

# Preconception Clinical Care for Women Medical Conditions

All women of reproductive age are candidates for preconception care; however, preconception care must be tailored to meet the needs of the individual. Given that preconception care ideally should occur throughout the reproductive years, some recommendations will be more relevant to women at specific stages in their lives and with varying levels of risk.

## Asthma

All women with asthma should be counseled about the potential for their asthma control to worsen with pregnancy and the importance of achieving asthma control before a pregnancy through appropriate medical management and avoidance of triggers. Women with asthma who are planning to become pregnant or who could become pregnant should be treated with pharmacologic step therapy for their chronic asthma based on the American College of Allergy, Asthma, and Immunology–American College of Obstetricians and Gynecologists recommendations for the Pharmacologic Step Therapy of Chronic Asthma During Pregnancy. Women with poor control of their asthma should be encouraged to use effective birth control until symptom control is achieved.

## Cardiovascular Disease

Women of reproductive age with cardiovascular disease should be counseled about the risks that pregnancy presents to their health and the risks of the cardiac condition and any medications needed to treat the condition (e.g., warfarin) on pregnancy-related outcomes. Women who are considering or planning a pregnancy should be counseled to achieve optimum control of the condition before conception and should be offered a suitable contraceptive method to achieve optimum timing of the pregnancy. Women whose treatment regimen involves warfarin should be counseled about its teratogenic nature; whenever possible, the treatment should be changed to a less teratogenic anticoagulant before conception. Women with a congenital cardiac condition should be offered preconception genetic counseling.



### Diabetes Mellitus

Good diabetes management reduces the increase in prevalence of birth defects among infants of women with diabetes.

All women with diabetes mellitus should be counseled about the importance of diabetes mellitus control before considering pregnancy. Important counseling topics include maintaining optimal weight control; maximizing diabetes mellitus control; self-glucose monitoring, maintaining a regular exercise program; and ceasing tobacco, alcohol, and drug use, along with social support to assist during the pregnancy. In the months before pregnancy, these women should demonstrate as near-normal a glycosylated hemoglobin level as possible for the purpose of decreasing the rate of congenital anomalies. Testing to detect prediabetes and type 2 diabetes among asymptomatic women should be considered for adults who are overweight or obese (BMI  $\geq 25$  kg/m<sup>2</sup>) and who have one or more additional risk factors for diabetes, including a history of gestational diabetes mellitus. Women with gestational diabetes mellitus should be screened for type 2 diabetes 6 to 12 weeks postpartum, and then every 1 to 3 years.

Screening also should occur early during pregnancy and be repeated among women who are at high risk.

### Eating Disorders

All women with anorexia and bulimia should be counseled about the risks to fertility and future pregnancies. Women with these disorders should be encouraged to enter into treatment programs before pregnancy.

### Hypertension

Women of reproductive age with chronic hypertension should be counseled about the risks associated with hypertension during pregnancy for both themselves and their offspring and the possible need to change the antihypertensive regimen when they are planning a pregnancy. Women with chronic hypertension should be assessed for ventricular hypertrophy, retinopathy, and renal disease before pregnancy.

Angiotensin-converting enzyme inhibitors and angiotensin-receptor blockers are contraindicated during pregnancy; women who could become pregnant while taking these medications should be counseled about their adverse fetal effects. Women who are planning a pregnancy should discontinue these medications before pregnancy.

### Lupus

Women of reproductive age with lupus should be counseled about the risks associated with lupus during pregnancy for themselves and their offspring, the importance of optimizing disease control before pregnancy, the possible need to change the medication regimen close to conception or early during pregnancy, and the importance of specialized prenatal care once pregnant. Women whose treatment regimen involves cyclophosphamide should be advised of its teratogenic nature; whenever possible, the treatment should be changed to a safer regimen before conception, and the women should be offered contraception if they are not planning a pregnancy.

### Phenylketonuria (PKU)

Maternal PKU management prevents babies from being born with PKU-related intellectual disability.

Women of reproductive age with PKU should be counseled about the importance of maintaining a low phenylalanine level during their childbearing years and should be encouraged to maintain a low phenylalanine diet, particularly when they are planning to become pregnant, to avoid adverse outcomes for the offspring. Women who do not desire a pregnancy should be encouraged to use contraception.

### Psychiatric Conditions

#### Bipolar Disorder

Women of reproductive age with bipolar disorder should be counseled that pregnancy is a time of substantial risk of relapse, particularly after discontinuation of ongoing mood-stabilizing maintenance treatment. A relapse prevention and management strategy for bipolar disorder should be outlined before the patient attempts conception. Women of reproductive age with bipolar disorder should be counseled regarding contraceptive options, which should include options that will prevent conception during bipolar episodes.

#### Depression and Anxiety

Providers should screen and be vigilant for depression and anxiety disorders among women of reproductive age because treating or controlling these conditions before pregnancy can help prevent negative pregnancy and family outcomes. Women of reproductive age with depressive and anxiety disorders who are planning a pregnancy or who could become pregnant should be informed about the potential risks of an untreated illness during pregnancy and about the risks and benefits of various treatments during pregnancy. Several studies have shown an increased risk for heart defects associated with taking selective serotonin-reuptake inhibitors (SSRIs) during early pregnancy. One recent study found that taking bupropion during pregnancy might increase the risk of certain heart defects. A number of studies have identified risks to the fetus and newborn associated with use of antidepressant medications.

#### Schizophrenia

Women of reproductive age with schizophrenia should be counseled, together with a partner or family member whenever possible, about the risks of pregnancy on their condition and the risks of their condition on pregnancy-related outcomes. They should be counseled about the importance of prenatal care, and a relapse prevention and management strategy of the illness should be outlined before the patient attempts conception.

#### Renal Disease

Women of reproductive age with renal disease should be counseled about the likelihood of progression of renal disease during pregnancy and the increased risk of adverse pregnancy outcomes for themselves and their offspring, and the importance of achievement and maintenance of normal blood pressure before conception. Angiotensin-converting enzyme inhibitors and angiotensin-receptor blockers are contraindicated during pregnancy; women who could become pregnant while taking these medications should be counseled about their adverse fetal effects and should be offered contraception if they are not planning a pregnancy. Women who are planning a pregnancy should discontinue these medications before pregnancy in favor of a safer regimen, whenever possible. Women who do not desire pregnancy should be offered an appropriate method of contraception.

### Rheumatoid Arthritis

Women who are planning a pregnancy should be advised to avoid travel to malaria-endemic areas. If travel cannot be deferred, the traveler should be advised to defer pregnancy and use effective contraception until travel is completed and to follow preventive approaches. Antimalarial chemoprophylaxis should be provided to women who plan a pregnancy who travel to malaria-endemic areas.

### Sexually Transmitted Infection

Sexually transmitted infection (STI) screening and treatment might reduce the risk of ectopic pregnancy, infertility, and chronic pelvic pain associated with *Chlamydia trachomatis* and *Neisseria gonorrhoeae*, and also reduce the possible risk to a fetus of fetal death or physical and developmental disabilities, including mental retardation and blindness. Health care providers regularly and routinely should assess STI risks, provide counseling and other strategies (including immunizations) to prevent acquisition of STIs, and provide indicated STI testing and treatment for all women of childbearing age.

### Seizure Disorders

Women of reproductive age with seizure disorders should be counseled about the risks of increased seizure frequency during pregnancy, the potential effects of seizures and anticonvulsant medications on pregnancy outcomes, and the need to plan their pregnancies with a health care provider well in advance of a planned conception. Women who take liver enzyme-inducing anticonvulsants should be counseled about the increased risk of hormonal contraceptive failure. Whenever possible, women of reproductive age should be placed on anticonvulsant monotherapy with the lowest effective dose to control seizures. Women who are planning a pregnancy should be fully evaluated for consideration of alteration or withdrawal of the anticonvulsant regimen before conception, and folic acid supplementation of 4 milligrams (mg) per day should be initiated for at least one month before conception through the end of the first trimester to prevent neural tube defects.

### Thrombophilia

Providers might consider screening women of childbearing age for a personal or family history of venous thrombotic events or recurrent or severe adverse pregnancy outcomes. Women with a personal or family history suggestive of thrombophilia then might be offered counseling and testing for thrombophilias if they are contemplating pregnancy. Screening for thrombophilias with laboratory testing during routine care is not recommended. Women of reproductive age with a known genetic thrombophilia should be offered preconception genetic counseling to address the risk of the condition for their offspring. Women of reproductive age with thrombophilia whose treatment regimen involves warfarin should be counseled about its teratogenic nature; whenever possible, the treatment should be changed to a less teratogenic anticoagulant before conception. Switching women off teratogenic anticoagulants (i.e., warfarin) before pregnancy avoids harmful exposure to the fetus.

### Thyroid Disease

Women with hypothyroidism should be counseled about the risks of this condition for pregnancy outcomes and the importance of achieving optimal replacement therapy before conception. All women with symptoms of hypothyroidism should be screened for thyroid disease.

Adjusting levothyroxine dosage early during pregnancy protects proper neurological development of the fetus.

### More Information

This fact sheet is part of a series on the clinical content of preconception care for women. Other fact sheets in the series include:

- Health Promotion
- Personal History
- Nutrition
- Immunization
- Infectious Diseases
- Exposures
- Psychosocial Risks
- Special Populations

To see the complete list of the preconception clinical content and description of how the content was selected and rated, please visit: [www.cdc.gov/preconception/careforwomen](http://www.cdc.gov/preconception/careforwomen)