CLINICAL PRACTICE ALERT
CONTRACEPTION FOR INDIVIDUALS WITH CHRONIC MEDICAL CONDITIONS

Introduction

The Family Planning, Access, Care, and Treatment (Family PACT) Program encourages the use of the *U.S. Medical Eligibility Criteria for Contraceptive Use (U.S. MEC), 2016*[1] from the United States Centers for Disease Control and Prevention (CDC), an evidence-based guideline focused on contraceptive safety. There are four risk levels that are used with a matrix of 60+ medical conditions and 6 categories of contraceptive methods, including copper intrauterine devices (IUDs), levonorgestrel (LNg) IUDs, contraceptive implants (Nexplanon®), depot medroxyprogesterone acetate (DMPA, also known as Depo-Provera®), progestin-only pills (POPs), and combined hormonal contraceptives (CHCs) such as combined oral contraceptives (OCs), patch, and ring. Five categories of drug interactions with contraceptives are also included. The risk levels are defined as:

Category Level	Clinical Recommendation
Category 1	A condition for which there is no restriction on the use of the contraceptive method. Use the method in any circumstance.
Category 2	A condition where the advantages of using the method generally outweigh the theoretical or proven risks. More frequent client follow-up visits may be required than with MEC-1 methods.
Category 3	A condition where the theoretical or proven risks of the method usually outweigh the advantages of using the method. Use of the method is not recommended ***unless*** other more appropriate methods are not available or acceptable to the client.
Category 4	A condition which represents an unacceptable health risk if the contraceptive method is used.

Family PACT providers are strongly encouraged to use the U.S. MEC to aid individuals who have chronic medical conditions in choosing a method that will not worsen their underlying medical condition. The CDC has developed a free contraception app that contains the recommendations of the U.S. MEC and *U.S. Selected Practice Recommendations for Contraceptive Use (U.S. SPR), 2016*[2], that can be found in the app store. The app is available for iOS and Android operating systems. A full color-coded U.S. MEC summary chart is also available.

This clinical practice alert reviews the answers to commonly asked questions about the safety of contraceptive methods but is not comprehensive. Please consult the full U.S. MEC for more detail, the rationale of recommendations, and references.

Key Recommendations

MEC-3 conditions do not represent an absolute contraindication to using a particular method. While a **MEC-1** or **MEC-2** method is preferred, using a **MEC-3** method almost always is safer than pregnancy.

In a dose-dependent relationship, the estrogen in combined hormonal contraceptives increases the risk of rare venous thromboembolic events (VTE), including deep vein thrombosis (DVT) and pulmonary thromboembolism (PTE).

Individuals who have underlying cardiovascular disease (CVD) and who use combined hormonal contraceptives have a small attributable risk of heart attack and stroke. The development of CVD is multifactorial, and an individual's risk of CVD increases with a greater number of risk factors and an increasing severity of each risk factor. CVD risk factors include increasing age (especially over 35 years old), cigarette smoking, hypertension, diabetes, and abnormal lipid levels (increased triglycerides and low-density lipoprotein (LDL) cholesterol and decreased high-density lipoprotein (HDL) cholesterol).

Questions and Answers

Are any routine screening tests recommended before the initiation of CHCs to evaluate CVD risk?

- According to U.S. MEC guidelines (and *Family PACT Program Standards*), a blood pressure check is the only routine screening test necessary for an individual initiating a CHC method. If the method is continued, a blood pressure measurement is recommended at least every 2 years afterwards. During a telehealth visit, it is acceptable to accept a client's report of their recent blood pressure reading, if known.
- To complete their CVD risk profile, individuals who use, or who intend to use, a CHC method and who are 35 years old or older or who have hypertension should be screened for type 2 diabetes (with a hemoglobin A1c [HbA1c] test and/or fasting plasma glucose test) and for hyperlipidemia (with a total cholesterol level or lipid profile).
  - NOTE: These tests are not Family PACT benefits, but if not performed recently, usually can be obtained through the individual's primary care provider.
- For individuals with multiple CVD risk factors, the use of CHCs is **MEC-3**/**MEC-4**, DMPA is **MEC-3**, other hormonal methods are **MEC-2**, and the copper IUD is **MEC-1**.

Can a CHC method be used by individuals with a history of deep vein thrombosis or pulmonary embolism?

- Individuals at a higher risk for recurrent deep vein thrombrosis (DVT)/pulmonary embolism (PE) include those with a previous estrogen-associated DVT/PE, pregnancy-associated DVT/PE, idiopathic DVT/PE, a known thrombophilia (including antiphospholipid syndrome), active cancer (metastatic, receiving therapy, or within 6 months after clinical remission), excluding nonmelanoma skin cancer, or a personal history of recurrent DVT/PE. If one or more risk factors is present, the individual should not use a CHC method (**MEC-4**). If at lower risk of recurrence, (none of the above risk factors), CHCs are **MEC-3**.
- Progestin-only methods and LNg IUDs are **MEC-2** and copper IUDs are **MEC-1**.

If an individual requires anticoagulation after a previous VTE, what methods of contraception can be used?

- If established on anticoagulant therapy for at least 3 months, and at higher risk for recurrent DVT/PE, CHC use is **MEC-4**; If no risk factors for recurrence exist, CHCs are **MEC-3** even if the individual remains on an anticoagulant.
- All other methods are **MEC-2**. Both types of IUDs are acceptable, but the LNg-IUD is preferred due to the potential for increased menstrual bleeding with a copper IUD.

What if a family member has an inherited coagulopathy?

- Individuals with a first-degree family member with a history of VTE or a known inherited coagulopathy (homozygous factor V Leiden; prothrombin mutation; and protein S, protein C, and antithrombin deficiencies) should be advised to undergo hematologic evaluation if desiring pregnancy, as these conditions are associated with increased risk for miscarriage and adverse health events as a result of pregnancy (testing is not a Family PACT benefit).
- Family history of inherited coagulopathy in first-degree relatives: CHCs are **MEC-2**; all other methods are **MEC-1**.

Can individuals with varicose veins or superficial thrombophlebitis use CHCs?

- Individuals with superficial varicose veins may use all methods (**MEC-1**). In individuals with an acute or a history of superficial venous thrombosis, CHC methods are **MEC-3**, but superficial venous thrombosis associated with a peripheral intravenous (IV) catheter is less likely to be associated with additional thrombosis and use of CHCs may be considered.

Can an individual with treated hypertension use CHCs?

- Individuals with adequately controlled hypertension (systolic ≤ 159 / diastolic ≤ 99) without vascular disease or other CVD risk factors can use CHCs (**MEC-3**), but blood pressure must be followed closely after method initiation to determine whether hypertension control is maintained.
- In hypertensive smokers, those with vascular disease, or individuals with poorly controlled hypertension (systolic ≥160 / diastolic ≥ 100) CHCs are **MEC-4**, DMPA is **MEC-3**, progestin-only methods are **MEC-2**, and the copper IUD is **MEC-1**.

Can I give CHCs to an individual with a history of high blood pressure during pregnancy (gestational hypertension)? If started, how often is follow-up necessary?

- If current blood pressure is normal, CHCs are **MEC-2**; all others are **MEC-1**. A follow-up blood pressure check in 2 months is recommended to ensure that hypertension does not develop as a result of method initiation.

Which methods can be used for individuals with type 2 diabetes or those with a history of gestational diabetes?

- In diabetic individuals WITH vascular disease (i.e., retinopathy, nephropathy, peripheral vascular disease, heart disease) or diabetes > 20 years duration, IUDs or progestin-only methods are preferred. CHCs are **MEC-3**/**MEC-4**, DMPA is **MEC-3**, progestin-only methods are **MEC-2**, and copper IUDs are **MEC-1**.
- In diabetics individuals WITHOUT vascular disease and/or without nephropathy/retinopathy/neuropathy, all methods are considered to be safe (mainly **MEC-2**) whether or not the individual uses insulin. Copper IUDs are **MEC-1**.
- In individuals with a history of gestational diabetes mellitus (GDM), all methods are **MEC-1**.
  - NOTE: Individuals with a history of GDM should be screened at 6 weeks postpartum with a 75gm, 2-hour post-glucose load test to evaluate the individual for type 2 diabetes. If normal, routine screening for type 2 diabetes should be performed every 2 years (not a Family PACT benefit).

Which methods are best for individuals who have a seizure disorder?

- Regarding safety, all methods are **MEC-1**. DMPA or IUDs are excellent choices because of their low failure rate, lack of interactions with any anti-seizure medication, and DMPA may reduce the number of seizure episodes.
- Individuals who use a combination of hormonal contraceptives and anti-seizure drugs with particular enzymes may have a significant reduction in the blood level of progestin (and, in some cases, estrogen), enough to allow follicle development and ovulation, resulting in method failure. Drugs in this category include the following: phenobarbital, phenytoin (Dilantin®), carbamazepine (Tegretol®), felbamate (Felbatol®), oxcarbazepine (Trileptal®), and topiramate (Topamax®). In individuals who use these anticonvulsant drugs, CHCs, and progestin-only pills are **MEC-3**, contraceptive implants (Nexplanon®) are **MEC-2**, and DMPA and both IUDs are **MEC-1**.
- If using lamotrigine (Lamictal®) monotherapy, CHCs are **MEC-3**; all others are **MEC-1**.
- If an individual using a listed anti-seizure medication insists upon using COCs, prescribe a product with a relatively higher progestin dose and at least 35 mcg of ethinyl estradiol, used continuously (no hormone free interval) or cycled as an extended regimen with a short (3-4 day) hormone free interval.

Can individuals with migraine headaches use CHCs?

- A critical issue is whether the individual experiences an *aura* before the onset of the migraine headache. Pre-migraine auras begin within 60 minutes of headache onset and

can consist of flickering zigzag lines that move toward the periphery of the visual field, scotomata (blind spots) or intermittent loss of vision. Migraines with aura increase the risk of ischemic stroke, which is increased even more if CHCs are used.

- In individuals with migraines *with* aura, regardless of age, CHCs are **MEC-4**.
- In individuals with migraines *without* aura, CHCs are **MEC-2** and all other methods are **MEC-1**.
- For those with other types of headache (tension headaches, cluster headaches) all methods are **MEC-1**.

Which methods can be used in individuals with a past history of breast cancer?

- For individuals with a history of breast cancer who have been treated within 5 years, all methods are **MEC-4**, with the exception of the copper IUD, which is **MEC-1**.
- For individuals with a history of breast cancer and who have no evidence of recurrent breast cancer for 5 years or more after treatment, all methods are **MEC-3**, except the copper IUD, which is **MEC-1**.
- Key point: If an individual declines a copper IUD or condoms, the levels of estrogen and progesterone in pregnancy are much higher than the levels from all hormonal methods that are **MEC-3**.

Can individuals with benign breast conditions (such as a fibroadenoma or fibrocystic change) or a family history of breast cancer use CHCs?

- All methods are **MEC-1**. A woman with an undiagnosed breast mass may remain on any hormonal method during her medical evaluation (copper IUDs are **MEC-1**; all others are **MEC-2**), as the risk of pregnancy outweighs the risk of hormones should breast cancer be confirmed.

What is the ideal contraceptive method for an individual with sickle cell anemia?

- While all methods are considered to be safe (the copper IUD and CHCs are **MEC-2**; all others are **MEC-1**), DMPA may be the ideal choice, as it may decrease the likelihood of painful sickle cell crises.

Can an individual with uterine fibroids use a hormonal method of contraception?

- In individuals with a distorted uterine cavity, both IUDs are **MEC-4**; but if no cavity distortion, **MEC-2**.
- All other methods of contraception are **MEC-1**. COCs do not cause growth of fibroids, and the patch and ring also are not expected to cause fibroid growth.

When is liver disease a problem?

- In an individual with acute hepatitis or a flare, initiation of CHCs is **MEC-3**/**MEC-4**, continuation of CHCs is **MEC-2**, and all others are **MEC-1**. In an asymptomatic viral hepatitis carrier, all methods are **MEC-1**.
- If severe (decompensated) cirrhosis, CHCs are **MEC-4**, other methods are **MEC-3**, and the

copper IUD is **MEC-1**. In mild (compensated) cirrhosis, all methods are **MEC-1**.

- If a history of cholestasis in pregnancy, CHCs are **MEC-2**, all others are **MEC-1**. If a history of past OC-related cholestasis, CHCs are **MEC-3**, most others are **MEC-2**, and copper IUDs are **MEC-1**.
- History of focal nodular hyperplasia: copper IUDs are **MEC-1**; all other methods are **MEC-2**.
- Hepatocellular adenoma (benign) and hepatoma (malignant): CHCs are **MEC-4**, most others are **MEC-2**, and copper IUDs are **MEC-1**.

Applications of Family PACT Policies

Which lab tests does Family PACT cover for individuals with chronic medical conditions?

- The tests that are available as Family PACT benefits are listed in the Benefits Grid section of the *Family PACT Policies, Procedures and Billing Instructions (PPBI)* manual. They are covered only as necessary for individuals who have an identified chronic medical condition and can be ordered as necessary to determine the safety of using a particular method. They are not intended to be used as primary care screening tests for all individuals.
- An example is a complete blood count (CBC), hemoglobin, or hematocrit testing for individuals with a history of anemia who would like to use a copper IUD, since it may increase menstrual bleeding and aggravate the degree of anemia. The same risks would not be applicable for individuals using other methods; therefore, CBC, hemoglobin, and hematocrit are not Family PACT benefits for other methods.

Providers should refer to the *Family PACT Policies, Procedures and Billing Instructions (PPBI)* manual for the complete text of the *Family PACT Standards*, official administrative practices, and billing information.

References

1. Curtis KM, Tepper NK, Jatlaoui TC, et al. U.S. Medical Eligibility Criteria for Contraceptive Use, 2016. *MMWR Recomm Rep*. 2016 Jul 29;65(3):1-104. https://www.cdc.gov/mmwr/volumes/65/rr/rr6503a1.htm.
2. Curtis KM, Jatlaoui TC, et al. U.S. Selected Practice Recommendations for Contraceptive Use, 2016. *MMWR Recomm Rep*. 2016 Jul 29;65(4):1-66. https://www.cdc.gov/mmwr/volumes/65/rr/rr6504a1.htm.

Additional Resources

1. American College of Obstetricians and Gynecologists. Practice Bulletin No. 206: Use of Hormonal Contraception in Women with Coexisting Medical Conditions. *Obstet Gynecol*. 2019 Feb;133(2):e128-150. https://journals.lww.com/greenjournal/fulltext/2019/02000/acog_practice_bulletin_no__206__use_of_hormonal.41.aspx.
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3. Carmine L. Contraception for Adolescents with Medically Complex Conditions. *Curr Probl Pediatr Adolesc Health Care*. 2018 Dec;48(12):345-357. https://www.sciencedirect.com/science/article/pii/S1538544218301561?via%3Dihub.
4. Cannon R, Treder K, Woodhams EJ. Contraception. *Ann Intern Med*. 2023 Aug;176(8):ITC113-ITC128. https://www.acpjournals.org/doi/10.7326/AITC202308150?url_ver=Z39.88-2003&rfr_id=ori:rid:crossref.org&rfr_dat=cr_pub%20%200pubmed.
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6. Lathrop E, et al. Contraception for Women With Chronic Medical Conditions: An Evidence-Based Approach. *Clin Obstet Gynecol*. 2014 Dec;57(4):674-81. https://journals.lww.com/clinicalobgyn/fulltext/2014/12000/contraception_for_women_with_chronic_medical.6.aspx.