the risk of STI/HIV.
CONDITION	l=Initi		CATEGORY I=Initiation, C=Continuation		CLARIFICATIONS/EVIDENCE
	Cu-IUD		LNG-IUD		
			'		
a) Without distortion of the uterine cavity		1		1	Evidence: Among women with fibroids, there were no adverse health events with LNG-IUD use and there was a decrease in symptoms and size of fibroids for some
b) With distortion of the uterine cavity	4	4	4	4	women. ³⁸⁻⁴⁴
ANATOMICAL ABNORMALITIES* a) Distorted uterine cavity (any congenital or acquired uterine abnormality distorting the uterine cavity in a manner that is incompatible with IUD insertion) b) Other abnormalities (including cervical stenosis or cervical lacerations) not distorting the uterine cavity or interfering with IUD insertion		2 2			
PELVIC INFLAMMATORY DISEASE (PID)*	ı	С	I	С	
a) Past PID (assuming no known current risk factors for STIs) (i) with subsequent pregnancy (ii) without subsequent pregnancy b) PID - current	1 2 4	1 2 2	1 2 4	1 2 2	Clarification for continuation: Treat the PID using appropriate antibiotics. There is usually no need for removal of the IUD if the client sheets to continue its
					use. (See Selected Practice Recommendations for Contraceptive Use. WHO: Geneva, 2005). ² Continued use of an IUD depends on the woman's informed choice and her current risk factors for STIs and PID.

^{*}See also additional comments at end of table

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Evidence: Among IUD users treated for PID, there was no difference in clinical course if the IUD was removed or left in place.⁴⁵⁻⁴⁷

INTRAUTERINE DEVICES (IUDs) Copper-bearing IUD (Cu-IUD) Levonorgestrel-releasing IUD (LNG-IUD)	IUDs do not protect against STI/HIV. If there is risk of STI/HIV (including the postpartum period), the correct and consistent use condoms is recommended, either alone or with another contracept method. Male condoms reduce the risk of STI/HIV.			
CONDITION	l=Init	GORY iation, tinuation	CLARIFICATIONS/EVIDENCE	

STIs*	I	С	I	С	
a) Current purulent cervicitis or chlamydial infection or gonorrhoea	4	2	4	2	Clarification for continuation: Treat the STI using appropriate antibiotics. There is usually no need for removal of the IUD if the client wishes to continue its use. Continued use of an IUD depends on the woman's informed choice and her current risk factors for STIs and PID. Evidence: There is no evidence regarding whether IUD insertion among women with STIs increases the risk of PID compared with no IUD insertion. Among women who have an IUD inserted, the absolute risk of subsequent PID was low among women with STI at
b) Other STIs (excluding HIV and hepatitis)	2	2	2	2	the time of insertion but greater than among women with no STI at the time of IUD insertion. ⁴⁸⁻⁵⁴
c) Vaginitis (including Trichomonas vaginalis and Bacterial vaginosis)	2	2	2	2	
d) Increased risk of STIs	2/3	2	2/3	2	Clarification for initiation: If a woman has a very high individual likelihood of exposure to gonorrhoea or chlamydial infection, the condition is a Category 3. Evidence: Using an algorithm to classify STI risk status among IUD users, one study reported that 11% of high STI-risk women experienced IUD-related complications compared with 5% of those not classified as high risk. ⁵⁰
HIV/AIDS					
HIGH RISK OF HIV*	I	С	ı	С	
	2	2	2	2	Evidence: Among women at risk of HIV, copper IUD use did not increase risk of HIV acquisition. 55-85
HIV-INFECTED	I	С	ı	С	
a) Not using anti-retroviral therapy b) Using interacting anti-retroviral therapy	2	2	2	2	Evidence: Among IUD users, there is limited evidence showing no increased risk of overall complications or infection-related complications when comparing HIV-infected women with non-infected women. Furthermore, IUD use among HIV-infected women was not associated with increased risk of transmission to sexual partners. 55,66-69
AIDS and using HAART	ı	С	ı	С	Clarification for continuation: IUD users with AIDS
	2	2	2	2	should be closely monitored for pelvic infection. Evidence: No good evidence that efficacy of LNG-IUD is reduced by liver enzyme inducing drugs. 5.21:22

^{*}See also additional comments at end of table

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INTRAUTERINE DEVICES (IUDs) Copper-bearing IUD (Cu-IUD) Levonorgestrel-releasing IUD (LNG-IUD)	(including condoms	the postpa	against STI/HIV. If there is risk of STI/HIV irtum period), the correct and consistent use of ended, either alone or with another contraceptive ins reduce the risk of STI/HIV.
CONDITION	CATEGORY I=Initiation, C=Continuation		CLARIFICATIONS/EVIDENCE
	Cu-IUD LNG-IUD		

OTHER INFECTIONS	1	ı	
SCHISTOSOMIASIS			
a) Uncomplicated	1	1	
b) Fibrosis of the liver (if	1	1	
severe, see cirrhosis)	,		
TUBERCULOSIS*	I C	I C	
a) Non-pelvic	1 1	1 1	
b) Known pelvic	4 3	4 3	
MALARIA	1	1	
ENDOCRINE CONDITION	ONS		
DIABETES*			
a) History of gestational	1	1	
disease			
b) Non-vascular disease			
(i) non-insulin dependent	1	2	
(ii) insulin dependent	1	2	
c) Nephropathy/ retinopathy/	1	2	
neuropathy			
d) Other vascular disease or	1	2	
diabetes of >20 years'			
duration			
THYROID DISORDERS			
a) Simple goitre	1	1	
b) Hyperthyroid	1	1	
c) Hypothyroid	1	1	
GASTROINTESTINAL (CONDITIO	NS	
GALL-BLADDER DISEASE			
a) Symptomatic			
(i) treated by	1	2	
cholecystectomy			
(ii) medically treated	1	2	
(iii) current	1	2	
o) Asymptomatic	1	2	
HISTORY OF			
CHOLESTASIS*			
a) Pregnancy-related	1	1	
b) Past COC-related		2	
•	'		
VIRAL HEPATITIS*	,	_	
a) Active	1	3	
b) Carrier	1	1	
CIRRHOSIS*			Clarification:
a) Mild (compensated)	1	2	Mild (compensated) cirrhosis: without complications.
b) Severe	1	3	Severe (decompensated) cirrhosis: development of
(decompensated)			major complications (ascites, jaundice, encephalopa
			or gastrointestinal haemorrhage).23

^{*}See also additional comments at end of table

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INTRAUTERINE DEVICES (IUDs) Copper-bearing IUD (Cu-IUD) Levonorgestrel-releasing IUD (LNG-IUD)	(including the postpa			ostpa omm	against STI/HIV. If there is risk of STI/HIV artum period), the correct and consistent use of ended, either alone or with another contraceptive ms reduce the risk of STI/HIV.
CONDITION	l=Initi		EGORY tiation, tinuation		CLARIFICATIONS/EVIDENCE
	Cu-IUD I		LNG-IUD		
LIVER TUMOURS*					
a) Benign (adenoma)b) Malignant (hepatoma)	1			3 3	
INFLAMMATORY	1			1	
BOWEL DISEASE*					
(includes Crohn's					
disease Ulcerative colitis)					
ANAEMIAS					
THALASSAEMIA*	2			1	
SICKLE CELL DISEASE*	2		1		
IRON-DEFICIENCY ANAEMIA*	2	2		1	
RAYNAUD'S DISEASE					Clarification: Secondary Raynaud's usually has an
a) Primary	1 1		1		underlying cause such as scleroderma, rheumatoid
b) Secondary	1				arthritis, systemic lupus erythematosus and other
(i) without lupus				1	diseases. Systemic lupus erythematosus causes a
anticoagulant (ii) with lupus	1 1		2		tendency for increased coagulation if lupus coagulan is present. ²⁴⁻²⁸
anticoagulant	'				
DRUG INTERACTIONS					
DRUGS WHICH	1	<u> </u>		1	Evidence: One study found that rifabutin, which is in
AFFECT LIVER					the same class of drugs as rifampicin, has no impact
ENZYMES					on the effectiveness of LNG-IUD.70
For example Rifampicin,					St John's Wort and griseofulvin are liver enzyme
Rifabutin, St John's					inducers, but are less potent than rifampicin. 5,22,29
Wort, Griseofulvin, Certain					
Anticonvulsants					
(Phenytoin,					
Carmazepine,					
Barbiturates, Primidone, Topiramate,					
oxcarbazepine)					
NON-LIVER ENZYME	ME 1		1		
INDUCING ANTIBIOTICS					
HIGHLY ACTIVE	I	С	ı	С	Clarification: There is no known drug interaction
ANTIRETROVIRAL	2/3	2	2/3	2	between ARV therapy and IUD use. However, AIDS as
THERAPY (HAART)					a condition is classified as Category 3 for insertion and Category 2 for continuation unless the woman is
					clinically well on ARV therapy in which case, both
					insertion and continuation are classified as Category 2.
					(See AIDS condition above.)

^{*}See also additional comments at end of table

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Additional comments

AGF

Menarche to < 20 years: There is concern both about the risk of expulsion due to nulliparity and risk of STIs due to sexual behaviour in younger age groups. Although young women rarely use intrauterine methods²⁹ they may be suitable options for some. ³⁰

PARITY

Nulliparous: Nulliparity is related to an increased risk of expulsion.

POSTPARTUM

< 48 hours, 48 hours to < 4 weeks, \geq 4 weeks: Concern that the neonate may be at risk due to exposure to steroid hormones with LNG-IUD use during the first 6 weeks postpartum is the same as for other POCs. Risk of perforation is increased between 48 hours and 4 weeks, and insertion should be delayed.

Puerperal sepsis: Insertion of an IUD may substantially worsen the condition.

POST-ABORTION

Immediate post-septic abortion: Insertion of an IUD may substantially worsen the condition.

PAST ECTOPIC PREGNANCY

The absolute risk of ectopic pregnancy is extremely low due to the high effectiveness of IUDs. However, when a woman becomes pregnant during IUD use, the relative likelihood of ectopic pregnancy is greatly increased, and should be excluded.

HYPERTENSION

There is theoretical concern about the effect of LNG on lipids. There is no restriction for copper IUDs.

VENOUS THROMBOEMBOLISM (VTE)

Little evidence for LNG-IUD and risk of VTE. Insertion of Cu-IUD and LNG-IUD can be performed while using anticoagulants but risks and benefits should be discussed and clinical judgement is required.

CURRENT AND HISTORY OF ISCHAEMIC HEART DISEASE

There is theoretical concern about the effect of LNG on lipids. There is no restriction for copper IUDs.

STROKE

There is theoretical concern about the effect of LNG on lipids. There is no restriction for copper IUDs.

HEADACHES

Aura is a specific focal neurologic symptom. For more information on this and other diagnostic criteria, see: Headache Classification Subcommittee of the International Headache Society. The International Classification of Headache Disorders, 2nd Edition. Cephalalgia. 2004; 24 (Suppl 1): 1- 150. http://216.25.100.131/ihscommon/guidelines/pdfs/ihc_II_main_no_print.pdf

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, thus LNG-IUDs are sometimes used as a treatment to correct heavy bleeding.

ENDOMETRIOSIS

Copper IUD use may worsen dysmenorrhoea associated with the condition.

SEVERE DYSMENORRHOEA

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

GESTATIONAL TROPHOBLASTIC NEOPLASIA (GTN)

There is an increased risk of perforation since the treatment for the condition may require multiple uterine curettages.

CERVICAL INTRAEPITHELIAL NEOPLASIA (CIN)

There is some theoretical concern that LNG-IUDs may enhance progression of CIN.

CERVICAL CANCER (awaiting treatment)

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

BREAST DISEASE

Breast cancer: Breast cancer is a hormonally sensitive tumour. Concerns about progression of the disease may be less with LNG-IUDs than with COCs or higher-dose POCs. The LNG-IUS may be considered individually, and in consultation with the woman's breast surgeon.³

ENDOMETRIAL CANCER

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

OVARIAN CANCER

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

UTERINE FIBROIDS

Without distortion of the uterine cavity: Women with heavy or prolonged bleeding should be assigned the category for that condition.

With distortion of the uterine cavity: Pre-existing uterine fibroids that distort the uterine cavity may be incompatible with insertion and proper placement of the IUD.

ANATOMICAL ABNORMALITIES

Distorted uterine cavity: In the presence of an anatomic abnormality that distorts the uterine cavity, proper IUD placement may not be possible.

PELVIC INFLAMMATORY DISEASE (PID)

IUDs do not protect against STI/HIV/PID. In women at low risk of STIs, IUD insertion poses little risk of PID. Current risk of STIs and desire for future pregnancy are relevant considerations.

STIs

IUDs do not protect against STI/HIV/PID. Among women with chlamydial infection or gonorrhoea, the potential increased risk of PID with IUD insertions should be considered carefully and insertion delayed where possible until swab results are available and any treatment has been given. The concern is less for other STIs.

HIGH RISK OF HIV

IUDs do not protect against STI/HIV/PID.

TUBERCULOSIS

Known pelvic: Insertion of an IUD may substantially worsen the condition.

DIABETES

Whether the amount of LNG released by the IUD may slightly influence carbohydrate and lipid metabolism is unclear. Some progestogens may increase the risk of thrombosis, although this increase is substantially less than for COCs.

HISTORY OF CHOLESTASIS

There is concern that a history of COC-related cholestasis may predict subsequent cholestasis with LNG use. Whether there is any risk with use of an LNG-IUD is unclear.

VIRAL HEPATITIS

Active: POCs are metabolized by the liver and their use may adversely affect women whose liver function is compromised. This concern is similar to, but less than, that with COCs.

CIRRHOSIS

POCs are metabolized by the liver and their use may adversely affect women whose liver function is compromised. This concern is similar to, but less than, that with COCs.

LIVER TUMOURS

POCs are metabolized by the liver and their use may adversely affect women whose liver function is compromised. In addition, POC use may enhance the growth of tumours. This concern is similar to, but less than, that with COCs.

INFLAMMATORY BOWEL DISEASE

There is no evidence that women with IBD have an inherent increased risk of VTE. 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 the Cu-IUD or LNG-IUD is safe.

THALASSAEMIA

There is concern about an increased risk of blood loss with copper IUDs.

SICKLE CELL DISEASE

There is concern about an increased risk of blood loss with copper IUDs.

IRON-DEFICIENCY ANAEMIA

There is concern about an increased risk of blood loss with copper IUDs.

UK REFERENCES

- 1. Faculty of Family Planning and Reproductive Health Care Clinical Effectiveness Unit. The Copper Intrauterine Device as Long-Term Contraception. *Journal of Family Planning and Reproductive Health Care* 2004;**30**:29-42.
- 2. World Health Organisation. Selected Practice Recommendations for Contraceptive Use [Second Edition] http://www.who.int/reproductive-health/publications/spr/2004
- 3. Hubacher D, Lara-Ricalde R, Taylor DJ, Guerra-Infante F, Guzman-Rodriguez R. Use of copper Intrauterine devices and the risk of Tubal Infertility among nulligravid women. *The New England Journal of Medicine* 2001:345:561-7.
- 4. Andersson, K., Batar, I., and Rybo, G. Return to fertility after removal of a levonorgestrel-releasing intrauterine device and Nova-T. *Contraception* 46, 575-584. 1992.
- 5. Faculty of Family Planning and Reproductive Health Care Clinical Effectiveness Unit. The levonorgestrel-releasing intrauterine system (LNG-IUS) in contraception and reproductive health. *The Journal of Family Planning and Reproductive Health Care* 2004;**30**:99-109.

- 6. Vessey M, Painter R, Yeates D. Mortality in relation to oral contraceptive use and cigarette smoking. *Lancet* 2003;**362**:185-91.
- 7. McElduff P, Dobson A, Beaglehole R, Jackson R. Rapid reduction in coronary risk for those who quit cigarette smoking. *Australian and New Zealand Journal of Public Health* 1998;**22**:787-91.
- 8. Williams B, Poulter N, Brown MJ, Davies M, McInnes GT, Potter JP *et al.* The BHS Guidelines Working Party Guidelines for Management of Hypertension: Report of the Fourth Working Party of the British Hypertension Society, 2004 BHS IV. *Journal of Human Hypertension* 2004;**18**:139-85.
- 9. National Institute for Clinical Excellence. Hypertension. Management of hypertension in adults in primary care. 18. 2004. London, National Institute for Clinical Excellence.
- Scottish Intercollegiate Guidelines Network Secretariat. Prophylaxis of venous thromboembolism. 62, 1-47.
 2003.
- 11. Department of Health. Prodigy Guidance- Hyperlipidaemia. 2004. http://www.prodigy.nhs.uk/guidance/hyperlipidaemia
- 12. British Heart Foundation. What is Valvular Heart Disease? 2005. http://www.bhf.org.uk/hearthealth/index.asp?secID=1&secondlevel=77&thirdlevel=478
- 13. British Heart Foundation. Living with Congenital Heart Disease. 2005. http://www.bhf.org.uk/hearthealth/index.asp?secID=1&secondlevel=77&thirdlevel=362
- 14. American Council for Headache Education. How headaches differ. 2004. http://www.achenet.org/understanding/differ.php
- 15. The International Headache Society Task Force on Combined Oral Contraceptives and Hormone replacement Therapy. Recommendations on the risk of ischaemic stroke associated with use of combined oral contraceptives and hormone replacement therapy in women with migraine. *Cephalagia* 2000;**20**:155-6.
- 16. Royal College of Obstetricians and Gynaecologists. The Initial Management of Menorrhagia. National Evidence-Based Clinical Guidelines. 1998.
- 17. Royal College of Obstetricians and Gynaecologists. The Management of Menorrhagia in Secondary Care. National Evidence-Based Clinical Guidelines. 1999.
- 18. Royal College of Obstetricians and Gynaecologists. The Management of Gestational Trophoblastic Neoplasia. 2004.
- 19. Wildemeersch D,.Dhont M. Treatment of nonatypical endometrial hyperplasia with a levonorgestrel-releasing intrauterine system. *American Journal of Obstetrics and Gynecology* 2003;**188**:1297-8.
- 20. Rose GL,.Edmonds DK. Levonorgestrel IUS treatment for endometrial cystic hyperplasia. *Journal of Obstetrics and Gynaecology* 2001;**21**:642-3.
- 21. Wyeth Pharmaceuticals. Microval. 2003. www.medicines.org.uk
- 22. Faculty of Family Planning and Reproductive Health Care Clinical Effectiveness Unit. Drug Interactions with Hormonal Contraception. *Journal of Family Planning and Reproductive Health Care* 2005;**31**:139-50.
- 23. Gines, P., Quintero, E., Arroyo, V., Teres, J., Bruguera, M., Rimola, A., Caballeria, J., Rodes, J., and Rozman, C. Compensated cirrhosis: natural history and prognostic factors. *Hepatology* 7(1), 122-128. 1987.
- 24. Department of Health. PRODIGY Guidance Raynaud's phenomenon. 2002. http://www.prodigy.nhs.uk/raynauds-phenomenon
- 25. Eastcott H.H. Raynaud's disease and the oral contraceptive pill [Letter]. British Medical Journal 2, 477. 1976.
- 26. Altura BM. Sex and oestrogens and responsiveness of terminal arterioles to neurohypophyseal hormones and catecholamines. *Pharmacology and Experimental Therapeutics* 1975;**193**:403-12.
- 27. Greenstein D., Jeffcote N., Ilsley D., Kester R.C. The menstrual cycle and Raynaud's phenomenon. *Angiology* 1996;**47**:427-36.
- 28. Bartelink M.L, Wollersheim H., Vemer H, Thomas C.M., de Boo T., Thien T. The effects of single oral doses of 17 beta-oestradiol and progesterone on finger circulation in healthy women and in women with primary Raynaud's phenomenon. *European Journal of Clinical Pharmacology* 1994;**46**:557-60.
- 29. McCarthy TG, Roy AC, Kottegoda SR, Ratnam SS. Menstrual blood loss (MBL) in users of copper and progesterone medicated intrauterine devices (IUDs). *Singapore Journal of Obstetrics and Gynaecology* 1984;**15**:178-80.
- 30. Dawe, Fiona and Meltzer, Howard. Contraception and Sexual Health 2002. National Statistics www.statistics.gov.uk, 1-49. 2003. HMSO. National Statistics.
- 31. Faculty of Family Planning and Reproductive Health Care Clinical Effectiveness Unit. Contraceptive Choices for Young People. *Journal of Family Planning and Reproductive Health Care* 2004;**30**:237-51.

WHO REFERENCES

- Cramer DW et al. Tubal infertility and the intrauterine device. New England Journal of Medicine, 1985, 312:941-7.
- 2. Daling JR et al. Primary tubal infertility in relation to the use of an intrauterine device. *New England Journal of Medicine*, 1985, 312:937-41.
- 3. Daling JR et al. The intrauterine device and primary tubal infertility. *New England Journal of Medicine*, 1992, 326:203-4.
- 4. Delbarge W et al. Return to fertility in nulliparous and parous women after removal of the GyneFix intrauterine contraceptive system. *European Journal of Contraception & Reproductive Health Care*, 2002, 7:24-30.
- 5. Doll H, Vessey M, Painter R. Return of fertility in nulliparous women after discontinuation of the intrauterine device: comparison with women discontinuing other methods of contraception. *BJOG: an International Journal of Obstetrics & Gynaecology*, 2001, 108:304-14.
- 6. Hubacher D et al. Use of copper intrauterine devices and the risk of tubal infertility among nulligravid women. New England Journal of Medicine, 2001, 345:561-7.
- 7. Skjeldestad FE, Bratt H. Return of fertility after use of IUDs (Nova-T, MLCu250 and MLCu375). *Advances in Contraception*, 1987, 3:139-45.
- 8. Urbach DR et al. Association of perforation of the appendix with female tubal infertility. *American Journal of Epidemiology*, 2001, 153:566-71.
- 9. Wilson JC. A prospective New Zealand study of fertility after removal of copper intrauterine contraceptive devices for conception and because of complications: a four-year study. *American Journal of Obstetrics & Gynecology*, 1989, 160:391-6.
- 10. Brenner PF. A clinical trial of the Delta-T intrauterine device: immediate postpartum insertion. *Contraception*, 1983, 28:135-47.
- 11. Chi IC, Wilkens L, Rogers S. Expulsions in immediate postpartum insertions of Lippes Loop D and Copper T IUDs and their counterpart Delta devices—an epidemiological analysis. *Contraception*, 1985, 32:119-34.
- 12. El-Shafei M. Postpartum and postabortion intrauterine device insertion unmet needs of safe reproductive health: three year experience of Mansoura University Hospital. *European Journal of Contraception & Reproductive Health Care*, 2000, 26:253-62.
- 13. Grimes D et al. Immediate post-partum insertion of intrauterine devices.[update of *Cochrane Database Systematic Reviews*, 2001, CD003036; PMID: 11406064]. [Review] [30 refs]. *Cochrane Database of Systematic Reviews*, 2003, CD003036.
- 14. Morrison C et al. Clinical outcomes of two early postpartum IUD insertion programs in Africa. *Contraception*, 1996, 53:17-21.
- 15. Thiery M et al. The ML Cu250; clinical experience in Belgium and The Netherlands. *British Journal of Obstetrics & Gynaecology*, 1982, 89:51-3.
- Thiery M, Delbeke L, Van Kets H. Comparative performance of two copper-wired IUDs (ML Cu 250 and T Cu 200): immediate postpartum and interval insertion. Advances in Contraceptive Delivery Systems, 1980, 1:27-35.
- 17. The World Health Organization's Special Programme of Research, Development and Research Training in Human Reproduction. Task Force on Intrauterine Devices for Fertility Regulation. The Alza T IPCS 52, a longer acting progesterone IUD: safety and efficacy compared to the TCu22OC and multiload 250 in two randomized multicentre trials. Clinical Reproduction & Fertility, 1983, 2:113-28.
- 18. The World Health Organization's Special Programme of Research, Development and Research Training in Human Reproduction. Task Force on Intrauterine Devices for Fertility Regulation. IUD insertion following termination of pregnancy: a clinical trial of the TCu 220C, Lippes loop D, and copper 7. *Studies in Family Planning*, 1983, 14:99-108.
- 19. The World Health Organization's Special Programme of Research, Development and Research Training in Human Reproduction. Task Force on Intrauterine Devices for Fertility Regulation. IUD insertion following spontaneous abortion: a clinical trial of the TCu 220C, Lippes loop D, and copper 7. Studies in Family Planning, 1983, 14:109-14.
- El Tagy A et al. Safety and acceptability of post-abortal IUD insertion and the importance of counseling. Contraception, 2003, 67:229-34.
- 21. Gillett PG et al. A comparison of the efficacy and acceptability of the Copper-7 intrauterine device following immediate or delayed insertion after first-trimester therapeutic abortion. *Fertility & Sterility*, 1980, 34:121-4.
- 22. Grimes D, Schulz K, Stanwood N. Immediate postabortal insertion of intrauterine devices.[update of Cochrane Database Syst Rev. 2000;(2):CD001777; PMID: 10796820]. [Review] [28 refs]. *Cochrane Database of Systematic Reviews*, 2002, CD001777.
- 23. Gupta I, Devi PK. Studies on immediate post-abortion copper "T" device. *Indian Journal of Medical Research*, 1975, 63:736-9.
- 24. Moussa A. Evaluation of postabortion IUD insertion in Egyptian women. Contraception, 2001, 63:315-7.
- 25. Pakarinen P, Toivonen J, Luukkainen T. Randomized comparison of levonorgestrel- and copper-releasing intrauterine systems immediately after abortion, with 5 years' follow-up. *Contraception*, 2003, 68:31-4.

- Stanwood NL, Grimes DA, Schulz KF. Insertion of an intrauterine contraceptive device after induced or spontaneous abortion: a review of the evidence. BJOG: an International Journal of Obstetrics & Gynaecology, 2001, 108:1168-73.
- 27. Suvisaari J, Lahteenmaki P. Detailed analysis of menstrual bleeding patterns after postmenstrual and postabortal insertion of a copper IUD or a levonorgestrel-releasing intrauterine system. *Contraception*, 1996, 54:201-8.
- 28. Timonen H, Luukkainen T. Immediate postabortion insertion of the copper-T (TCu-200) with eighteen months follow-up. *Contraception*, 1974, 9:153-60.
- Tuveng JM, Skjeldestad FE, Iversen T. Postabortal insertion of IUD. Advances in Contraception, 1986, 2:387-92.
- 30. Zhang PZ. Five years experience with the copper T 200 in Shanghai 856 cases. *Contraception,* 1980, 22:561-71.
- 31. Barrington JW, Arunkalaivanan AS, Abdel-Fattah. Comparison between the levonorgestrel intrauterine system (LNG-IUS) and thermal balloon ablation in the treatment of menorrhagia. *European Journal of Obstetrics, Gynecology & Reproductive Biology*, 2003, 108:72-4.
- 32. Hurskainen R et al. Quality of life and cost-effectiveness of levonorgestrel-releasing intrauterine system versus hysterectomy for treatment of menorrhagia: a randomised trial. *Lancet*, 2001, 357:273-7.
- 33. Istre O, Trolle B. Treatment of menorrhagia with the levonorgestrel intrauterine system versus endometrial resection. *Fertility & Sterility*, 2001, 76:304-9.
- 34. Lethaby AE, Cooke I, Rees M. Progesterone/progestogen releasing intrauterine systems versus either placebo or any other medication for heavy menstrual bleeding. *Cochrane Database of Systematic Reviews*, 2000, CD002126.
- 35. Stewart A et al. The effectiveness of the levonorgestrel-releasing intrauterine system in menorrhagia: a systematic review. *BJOG: an International Journal of Obstetrics & Gynaecology*, 2001, 108:74-86.
- 36. Fedele L et al. Use of a levonorgestrel-releasing intrauterine device in the treatment of rectovaginal endometriosis. *Fertility & Sterility*, 2001, 75:485-8.
- 37. Vercellini P et al. A levonorgestrel-releasing intrauterine system for the treatment of dysmenorrhea associated with endometriosis: a pilot study. *Fertility & Sterility*, 1999, 72:505-8.
- 38. Fedele L et al. Treatment of adenomyosis-associated menorrhagia with a levonorgestrel-releasing intrauterine device. *Fertility & Sterility*, 1997, 68:426-9.
- 39. Grigorieva V et al. Use of a levonorgestrel-releasing intrauterine system to treat bleeding related to uterine leiomyomas. *Fertility & Sterility*, 2003, 79:1194-8.
- 40. Mercorio F et al. The effect of a levonorgestrel-releasing intrauterine device in the treatment of myoma-related menorrhagia. *Contraception*, 2003, 67:277-80.
- 41. Wildemeersch D, Schacht E, Wildemeersch P. Treatment of primary and secondary dysmenorrhea with a novel 'frameless' intrauterine levonorgestrel-releasing drug delivery system: a pilot study. *European Journal of Contraception & Reproductive Health Care*, 2001, 6:192-8.
- 42. Wildemeersch D, Schacht E. The effect on menstrual blood loss in women with uterine fibroids of a novel "frameless" intrauterine levonorgestrel-releasing drug delivery system: a pilot study. *European Journal of Obstetrics, Gynecology & Reproductive Biology,* 2002, 102:74-9.
- 43. Wildemeersch D, Schacht E, Wildemeersch P. Contraception and treatment in the perimenopause with a novel "frameless" intrauterine levonorgestrel-releasing drug delivery system: an extended pilot study. *Contraception*, 2002, 66:93-99.
- 44. Wildemeersch D, Schacht E, Wildemeersch P. Performance and acceptability of intrauterine release of levonorgestrel with a miniature delivery system for hormonal substitution therapy, contraception and treatment in peri and postmenopausal women. *Maturitas*, 2003, 44:237-45.
- 45. Larsson B, Wennergren M. Investigation of a copper-intrauterine device (Cu-IUD) for possible effect on frequency and healing of pelvic inflammatory disease. *Contraception*, 1977, 15:143-9.
- 46. Soderberg G, Lindgren S. Influence of an intrauterine device on the course of an acute salpingitis. *Contraception*, 1981, 24:137-43.
- 47. Teisala K. Removal of an intrauterine device and the treatment of acute pelvic inflammatory disease. *Annals of Medicine*, 1989, 21:63-5.
- 48. Faundes A et al. The risk of inadvertent intrauterine device insertion in women carriers of endocervical Chlamydia trachomatis. *Contraception*, 1998, 58:105-9.
- 49. Ferraz do Lago R et al. Follow-up of users of intrauterine device with and without bacterial vaginosis and other cervicovaginal infections. *Contraception*, 2003, 68:105-9.
- Morrison CS et al. Use of sexually transmitted disease risk assessment algorithms for selection of intrauterine device candidates. Contraception, 1999, 59:97-106.
- 51. Pap-Akeson M et al. Genital tract infections associated with the intrauterine contraceptive device can be reduced by inserting the threads into the uterine cavity. *British Journal of Obstetrics & Gynaecology,* 1992, 99:676-9.
- 52. Sinei SK et al. Preventing IUCD-related pelvic infection: the efficacy of prophylactic doxycycline at insertion. *British Journal of Obstetrics & Gynaecology,* 1990, 97:412-9.

- Skjeldestad FE et al. IUD users in Norway are at low risk for genital C. trachomatis infection. Contraception, 1996, 54:209-12.
- 54. Walsh TL et al. IUD Study Group. Effect of prophylactic antibiotics on morbidity associated with IUD insertion: results of a pilot randomized controlled trial. *Contraception*, 1994, 50:319-27.
- 55. European Study Group on Heterosexual Transmission of HIV. Comparison of female to male and male to female transmission of HIV in 563 stable couples. *BMJ*, 1992, 304:809-13.
- 56. Carael M et al. Human immunodeficiency virus transmission among heterosexual couples in Central Africa. *AIDS*, 1988, 2:201-5.
- 57. Kapiga SH et al. Risk factors for HIV infection among women in Dar-es-Salaam, Tanzania. *Journal of Acquired Immune Deficiency Syndromes*, 1994, 7:301-9.
- 58. Kapiga SH et al. The incidence of HIV infection among women using family planning methods in Dar es Salaam, Tanzania. *AIDS*, 1998, 12:75-84.
- 59. Mann JM et al. HIV infection and associated risk factors in female prostitutes in Kinshasa, Zaire. *AIDS*, 1988, 2:249-54.
- 60. Martin HL, Jr. et al. Hormonal contraception, sexually transmitted diseases, and risk of heterosexual transmission of human immunodeficiency virus type 1. *Journal of Infectious Diseases*, 1998, 178:1053-9.
- 61. Mati JK et al. Contraceptive use and the risk of HIV infection in Nairobi, Kenya. *International Journal of Gynaecology & Obstetrics*, 1995, 48:61-7.
- 62. Nicolosi A et al. Italian Study Group on HIV Heterosexual Transmission. The efficiency of male-to-female and female-to-male sexual transmission of the human immunodeficiency virus: a study of 730 stable couples. *Epidemiology*, 1994, 5:570-5.
- 63. Plourde PJ et al. Human immunodeficiency virus type 1 infection in women attending a sexually transmitted diseases clinic in Kenya. *Journal of Infectious Diseases*, 1992, 166:86-92.
- 64. Sinei SK et al. Contraceptive use and HIV infection in Kenyan family planning clinic attenders. *International Journal of STD & AIDS*, 1996, 7:65-70.
- 65. Spence MR et al. Seroprevalence of human immunodeficiency virus type I (HIV-1) antibodies in a family-planning population. *Sexually Transmitted Diseases*, 1991, 18:143-5.
- 66. Morrison CS et al. Is the intrauterine device appropriate contraception for HIV-1-infected women? *BJOG: an International Journal of Obstetrics & Gynaecology,* 2001, 108:784-90.
- 67. Sinei SK et al. Complications of use of intrauterine devices among HIV-1-infected women. *Lancet*, 1998, 351:1238-41.
- 68. Mostad SB et al. Hormonal contraception, vitamin A deficiency, and other risk factors for shedding of HIV-1 infected cells from the cervix and vagina. *Lancet*, 1997, 350:922-7.
- 69. Richardson BA et al. Effect of intrauterine device use on cervical shedding of HIV-1 DNA. *AIDS*, 1999, 13:2091-7.
- 70. Bounds W, Guillebaud J. Observational series on women using the contraceptive Mirena concurrently with anti-epileptic and other enzyme-inducing drugs. *Journal of Family Planning and Reproductive Health Care, 2002*, 28:78-80.

Table of contents

Surgical sterilisation procedures

A. Female surgical sterilisation	96
PERSONAL CHARACTERISTICS AND REPRODUCTIVE HISTORY	96
Pregnancy	96
Young Age	96
Parity	96
Breastfeeding	96
Postpartum	96
Post-abortion	96
Past ectopic pregnancy	96
Smoking	96
Obesity	96
CARDIOVASCULAR DISEASE	. 97
Multiple risk factors for arterial cardiovascular disease	97
Hypertension	97
History of high blood pressure during pregnancy	97
Venous thromboembolism (VTE)	98
Known thrombogenic mutations	98
Superficial venous thrombosis	98
Current and history of ischaemic heart disease	98
Stroke	98
Known hyperlipidaemias	98
Valvular and congenital heart disease	99
NEUROLOGICAL CONDITIONS	
Headaches	99
Epilepsy	99
DEPRESSIVE DISORDERS Depressive disorders	. 99 99
REPRODUCTIVE TRACT INFECTIONS AND DISORDERS	
Vaginal bleeding patterns	. . 99
Unexplained vaginal bleeding	99
Endometriosis	99
Benign ovarian tumours	100
Severe dysmenorrhoea	100
Gestational trophoblastic neoplasia	100
Cervical ectropion	100
Cervical intraepithelial neoplasia (CIN)	100
Cervical cancer	100
Breast disease	100
Endometrial cancer	100
Ovarian cancer	100
Uterine fibroids	100
Pelvic inflammatory disease (PID)	100
STIs	101
HIV/AIDS	. 101
High risk of HIV	101
HIV-infected	101
AIDS and using HAART	101
OTHER INFECTIONS	101
Schistosomiasis	101
Tuberculosis	101
Malaria SANDITIONS	101
	. 101
Diabetes Thyroid disorders	101
TOWN OF THE STREET	

GASTROINTESTINAL CONDITIONS	.102
Gall-bladder disease	102
History of cholestasis	102
Viral hepatitis	102
Cirrhosis	102
Liver tumours	102
Inflammatory bowel disease (Crohn's and Ulcerative Colitis)	102
	.102
Thalassaemia	102
Sickle cell disease	102
Iron-deficiency anaemia	102
Raynaud's disease	102
OTHER CONDITIONS RELEVANT ONLY FOR FEMALE SURGICAL STERILISATION	103
Local infection	103
Coagulation disorders	103
Respiratory diseases	103
Systemic infection or gastroenteritis	103
Fixed uterus due to previous surgery or infection	103
Abdominal wall or umbilical hernia	103
Diaphragmatic hernia	103
Kidney disease	103
Severe nutritional deficiencies	103
Previous abdominal or pelvic surgery	103
Sterilisation concurrent with abdominal surgery	103
B. Male surgical sterilisation	105
PERSONAL CHARACTERISTICS AND REPRODUCTIVE HISTORY	.106
Young age	106
No offspring	106
DEPRESSIVE DISORDERS	
Depressive disorders	106
HIV/AIDS	
High risk of HIV	106
HIV-infected	106
AIDS	106
	.106
	106
ANAEMIAS	
Sickle cell disease	106
OTHER CONDITIONS RELEVANT ONLY FOR MALE SURGICAL STERILISATION	
Local infections	106
Coagulation disorders	106
Previous scrotal injury	106
Systemic infection or gastroenteritis	106
Large varicocele	106
Large hydrocele	106
Filariasis; elephantiasis	106
Intrascrotal mass	106
Cryptorchidism	107
Inguinal hernia	107
mydmar norma	107
Additional Comments	109
Additional Commonts.	100
References for sterilisation	100
TOO OF THE STATE O	.00

SURGICAL STERILISATION PROCEDURES

Given that sterilisation is a surgical procedure that is intended to be permanent, special care must be taken to assure that every client makes a voluntary informed choice of the method. Particular attention must be given in the case of young people, nulliparous women, men who have not yet been fathers, and clients with mental health problems, including depressive conditions. All clients should be carefully counselled about the intended permanence of sterilisation and the availability of alternative, long-term, highly effective methods. This is of extra concern for young people. The national laws and existing norms for the delivery of sterilisation procedures must be considered in the decision process.

Transcervical methods of female sterilisation are not addressed in these recommendations.

There is no medical condition that would absolutely restrict a person's eligibility for sterilisation, although some conditions and circumstances will require that certain precautions are taken, including those where the recommendation is C (Caution), D (Delay), or S (Special). For some of these conditions and circumstances, the theoretical or proven risks may outweigh the advantages of undergoing sterilisation, particularly female sterilisation. Where the risks of sterilisation outweigh the benefits, long-term, highly effective contraceptive methods are a preferable alternative. Decisions in this regard will have to be made on an individual basis, considering the risks and benefits of sterilisation versus the risks of pregnancy, and the availability and acceptability of highly effective, alternative methods.

The following classification of conditions into the four different categories is based on an in-depth review of the epidemiological and clinical evidence relevant to medical eligibility. Sterilisation procedures should only be performed by well-trained providers in appropriate clinical settings using proper equipment and supplies. Appropriate service delivery guidelines, including infection prevention protocols, should be followed to maximize client safety.

Categories in this Chapter are based on recent existing guidelines from the Royal College of Obstetricians and Gynaecologists on sterilisation.¹

UK Category		Sterilisation
A	Accept	There is no medical reason to deny sterilisation to a person with this condition.
С	Caution	The procedure is normally conducted in a routine setting, but with extra preparation, precautions and counselling.
D	Delay	The procedure is delayed until the condition is evaluated, treated and / or changes. Alternative temporary methods of contraception should be provided.
S	Special	The procedure should be undertaken in a setting with an experienced surgeon and staff, equipment needed to provide general anaesthesia, and other back-up medical support. For these conditions, the capacity to decide on the most appropriate procedure and anaesthesia method is also needed. Alternative temporary methods of contraception should be provided, if referral is required or there is otherwise any delay.

Please note: References used for the development of this UK version are numbered in **red**. The original WHO references are numbered in **black**.

FEMALE SURGICAL STERILISATION	Sterilisation does not protect against STI/HIV. If there is risk of STI/HIV (including during the postpartum period), the correct and consistent use of condoms is recommended, either alone or with another contraceptive method. Male condoms reduce the risk of STI/HIV.					
CONDITION	CATEGORY	CLARIFICATIONS/EVIDENCE				

		REPRODUCTIVE HISTORY
PREGNANCY	D	
YOUNG AGE*	С	Clarification: Young women, like all women, should be counselled about the permanency of sterilisation and the availability of alternative, long-term, highly effective methods. Additional care must be taken when counselling people aged <30 years.¹ Evidence: Studies show that up to 20% of women sterilised at a young age later regret this decision, and that young age is one of the strongest predictors of regret (including request for reversal information and obtaining reversal) that can be identified before sterilisation.¹¹¹9
PARITY*		
(specifically in relation to existing children)		
a) Nulliparous – no children	С	Clarification: Additional care must be taken when
b) Parous – any children	Α	counselling people who have no children.1
BREASTFEEDING	Α	
POSTPARTUM*		Clarification: Laprascopic sterilisation is usually performed
a) Following vaginal delivery or emergency caesarean section	D	as an interval procedure ≥ 6 weeks postpartum. Laprascopic sterilisation may be performed at the time of an elective caesarean section when there has been sufficient
b) At the time of caesarean section	С	time (a week or more) between counselling and the procedure.1
POST-ABORTION*	D	Clarification: Includes spontaneous and induced abortion < 24 weeks gestation (medical or surgical abortion). Normally sterilisation should be performed as an interval procedure following medical or surgical abortion; ≥ 6 weeks postabortion, but alternative contraception provided in the interim.¹
PAST ECTOPIC PREGNANCY	Α	
SMOKING		
a) Age < 35 years b) Age ≥ 35 years	Α	
(i) <15 cigarettes/day	Α	
(ii) ≥15 cigarettes/day (iii) stopped smoking	Α	
(iii) stopped smoking < 1 year ago (iv) stopped smoking	Α .	
≥1 year ago	A	
OBESITY		
a) ≥ 30 – 34 kg/m² body mass index (BMI)	С	Clarification: The procedure may be more difficult. There is an increased risk of wound infection and disruption. Obese
b) 35 – 39 kg/m² body mass index (BMI)	С	women may have limited respiratory function and may be more likely to require general anaesthesia. Risk of
c) ≥ 40 kg/m² body mass index (BMI)	С	laparotomy increases with obesity.¹ Evidence: Women who were obese were more likely to have complications when undergoing sterilisation.²0-23

^{*}See also additional comments at end of table

UKI	MEC	DEFINITION OF CATEGORY	
Α	ACCEPT	There is no medical reason to deny sterilisation to a person with this condition.	
С	CAUTION	The procedure is normally conducted in a routine setting, but with extra preparation, precautions and counselling.	
D	DELAY	The procedure is delayed until the condition is evaluated and / or changes. Alternative temporary methods of contraception should be provided.	
S	SPECIAL	The procedure should be undertaken in a setting with an experienced surgeon and staff, equipment needed to provide general anaesthesia, and other back up medical support. For these conditions, the capacity to decide on the most appropriate procedure and anaesthesia method is also needed. Alternative temporary methods of contraception should be provided, if referral is required or there is otherwise any delay.	

FEMALE SURGICAL STERILISATION	Sterilisation does not protect against STI/HIV. If there is risk of STI/HIV (including during the postpartum period), the correct and consistent use of condoms is recommended, either alone or with another contraceptive method. Male condoms reduce the risk of STI/HIV.	
CONDITION	CATEGORY	CLARIFICATIONS/EVIDENCE

CARDIOVASCULAR DISEASE			
MULTIPLE RISK FACTORS FOR ARTERIAL CARDIOVASCULAR DISEASE* (such as older age, smoking, diabetes and hypertension)	S		
HYPERTENSION			
For all categories of hypertension, classifications are based on the assumption that no other risk factors for cardiovascular disease exist. When multiple risk factors do exist, risk of cardiovascular disease may increase exhibit and programs of blood programs level is not sufficient to classify a woman as hypertensive. If			

substantially. A single reading of blood pressure level is not sufficient to classify a woman as hypertensive. If elevated the BP should be re-assessed at the end of the consultation. If blood pressure is increased it should be re-assessed on at least two subsequent clinic visits at monthly intervals. 4:5

30 10 d000000 011 dt 10d0t till 0	or in accessor on an issuer the careequent on no constant, the rails.			
a) Hypertension, adequately controlled b) Consistently elevated blood pressure (properly taken measurements) (i) systolic 140-159 or diastolic > 90 to 94mmHg (ii) systolic ≥160 or diastolic ≥95mmHg c) Vascular disease	C S S	Clarification: Elevated blood pressure should be controlled before surgery. There are increased anaesthesia-related risks and an increased risk of cardiac arrhythmia with uncontrolled hypertension. Careful monitoring of blood pressure intraoperatively is particularly necessary in this situation. Vascular disease includes: coronary heart disease presenting with angina; peripheral vascular disease presenting with intermittent claudication; hypertensive retinopathy; and transient ischaemic attacks)		
HISTORY OF HIGH BLOOD PRESSURE DURING PREGNANCY (where current blood pressure is normal)	А			

^{*}See also additional comments at end of table

UK	MEC	DEFINITION OF CATEGORY	
Α	ACCEPT	There is no medical reason to deny sterilisation to a person with this condition.	
С	CAUTION	The procedure is normally conducted in a routine setting, but with extra preparation, precautions and counselling.	
D	DELAY	The procedure is delayed until the condition is evaluated and / or changes. Alternative temporary methods of contraception should be provided.	
S	SPECIAL	The procedure should be undertaken in a setting with an experienced surgeon and staff, equipment needed to provide general anaesthesia, and other back up medical support. For these conditions, the capacity to decide on the most appropriate procedure and anaesthesia method is also needed. Alternative temporary methods of contraception should be provided, if referral is required or there is otherwise any delay.	

FEMALE SURGICAL STERILISATION	Sterilisation does not protect against STI/HIV. If there is risk of STI/HIV (including during the postpartum period), the correct and consistent use of condoms is recommended, either alone or with another contraceptive method. Male condoms reduce the risk of STI/HIV.	
CONDITION	CATEGORY	CLARIFICATIONS/EVIDENCE

		1
VENOUS		Clarification: VTE includes deep vein thrombosis (DVT)
THROMBOEMBOLISM (VTE)		and pulmonary embolism (PE).
a) History of VTE	Α	To reduce the risk of VTE, early ambulation is recommended.
b) Current VTE (on anticoagulants)	D	Current VTE refers to disease for which anti-coagulants are still being used
c) Family history of VTE		Family history of VTE may alert clinicians to women who
(i) first-degree relative age < 45 years	А	may have an increased risk themselves. Nevertheless, this alone cannot identify with any certainty an underlying
(ii) first-degree relative age≥ 45 yearsd) Major surgery	А	thrombophilia. Moreover, even when a genetic thrombophilia is identified not every woman will go on to develop a VTE.
(i) without prolonged	Α	Major Surgery includes operations of > 30 minutes
immobilisation	, ,	duration. Procedures with high risk of VTE include: general
(ii) with prolonged immobilisation	D	or orthopaedic surgery, trauma, neurosurgery.6
e) Minor surgery without	Α	Minor surgery includes operations lasting < 30 minutes (eg
immobilisation		laparoscopic sterilisation), procedures such as knee
f) language leilite (/ / / / / / language leilite	_	arthroscopy. Varicose vein surgery has a low risk for VTE.
f) Immobility (unrelated to surgery) e.g. wheelchair	D	Immobility due to hospitalisation for acute trauma, acute illness, paralysis is associated with a high risk of VTE.
use, debilitating illness		innoos, paralyolo lo accordated with a high hole of VTE.
KNOWN THROMBOGENIC	Α	
MUTATIONS		
(e.g., Factor V Leiden; Prothrombin mutation; Protein S,		
Protein C, and Antithrombin deficiencies)		
SUPERFICIAL VENOUS THROMBOSIS		
a) Varicose veins	Α	
b) Superficial thrombophlebitis	Α	
CURRENT AND HISTORY OF ISCHAEMIC HEART DISEASE*		
a) Current ischaemic heart	D	
disease	٥	
b) History of ischaemic heart	C	
b) History of ischaemic heart disease	С	
b) History of ischaemic heart disease STROKE		
b) History of ischaemic heart disease	С	
b) History of ischaemic heart disease STROKE (history of cerebrovascular	С	
b) History of ischaemic heart disease STROKE (history of cerebrovascular accident)	C	
b) History of ischaemic heart disease STROKE (history of cerebrovascular accident)	C	
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FEMALE SURGICAL STERILISATION	Sterilisation does not protect against STI/HIV. If there is risk of STI/HIV (including during the postpartum period), the correct and consistent use of condoms is recommended, either alone or with another contraceptive method. Male condoms reduce the risk of STI/HIV.	
CONDITION	CATEGORY	CLARIFICATIONS/EVIDENCE

VALVULAR AND CONGENTIAL HEART DISEASE a) Uncomplicated b) Complicated (e.g. pulmonary hypertension, atrial fibrillation, history of subacute bacterial endocarditis)	C S	Clarification: Valvular heart disease occurs when any of the valves are stenotic and/or incompetent (eg. Aortic stenosis, mitral regurgitation; tricuspid valve abnormalities; pulmonary stenosis) ⁸ Congenital heart disease: Aortic stenosis; Atrial septal defects; Atrio-ventricular septal defect; Cardiomyopathy; (hypertrophic or dilated); Co-arctation of the Aorta; Complex Transposition of the Great Arteries; Ebstein's Anomaly; Eisenmenger Syndrome: Persistent Ductus Arteriosus; Pulmonary Atresia; Pulmonary Stenosis; Tetralogy of Fallot; Total Anomalous Pulmonary Venous Connection; Tricuspid Atresia; Truncus Arteriosus; Ventricular Septal Defect. ⁹ Clarification: The woman may require prophylactic antibiotics. Clarification: The woman is at high risk for complications associated with anaesthesia and surgery. If the woman has atrial fibrillation that has not been successfully managed or current subacute bacterial endocarditis, the procedure should be delayed.
NEUROLOGIC CONDITIO	NS	
HEADACHES a) Non-migrainous (mild or severe) b) Migraine	А	
 (i) without aura Age < 35 (ii) without aura Age ≥ 35 (iii) with aura (at any age) c) Past history of migraine with aura at any age 	A A A	
EPILEPSY	С	Ensure epilepsy adequately controlled
DEPRESSIVE DISORDER	S	
DEPRESSIVE DISORDERS	С	
REPRODUCTIVE TRACT		AND DISORDERS
VAGINAL BLEEDING		
PATTERNS a) Irregular pattern without heavy bleeding	А	
b) Heavy or prolonged bleeding (includes regular and irregular patterns)	А	
UNEXPLAINED VAGINAL BLEEDING (suspicious for serious condition)		Clarification: The condition must be investigated before the procedure is performed.
Before evaluation	D	
ENDOMETRIOSIS	S	Clarification: The severity of endometriosis and its effects on pelvic anatomy may increase the risk of complications or the ability to gain access to both fallopian tubes.

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CONDITION	CATEGORY	CLARIFICATIONS/EVIDENCE

BENIGN OVARIAN TUMOURS	Α	
(including cysts)		
SEVERE DYSMENORRHOEA	Α	
GESTATIONAL		Clarification: In the UK management depends on serum
TROPHOBLASTIC		hCG concentrations and need for chemotherapy identified
NEOPLASIA (GTN) (includes hydatidiform mole,		by measuring hCG concentrations. ¹²
invasive mole, placental site		
trophoblastic tumour)		
a) hCG normal	Α	
b) hCG abnormal	D	
CERVICAL ECTROPION	А	
CERVICAL INTRAEPITHELIAL	A	
NEOPLASIA (CIN)		
CERVICAL CANCER*	D	
(awaiting treatment)		
BREAST DISEASE		
a) Undiagnosed mass	Α	
b) Benign breast disease	Α	
c) Family history of breast cancer		
d) Carriers of known gene mutations associated with	Α	
breast cancer (eg. BRCA1)		
e) Breast cancer		
(i) current	С	
(ii) past and no evidence of	Ä	
current disease for 5 years		
ENDOMETRIAL CANCER*	D	
OVARIAN CANCER*	D	
UTERINE FIBROIDS*		Clarification: Depending on the size and location of the
a) Without distortion of the	С	fibroids, it might be difficult to localize the tubes and
uterine cavity b) With distortion of the uterine	0	mobilise the uterus.
cavity	С	
PELVIC INFLAMMATORY		
DISEASE (PID)*		
a) Past PID		Clarification: A careful pelvic examination must be
(assuming no current risk		performed to rule out recurrent or persistent infection and to
factors for STIs)		determine the mobility of the uterus. Depending on degree
(i) with subsequent	Α	of pelvic adhesions it may be difficult to localise the tubes.
pregnancy	0	
(ii) without subsequent	С	
pregnancy b) PID – current	D	
b) I ID — cuitetit	U	

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CONDITION	CATEGORY	CLARIFICATIONS/EVIDENCE

STIs*		
a) Current purulent cervicitis or	D	Clarification: If no symptoms persist following treatment,
chlamydial infection or		sterilisation may be performed.
gonorrhoea		
b) Other STIs (excluding HIV	A	
and hepatitis)		
c) Vaginitis (including	A	
trichomonas vaginalis and		
bacterial vaginosis)	_	
d) Increased risk of STIs	Α	
HIV/AIDS		
HIGH RISK OF HIV	Α	Clarification: No routine screening is needed. Appropriate
HIV-INFECTED	Α	infection prevention procedures, including universal
		precautions, must be carefully observed with all surgical
		procedures. The use of condoms is recommended following
		sterilisation.
AIDS and using HAART	S	Clarification: The presence of an AIDS-related illness may
, and the second second		require that the procedure be delayed.
OTHER INFECTIONS		
SCHISTOSOMIASIS		
a) Uncomplicated	Α	
b) Fibrosis of liver	С	Clarification: Liver function may need to be evaluated
TUBERCULOSIS		,
a) Non-pelvic	А	Clarification: Depending on the degree of pelvic
b) Known pelvic	S	involvement it may be difficult to localise the tubes.
MALARIA	A	involvement it may be amount to localize the tables.
ENDOCRINE CONDITION	5	
DIABETES*		
a) History of gestational disease	Α	
b) Non-vascular disease: (i) non-insulin dependent		Clarification: If blood glucose is not well controlled, referral
	C	to a higher-level facility is recommended.
(ii) insulin dependent c) Nephropathy/	S	Clarification: There is a possible decrease in healing and an increased risk of wound infection. Use of prophylactic
retinopathy/neuropathy	٥	an increased risk of wound infection. Use of prophylactic antibiotics is recommended.
d) Other vascular disease or	S	
diabetes of > 20 years'	٥	Evidence: Diabetic women were more likely to have complications when undergoing sterilisation. ²²
duration		complications when undergoing sterilisation."
THYROID DISORDERS*		
a) Simple goitre		Clarification. The woman is at high view of accomplications
b) Hyperthyroid	A S	Clarification: The woman is at high risk of complications
c) Hypothyroid	C	associated with anaesthesia and surgery if thyroid disease not well controlled.
o, riypotityroid		Hot well controlled.

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CONDITION	CATEGORY	CLARIFICATIONS/EVIDENCE

GASTROINTESTINAL CO	NDITIONS	
GALL-BLADDER DISEASE		
a) Symptomatic		
(i) treated by cholecystectomy	A A	
(ii) medically treated (iii) current	D	
b) Asymptomatic	A	
HISTORY OF CHOLESTASIS		
a) Pregnancy-related	Α	
b) Past COC-related	A	
VIRAL HEPATITIS*		
a) Active	D	Clarification: Appropriate infection prevention procedures,
b) Carrier	А	including universal precautions, must be carefully observed with all surgical procedures.
CIRRHOSIS		Clarification:
a) Mild (compensated)	С	Mild (compensated) cirrhosis: without complications.
b) Severe (decompensated)	S	Severe (decompensated) cirrhosis: development of major
		complications (ascites, jaundice, encephalopathy, or
		gastrointestinal haemorrhage).13
		Liver function and clotting might be altered. Liver function
		should be evaluated preoperatively.
LIVER TUMOURS		
a) Benign (adenoma)	С	Clarification: Liver function and clotting might be altered.
b) Malignant (hepatoma)	С	Liver function should be evaluated preoperatively.
INFLAMMATORY	S	Clarification: Previous abdominal or pelvic surgery should
BOWEL DISEASE		be taken into consideration and alternative options
(Crohn's disease, Ulcerative colitis)		considered. ¹⁴
ANAEMIAS		
THALASSAEMIA		
SICKLE-CELL DISEASE*	C	Clarification: There is an increased risk of pulmonary,
SIOREL-CELE DISEASE		cardiac or neurological complications and possible
		increased risk of wound infection
IRON-DEFICIENCY ANAEMIA	D	Clarification: The underlying disease should be identified.
a) Hb < 7g/dl	С	Both preoperative Hb level and operative blood loss are
b) Hb > 7 to < 10g/dl		important factors in women with anaemia. If peripheral
		perfusion is inadequate, this may decrease wound healing.
RAYNAUD'S DISEASE		
a) Primary	Α	Evidence: Secondary Raynaud's usually has an underlying
b) Secondary	_	cause such as scleroderma, rheumatoid arthritis, systemic
(i) without lupus	A	lupus erythematosus and other diseases. Systemic lupus
anticoagulant	_	erythematosus causes a tendency for increased coagulation if lupus coagulant is present. 15-19
(ii) with lupus anti-coagulant	A	ii iupus coaguiani is present.

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CONDITION	CATEGORY	CLARIFICATIONS/EVIDENCE

OTHER CONDITIONS REL	EVANT ONLY	FOR FEMALE SURGICAL STERILISATION		
LOCAL INFECTION	D	Clarification: There is an increased risk of postoperative		
(Abdominal skin infection)		infection.		
COAGULATION DISORDERS*	S	Clarification: There may be a small risk of venous thrombosis		
RESPIRATORY DISEASES*				
a) Acute (bronchitis, pneumonia) b) Chronic	D	Clarification: The procedure should be delayed until the condition is corrected. There are increases in anaesthesia-related and other perioperative risks. May require intensive		
(i) asthma	S	anaesthesic care post-operatively.		
(ii) bronchitis	S			
(iii) emphysema	S			
(iv) lung infection	S			
SYSTEMIC INFECTION OR GASTROENTERITIS*	D			
FIXED UTERUS DUE TO PREVIOUS SURGERY OR INFECTION*	S	Clarification: Risk of laparotomy is increased. Depending the degree of pelvic adhesions it may be difficult to localise the tubes.		
ABDOMINAL WALL OR UMBILICAL HERNIA	S	Clarification: Hernia repair and tubal sterilisation should be performed concurrently, if possible.		
DIAPHRAGMATIC HERNIA*	С			
KIDNEY DISEASE*	С	Clarification: Blood clotting may be impaired. There may be a risk of infection and hyporolemic shock. Condition may cause baseline anaemia, electrolyte disturbances and abnormalities in drug metabolism and excretion.		
SEVERE NUTRITIONAL DEFICIENCIES*	С	Clarification: There may be an increased risk of wound infection and impaired healing.		
PREVIOUS ABDOMINAL OR PELVIC SURGERY	S	Evidence: Women with previous abdominal or pelvic surgery were more likely to have complications when undergoing sterilisation. ^{21, 22, 24-26}		
STERILISATION CONCURRENT WITH ABDOMINAL SURGERY				
a) Elective b) Emergency (without previous counselling)	C D			
c) Infectious condition	D			

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MALE SURGICAL STERILISATION

MALE SURGICAL STERILISATION	STI/HIV (included consistent use	oes not protect against STI/HIV. If there is risk of ding during the postpartum period), the correct and e of condoms is recommended, either alone or with aceptive method. Male condoms reduce the risk of
CONDITION	CATEGORY	CLARIFICATIONS/EVIDENCE

PERSONAL CHARACTERISTICS AND REPRODUCTIVE HISTORY					
YOUNG AGE*	С	Clarification: Young men, like all men, should be counselled about the permanency of sterilisation and the availability of alternative, long-term, highly effective methods. Additional care must be taken when counselling people aged < 30 years.¹ Evidence: Men who underwent vasectomy at young ages were more likely to have the procedure reversed than those who underwent vasectomy at older ages.¹¹			
NO OFFSPRING	С	Clarification: Additional care must be taken when counselling people aged < 30 years.1			
DEPRESSIVE DISORDERS					
DEPRESSIVE DISORDERS	С				
HIV/AIDS					
HIGH RISK OF HIV	Α	Clarification: No routine screening is needed. Appropriate			
HIV-INFECTED	A	infection prevention procedures, including universal precautions, must be carefully observed with all surgical procedures. The use of condoms is recommended following sterilisation.			
AIDS	S	Clarification: The presence of an AIDS-related illness may require a delay in the procedure.			
ENDOCRINE CONDITIONS	S				
DIABETES*	С				
ANAEMIAS					
SICKLE-CELL DISEASE	А				
	EVALUE OF ITS	Y FOR MALE SURGICAL STERILISATION			
OTHER CONDITIONS REL	LEVANT ONL	FOR WALE SUNGICAL STERILISATION			
a) scrotal skin infection b) active STI c) balanitis	D D D	Clarification: There is an increased risk of postoperative infection.			
a) scrotal skin infection b) active STI	D D	Clarification: There is an increased risk of postoperative			
a) scrotal skin infection b) active STI c) balanitis d) epididymitis or orchitis	D D D	Clarification: There is an increased risk of postoperative infection. Clarification: Bleeding disorders lead to an increased risk of postoperative haemotoma formation which, in turn, leads			
a) scrotal skin infection b) active STI c) balanitis d) epididymitis or orchitis COAGULATION DISORDERS*	D D D D	Clarification: There is an increased risk of postoperative infection. Clarification: Bleeding disorders lead to an increased risk of postoperative haemotoma formation which, in turn, leads			
a) scrotal skin infection b) active STI c) balanitis d) epididymitis or orchitis COAGULATION DISORDERS* PREVIOUS SCROTAL INJURY SYSTEMIC INFECTION OR	D D D D S	Clarification: There is an increased risk of postoperative infection. Clarification: Bleeding disorders lead to an increased risk of postoperative haemotoma formation which, in turn, leads to an increased risk of infection. Clarification: There is an increased risk of postoperative			
LOCAL INFECTIONS* a) scrotal skin infection b) active STI c) balanitis d) epididymitis or orchitis COAGULATION DISORDERS* PREVIOUS SCROTAL INJURY SYSTEMIC INFECTION OR GASTROENTERITIS*	D D D S	Clarification: There is an increased risk of postoperative infection. Clarification: Bleeding disorders lead to an increased risk of postoperative haemotoma formation which, in turn, leads to an increased risk of infection. Clarification: There is an increased risk of postoperative infection. Clarification: The vas may be difficult or impossible to locate; a single procedure to repair hydrocele and perform a			
a) scrotal skin infection b) active STI c) balanitis d) epididymitis or orchitis COAGULATION DISORDERS* PREVIOUS SCROTAL INJURY SYSTEMIC INFECTION OR GASTROENTERITIS* LARGE VARICOCELE*	D D D D S	Clarification: There is an increased risk of postoperative infection. Clarification: Bleeding disorders lead to an increased risk of postoperative haemotoma formation which, in turn, leads to an increased risk of infection. Clarification: There is an increased risk of postoperative infection. Clarification: The vas may be difficult or impossible to locate; a single procedure to repair hydrocele and perform a vasectomy decreases the risk of complications. Clarification: The vas may be difficult or impossible to locate; a single procedure to repair hydrocele and perform a			

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MALE SURGICAL STERILISATION	Sterilisation does not protect against STI/HIV. If there is risk of STI/HIV (including during the postpartum period), the correct and consistent use of condoms is recommended, either alone or with another contraceptive method. Male condoms reduce the risk of STI/HIV.				
CONDITION	CATEGORY	CLARIFICATIONS/EVIDENCE			
CRYPTORCHIDISM	С	Clarification: If cryptorchidism is bilateral, and fertility has been demonstrated, this will require extensive surgery to locate the vas, and this becomes category S. If the cryptorchidism is unilateral, and fertility has been demonstrated, vasectomy may be performed on the normal side and semen analysis performed, as per routine. If the man continues to have a persistent presence of sperm, more extensive surgery may be required to locate the other vas, and this becomes category S.			
INGUINAL HERNIA*	S	Clarification: Vasectomy can be performed with hernia repair.			

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Additional comments

A. Female surgical sterilisation

PARITY

Nulliparous: Nulliparous women, like all women, should be counselled about the permanency of sterilisation and the availability of alternative, long-term, highly effective methods.

YOUNG AGE:

Additional care must be taken when counselling people aged < 30 years.

POSTPARTUM

Ideally sterilisation should be preformed after an interval, with appropriate alternative contraception while waiting surgery. Laprascopic sterilisation may be performed at the time of an elective caesarean section when there has been sufficient time (a week or more) between counselling and the procedure.

1

POST-ABORTION

Normally sterilisation should be performed as an interval procedure following medical or surgical abortion; ≥ 6 weeks postabortion, but alternative contraception provided in the interim. ¹

MULTIPLE RISK FACTORS FOR ARTERIAL CARDIOVASCULAR DISEASE

When multiple risk factors are present concurrently, the woman may be at high risk for complications associated with anaesthesia and surgery.

CURRENT AND HISTORY OF ISCHAEMIC HEART DISEASE

The woman is at high risk for complications associated with anaesthesia and surgery.

CERVICAL CANCER (awaiting treatment)

In general, the treatment renders a woman sterile.

ENDOMETRIAL CANCER

In general, the treatment renders a woman sterile.

OVARIAN CANCER

In general, the treatment renders a woman sterile.

PELVIC INFLAMMATORY DISEASE (PID)

PID can lead to an increased risk of post-sterilisation infection or adhesions.

STIs

There is an increased risk of postoperative infection.

DIABETES

There is a risk of hypoglycaemia or ketoacidosis.

THYROID DISORDERS

The woman is at high risk for complications associated with anaesthesia and surgery.

VIRAL HEPATITIS

The woman is at high risk for complications associated with anaesthesia and surgery.

COAGULATION DISORDERS

Women with coagulation disorders are at increased risk of haematologic complications of surgery.

RESPIRATORY DISEASES

For laparoscopy, the woman may experience acute cardiorespiratory complications induced by pneumoperitoneum or the Trendelenburg position.

SYSTEMIC INFECTION OR GASTROENTERITIS

There are increased risks of postoperative infection, complications from dehydration, and anaesthesia-related complications.

FIXED UTERUS DUE TO PREVIOUS SURGERY OR INFECTION

Decreased mobility of the uterus, fallopian tubes and bowel may make laparoscopy and minilaparotomy difficult and increase the risk of complications.

DIAPHRAGMATIC HERNIA

For laparoscopy, the woman may experience acute cardiorespiratory complications induced by pneumoperitoneum or the Trendelenburg position.

STERILISATION CONCURRENT WITH CAESAREAN SECTION

Concurrent sterilisation does not increase the risk of complications in a surgically stable client.

B. Male surgical sterilisation

YOUNG AGE, CHILDREN

As for women, men should be counselled about the permanency of the procedure and variable success rates for reversal. Additional counselling for people aged < 30 years.

DIABETES

Diabetics are more likely to get postoperative wound infections. If signs of infection appear, treatment with antibiotics needs to be given.

UK REFERENCES

- 1. Royal College of Obstetricians and Gynaecologists. Male and Female Sterilisation. Guideline Summary. Evidence-based Clinical Guideline Number 4 January 2004. RCOG. 4, 1-18. 2004. RCOG Press Royal College of Obsterician and Gynaecologists, London. Evidence-based Clinical Guidelines.
- 2. Vessey M, Painter R, Yeates D. Mortality in relation to oral contraceptive use and cigarette smoking. *Lancet* 2003;**362**:185-91.
- 3. McElduff P, Dobson A, Beaglehole R, Jackson R. Rapid reduction in coronary risk for those who quit cigarette smoking. *Australian and New Zealand Journal of Public Health* 1998;**22**:787-91.
- 4. Williams B, Poulter N, Brown MJ, Davies M, McInnes GT, Potter JP *et al.* The BHS Guidelines Working Party Guidelines for Management of Hypertension: Report of the Fourth Working Party of the British Hypertension Society, 2004 BHS IV. *Journal of Human Hypertension* 2004;**18**:139-85.
- 5. National Institute for Clinical Excellence. Hypertension. Management of hypertension in adults in primary care. 18. 2004. London, National Institute for Clinical Excellence.
- 6. Scottish Intercollegiate Guidelines Network Secretariat. Prophylaxis of venous thromboembolism. 62, 1-47. 2003.
- 7. Department of Health. Prodigy Guidance- Hyperlipidaemia. 2004. http://www.prodigy.nhs.uk/hyperlipidaemia
- 8. British Heart Foundation. What is Valvular Heart Disease? 2005. http://www.bhf.org.uk/hearthealth/index.asp?secID=1&secondlevel=77&thirdlevel=478
- 9. British Heart Foundation. Living with Congenital Heart Disease. 2005. http://www.bhf.org.uk/hearthealth/index.asp?secID=1&secondlevel=77&thirdlevel=362
- American Council for Headache Education. How headaches differ. 2004. http://www.achenet.org/understanding/differ.php
- 11. The International Headache Society Task Force on Combined Oral Contraceptives and Hormone replacement Therapy. Recommendations on the risk of ischaemic stroke associated with use of combined oral contraceptives and hormone replacement therapy in women with migraine. *Cephalagia* 2000;**20**:155-6.
- 12. Royal College of Obstetricians and Gynaecologists. The Management of Gestational Trophoblastic Neoplasia. 2004.
- 13. Gines, P., Quintero, E., Arroyo, V., Teres, J., Bruguera, M., Rimola, A., Caballeria, J., Rodes, J., and Rozman, C. Compensated cirrhosis: natural history and prognostic factors. Hepatology 7(1), 122-128. 1987.
- 14. Faculty of Family Planning and Reproductive Health Care Clinical Effectiveness Unit. Contraceptive choices for women with inflammatory bowel disease. *The Journal of Family Planning and Reproductive Health Care* 2003;**29**:127-34.
- 15. Department of Health. PRODIGY Guidance Raynaud's phenomenon. 2002. http://www.prodigy.nhs.uk/raynaud's-phenomenon
- 16. Eastcott H.H. Raynaud's disease and the oral contraceptive pill [Letter]. *British Medical Journal* 2, 477. 1976.
- 17. Altura BM. Sex and oestrogens and responsiveness of terminal arterioles to neurohypophyseal hormones and catecholamines. *Pharmacology and Experimental Therapeutics* 1975;**193**:403-12.
- 18. Greenstein D., Jeffcote N., Ilsley D., Kester R.C. The menstrual cycle and Raynaud's phenomenon. *Angiology* 1996;**47**:427-36.
- 19. Bartelink M.L, Wollersheim H., Vemer H, Thomas C.M., de Boo T., Thien T. The effects of single oral doses of 17 beta-oestradiol and progesterone on finger circulation in healthy women and in women with primary Raynaud's phenomenon. *European Journal of Clinical Pharmacology* 1994;**46**:557-60.

WHO REFERENCES

- 1. Abraham S et al. The characteristics, perceptions and personalities of women seeking a reversal of their tubal sterilization. *Medical Journal of Australia*, 1986, 145:4-7.
- 2. Allyn DP et al. Presterilization counseling and women's regret about having been sterilized. *Journal of Reproductive Medicine*, 1986, 31:1027-32.
- 3. Boring CC, Rochat RW, Becerra J. Sterilization regret among Puerto Rican women. *Fertility & Sterility*, 1988, 49:973-81.
- 4. Clarkson SE, Gillett WR. Psychological aspects of female sterilisation—assessment of subsequent regret. *New Zealand Medical Journal*, 1985, 98:748-50.
- 5. Grubb GS et al. Regret after decision to have a tubal sterilization. Fertility & Sterility, 1985, 44:248-53.
- Hardy E et al. Risk factors for tubal sterilization regret, detectable before surgery. Contraception, 1996, 54:159-62.
- 7. Henshaw SK, Singh S. Sterilization regret among U.S. couples. *Family Planning Perspectives*, 1986, 18:238-40.
- 8. Hillis SD et al. Poststerilization regret: findings from the United States Collaborative Review of Sterilization. *Obstetrics & Gynecology*, 1999, 93:889-95.
- 9. Jamieson DJ et al. A comparison of women's regret after vasectomy versus tubal sterilization. *Obstetrics & Gynecology*, 2002, 99:1073-9.
- 10. Kariminia A, Saunders DM, Chamberlain M. Risk factors for strong regret and subsequent IVF request after having tubal ligation. *Australian & New Zealand Journal of Obstetrics & Gynaecology*, 2002, 42:526-9.
- 11. Leader A et al. A comparison of definable traits in women requesting reversal of sterilization and women satisfied with sterilization. *American Journal of Obstetrics & Gynecology*, 1983, 145:198-202.
- 12. Loaiza E. Sterilization regret in the Dominican Republic: looking for quality-of-care issues. *Studies in Family Planning*, 1995, 26:39-48.
- 13. Marcil-Gratton N. Sterilization regret among women in metropolitan Montreal. *Family Planning Perspectives*, 1988, 20:222-7.
- 14. Platz-Christensen JJ et al. Evaluation of regret after tubal sterilization. *International Journal of Gynaecology & Obstetrics*, 1992, 38:223-6.
- 15. Ramsay IN, Russell SA. Who requests reversal of female sterilisation? A retrospective study from a Scottish unit. *Scottish Medical Journal*, 1991, 36:44-6.
- 16. Schmidt JE et al. Requesting information about and obtaining reversal after tubal sterilization: findings from the U.S. Collaborative Review of Sterilization. *Fertility & Sterility*, 2000, 74:892-8.
- 17. Thranov I et al. Regret among 547 Danish sterilized women. *Scandinavian Journal of Social Medicine*, 1988, 16:41-8.
- 18. Trussell J, Guilbert E, Hedley A. Sterilization failure, sterilization reversal, and pregnancy after sterilization reversal in Quebec. *Obstetrics & Gynecology*, 2003, 101:677-84.
- 19. Wilcox LS et al. Risk factors for regret after tubal sterilization: 5 years of follow-up in a prospective study. *Fertility & Sterility*, 1991, 55:927-33.
- 20. Chi I, Mumford SD, Laufe LE. Technical failures in tubal ring sterilization: incidence, perceived reasons, outcome, and risk factors. *American Journal of Obstetrics & Gynecology*, 1980, 138:307-12.
- 21. Chi I, Kennedy KI. Early readmission following elective laparoscopic sterilization: a brief analysis of a rare event. *American Journal of Obstetrics & Gynecology*, 1984, 148:322-7.
- 22. Jamieson DJ et al. Complications of interval laparoscopic tubal sterilization: findings from the United States Collaborative Review of Sterilization. *Obstetrics & Gynecology*, 2000, 96:997-1002.
- 23. White MK, Ory HW, Goldenberg LA. A case-control study of uterine perforations documented at laparoscopy. *American Journal of Obstetrics & Gynecology*, 1977, 129:623-5.
- 24. Baggish MS et al. Complications of laparoscopic sterilization. Comparison of 2 methods. *Obstetrics & Gynecology*, 1979, 54:54-9.
- 25. Chi I, Feldblum PJ, Balogh SA. Previous abdominal surgery as a risk factor in interval laparoscopic sterilization. *American Journal of Obstetrics & Gynecology*, 1983, 145:841-6.
- 26. Feldblum PJ et al. Technical failures in female sterilization using the tubal ring: a case-control analysis. *Contraception*, 1986, 34:505-12.

Table of contents Emergency contraception

Pregnancy	113
Postpartum	113
Breastfeeding	113
History of ectopic pregnancy	113
Smoking	114
Hypertension	114
Venous thromboembolism (VTE)	115
Known hyperlipidaemias	115
Headaches	116
Gestational trophoblastic neoplasia (GTN)	116
Breast disease	116
Inflammatory bowel disease (Crohn's and Ulcerative Colitis)	117
History of severe cardiovascular complications	117
Angina pectoris	117
Severe liver disease	117
Acute intermittent porphyria	117
Repeated use of POEC	117
Risk of STI	117
Additional Comments	118
References for emergency contraception	119

Please note: References used for the development of this UK version are numbered in **red**. The original WHO references are numbered in **black**.

EMERGENCY CONTRACEPTION (Progestogen-only emergency contraception, POEC; copper intrauterine contraceptive device, Cu-IUD) CONDITION POEC and Cu-IUDs do not protect against STI/HIV. If there is risk of STI/HIV (including during pregnancy or postpartum), the correct and consistent use of condoms is recommended, either alone or with another contraceptive method. Male condoms reduce the risk of STI/HIV. CATEGORY CLARIFICATIONS/EVIDENCE POEC Cu-IUD

PREGNANCY	NA	NA	Clarification: These methods are not abortifacient. Although not indicated for a woman with a known or suspected pregnancy, there is no known harm to the woman, the course of her pregnancy, or the fetus if POEC is accidentally used. An IUD can be inserted up to 5 days after the <i>first episode</i> of unprotected sex or if necessary up to 5 days after the <i>expected date of ovulation</i> (day 19 in a regular 28 day cycle) thus avoiding insertion after implantation is complete.
POSTPARTUM			
(not breastfeeding) a) <21 days b) ≥ 21 days	NA 1	NA 4	Clarification: Emergency contraception is not required if unprotected sex or barrier method failure occurs < 21 days postpartum. The risks of inserting a Cu- IUD prior to 28 days (4 weeks) postpartum outweigh the benefits. POEC is indicated between 21 and 27 days postpartum, or an IUD after day 28 (≥ 4 weeks).
BREASTFEEDING (full or partial)			
(ull or partial) a) 21-27 days b) ≥ 28 days	1 1	4 1	Women who are fully or almost fully breastfeeding, amenorrhoeic and < 6 months postpartum can rely on lactational amenorrhoea method (LAM) for contraception and therefore emergency contraception is not indicated unless frequency of breastfeeding decreases or menstruation returns.
			Definition: Full and almost fully breastfeeding includes exclusive with no other liquids or solids given; almost exclusive: vitamins, water or juice given infrequently in addition to breastfeeds; or partial breastfeeding (high): where the vast majority of feeds are breastfeeds. Definition: Partial or token breastfeeding: Medium - about half feeds are breastfeeds; Low- vast majority of feeds are not breastfeeds; Minimal- occasional irregular breastfeeds. ²³
HISTORY OF ECTOPIC PREGNANCY	1	1	Clarification: Women using contraception have a lower risk of ectopic pregnancy compared to women not using contraception. There does not appear to be an increased risk of ectopic pregnancy following use of POEC or Cu-IUD.

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

EMERGENCY CONTRACEPTION (Progestogen-only emergency contraception, POEC; copper intrauterine contraceptive device, Cu-IUD) CONDITION POEC and Cu-IUDs do not protect against STI/HIV. If there is risk of STI/HIV (including during pregnancy or postpartum), the correct and consistent use of condoms is recommended, either alone or with another contraceptive method. Male condoms reduce the risk of STI/HIV. CATEGORY CLARIFICATIONS/EVIDENCE POEC Cu-IUD

SMOKING a) Age < 35 years	1	1	Evidence: Myocardial infarction (MI) is rare in women of reproductive age. Smoking is an important risk
b) Age ≥ 35 years (i) <15 cigarettes/day	1	1	factor for cardiovascular disease. Overall mortality is strongly related to smoking.
(ii) ≥15 cigarettes/day	1		anong.y rolated to emotioning.
(iii) stopped smoking < 1 year ago	1	1	Excess mortality in heavy smokers is apparent from age 35 years. ⁴ MI increases as the number of
(iv) stopped smoking ≥ 1	1	1	cigarettes smoked per day increases.
year ago			For those who stop smoking there is a rapid decrease in risk of cardiovascular disease, by as much as 50% after 1 year. However, it may take longer, up to 10 years to reach the risk levels of those who have never smoked. A population-based case control study confirmed a three-fold reduction in the risk of MI one year after smoking cessation and the excess risk was gone 4 – 6 years after stopping. ⁵
HYPERTENSION			
a) Adequately controlled hypertension b) Consistently elevated blood pressure levels (properly taken measurements)	1	1	
(i) systolic >140 to 159 mmHg or diastolic > 90 to 94mmHg	1	1	
(ii) systolic ≥160 or diastolic ≥95 mmHg	1	1	
c) Vascular disease	1	1	

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CATEGORY 3	A condition where the theoretical or proven risks usually outweigh the advantages of using the method. Provision of a method requires expert clinical judgement and/or referral ot a specialist contraceptive provider, since use of the method is not usually recommended unless other methods are not available or not acceptable
CATEGORY 4	A condition which represents an unacceptable health risk if the contraceptive method is used

EMERGENCY CONTRACEPTION (Progestogen-only emergency contraception, POEC; copper intrauterine contraceptive device, Cu-IUD)	POEC and Cu-IUDs do not protect against STI/HIV. If there is risk of STI/HIV (including during pregnancy or postpartum), the correct and consistent use of condoms is recommended, either alone or with another contraceptive method. Male condoms reduce the risk of STI/HIV.		
CONDITION	CATEGORY		CLARIFICATIONS/EVIDENCE
	POEC	Cu-IUD	

VENOUS THROMBOEMBOLISM (VTE)			Clarification: VTE includes deep vein thrombosis (DVT) and pulmonary embolism (PE)
a) History of VTE b) Current VTE (on anticoagulants) c) Family history of VTE	1 2	1 3	Current VTE refers to disease for which anti- coagulants are still being used. Evidence is limited on the risk of VTE with progestogen-only oral contraceptives, however existing evidence is
(i) first-degree relative age < 45 years	1	1	reassuring.6
(ii) first-degree relative ≥ 45 years	1	1	
d) Major surgery (i) with prolonged immobilisation	1	1	<i>Major Surgery</i> includes operations of > 30 minutes duration. Procedures with high risk of VTE include: general or orthopaedic surgery, trauma,
(ii) without prolonged immobilisation	1	1	neurosurgery. ⁷
e) Minor surgery without immobilisation	1	1	Minor surgery includes operations lasting < 30 minutes (eg laparoscopic sterilisation), procedures such as knee arthroscopy. Varicose vein surgery has a low risk for VTE.
f) Immobility (unrelated to surgery) e.g.wheelchair bound, debilitating illness	1	1	Immobility due to hospitalisation for acute trauma, acute illness, paralysis is associated with a high risk of VTE.
KNOWN HYPERLIPIDAEMIAS	1	1	Clarification: Routine screening is not appropriate because of the rarity of the conditions and the high cost of screening.

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

EMERGENCY CONTRACEPTION (Progestogen-only emergency contraception, POEC; copper intrauterine contraceptive device, Cu-IUD)	POEC and Cu-IUDs do not protect against STI/HIV. If there is risk of STI/HIV (including during pregnancy or postpartum), the correct and consistent use of condoms is recommended, either alone or with another contraceptive method. Male condoms reduce the risk of STI/HIV.			
CONDITION	CATEGORY		CLARIFICATIONS/EVIDENCE	
	POEC	Cu-IUD		

a) Non-migrainous (mild or severe) b) Migraine i) without aura Age < 35 ii) with aura Age ≥ 35 iii) with aura, at any age c) Past history of migraine with aura at any age	1 1 1 1	1 1 1 1	Clarification: Classification depends on accurate diagnosis of those severe headaches that are migrainous and those that are not. Definition: Non-migrainous headaches include tension-type, cluster or rebound headaches. Aura (focal symptoms) indicate ischaemia: homonymous hemianopia, unilateral paraesthesia and /or numbness, unilateral weakness; and aphasia or unclassifiable speech disorder. Visual symptoms progress from fortification spectra (a star shaped figure near the point of fixation with scintillating edges to scotoma (a bright shape which gradually increases in size). Flashing lights are not focal symptoms. Aura occurs before the onset of headache. Any new headaches or marked changes in headaches should be evaluated. Classification is for women without any other risk factors for stroke. Risk of stroke increases with age, hypertension, and smoking.
GESTATIONAL TROPHOBLASTIC NEOPLASIA (GTN) (includes hydatidiform mole, invasive mole, placental site trophoblastic tumour) a) hCG normal b) hCG abnormal	1 3	1 4	Clarification: In the UK management depends on serum hCG concentrations and need for chemotherapy identified by measuring hCG concentrations. ¹⁰ POEC may be considered but needs discussion with a family planning specialist anal centres, and clinical judgement is necessary.
a) Undiagnosed mass b) Benign breast disease c) Family history of cancer d) Carriers of known gene mutations associated with breast cancer (eg. BRCA) e) Breast cancer (i) current (ii) past and no evidence of current disease for 5 years	1 1 1 1	1 1 1 1	

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

EMERGENCY CONTRACEPTION (Progestogen-only emergency contraception, POEC; copper intrauterine contraceptive device, Cu-IUD) POEC and Cu-IUDs do not protect against STI/HIV. If there is risk of STI/HIV (including during pregnancy or postpartum), the correct and consistent use of condoms is recommended, either alone or with another contraceptive method. Male condoms reduce the risk of STI/HIV.

CONDITION	CATEGORY		CLARIFICATIONS/EVIDENCE
	POEC Cu-IUD		

INFLAMMATORY BOWEL DISEASE (includes Crohn's disease, ulcerative colitis)	2	1	Clarification: 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.
HISTORY OF SEVERE CARDIOVASCULAR COMPLICATIONS* (ischaemic heart disease, cerebrovascular attack, or other thromboembolic conditions)	1	1	Clarification: There is no evidence that POEC increases the risk of cardiovascular disease.
ANGINA PECTORIS*	1	1	
SEVERE LIVER DISEASE (including jaundice)*	1	1	
ACUTE INTERMITTENT PORPHYRIA	2	1	Evidence: Acute intermittent porphyria is a rare disorder characterised by acute attacks often precipitated by drugs. Estrogen and progestogens have been implicated. Around 1% of acute attacks are fatal. A third of female patients have cyclical symptoms in relation to the menstrual cycle but seldom proceed to an acute attack. In a population study almost half of women with porphyria had used hormonal contraception but only 4.5% had associated acute attacks. Combined hormonal contraception has been shown to reduce attacks for some women. Natural fluctuations in estrogen and progesterone appear to be associated with acute attacks more often than exogenous hormones. Women may use hormonal contraception following discussion of the risks and benefits and with clinical judgement. 11-15
REPEATED USE OF POEC (in the same cycle)	1	NA	Clarification: Recurrent use of emergency contraception is an indication that the woman requires further counselling on other contraceptive options. POEC can be used more than once in a cycle if clinically indicated. Alternatively a Cu-IUD can be inserted if repeated unprotected sex occurs up to 5 days after the first episode of unprotected sex or up to five days after expected date of ovulation.
RISK OF STI	1	1	Clarification: Women thought to be at higher risk of STI from their sexual history (aged < 25 years, or with a change in sexual partner or two or more partners in the last year) should be offered testing for STI. A Cu-IUD can be inserted as emergency contraception, pending swab results. If deemed higher risk prophylactic antibiotics (such as azithromycin or doxycycline) can be given to protect against Chlamydia trachomatis at the time of Cu-IUD insertion.

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

Additional comments

POSTPARTUM

The earliest ovulation postpartum s thought to be day 21 and therefore unprotected sex prior to day 21 is not an indication for emergency contraception. If unprotected sex occurs after day 21 emergency contraception can be considered. A Cu-IUD should not be inserted < 4 weeks postpartum.

BREASTFEEDING

Although women who are fully or nearly fully breastfeeding, amenorrhoeic and < 6 months postpartum can rely on this as an effective method of contraception, if breastfeeding frequency decreases or menstruation recurs emergency contraception may be indicted. POEC can be used from day 21 postpartum even if breastfeeding and a Cu-IUD from 28 days postpartum.

HISTORY OF SEVERE CARDIOVASCULAR COMPLICATIONS, ANGINA PECTORIS

Use of POEC are not thought to increase the risk of cardiovascular complications

MIGRAINE

Use of POEC is safe for women with a history of migraine with aura

SEVERE LIVER DISEASE (including jaundice)

The duration of use of ECPs is less than that of regular use of COCs or POPs 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. Natural fluctuations in estrogen and progesterone appear to be associated with acute attacks more often than exogenous hormones. Women may use POEC following discussion of the risks and benefits and with clinical judgement.

REPEAT USE OF EMERGENCY CONTRACEPTION

POEC can be used more than once in a cycle if clinically indicated.

RISK OF STI

Women who are thought to be a 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 STI and should be given prophylactic antibiotics to prevent *Chlamydia trachomatis* at the time of Cu-IUD insertion pending swab results.

INTERACTIONS WITH DRUGS WHICH AFFECT LIVER ENZYMES

No category was scored by the Concensus Group on use of progestogen-only contraception by women using liver enzyme inducers. Current guidance from the FFPRHC recommends that women using liver enzyme inducers should be advised to use a Cu-IUD.¹⁸ If progestogen-only emergency contraception is to be used it should be given as soon as possible and within 72 hours of unprotected sex: levonorgestrel when using 0.75 milligram tablets take 3 tablets (2.25 milligrams) as a single dose; or if using 1.5 milligram levonorgestrel tablets take 2 tablets (3 milligrams) as a single dose.

References for Emergency Contraception

UK REFERENCES

- 1. Faculty of Family Planning and Reproductive Health Care Clinical Effectiveness Unit. The Copper Intrauterine Device as Long-Term Contraception. *Journal of Family Planning and Reproductive Health Care* 2004;30:29-42.
- 2. Faculty of Family Planning and Reproductive Health Care Clinical Effectiveness Unit. Contraceptive Choices for Breastfeeding Women. *Journal of Family Planning and Reproductive Health Care* 2004;30:181-9.
- 3. Knight J, Pyper C. Postnatal contraception: what are the choices? Nursing in Practice 2002; May: 23-5.
- 4. Vessey M, Painter R, Yeates D. Mortality in relation to oral contraceptive use and cigarette smoking. *Lancet* 2003;362:185-91.
- 5. McElduff P, Dobson A, Beaglehole R, Jackson R. Rapid reduction in coronary risk for those who quit cigarette smoking. *Australian and New Zealand Journal of Public Health* 1998;22:787-91.
- World Health Organization. Cardiovascular disease and use of oral and injectable progestagen only
 contraceptives and combine injectable contraceptives. Results of an international, multicentre, case control
 study. Contraception 1998;57:315-24.
- 7. Scottish Intercollegiate Guidelines Network Secretariat. Prophylaxis of venous thromboembolism. 62, 1-47. 2003.
- 8. American Council for Headache Education. How headaches differ. 2004. http://www.achenet.org/understanding/differ.php
- The International Headache Society Task Force on Combined Oral Contraceptives and Hormone replacement Therapy. Recommendations on the risk of ischaemic stroke associated with use of combined oral contraceptives and hormone replacement therapy in women with migraine. *Cephalagia* 2000;20:155-6.
- 10. Royal College of Obstetricians and Gynaecologists. The Management of Gestational Trophoblastic Neoplasia. 2004.
- 11. Andersson C, Innala E, Bäckström T. Acute intermittant porphyria in women: clinical expression, use and experience of exogenous sex hormones. A population-based study in northern Sweden. *Journal of Internal Medicine* 2003;254:176-83.
- 12. Kauppinen, R and Mustajoki, Pj. Prognosis of acute porphyria: occurrence of acute attacks, precipitating factors, and associated diseases. *Medicine* 71(1), 1-13. 1992.
- 13. Gross, U, Honcamp, M, Daume, E, Frank, M, Dusterberg, B, and Doss, M O. Hormonal oral contraceptives, urinary porphyrin excretion and porphyrias. *Hormone & Metabolic Research* 27(8), 379-383. 1995.
- 14. Castelo-Branco C, Vicente JJ, Vanrell JA. Use of Conadotropin-Releasing Hormone Analog With Tibolone to Prevent Cyclic Attacks of Acute Intermittent Porphyria. *Metabolism* 2001;50:995-6.
- 15. Thadani H, Deacon A, Peters T. Diagnosis and management of porphyria. *British Medical Journal* 2000;320:1647-51.
- 16. Faculty of Family Planning and Reproductive Health Care Clinical Effectiveness Unit. Emergency Contraception. *The Journal of Family Planning and Reproductive Health Care* 2003;29:9-16.
- 17. Faculty of Family Planning and Reproductive Health Care Clinical Effectiveness Unit. Emergency Contraception update (April 2006) *The Journal of Family Planning and Reproductive Health Care*. 2006; 32 (2): 121-128.

Table of contents Barrier methods

PERSONAL CHARACTERISTICS AND REPRODUCTIVE HISTORY1	123
Pregnancy	123
	123
•	123
	123
	123
	123
1 1 0 7	123
, ,	123
	123
•	123
	123
· · · · · · · · · · · · · · · · · · ·	123
71	124
, , , , , , , , , , , , , , , , , , , ,	124
	124
	125
	125
	125
	125
71 1	125
	125
	126
	126
	126 126
	1 26 126
	126 126
	126
	126
	126
	126
· · · · · · · · · · · · · · · · · · ·	126
	126
·	126
	126
	126
	126
	127
	127
	127
	127
	127
	127
HIV/AIDS1	127
High risk of HIV	127
HIV-infected 1	128
AIDS and using HAART	128
OTHER INFECTIONS	128
Schistosomiasis 1	128
Tuberculosis 1	128
Malaria 1	128
History of toxic shock syndrome	128
	128
	128
	128
Thyroid disorders 1	128

GASTROINTESTINAL CONDITIONS	128
Gall-bladder disease	128
History of cholestasis	128
Viral hepatitis	129
Cirrhosis	129
Liver tumours	129
Inflammatory bowel disease (Crohn's and Ulcerative Colitis)	129
ANAEMIAS	129
Thalassaemia	129
Sickle cell disease	129
Iron-deficiency anaemia	129
Raynaud's disease	129
DRUG INTERACTIONS	129
Drugs which affect liver enzymes	129
Non-liver enzyme inducing antibiotics	129
Highly Active Antiretroviral Therapy	129
Sensitivity to latex proteins	129
Additional Comments	130
References for barrier methods	130

Please note: References used for the development of this UK version are numbered in **red.** The original WHO references are numbered in **black**.

Male latex condoms, male & female polyurethane condoms, spermicide-free condoms (C) Diaphragm (with spermicide) and cervical caps (D)

If there is risk of STI/HIV (including during pregnancy or postpartum), the correct and consistent use of condoms should be recommended, either alone or with another contraceptive method. Male condoms reduce the risk of STI/HIV.

Women with conditions which make pregnancy an unacceptable risk should be advised that barrier methods for pregnancy prevention may not be appropriate for those who cannot use them consistently and correctly because of their relatively-higher typical-use failure rates.

CONDITION	CATEGORY		CLARIFICATIONS/EVIDENCE
	С	D	

PERSONAL CHARACTERIS	STICS	AND R	EPRODUCTIVE HISTORY
PREGNANCY	NA	NA	Clarification: None of these methods are relevant for contraception during known pregnancy. However, for women who continue to be at risk of STI/HIV during pregnancy, the correct and consistent use of condoms is recommended.
AGE			
a) Menarche to < 40 years	1	1	
b) ≥ 40 years	1	1	
PARITY			
a) Nulliparous	1	1	OLITERATE DE MILITA DE LA COMPANIO
b) Parous	1	2	Clarification: Possible higher risk of cervical cap failure in parous women than in nulliparous women, but may be due to less caution with use than true increased failure.
POSTPARTUM			
a) < 6 weeks postpartum	NA	NA	Clarification: This includes any births, including stillbirths
b) ≥ 6 weeks postpartum	1	1	from 24 weeks gestation
			Diaphragm and cap are unsuitable < 6 weeks postpartum until uterine involution is complete.
POST-ABORTION			Clarification: Includes spontaneous and induced abortion < 24 weeks gestation
a) First trimester	1	1	
b) Second trimester	NA	NA	Diaphragm and cap are unsuitable until 6 weeks after
c) Immediate post-septic abortion	1	1	second-trimester abortion.
PAST ECTOPIC PREGNANCY	1	1	
HISTORY OF PELVIC SURGERY	1	1	
SMOKING			
a) Age < 35	1	1	Evidence: Myocardial infarction (MI) is rare in women of
b) Age ≥ 35			reproductive age. Smoking is an important risk factor for
(i) <15 cigarettes/day	1	1	cardiovascular disease. Overall mortality is strongly related
(ii) ≥15 cigarettes/day	1	1	to smoking.
			Excess mortality in heavy smokers is apparent from age 35 years. MI increases as the number of cigarettes smoked per day increases.
OBESITY*			Clarification: Weigh increase or decrease of > 3 kg
> 30 kg/m² body mass index (BMI)	1	1	should prompt women to seek advice regarding diaphragm fitting.
CARDIOVASCULAR DISEA	SE _		
MULTIPLE RISK FACTORS FOR	1	1	
ARTERIAL CARDIOVASCULAR DISEASE			
(such as older age, smoking,			
diabetes and hypertension)			
		l	

^{*}See also additional comments at end of table

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

Male latex condoms, male & female polyurethane condoms, spermicide-free condoms (C) Diaphragm (with spermicide) and cervical caps (D)

If there is risk of STI/HIV (including during pregnancy or postpartum), the correct and consistent use of condoms should be recommended, either alone or with another contraceptive method. Male condoms reduce the risk of STI/HIV.

Women with conditions which make pregnancy an unacceptable risk should be advised that barrier methods for pregnancy prevention may not be appropriate for those who cannot use them consistently and correctly because of their relatively-higher typical-use failure rates.

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CONDITION	CATE	GORY	CLARIFICATIONS/EVIDENCE		
	С	D			

HYPERTENSION			
 a) Adequately controlled hypertension b) Consistently elevated blood pressure levels (properly taken measurements) (i) systolic 140-159 or diastolic > 90 to 94mmHg 	1	1	Clarification: For all categories of hypertension, classifications are based on the assumption that no other risk factors for cardiovascular disease exist. When multiple risk factors do exist, risk of cardiovascular disease may increase substantially. A single reading of blood pressure level is not sufficient to classify a woman as hypertensive. If elevated the BP should be re-assessed at the end of the
(ii) systolic ≥160 or diastolic ≥95 mmHg	1	1	consultation. If blood pressure is increased it should be re-assessed on at least two subsequent clinic visits at monthly intervals. ^{2,3} Vascular disease includes: coronary heart disease presenting with angina; peripheral vascular disease presenting with intermittent claudication; hypertensive
c) Vascular disease	1	1	retinopathy; and transient ischaemic attacks)
HISTORY OF HIGH BLOOD PRESSURE DURING PREGNANCY (where current blood pressure is normal)	1	1	
VENOUS THROMBOEMBOLISM (VTE)			Clarification: VTE includes deep vein thrombosis (DVT) and pulmonary embolism (PE).
a) History of VTE	1	1	
b) Current VTE (on anticoagulants)c) Family history of VTE	1	1	Current VTE refers to disease for which anti-coagulants are still being used Family history of VTE may alert clinicians to women who
(i) first-degree relative aged < 45 years	1	1	may have an increased risk themselves. Nevertheless, this alone cannot identify with any certainty an underlying
(ii) first-degree relative age ≥ 45 years	1	1	thrombophilia. Moreover, even when a genetic thrombophilia is identified not every woman will go on to develop a VTE.
d) Major surgery (i) without prolonged	1	1	Major Surgery includes operations of > 30 minutes duration. Procedures with high risk of VTE include:
immobilisation			general or orthopaedic surgery, trauma, neurosurgery.4
(ii) <i>with</i> prolonged immobilisation	1	1	
e) Minor surgery without immobilisation	1	1	Minor surgery includes operations lasting < 30 minutes (eg laparoscopic sterilisation), procedures such as knee arthroscopy. Varicose vein surgery has a low risk for VTE.
f) Immobility (unrelated to surgery) <i>e.g.</i> wheelchair use, debilitating illness	1	1	Immobility due to hospitalisation for acute trauma, acute illness, paralysis is associated with a high risk of VTE.

^{*}See also additional comments at end of table

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CATEGORY 4	A condition which represents an unacceptable health risk if the contraceptive method is used

Male latex condoms, male & female polyurethane condoms, spermicide-free condoms (C) Diaphragm (with spermicide) and cervical caps (D)

If there is risk of STI/HIV (including during pregnancy or postpartum), the correct and consistent use of condoms should be recommended, either alone or with another contraceptive method. Male condoms reduce the risk of STI/HIV.

Women with conditions which make pregnancy an unacceptable risk should be advised that barrier methods for pregnancy prevention may not be appropriate for those who cannot use them consistently and correctly because of their relatively-higher typical-use failure rates.

CONDITION	CATEGORY		CLARIFICATIONS/EVIDENCE
	C D		

KNOWN THROMBOGENIC MUTATIONS	1	1	Clarification: Routine screening is not appropriate because of the rarity of the conditions and the high cost of
(e.g., Factor V Leiden; Prothrombin mutation; Protein S, Protein C, and Antithrombin deficiencies)			screening.
SUPERFICIAL VENOUS THROMBOSIS			
a) Varicose veinsb) Superficial thrombophlebitis	1 1	1	
CURRENT AND HISTORY OF ISCHAEMIC HEART DISEASE	1	1	
STROKE (history of cerebrovascular accident)	1	1	
KNOWN HYPERLIPIDAEMIAS	1	1	Clarification: Routine screening is not appropriate because of the rarity of the conditions and the high cost of screening. Lipid levels alone are poor predictors of risk coronary heat disease (CHD). In the UK screening and treatment is aimed towards those at greatest risk of CHD. Risk categories will vary depending on risk of premature coronary heart disease and the presence of other risk factors. ⁵ Common hypercholestrolaemia and Familial combined hyperlipidaemia are associated with an increased risk of CHD but usually this occurs over the age of 60 years. Familial hypercholesterolaemia (autosomal dominant) has a prevalence of about 1 in 500. People with this condition have a four-fold increase in the risk of premature CHD. ⁵
VALVULAR AND CONGENITAL HEART DISEASE*			
a) Uncomplicated b) Complicated (e.g. with pulmonary hypertension, atrial fibrillation, history of subacute bacterial endocarditis)	1	1 2	Clarification: Valvular heart disease occurs when any of the heart valves are stenotic and/or incompetent (eg. aortic stenosis, mitral regurgitation; tricuspid valve abnormalities; pulmonary stenosis). Congenital heart disease: Aortic stenosis; Atrial septal defects; Atrio-ventricular septal defect; Cardiomyopathy; (hypertrophic or dilated); Coarctation of the Aorta; Complex Transposition of the Great Arteries; Congenitally corrected Transposition of the Great Arteries; Ebstein's Anomaly; Eisenmenger Syndrome: Persistent Ductus Arteriosus; Pulmonary Atresia; Pulmonary Stenosis; Tetralogy of Fallot; Total Anomalous Pulmonary Venous Connection; Tricuspid Atresia; Truncus Arteriosus; Ventricular Septal Defect.

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CONDITION	CATEGORY		CLARIFICATIONS/EVIDENCE		
	С	D			

NEUROLOGIC CONDITION	IS		
HEADACHES			Clarification: Classification depends on accurate diagnosis of those severe headaches that are migrainous and those that are not.
a) Non-migrainous (mild or severe)b) Migraine	1	1	Definition: Non-migrainous headaches include tension-type, cluster or rebound headaches. ⁸
(i) without aura Age < 35 years	1	1	
(ii) without aura Age ≥ 35 (iii) with aura, at any age	1	1 1	Aura (focal symptoms) indicate ischaemia: homonymous
c) Past history of migraine with aura at any age	1	1	hemianopia, unilateral paraesthesia and /or numbness, unilateral weakness; and aphasia or unclassifiable speech disorder. Visual symptoms progress from fortification spectra (a star shaped figure near the point of fixation with scintillating edges to scotoma (a bright shape which gradually increases in size). Flashing lights are not focal symptoms. Aura occurs before the onset of headache. Any new headaches or marked changes in headaches should be evaluated.
EPILEPSY	1	1	
DEPRESSIVE DISORDERS		<u> </u>	
DEPRESSIVE DISORDERS	1	1	
DEDDODUOTIVE TO A OT III	ICCATI		
REPRODUCTIVE TRACT IN	IFEC II	ONS A	ND DISORDERS
UNEXPLAINED VAGINAL BLEEDING	IFECTI	ONS A	Clarification: If pregnancy or an underlying pathological condition (such as pelvic malignancy) is suspected, it must
UNEXPLAINED VAGINAL	IFECTI 1	ONS A	Clarification: If pregnancy or an underlying pathological
UNEXPLAINED VAGINAL BLEEDING (suspicious for serious condition			Clarification: If pregnancy or an underlying pathological condition (such as pelvic malignancy) is suspected, it must
UNEXPLAINED VAGINAL BLEEDING (suspicious for serious condition before evaluation)	1	1	Clarification: If pregnancy or an underlying pathological condition (such as pelvic malignancy) is suspected, it must
UNEXPLAINED VAGINAL BLEEDING (suspicious for serious condition before evaluation) ENDOMETRIOSIS BENIGN OVARIAN TUMOURS	1	1 1	Clarification: If pregnancy or an underlying pathological condition (such as pelvic malignancy) is suspected, it must
UNEXPLAINED VAGINAL BLEEDING (suspicious for serious condition before evaluation) ENDOMETRIOSIS BENIGN OVARIAN TUMOURS (including cysts) SEVERE DYSMENORRHOEA GESTATIONAL	1 1 1	1 1 1	Clarification: If pregnancy or an underlying pathological condition (such as pelvic malignancy) is suspected, it must be evaluated and the category adjusted after evaluation. Clarification: In the UK management depends on serum
UNEXPLAINED VAGINAL BLEEDING (suspicious for serious condition before evaluation) ENDOMETRIOSIS BENIGN OVARIAN TUMOURS (including cysts) SEVERE DYSMENORRHOEA GESTATIONAL TROPHOBLASTIC NEOPLASIA	1 1 1	1 1 1	Clarification: If pregnancy or an underlying pathological condition (such as pelvic malignancy) is suspected, it must be evaluated and the category adjusted after evaluation. Clarification: In the UK management depends on serum hCG concentrations and need for chemotherapy identified
UNEXPLAINED VAGINAL BLEEDING (suspicious for serious condition before evaluation) ENDOMETRIOSIS BENIGN OVARIAN TUMOURS (including cysts) SEVERE DYSMENORRHOEA GESTATIONAL	1 1 1	1 1 1	Clarification: If pregnancy or an underlying pathological condition (such as pelvic malignancy) is suspected, it must be evaluated and the category adjusted after evaluation. Clarification: In the UK management depends on serum
UNEXPLAINED VAGINAL BLEEDING (suspicious for serious condition before evaluation) ENDOMETRIOSIS BENIGN OVARIAN TUMOURS (including cysts) SEVERE DYSMENORRHOEA GESTATIONAL TROPHOBLASTIC NEOPLASIA (GTN) (includes hydatidiform mole, invasive mole, placental site	1 1 1	1 1 1	Clarification: If pregnancy or an underlying pathological condition (such as pelvic malignancy) is suspected, it must be evaluated and the category adjusted after evaluation. Clarification: In the UK management depends on serum hCG concentrations and need for chemotherapy identified
UNEXPLAINED VAGINAL BLEEDING (suspicious for serious condition before evaluation) ENDOMETRIOSIS BENIGN OVARIAN TUMOURS (including cysts) SEVERE DYSMENORRHOEA GESTATIONAL TROPHOBLASTIC NEOPLASIA (GTN) (includes hydatidiform mole, invasive mole, placental site trophoblastic tumour)	1 1 1	1 1 1	Clarification: If pregnancy or an underlying pathological condition (such as pelvic malignancy) is suspected, it must be evaluated and the category adjusted after evaluation. Clarification: In the UK management depends on serum hCG concentrations and need for chemotherapy identified
UNEXPLAINED VAGINAL BLEEDING (suspicious for serious condition before evaluation) ENDOMETRIOSIS BENIGN OVARIAN TUMOURS (including cysts) SEVERE DYSMENORRHOEA GESTATIONAL TROPHOBLASTIC NEOPLASIA (GTN) (includes hydatidiform mole, invasive mole, placental site trophoblastic tumour) a) hCG normal	1 1 1	1 1 1	Clarification: If pregnancy or an underlying pathological condition (such as pelvic malignancy) is suspected, it must be evaluated and the category adjusted after evaluation. Clarification: In the UK management depends on serum hCG concentrations and need for chemotherapy identified
UNEXPLAINED VAGINAL BLEEDING (suspicious for serious condition before evaluation) ENDOMETRIOSIS BENIGN OVARIAN TUMOURS (including cysts) SEVERE DYSMENORRHOEA GESTATIONAL TROPHOBLASTIC NEOPLASIA (GTN) (includes hydatidiform mole, invasive mole, placental site trophoblastic tumour)	1 1 1	1 1 1	Clarification: If pregnancy or an underlying pathological condition (such as pelvic malignancy) is suspected, it must be evaluated and the category adjusted after evaluation. Clarification: In the UK management depends on serum hCG concentrations and need for chemotherapy identified
UNEXPLAINED VAGINAL BLEEDING (suspicious for serious condition before evaluation) ENDOMETRIOSIS BENIGN OVARIAN TUMOURS (including cysts) SEVERE DYSMENORRHOEA GESTATIONAL TROPHOBLASTIC NEOPLASIA (GTN) (includes hydatidiform mole, invasive mole, placental site trophoblastic tumour) a) hCG normal b) hCG abnormal	1 1 1	1 1 1	Clarification: If pregnancy or an underlying pathological condition (such as pelvic malignancy) is suspected, it must be evaluated and the category adjusted after evaluation. Clarification: In the UK management depends on serum hCG concentrations and need for chemotherapy identified
UNEXPLAINED VAGINAL BLEEDING (suspicious for serious condition before evaluation) ENDOMETRIOSIS BENIGN OVARIAN TUMOURS (including cysts) SEVERE DYSMENORRHOEA GESTATIONAL TROPHOBLASTIC NEOPLASIA (GTN) (includes hydatidiform mole, invasive mole, placental site trophoblastic tumour) a) hCG normal b) hCG abnormal CERVICAL ECTROPION CERVICAL INTRAEPITHELIAL	1 1 1 1	1 1 1	Clarification: If pregnancy or an underlying pathological condition (such as pelvic malignancy) is suspected, it must be evaluated and the category adjusted after evaluation. Clarification: In the UK management depends on serum hCG concentrations and need for chemotherapy identified by measuring hCG concentrations. 10 Clarification: The cap should not be used. There is no

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CONDITION	CATEGORY		CLARIFICATIONS/EVIDENCE		
	С	D			
BREAST DISEASE					
a) Undiagnosed mass	1	1			
b) Benign breast disease	1	1			
c) Family history of cancer	1	1			
d) Carriers of known gene	1	1			
mutations associated with					
breast cancer (eg. BRCA1)					
e) Breast cancer					
(i) current	1	1			
(ii) past and no evidence of	1	1			
disease for 5 years					
ENDOMETRIAL CANCER	1	1			
OVARIAN CANCER	1	1			
UTERINE FIBROIDS					
a) Without distortion of the	1	1			
uterine cavity					
b) With distortion of the uterine	1	1			
cavity		NI A			
ANATOMICAL ABNORMALITIES	1	NA	Clarification: The diaphragm cannot be used in certain		
			cases of prolapse. Cap use is not appropriate for a client		
DELVIO INIEL ANNIATORY			with a markedly distorted cervical anatomy.		
PELVIC INFLAMMATORY					
a) Past PID (assuming no					
current risk factors of STIs)					
(i) with subsequent pregnancy	1	1			
(ii) without subsequent	1				
pregnancy	•				
b) PID current	1	1			
STIs					
a) Current purulent cervicitis or	1	1			
chlamydial infection or					
gonorrhoea					
b) Other STIs (excluding HIV and	1	1			
hepatitis)					
c) Vaginitis (including trichomonas	1	1			
vaginalis and bacterial					
vaginosis)	4	4			
d) Increased risk of STIs	1	1			
HIV/AIDS					
HIGH RISK OF HIV*	1	3	Evidence: Repeated and high-dose use of the spermicide		
			nonoxynol-9 was associated with increased risk of genital		
			lesions, which may increase the risk of acquiring HIV		
			infection. ¹		

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CONDITION

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CATEGORY CLARIFICATIONS/EVIDENCE

CONDITION	CATEGORY		_ CLARIFICATIONS/EVIDENCE			
	С	D				
	•					
HIV-INFECTED			Evidence: Repeated and high-dose use of the spermicide			
a) Not using anti-retroviral therapy	1	3	nonoxynol-9 was associated with increased risk of genital			
b) Using interacting anti-retroviral	1	3	lesions, which may increase the risk of acquiring HIV			
therapy			infection.1			
AIDS and using HAART	1	3	Clarification: Diaphragm and caps can be used but			
			condoms required in addition to reduce the risk of HIV and			
			other STI transmission.			
OTHER INFECTIONS						
SCHISTOSOMIASIS			Clarification: Diaphragm and caps can be used but			
a) Uncomplicated	1	1	condoms required in addition to reduce the risk of HIV and			
b) Fibrosis of liver	1	1	other STI transmission.			
TUBERCULOSIS						
a) Non-pelvic	1	1				
b) Known pelvic	1	1				
MALARIA	1	1				
HISTORY OF TOXIC SHOCK	1	3	Evidence: A case-control study suggested diaphragm			
SYNDROME (TSS)*			(and sponge) are associated with increased risk of non-			
			menstrual TSS. ^{11;12}			
URINARY TRACT INFECTION*	1	2				
ENDOCRINE CONDITIONS						
DIABETES						
a) History of gestationaldisease	1	1				
b) Non-vascular disease						
(i) non-insulin dependent	1	1				
(ii) insulin dependent	1	1				
c) Nephropathy/ retinopathy/neuropathy	1	1				
d) Other vascular disease or	1	1				
diabetes of > 20 years' duration	•	'				
THYROID DISORDERS						
a) Simple goitre	1	1				
b) Hyperthyroid	1	1				
c) Hypothyroid	1	1				
GASTROINTESTINAL CON	OITIO	VS				
GALL-BLADDER DISEASE						
a) Symptomatic						
(i) treated by cholecystectomy	1	1				
(ii) medically treated	1	1				
(iii) current	1	1				
b) Asymptomatic	1	1				
HISTORY OF CHOLESTASIS						
a) Pregnancy-related	1	1				
b) Past COC-related	1	1				

*See also	additional	comments	at	end	of table

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, ,			
CONDITION	CATE	GORY	CLARIFICATIONS/EVIDENCE
	С	D	

VIRAL HEPATITIS			
a) Active	1	1	
b) Carrier	1	1	
CIRRHOSIS			Clarification:
a) Mild (compensated)	1	1	Mild (compensated) cirrhosis: without complications.
b) Severe (decompensated)	1	1	Severe (decompensated) cirrhosis: development of major complications (ascites, jaundice, encephalopathy, or
			gastrointestinal haemorrhage). 13
			, , , , , , , , , , , , , , , , , , ,
LIVER TUMOURS			
a) Benign (adenoma) b) Malignant (hepatoma)	1	1	
INFLAMMATORY	1	1	
BOWEL DISEASE	l '	'	
(includes Crohn's disease,			
Ulcerative colitis)			
ANAEMIAS			
THALASSAEMIA	1	1	
SICKLE CELL DISEASE	1	1	
IRON-DEFICIENCY ANAEMIA	1	1	
RAYNAUD'S DISEASE	1	1	
DRUG INTERACTIONS		ı	
DRUGS WHICH AFFECT LIVER	1	1	Clarification: St John's Wort and griseofulvin are liver enzyme inducers, but are less potent than rifampicin. ¹⁴
ENZYMES For example Rifampicin,			enzyme inducers, but are less potent than mampicin.
Rifabutin, St John's Wort,			
Griseofulvin, Certain			
anticonvulsants (phenytoin,			
carmazepine, barbiturates, primidone, topiramate,			
oxcarbazepine)			
NON-LIVER ENZYME INDUCING	1	1	
ANTIBIOTICS			
HIGHLY ACTIVE	1	1	
ANTIRETROVIRAL THERAPY (HAART)			
SENSITIVITY TO LATEX	3	3	Clarification: This does not apply to non-latex
PROTEINS			condoms/diaphragms.

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Additional comments

OBESITY

Severe obesity may make diaphragm and cap placement difficult.

VALVULAR HEART DISEASE

Risk of urinary tract infection with the diaphragm may increase risk in a client with sub-acute bacterial endocarditis.

CERVICAL CANCER (awaiting treatment)

Repeated and high-dose use of nonoxynol-9 can cause vaginal and cervical irritation or abrasions.

HIGH RISK OF HIV

Category 3 for diaphragm use is assigned due to concerns about the spermicide, not the diaphragm.

HISTORY OF TOXIC SHOCK SYNDROME

Toxic shock syndrome has been reported in association with contraceptive sponge and diaphragm use.

URINARY TRACT INFECTION

There is a potential increase of urinary tract infection with diaphragms and spermicides.

UK REFERENCES

- 1. Vessey M, Painter R, Yeates D. Mortality in relation to oral contraceptive use and cigarette smoking. *Lancet* 2003;**362**:185-91.
- 2. Williams B, Poulter N, Brown MJ, Davies M, McInnes GT, Potter JP *et al.* The BHS Guidelines Working Party Guidelines for Management of Hypertension: Report of the Fourth Working Party of the British Hypertension Society, 2004 BHS IV. *Journal of Human Hypertension* 2004;**18**:139-85.
- 3. National Institute for Clinical Excellence. Hypertension. Management of hypertension in adults in primary care. 18. 2004. London, National Institute for Clinical Excellence.
- Scottish Intercollegiate Guidelines Network Secretariat. Prophylaxis of venous thromboembolism. 62, 1-47, 2003.
- 5. Department of Health. Prodigy Guidance- Hyperlipidaemia. 2004. http://www.prodigy.nhs.uk/hyperlipidaemia
- British Heart Foundation. What is Valvular Heart Disease? 2005. http://www.bhf.org.uk/hearthealth/index.asp?secID=1&secondlevel=77&thirdlevel=478
- 7. British Heart Foundation. Living with Congenital Heart Disease. 2005. http://www.bhf.org.uk/hearthealth/index.asp?secID=1&secondlevel=77&thirdlevel=362
- 8. American Council for Headache Education. How headaches differ. 2004. http://www.achenet.org/understanding/differ.php
- The International Headache Society Task Force on Combined Oral Contraceptives and Hormone replacement Therapy. Recommendations on the risk of ischaemic stroke associated with use of combined oral contraceptives and hormone replacement therapy in women with migraine. *Cephalagia* 2000;20: 155-6.
- Royal College of Obstetricians and Gynaecologists. The Management of Gestational Trophoblastic Neoplasia. 2004.
- 11. Schwartz, B., Gaventa, S., Broome, C. V., Reingold, A. L., Hightower, A. W., Perlman, J. A., and Wolf, P. H. Nonmenstrual toxic shock syndrome associated with barrier contraceptives: report of a case-control study. *Reviews of Infectious Diseases* 11(Supplement 1), 43-48. 1989.
- 12. Faich G, Pearson K, Fleming D, Sobel S, Anello C. Toxic shock syndrome and the vaginal contraceptive sponge. *Journal of the American Medical Association* 1985;**255**:216-8.
- 13. Gines, P., Quintero, E., Arroyo, V., Teres, J., Bruguera, M., Rimola, A., Caballeria, J., Rodes, J., and Rozman, C. Compensated cirrhosis: natural history and prognostic factors. Hepatology 7(1), 122-128. 1987.
- 14. Faculty of Family Planning and Reproductive Health Care Clinical Effectiveness Unit. Drug Interactions with Hormonal Contraception. *Journal of Family Planning and Reproductive Health Care* 2005;**31**:139-50.

WHO REFERENCES

1. Wilkinson D et al. Nonoxynol-9 for preventing vaginal acquisition of HIV infection by women from men. Cochrane Database of Systematic Reviews, 2002, 4:CD003936.

HAB

Table of contents Fertility awareness-based methods

PERSONAL CHARACTERISTICS AND REPRODUCTIVE HISTORY	134
Pregnancy	134
Life stage	134
Breastfeeding	134
Postpartum	134
Post-abortion	134
REPRODUCTIVE TRACT INFECTIONS AND DISORDERS	134
Irregular vaginal bleeding	134
Vaginal discharge	134
OTHER	134
Use of drugs which affect cycle regularity, hormones and/or fertility signs	134
Additional Comments	135

Please note: References used for the development of this UK version are numbered in **red**. The original WHO references are numbered in **black**.

FERTILITY AWARENESS-BASED METHODS

Fertility awareness-based (FAB) methods of family planning involve identification of the fertile days of the menstrual cycle, whether by observing fertility signs such as cervical secretions and basal body temperature, or by monitoring cycle days. FAB methods can be used in combination with abstinence or barrier methods during the fertile time. If barrier methods are used, refer to the section on barrier methods.

There are no medical conditions which become worse because of use of FAB methods. In general, these methods can be provided without concern for health effects to people who choose them. However, there are a number of conditions that make their use more complex. The existence of these conditions suggests that (1) use of these methods should be delayed until the condition is corrected or resolved or (2) they will require special counselling, and a more highly trained provider is generally necessary to ensure correct use.

Definitions

MUCUS Cervical Secretion and cycle length

FAB methods are based on observation of the signs of fertility, cervical secretions and menstrual cycle length (such as Billing's method). These methods must be taught by a trained FAB method teacher.

DEVICE Devices which measure hormones

FAB method based on devices which measure hormonal changes (e.g. Persona).

reasure hormonal changes (e.g. Persona). The main device available in the UK is Persona, which uses a computerised monitor and a series of urine test sticks to measure hormonal changes.

UK Category		Fertility awareness based methods (FAB)
A	Accept	There is no medical reason to deny the particular FAB method to a woman in this circumstance.
С	Caution	The method is normally provided in a routine setting, but with extra preparation and precautions. For FAB methods, this usually means that special counselling may be needed to ensure correct use of the method by a woman in this circumstance.
D	Delay	Use of the method should be delayed until the condition is evaluated or changes. Alternative temporary methods of contraception should be offered.

FERTILITY AWARENESS-BASED METHODS

Fertility awareness-based methods do not protect against STI/HIV. If there is a risk of STI/HIV (including during pregnancy or postpartum), the correct and consistent use of condoms should be recommended, either alone or with another contraceptive method. Male condoms reduce the risk of STI/HIV.

Women with conditions which make pregnancy an unacceptable risk should be advised that fertility awareness-based methods may not be appropriate for them because of their relatively-higher typical-use failure rates.

CONDITION	CATEGORY		CLARIFICATIONS/EVIDENCE
	MUCUS	DEVICE	

PERSONAL CHARACTERISTICS AND REPRODUCTIVE HISTORY						
PREGNANCY	NA		Comments: FAB methods are not relevant during pregnancy.			
LIFE STAGE						
a) In the first 2 years post-	С	С	Clarification: Menstrual irregularities are common			
menarche	•		in post-menarche and peri-menopause and may			
b) Peri-menopause	С	С	complicate the learning and use of FAB methods. Methods may be more difficult to learn at these times but can be used with caution.			
BREASTFEEDING*						
a) < 6 weeks postpartum	D	D				
b) ≥ 6 weeks	С	С				
c) After menses begin	С	С				
POSTPARTUM*			Clarification: This includes any births, including			
(in non-breastfeeding women)			stillbirths from 24 weeks gestation			
a) < 4 weeks	D	D				
b) ≥ 4 weeks	A	A				
POST-ABORTION*	С	D				
REPRODUCTIVE TRACT IN	IFECTION	S AND D	ISORDERS			
IRREGULAR VAGINAL BLEEDING*	D	D				
VAGINAL DISCHARGE*	D	А				
OTHER						
USE OF DRUGS WHICH AFFECT CYCLE REGULARITY, HORMONES AND/OR FERTILITY SIGNS*	D	D	Devices should not be relied upon during the use of these drugs or until two menstrual cycles have occurred. Users will just notice that the mucus symptoms will not be accurate, so it cannot be relied upon for preventing pregnancy.			

UKMEC		DEFINITION OF CATEGORY
Α	ACCEPT	There is no medical reason to deny the particular FAB method to a woman in this circumstance.
С	CAUTION	The procedure is normally conducted in a routine setting, but with extra preparation and precautions. For FAB methods, this usually means that special counselling may be needed to ensure correct use of the method by a woman in this circumstance.
D	DELAY	Use of the method should be delayed until the condition is evaluated or corrected. Alternative temporary methods of contraception should be offered.

Additional comments

BREASTFEEDING

FAB methods during breastfeeding may be more difficult to learn than when not breastfeeding.

< 6 weeks postpartum: Women who are primarily breastfeeding and are amenorrhoeic are unlikely to have sufficient ovarian function to produce detectable fertility signs and hormonal changes during the first 6 months postpartum. However, the likelihood of resumption of fertility increases with time postpartum and with substitution of breast milk by other foods.

After menses begin: When the woman notices fertility signs (particularly cervical secretions), she can use a symptoms-based method. When she has had 3 postpartum menses, she can use a calendar-based method. Prior to that time, a barrier method should be offered if the woman plans to use a FAB method later.

POSTPARTUM

- < 4 weeks: Non-breastfeeding women are not likely to have sufficient ovarian function to either require a FAB method or to have detectable fertility signs or hormonal changes prior to 4 weeks postpartum. Although the risk of pregnancy is low, a method appropriate for the postpartum period should be offered.
- \geq 4 weeks: Non-breastfeeding women are likely to have sufficient ovarian function to produce detectable fertility signs and/or hormonal changes at this time; likelihood increases rapidly with time postpartum. Women can use calendar-based methods as soon as they have completed 3 postpartum menses. Methods appropriate for the postpartum period should be offered prior to that time.

POST-ABORTION

Post-abortion women are likely to have sufficient ovarian function to produce detectable fertility signs and/or hormonal changes; likelihood increases with time post-abortion. Women can start using calendar based methods after they have had at least one post-abortion menses (e.g. women who before this pregnancy had most cycles between 26 and 32 days can use the Standard Days Method then). Methods appropriate for the post-abortion period should be offered prior to that time.

IRREGULAR VAGINAL BLEEDING

Presence of this condition makes FAB methods unreliable. Therefore, barrier methods should be recommended until the bleeding pattern is compatible with proper method use. The condition should be evaluated and treated as necessary.

VAGINAL DISCHARGE

Because vaginal discharge makes recognition of cervical secretions difficult, the condition should be evaluated and treated if needed prior to providing methods based on cervical secretions.

USE OF DRUGS WHICH AFFECT CYCLE REGULARITY, HORMONES AND/OR FERTILITY SIGNS

Use of certain mood-altering drugs such as lithium, tricyclic antidepressants, and anti-anxiety therapies, as well as certain antibiotics and anti-inflammatory drugs, may alter cycle regularity or affect fertility signs. The condition should be carefully evaluated and a barrier method offered until the degree of effect has been determined or the drug is no longer being used.

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Lactational amenorrhoea method

Lactational amenorrhoea method

The lactational amenorrhoea method does not protect against STI/HIV. If there is a risk of STI/HIV (including during pregnancy or postpartum), the correct and consistent use of condoms should be recommended, either alone or with another contraceptive method. Male latex condoms are proven to protect against STI/HIV.

Women with conditions which make pregnancy an unacceptable risk should be advised that the lactational amenorrhoea method may not be appropriate for them because of its relatively-higher typical-use failure rates.

The Bellagio Consensus provided the scientific basis for defining the conditions under which breastfeeding can be used safely and effectively for birth-spacing purposes, and programmatic guidelines were developed for the use of lactational amenorrhoea in family planning. These guidelines include the following three criteria, all of which must be met to ensure adequate protection from an unplanned pregnancy: 1) Amenorrhoea; 2) Fully or nearly fully breastfeeding; and 3) Less than six months postpartum. Table 8 includes definitions of full and partial or token breastfeeding.

Table 8.0 Definition Of Full / Exclusive Breastfeeding – Adapted From Knight and Pyper 1, 2

DEFINITION OF BE	REASTFEEDING	CONTRACEPTIVE EFFICACY		
Full breastfeeding		Over 98% effective if also -		
Exclusive – No other liquids or solids given Almost exclusive – Vitamins, water or juice given infrequently in addition to breastfeeds		Amenorrhoeic Less than 6 months postpartum No long intervals between feeds day or night		
Partial or token bre	eastfeeding	Little impact on fertility		
High –	Vast majority of feeds are breastfeeds			
Medium – About half of feeds are breastfeeds				
Low – Vast majority are not				
Minimal –	Occasional irregular breastfeeds			

The main indications for breastfeeding remain the need to provide an ideal food for the infant and to protect it against disease. There are no medical conditions in which the use of lactational amenorrhoea is restricted and there is no documented evidence of its negative impact on maternal health. However, certain conditions or obstacles which affect breastfeeding may also affect the duration of amenorrhoea, making this a less useful choice for family planning purposes. These include:

HIV infection

Breastfeeding should be promoted, protected, and supported in all populations, for all women who are HIV-negative or of unknown HIV status. When replacement feeding is acceptable, feasible, affordable, sustainable and safe, avoidance of all breastfeeding by HIV-infected mothers is recommended. Otherwise, exclusive breastfeeding is recommended during the first months of life, and should then be discontinued as soon as it is feasible. Women who are HIV-positive should receive counselling that includes information about both the risks and benefits of various infant feeding options based on local assessments, guidance in selecting the most suitable option for their situation, and be supported in their choice. They should also have access to follow-up care and support, including family planning and nutritonal support.

Medication used during breastfeeding

In order to protect infant health, breastfeeding is not recommended for women using such drugs as: anti-metabolites, bromocriptine, certain anticoagulants, corticosteroids (high doses), cyclosporin, ergotamine, lithium, mood-altering drugs, radioactive drugs, and reserpine.

Conditions affecting the newborn

Congenital deformities of the mouth, jaw or palate; newborns who are small-for-date or premature and needing intensive neonatal care; and certain metabolic disorders of the infant all can make breastfeeding difficult.

References for lactational amenorrhoea method

UK REFERENCES

- 1. Knight J, Pyper C. Postnatal contraception: what are the choices? *Nursing in Practice* 2002; May: 23-5.
- 2 Faculty of Family Planning and Reproductive Health Care Clinical Effectiveness Unit. Contracceptive Choices for Breastfeeding Women. *The Journal of Family Planning and Reproductive Health Care* 2004; **30(3)**: 181-189.

SECTION C: Summary table

TABLE 9.0	COMMON REVERSIBLE CONTRACEPTIVE METHODS143

Pull out copy of common reversible contraceptive methods

COMMON REVERSIBLE METHODS SUMMARY TABLE						
CONDITION	CHC	POP	DMPA / NET-EN	IMP	Cu-IUD	LNG-IUD
I = Initiation, C = Continuation						

PERSONAL CHARACTERIST	ICS AND	REPRODU	JCTIVE HI	ISTORY		
PREGNANCY	NA	NA	NA	NA	4	4
AGE	Menarche	Menarche	Menarche	Menarche	Menarche	Menarche
	to <40=1	to <18=1	to <18=2	to <18=1	to <20=2	to <20=2
	>40=2	18-45=1	18-45=1	18-45=1	>20=1	>20=1
		>45=1	>45=2	>45=1		
PARITY						
a) Nulliparous	1	1	1	1	1	1
b) Parous	1	1	1	1	1	1
BREASTFEEDING						
a) < 6 weeks postpartum	4	1	2	1		
b) 6 weeks to < 6 months	3	1	1	1		
(fully or almost fully						
breastfeeding)	_			_		
c) ≥ 6 weeks to < 6 months	2	1	1	1		
postpartum (partial						
breastfeeding medium to low)	_					
d) ≥ 6 months postpartum	1	1	1	1		
POSTPARTUM (non-breastfeeding						
women)						
a) < 21 days	3	1	1	1		
b) ≥ 21 days	1	1	1	1		
POSTPARTUM (breastfeeding or						
non-breastfeeding, including post-						
caesarean section)						0
a) 48 hours to < 4 weeks					3	3
b) > 4 weeks					1 4	1 4
c) Puerperal sepsis					4	4
POST-ABORTION a) First trimester	1	1	1	1	1	1
b) Second trimester	1	1 1		1 1		
c) Immediate post-septic abortion	1 1	1 1	1 1	1 1	2 4	2 4
PAST ECTOPIC PREGNANCY	1	1	1	1	1	1
HISTORY OF PELVIC SURGERY	1	1	1	1	1	1
(including caesarean section) (see	'	'	'	'	'	'
also postpartum section)						
SMOKING						
a) Age < 35 years	2	1	1	1	1	1
b) Age ≥ 35 years	_					.
(i) < 15 cigarettes / day	3	1	1	1	1	1
(ii) ≥ 15 cigarettes / day	4	1	1	1	1	1
(iii) Stopped smoking < 1 year ago	3	1	1	1	1	1
(iv) Stopped smoking ≥ 1 year ago	2	1	1	1	1	1
OBESITY						
a) \geq 30 - 34 kg/m ² body mass index(BMI)	2	1	1	1	1	1
b) 35 – 39 kg/m² body mass index						
(BMI)	3	1	1	1	1	1
c) ≥ 40 kg/m² body mass index (BMI)	4	1	1	1	1	1
CARDIOVASCULAR DISEASE						
MULTIPLE RISK FACTORS FOR	3/4	2	3	2	1	2
ARTERIAL CARDIOVASCULAR	_, -	_		_	_	_
DISEASE						
(such as older age, smoking,						
diabetes and hypertension)						

UKMEC	DEFINITION OF CATEGORY
CATEGORY 1	A condition for which there is no restriction for the use of the contraceptive 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
CATEGORY 4	A condition which represents an unacceptable health risk if the contraceptive method is used

COMMON REVERSIBLE METHODS SUMMARY TABLE							
CONDITION	СНС	POP	DMPA / NET-EN	IMP	Cu-IUD	LNG-IUD	
I = Initiation, C = Continuation							

HYPERTENSION						
Adequately controlled hypertension	3	1	2	1	1	1
b) Consistently elevated blood	3	'	_	'	'	'
pressure levels (properly taken						
measurements)						
(i) systolic >140 to 159 mmHg or	3	1	1	1	1	1
diastolic > 90 to 94mmHg	Ü		· ·		·	
(ii) systolic >160 or diastolic ≥ 95mmHg	4	1	2	1	1	1
c) Vascular disease	4	2	3	2	1	2
HISTORY OF HIGH BLOOD	2	1	1	1	1	1
PRESSURE DURING PREGNANCY	_		·			
(where current blood pressure is						
normal)						
VENOUS THROMBO-EMBOLISM						
(VTE) (includes deep vein thrombosis						
and pulmonary embolism)						
a) History of VTE	4	2	2	2	1	2
b) Current VTE (on anticoagulants)	4	2	3	3	3	3
c) Family history of VTE						
(i) First degree relative aged < 45 years	3	1	1	1	1	1
(ii) First degree relative aged ≥ 45 years	2	1	1	1	1	1
d) Major surgery						
(i) With prolonged immobilisation	4	2	2	2	1	2
(ii) Without prolonged	2	1	1	1	1	1
immobilisation						
e) Minor surgery without	1	1	1	1	1	1
immobilisation						
f) Immobility (unrelated to surgery)	3	1	1	1	1	1
e.g wheelchair use, debilitating						
illness						
KNOWN THROMBOGENIC	4	2	2	2	1	2
MUTATIONS						
(e.g. Factor V Leiden; Prothrombin						
mutation; Protein S, Protein C and						
Antithrombin deficiencies)						
SUPERFICIAL VENOUS						
THROMBOSIS	4	4	4	4	4	4
a) Varicose veins	1 2	1	1 1	1 1	1 1	1 1
b) Superficial thrombophlebitis		<u> </u>	ı	<u> </u>	ı	
CURRENT AND HISTORY OF ISCHAEMIC HEART DISEASE		I C		I C		I C
ISCHAEIVIIC HEART DISEASE	4	2 3	3	2 3	1	2 3
STROKE	7	I C		I C	'	2 0
(history of cerebrovascular accident)		' "		' "		
(motory of cerebrovascular accident)	4	2 3	3	2 3	1	2
KNOWN HYPERLIPIDAEMIAS	2/3	2	2	2	1	2
(screening is NOT necessary for safe	2/0	_	_	_		_
use of contraceptive methods)						
VALVULAR AND CONGENITAL						
HEART DISEASE						
a) Uncomplicated	2	1	1	1	1	1
b) Complicated	4	i i	1	i	2	2
(eg. With pulmonary hypertension,						
atrial fibrillation, history of subacute						
bacterial endocarditis)						

UKMEC	DEFINITION OF CATEGORY
CATEGORY 1	A condition for which there is no restriction for the use of the contraceptive 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
CATEGORY 4	A condition which represents an unacceptable health risk if the contraceptive method is used

COMMON REVERSIBLE METHODS SUMMARY TABLE							
CONDITION	СНС	POP	DMPA / NET-EN	IMP	Cu-IUD	LNG-IUD	
I = Initiation, C = Continuation							

NEUROLOGIC CONDITIONS						
HEADACHES						
	I C	I C	I C	I C		····
a) Non-migrainous (mild or severe)	1 2	1 1	1 1	1 1	4	
	├ <u>-</u>	<u>!</u>	 !	!	1	1 1
b) Migraine	····	····	····			<u>-</u>
(i) Without aura, age < 35 years	I C	I C	I C	I C	,	I C
	2 3	1 2	2 2	2 2	1	2 2
(ii) Without aura, age ≥ 35 years	I C	I C	I C	I C	_	I C
	3 4	1 2	2 2	2 2	1	2 2
(iii) With aura, at any age	I C	I C	I C	I C		I C
	4 4	2 3	2 3	2 3	1	2 3
c) Past history of migraine with aura	3	2	2	2	1	2
at any age						
EPILEPSY	1	1	1	1	1	1
DEPRESSIVE DISORDERS						
DEPRESSIVE DISORDERS	1	1	1	1	1	1
REPRODUCTIVE TRACT INFECT	TIONS AND	DISORDE	RS			
VAGINAL BLEEDING PATTERS						
a) Irregular pattern without heavy						I C
bleeding	1	2	2	2	1	1 1
g						I C
b) Heavy or prolonged bleeding	1	2	2	2	2	1 2
(includes regular and irregular patterns)	_	_	_	_	_	' -
, , , , , , , , , , , , , , , , , , , ,						
UNEXPLAINED VAGINAL					I C	I C
BLEEDING						
(suspicious for serious condition)	_			_	<u> </u>	
Before evaluation	2	2	3	3	4 2	4 2
ENDOMETRIOSIS	1	1	1	1	2	1
BENIGN OVARIAN TUMOURS	1	1	1	1	1	1
(including cysts)						
SEVERE DYSMENORRHOEA	1	1	1	1	2	1
GESTATIONAL TROPHOBLASTIC						
NEOPLASIA (GTN)						
(includes hydatidiform mole, invasive						
mole, placental site trophoblastic tumour)						
a) hCG normal	1	1	1	1	1	1
b) hCG abnormal	4	3	3	3	4	4
CERVICAL ECTROPION	1	1	1	1	1	1
CERVICAL INTRAEPITHELIAL	2	1	2	1	1	2
NEOPLASIA (CIN)						
CERVICAL CANCER					I C	I C
(awaiting treatment)						
	2	1	2	2	4 2	4 2
BREAST DISEASE					·	·
a) Undiagnosed mass	I C					
'	3 2	2	2	2	1	2
b) Benign breast disease	1	1	1	1	1	1
c) Family history of cancer	1	1	1	1	1	1 1
d) Carriers of known gene mutations	3	2	2	2	i i	2
associated with breast cancer (eg. BRCA1)		_	_	_	·	_
e) Breast cancer						
(i) Current	4	4	4	4	1	4
(ii) Past and no evidence of	3	3	3	3	1 1	3
current disease for 5 years				5	'	
Current disease for 5 years						

UKMEC	DEFINITION OF CATEGORY
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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
CATEGORY 4	A condition which represents an unacceptable health risk if the contraceptive method is used

COMMON REVERSIBLE METHODS SUMMARY TABLE							
CONDITION	СНС	POP	DMPA / NET-EN	IMP	Cu-IUD	LNG-IUD	
I = Initiation, C = Continuation							

ENDOMETRIAL CANCER						
ENDOMETRIAL CANCER	1	1	1	4	1 C 4 2	1 C 4 2
OVARIAN CANCER	'	ı	ı	1	I C	I C
OVARIAN GANGER	1	1	1	1	3 2	3 2
UTERINE FIBROIDS					0 2	0 2
a) Without distortion of the uterine cavity	1	1	1	1	1	1
b) With distortion of the uterine cavity	1	1	1	1	4	4
ANATOMICAL ABNORMALITIES						
a) Distorted uterine cavity (any					4	4
congenital or acquired uterine						
abnormality distorting the uterine						
cavity in a manner that is						
incompatible with IUD insertion)						_
b) Other abnormalities (including cervical stenosis or cervical					2	2
lacerations) not distorting the						
uterine cavity or interfering with						
IUD insertion						
PELVIC INFLAMMATORY DISEASE						
(PID)						
a) Past PID (assuming no current risk						
factors of STIs)					ļ <u>.</u>	····
(i) With subsequent pregnancy					I C	I C
	1	1	1	1	1 1	1 1
(II) NA(III)	_		_		1 C 2 2	1 C 2 2
(ii) Without subsequent pregnancy	1	1	1	1	I C	I C
b) PID – current	1	1	1	1	4 2	4 2
STIs	ı	ı	ı	I I	' ' '	
a) Current purulent cervicitis or					I C	I C
chlamydial infection or						
gonorrhoea	1	1	1	1	4 2	4 2
					I C	I C
b) Other STIs (excluding HIV and						
hepatitis)	1	1	1	1	2 2	2 2
					I C	I C
c) Vaginitis (including trichomonas	_		_	_	ļ <u>-</u>	···
vaginalis and bacterial vaginosis)	1	1	1	1	2 2	2 2
d) Increased risk of STIs	1	1	1	1	2/3 C	I C 2/3 2
•	'	I	ı	I	2/3 2	2/3 2
HIV / AIDS						
HIGH RISK OF HIV					I C	I C
	1	1	1	1	2 2	2 2
HIV INFECTED						
a) Not using anti-retroviral therapy					I C	I C
	1	1	1	1	2 2	2 2
b) Using anti-retroviral therapy		_			I C	I C
	2	2	1	2	2 2	2 2
AIDS and using HAART	_		_		I C	I C
	2	2	2	2	2 2	2 2
OTHER INFECTIONS						
SCHISTOSOMIASIS						,
a) Uncomplicated	1	1	1	1	1	1 1
b) Fibrosis of the liver	1	1	1	1	1	1

UKMEC	DEFINITION OF CATEGORY
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CATEGORY 3	A condition where the theoretical or proven risks usually outweigh the advantages of using the method
CATEGORY 4	A condition which represents an unacceptable health risk if the contraceptive method is used

COMMON REVERSIBLE METHODS SUMMARY TABLE							
CONDITION	CHC	POP	DMPA / NET-EN	IMP	Cu-IUD	LNG-IUD	
I = Initiation, C = Continuation							

TUBERCULOSIS					I C	I C
a) Non-pelvic	1	1	1	1	1 1	1 1
a) Hen period					I C	I C
b) Known pelvic	1	1	1	1	4 3	4 3
MALARIA	1	1	1	1	1	1
ENDOCRINE CONDITIONS					1	
DIABETES						
a) History of gestational disease	1	1	1	1	1	1
b) Non-vascular disease	0					
(i) non-insulin dependent	2	2	2	2	1	2
(ii) insulin dependent c) Nephropathy/ retinopathy/ neuropathy	2 3/4	2 2	2 3	2 2	1 1	2 2
d) Other vascular disease or diabetes	3/4 3/4	2	3	2	1	2
of >20 years' duration	3/4		3		'	
THYROID DISORDERS						
a) Simple goitre	1	1	1	1	1	1
b) Hyperthyroid	1	1	1	1	1	1 1
c) Hypothyroid	1	1	1	1	1	1 1
GASTROINTESTINAL CONDITIONS						
GALL BLADDER DISEASE						
a) Symptomatic						
(i) treated by cholecystectomy	2	2	2	2	1	2
(ii) medically treated	3	2	2	2	1	2
(iii) current	3	2	2	2	1	2
b) Asymptomatic	2	2	2	2	1	2
HISTORY OF CHOLESTASIS				_	_	_
a) Pregnancy related	2 3	1	1	1	1	1
b) Past COC-related	3	2	2	2	1	2
a) Active	4	3	3	3	1	3
b) Carrier	1	1	1	1	1	1
CIRRHOSIS		<u> </u>	'			'
a) Mild (compensated)	3	2	2	2	1	2
b) Severe (decompensated)	4	3	3	3	1	3
LIVER TUMOURS	-				-	
a) Benign (adenoma)	4	3	3	3	1	3
b) Malignant (hepatoma)	4	3	3	3	1	3
INFLAMMATORY BOWEL DISEASE	2	2	1	1	1	1
(includes Crohn's disease, Ulcerative colitis)						
ANAEMIAS		1				
THALASSAEMIA	1	1	1	1	2	1
SICKLE CELL DISEASE	2	1	1	1	2	1
IRON DEFICIENCY ANAEMIA	1	1	1	1	2	1
a) Primary	1	1	1	1	1	1
b) Secondary	'	'	'	'	'	'
(i) without lupus anticoagulant	2	1	1	1	1	1
(ii) with lupus anticoagulant	4	2	2	2		2
DRUG INTERACTIONS	Т			<u> </u>	<u>'</u>	
DRUGS WHICH AFFECT LIVER	3	3	1	3	1	1
ENZYMES	-	_	_	_		
For example Rifampicin, Rifabutin, St John's						
Wort, Griseofulvin, certain anticonvulsants						
(phenytoin, carmazepine, barbiturates,						
primidone, topiramate, oxcarbazepine)						

UKMEC	DEFINITION OF CATEGORY
CATEGORY 1	A condition for which there is no restriction for the use of the contraceptive 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
CATEGORY 4	A condition which represents an unacceptable health risk if the contraceptive method is used

COMMON REVERSIBLE METHODS SUMMARY TABLE						
CONDITION	CHC	CHC POP DMPA / NET-EN		IMP	Cu-IUD	LNG-IUD
I = Initiation, C = Continuation						

NON LIVER ENZYME INDUCING ANTIBIOTICS	2	1	1	1	1		1	
HIGHLY ACTIVE ANTIRETROVIRAL					I	С	ı	С
THERAPY (HAART)	2	2	2	2	2/3	2	2/3	2

UKMEC	DEFINITION OF CATEGORY
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CATEGORY 4	A condition which represents an unacceptable health risk if the contraceptive method is used

SECTION D: Annex

Annex 1	. (COCs	and	antiretroviral	therapies		50	ا
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COCs and antiretroviral therapies

This section is unchanged from WHOMEC. Few data from small, mostly unpublished studies suggest that the pharmacokinetics of a single dose of COCs may be altered by various antiretroviral (ARV) therapies. However, no clinical outcome studies have been conducted and the clinical significance of such changes, especially when the COCs have not been allowed to reach steady-state, is unknown. The following table summarizes the evidence to date regarding the effects of ARVs on contraceptive steroid levels and the effects of hormonal contraceptives on ARV levels. (This annex is unchanged from WHOMEC).

Table 1. Pharmacokinetic COC-ARV drug interactions.

ARV	Contraceptive steroid levels	ARV levels					
Protease inhibitors							
Nelfinavir	Y	No data					
Ritonavir	Y	No data					
Lopinavir/ritonavir	\	No data					
Atazanavir	A	No data					
Amprenavir	A	*					
Indinavir	A	No data					
Saquinavir	No data	No change					
Non-nucleoside reverse transcriptase inhibitors							
Nevirapine		No change					
Efavirenz	Y	No change					
Delavirdine	? 🛕	No data					

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References

Ouellet D et al. Effect of ritonavir on the pharmacokinetics of ethinyl oestradiol in healthy female volunteers. British Journal of Clinical Pharmacology, 1998, 46(2):111-6.

Mildvan D et al. Pharmacokinetic interaction between nevirapine and ethinyl estradiol/norethindrone when administered concurrently to HIV-infected women. *Journal of Acquired Immune Deficiency Syndromes: JAIDS*, 2002, 29(5):471-7.

Tackett D et al. Atazanavir: a summary of two pharmacokinetic drug interaction studies in healthy subjects (abstract). Presented at the 10th Retrovirus Conference, Boston, MA, February 10-14, 2003. Available on line at http://www.retroconference.org/2003/Abstract/Abstract.aspx?AbstractID=649. (Accessed July 31, 2003).

Mayer K et al. Efficacy, effect of oral contraceptives, and adherence in HIV infected women receiving Fortovase (Saquinavir) soft gel capsule (SQV-SGC; FTV) thrice (TID) and twice (BID) daily regimens (abstract). Presented at the XIII International AIDS Conference, Durban, 2000. Available on line at

http://www.iac2000.org/abdetail.asp?ID=TuPeB3226. (Accessed July 31, 2003).

Merck & Co., Inc. Indinavir prescribing information, 2002.

Abbot Laboratories. Ritonavir prescribing information, 2001.

Abbot Laboratories. Lopinavir/ritonavir prescribing information, 2003.

Agouron Pharmaceuticals, Inc. Nelfinavir prescribing information, 2003.

Glaxo Smith Kline. Amprenavir prescribing information, 2002.

Pharmacia & Upjohn Co. Delavirdine prescribing information, 2001.

DuPont Pharmaceuticals Co. Efavirenz prescribing information, 2001.

Bristol-Myers Squibb Company. Atazanavir prescribing information, 2003

World Health Organization. Medical Eligibility Criteria for Contraceptive Use. Third edition. 2004.

