

Genetic History Questionnaire for Prenatal Patients

Is your family...

- | | | |
|--|------------------------------|-----------------------------|
| <input type="radio"/> Asian | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| <input type="radio"/> Mediterranean | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| <input type="radio"/> Middle Eastern | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| <input type="radio"/> West Indian | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| <input type="radio"/> African American / African | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| <input type="radio"/> Hispanic | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| <input type="radio"/> Ashkenazi Jewish | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

**The next questions are in regards to you, your baby's father, both families
(*mother/father, sister/brother, grandparent, aunt/uncle, niece/nephew, cousin*)**

Has anyone ever been diagnosed with...

- | | | |
|--|------------------------------|-----------------------------|
| <input type="radio"/> Spina Bifida (opening in the back or spine) | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| <input type="radio"/> Anencephaly (absence of part of brain/skull) | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| <input type="radio"/> Cleft lip/palate | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| <input type="radio"/> Congenital heart defect | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| <input type="radio"/> Down Syndrome (Trisomy 21) | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| <input type="radio"/> Intellectual disability | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| <input type="radio"/> Fragile X | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| <input type="radio"/> Cystic Fibrosis (CF) | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| <input type="radio"/> Muscular Dystrophy | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| <input type="radio"/> Hemophilia / Bleeding disorder | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| <input type="radio"/> Huntington disease | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

The next questions are in regards to YOU only

Have you had a still born baby (after 20 weeks gestation) or 2+ miscarriages? Yes No

Do you have any of the following health problems (if yes, please list any medications that you take):

- | | | |
|--|------------------------------|-----------------------------|
| <input type="radio"/> Diabetes | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| <input type="radio"/> High blood pressure | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| <input type="radio"/> Thyroid disorder | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| <input type="radio"/> Seizures | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| <input type="radio"/> Depression / Anxiety / Bipolar | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| <input type="radio"/> Acne | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

PRENATAL TESTING CONSENT FORM

Below is a list of screening tests available to you. These tests are not always accurate. **False positives, as well as false negatives might occur. Normal tests do not guarantee your baby will be perfectly healthy.** If any of the tests come back abnormal, additional testing may be recommended.

Carrier Screening: Cystic Fibrosis (CF), Spinal Muscular Atrophy (SMA), Fragile X

Blood test in our office – can be **drawn anytime and does not need to be repeated with your next pregnancy.**

It checks to see if you are a carrier of the most common gene mutations causing cystic fibrosis, a very serious lung disease with an average life expectancy of 40 years. The carrier rate is as high as 1/24 in some high risk populations. SMA is a serious muscular disease that often severely shortens life expectancy and has a carrier rate as high as 1/47 in some high risk populations. Fragile X is a gene mutation associated with mental retardation.

Accept:	Decline:
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Cell Free DNA

Blood test in our office– **drawn at the 12 week visit (or anytime after 12 weeks of pregnancy), screens for trisomy 13, 18, and 21. This test is also able to identify the fetal sex. This does not screen for open neural tube defects.**

Accept:	Decline:
---------	----------

AFP Only

Blood test in our office – **drawn at the 16 week visit, screens for open neural tube defects only. This does not screen for trisomy.**

Accept:	Decline:
---------	----------

Nuchal Translucency Ultrasound

Ultrasound at Maternal Fetal Medicine office – **performed between 11-13 weeks, screens for chromosomal abnormalities and major congenital heart problems.** Occasionally other rare genetic disorders are detected.

Accept:	Decline:
---------	----------

Level II Ultrasound

Ultrasound at Maternal Fetal Medicine office – **performed at 18+ weeks, replaces the standard anatomy scan done in the office for women with an increased risk of fetal abnormalities or medical conditions requiring a high-risk consultation.**

Accept:	Decline:
---------	----------

Invasive Fetal Testing

Collection of fetal cells at Maternal Fetal Medicine office – this testing includes both **chorionic villi sampling and amniocentesis**. It is the only fetal testing that can be used to **officially diagnose** (instead of screen for). Both tests involve inserting a needle into the uterus and collecting fetal cells from the placenta or amniotic fluid which are used for genetic diagnosis.

Accept:	Decline:
---------	----------

My provider has discussed all testing options available with me, reviewed benefits and risks, and answered all of my questions to my satisfaction. I understand that certain prenatal genetic testing may not be covered by my insurance. If I elect to have any of the genetic testing done during my pregnancy, whether on me, or the father of my baby, and it is not covered by my insurance, I understand and agree that I am responsible and will pay in full for all laboratory costs of such testing.

Patient signature: _____

Today's date: _____

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Patient signature: _____

Today's date: _____

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Katerina M. Michaels-Bogdan, M.D.
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Katherine M. Riddle, MD
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Jessica Bridge, CNM
Josie Dumond, APRN

TDap Vaccination

With every pregnancy, we encourage all patients to receive the TDap vaccination between 28 and 36 weeks of pregnancy. This vaccination helps to decrease the risk of your newborn contracting whooping cough by providing them some immunity from your blood through the placenta. Ideally this vaccine is given during the pregnancy, but can also be given when postpartum in the hospital. We encourage you to receive the vaccine in our office or by visiting your primary care physician or local pharmacy.

OBGYN GROUP OF EASTERN CONNECTICUT, P.C.

2600 TAMARACK AVENUE, SUITE 200

SOUTH WINDSOR, CT 05074

P 860-646-1157 • F 860-646-9877

PRENATAL TEST CODES

**BELOW IS A LIST OF CODES WHICH MAY BE HELPFUL WHEN CONFIRMING INSURANCE COVERAGE.
ALL PRICES ARE APPROXIMATIONS ONLY. PLEASE CHECK WITH TESTING FACILITY TO CONFIRM.**

OBSTETRIC PANEL <ul style="list-style-type: none">• CPT code 80055• Billed and performed by Counsyl• Estimated cost \$60	GENETIC COUNSELING <ul style="list-style-type: none">• CPT code 99404- (preventive medicine counseling or risk factor reduction provided to an individual for least 60 minutes by a genetic individual)• Billed and performed by St. Francis
SMA TESTING (Spinal muscle atrophy) <ul style="list-style-type: none">• CPT code 81401• Billed and performed by Counsyl• Estimated cost \$975 SMA TESTING (Connecticare, Aetna, Husky patients) * <ul style="list-style-type: none">• CPT code 81401• Billed and performed by Quest Diagnostics• Estimated cost \$1,045• *Husky patients need to be preauthorized for SMA- sent to Quest.	QUAD SCREEN <ul style="list-style-type: none">• CPT codes 81511(bundled); individual 82105 (AFP serum), 82677 (Estriol), and 86336 (Inhibin A)• Performed by Integrated AFP ONLY <ul style="list-style-type: none">• CPT code 82105• Performed by Integrated CHRONIC VILLI SAMPLI (CVS) <ul style="list-style-type: none">• CPT code 59015• Billed and performed by Hartford Hospital
CYSTIC FIBROSIS * <ul style="list-style-type: none">• CPT code 81220• Billed through ECHN (Manchester Memorial Hospital) performed by ARUP Reference Lab or Counsyl• *Cystic Fibrosis test is covered, sent through ECHN for Husky patients.• Estimated cost \$3700	AMNIOCENTESIS <ul style="list-style-type: none">• CPT codes 59000 (diagnostic amnio), 76946 (ultrasound guidance)• Billed and performed by St. Francis
FRAGILE X <ul style="list-style-type: none">• CPT code 81243• Billed through ECHN (Manchester Memorial Hospital), performed by Integrated Genetics or by Counsyl• Estimated cost \$545	CELL FREE DNA <ul style="list-style-type: none">• CPT code 81420• Performed at St. Francis• This is an out of pocket expense
LEVEL II ULTRA SOUND <ul style="list-style-type: none">• CPT code 76818• Billed and performed by St. Francis • CPT code 76816• Billed and performed in office	POSSIBLE DIAGNOSIS CODE (ICD-10) <ul style="list-style-type: none">• Z34.00- supervision of normal first pregnancy• Z34.80- supervision of other normal pregnancy• O09.511- AMA primigravida• O09.521- AMA multigravida• Z36.9- unspecified antenatal screening of mother• Z34.89- family history of other conditions• O09.52- other advanced maternal age, antepartum condition• R93.8- abnormal ultrasound

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PRENATAL TEST CODES

Updated 1/22/19 LC

Phone numbers for corresponding labs:

- ECNH (860) 533-6565
- Manchester Memorial Hospital (860) 646-1222
- St. Francis (860) 714-4000
- Counsyl (888) 268-6795

PLEASE NOTE All costs are subject to insurance processing and are in no way controlled by OBYN Group of Eastern CT. If you have questions concerning your lab bills, please contact the lab which directly billed you. OBGYN Group has no access to billing information for services performed in separate facilities.



Counsyl participates as an in-network laboratory for the following insurance/payors:

- Aetna
- Blue Cross Blue Shield Connecticut (not including POS and HMO)
- Blue Cross Blue Shield Massachusetts
- Blue Cross Blue Shield Rhode Island
- Cigna
- Connecticare
- Oxford
- UnitedHealthCare

<p>Ancillary Care Services Amerigroup Anthem Blue Cross California Arch Health Partners Blue Cross Blue Shield Alabama Blue Cross Blue Shield Arizona Blue Cross Blue Shield Georgia (PPO and Indemnity) Blue Cross Idaho Blue Cross Blue Shield Illinois Blue Cross Blue Shield Indiana Blue Cross Blue Shield Iowa Blue Cross Blue Shield Kansas City (PPO, POS, Indemnity) Blue Cross Blue Shield Kentucky Blue Cross Blue Shield Maine Blue Cross Blue Shield Michigan Blue Cross Blue Shield Minnesota Blue Cross Blue Shield Mississippi Blue Cross Blue Shield Missouri Blue Cross Blue Shield Nebraska Blue Cross Blue Shield New Hampshire Blue Cross Blue Shield North Carolina Blue Cross Blue Shield North Dakota Blue Cross Blue Shield Ohio Blue Cross Blue Shield Regence Blue Cross Blue Shield South Dakota (PPO and Indemnity)</p>	<p>Medicaid Michigan Medicaid Minnesota Medicaid Missouri Medicaid Montana Medicaid Nebraska Medicaid Nevada Medicaid New Mexico Medicaid North Dakota Medicaid Ohio Medicaid Oklahoma Medicaid Oregon Medicaid Oregon Medicaid Pennsylvania Medicaid South Carolina Medicaid South Dakota Medicaid Tennessee Medicaid Utah Medicaid Virginia Medicaid Washington Medicaid Wisconsin Medicaid Wyoming MedNet Midland Choice Multiplan Network Health Noridian Olympus Managed Care PCHS</p>
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ULTRASOUND EXAMINATION GUIDELINES

Our ultrasound technologists' first and foremost responsibility is completing a thorough scan without any distractions or disruptions.

As a courtesy to our patients, we will allow only two adults in the ultrasound room while a scan is being performed.

Children will not be allowed to accompany mothers during an ultrasound scan and must not be left unattended in our waiting room.

Cell phones and other electronic devices must be turned off during your ultrasound examination. Also, no video or pictures can be taken in our office.

Thank you for your cooperation.

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To Our Obstetrical Patients

There may be occasions when it may be necessary to perform certain office tests to rule out any problems related to your pregnancy.

These tests may include an ultrasound or a fetal non-stress test.

We recommend that you confirm coverage with your insurance company prior to having any of these tests performed in our office

If you have **Oxford Health Plan** you have three (3) ultrasounds that can be performed without a prior authorization.

Therefore, it is important for you to inform us of any additional test that have been performed outside of our office

Thank you for your cooperation and we look forward to serving you.



GUIDELINES FOR COMPLETION FMLA/SHORT-TERM DISABILITY FORMS

As a convenience to our patients, our office is more than happy to complete your Family Medical Leave Act (FMLA) or Short-Term Disability paperwork for you for a fee of **\$25.00**.

Please:

- Allow two weeks for the completion of any forms.
- Leave all sections to be completed by the healthcare provider **blank**. If you improperly complete a form it may cause delays and/or we may request a new form from you.
- Understand that if your short-term disability form does not include a signed medical release, you will be required to complete our Authorization to Use or Disclose Medical Information.
- Let us know if you would like your form faxed, mailed or picked-up in person.
- **Know that we will contact you when your paperwork is completed.**

Date: _____/_____/_____ Patient's Name: _____
Last First

DOB: _____/_____/_____ Patient's Telephone Number: _____-_____-_____

Fax to Company: Attention: _____ Fax#: _____-_____-_____

Mail to: Home Company: Name: _____

Address: _____

Pick-up: Signature of person: _____

Relationship to Patient: Self Spouse Other _____

We thank you in advance for your cooperation!

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Birth Plan Patient Information

All of us at OBGYN Group of Eastern Connecticut would like to congratulate you. Whether this is your first pregnancy or not, we understand that this is a very special time. It is our policy to provide you with the best obstetrical care and to do all that we can to ensure the well-being of both you and your unborn child.

Although we make every attempt to respect your requests for a birth plan, we feel it is necessary to advise you of our group policy to provide the best medical care possible.

At the discretion of the physician it may be necessary to:

1. Continue monitoring for the welfare of your unborn child
2. Rupture membranes
3. Perform an episiotomy
4. Utilize medications or delivery techniques to hasten delivery; if necessary, for the well-being of you or your baby.

The physician and only the physician is capable of directing the medical necessity for any of these procedures. If for any reason you choose not to concur with our policies, we will have to recommend you seek your obstetrical care with another physician or group more suited to your needs. Upon your written authorization, we will transfer your records.

We look forward to the opportunity to continue your care with us knowing that we have a mutual respect for each other's wishes to provide you the best medical care.

Safe Medications in Pregnancy

Cold and Flu

- Saline nasal drops or spray
- Warm salt / water gargle
- Vicks Vapor Rub
- Cough Drops
- Acetaminophen (Tylenol)
- Diphenhydramine (Benadryl)
- Dextromethorphan (Robitussin)
- Guaifenesin (Mucinex)
- Pseudoephedrine (Sudafed) NOT in 1st trimester

Diarrhea

- Loperamide (Imodium) NOT in 1st trimester, for 24 hours only

Constipation

- Milk of Magnesia
- Methylcellulose fiber (Citrucel)
- Docusate (Colace)
- Psyllium (Fiberall, Metamucil)
- Polycarbophil (FiberCon)
- Polyethylene Glycol (MiraLAX)
- Glycerine Suppository
- Fleet Enemas

Hemorrhoids

- Phenylephrine / mineral oil / petrolatum (Preparation H)
- Witch hazel (Tucks pads or ointment)

Nausea / Vomiting

- Ginger capsules
- Vitamin B6 & Unisom (doxylamine succinate)
- Dimenhydrinate (Dramamine)

Heartburn / Indigestion

- Aluminum hydroxide / magnesium carbonate (Gaviscon)
- Aluminum hydroxide / magnesium hydroxide (Maalox)
- Calcium carbonate / magnesium carbonate (Mylanta)
- Calcium carbonate (Tums)
- Famotidine (Pepcid AC)
- Simethicone (Gas-X)

Rash

- Diphenhydramine cream (Benadryl)
- Hydrocortisone cream or ointment
- Oatmeal bath (Aveeno)

Allergy

- Diphenhydramine (Benadryl)
- Loratidine (Claritin)
- Cetirizine (Zyrtec)

Sleep

- Diphenhydramin (Benadryl)
- Melatonin

Avoid: NSAIDS (Ibuprofen, Advil, Aleve), Pepto Bismol, NyQuil, Phenylephrine

Alternative Therapies for Common Discomforts of Pregnancy

Nausea / Vomiting

- Take your prenatal vitamin before you go to sleep, not when you wake up
- “Sea-Band” Wristbands
- Ginger capsules or hard candy
- Freeze Gatorade ice cubes
- Watermelon
- Papaya extract

Headache

- Peppermint & lavender essential oil
- Place feet in hot water, rest ice pack on neck
- 1 cup of caffeine (coffee, tea, soda)

Heartburn / Indigestion

- Avoid trigger foods (spicy, fried, caffeine, chocolate, citrus)
- Eat small, frequent meals. Don’t eat too close to bedtime
- Elevate your head above your stomach with pillow

Constipation

- Fiber-containing foods: apples, pears, whole wheat grains, chia seeds
- Drink lots of water
- Stay active, walk!

Insomnia

- “Sleep Hygiene” Handout
- Body / pregnancy pillow
- Magnesium “Calm” by Natural Vitality
- Melatonin fast dissolve by Natrol

Back Pain / Sciatica

- BioFreeze gel
- Abdominal support band
- Kinesio tape
- Stretching and yoga
- Physical therapy
- TENS unit

Stretch marks / Itching

- Aveeno Oatmeal Bath
- Avoid hot water
- Burt’s Bees Belly Butter
- Lavender essential oil

Varicose veins / Swelling

- Compression stockings
- Elevate legs above heart level
- Massage in the direction toward your heart



Alcohol

In every pregnancy, a woman starts out with a 3-5% chance of having a baby with a birth defect. This is called her background risk. This sheet talks about whether exposure to alcohol may increase the risk for birth defects over that background risk. This information should not take the place of medical care and advice from your health care provider.

What is alcohol?

Alcohol, drinking alcohol, ethanol and ethyl alcohol are all names for the ingredient in beer, wine, or hard liquor that gives an intoxicating effect to the drinker. The same amount of alcohol is found in a standard serving of beer, wine, or hard liquor. A standard serving is considered to be 12 ounces of beer, 4-5 ounces of wine, or 1.5 ounces of hard liquor.

Is there a safe amount of alcohol I can drink during pregnancy?

No, there is no safe level. Alcohol crosses the placenta easily and reaches the developing baby. Differences in genetics and metabolism of alcohol by both the mother and the developing baby lead to a wide range of risks. The risk may be different even in the same mother in different pregnancies.

Can drinking alcohol make it harder for me to get pregnant?

Yes. Some studies have shown an increase in fertility problems among women with heavy alcohol exposure. It is best to avoid alcohol while trying to get pregnant.

Can drinking alcohol cause a miscarriage?

Yes. Some studies reported higher rates of miscarriage and stillbirth with alcohol use during pregnancy.

Can drinking alcohol during my pregnancy cause a birth defect?

Yes. Drinking alcohol in pregnancy is a leading cause of intellectual disability. Drinking alcohol in pregnancy puts the developing baby at risk for Fetal Alcohol Syndrome (FAS). The features of FAS include a pattern of certain birth defects: small head and body size, specific facial features, and learning and behavioral problems. FAS is the most severe outcome of alcohol use during pregnancy. When a child has some but not all of the findings of FAS, health care providers may use other terms, such as Fetal Alcohol Spectrum Disorder (FASD) and Fetal Alcohol Effects (FAE). The risks from heavy alcohol use (5 or more drinks a days) and binge drinking (around 5 or more drinks on one occasion) have been well established. The risks for occasional use of lower amounts of alcohol are less clear.

Are there long term issues with FAS, FASD, and FAE?

Yes. These cause lifelong challenges, such as problems with learning and poor memory. People with FAS, FASD, and FAE can have a harder time understanding the consequences of their actions, have poor judgment, and difficulty with social relationships. Higher rates of dropping out of school, mental health problems, and alcohol or drug abuse have also been reported in these individuals.

I just found out I am 6 weeks pregnant and last weekend I had one beer. Will my baby have FASD?

While there is no known safe amount of alcohol, a single drink is unlikely to cause a problem. The best thing you can do for your baby is to avoid further use of alcohol during your pregnancy.

Is binge drinking on only some days of the week as risky as drinking alcohol everyday but at lower amounts?

Yes. Binge drinking provides the highest alcohol dose to the developing baby at one time. However, studies on alcohol use during pregnancy often calculate weekly averages, so the effects of certain patterns of drinking alcohol are not well studied.

Is it ok to drink after the first trimester?

No. Alcohol affects brain development. The baby's brain develops throughout the entire pregnancy and continues to grow after birth. Drinking alcohol at any time in pregnancy increases the risk for the baby to have alcohol related brain damage. This means there is no safe period to drink when pregnant.

Can a baby go through withdrawal after birth?

Yes, if the mother has been drinking close to delivery. Symptoms can include tremors, increased muscle tone, restlessness and excessive crying.

How will I know if alcohol has hurt my baby?

If you are worried about the amount of alcohol you have drank during pregnancy, it is important to discuss this with your health care provider. Your health care provider may offer ultrasounds to look for birth defects and to watch the baby's growth more closely. However, an ultrasound cannot see if alcohol has caused intellectual disabilities or learning difficulties.

Once your baby is born, tell your pediatrician about your alcohol use during pregnancy. Your baby can then be evaluated for effects of prenatal alcohol exposure. However, some of the problems caused by prenatal alcohol exposure, such as learning difficulties and behavioral problems, are more likely to be identified as your child gets older. Your child's health care provider can continue to monitor your child over time.

Is there any hope for a baby who has been exposed to alcohol throughout pregnancy?

Yes. It is always recommended for a pregnant woman to stop her alcohol use, regardless of how far along in her pregnancy she is. The baby will benefit by no longer being exposed to alcohol. Though FAS/FASD cannot be cured, children with FAS/FASD benefit from an early diagnosis. The best outcomes happen with children who are diagnosed early. Being raised in a stable and nurturing home can lead to better outcomes. Services and support are available for children with alcohol related problems.

Can I drink alcohol while breastfeeding?

This should be avoided. Drinking alcohol can make it harder for your body to make milk, and alcohol gets into breast milk. The amount of alcohol in the milk is about the same level of alcohol in the woman's bloodstream. Alcohol can pass back and forth from the bloodstream into the milk. Only time can reduce the amount of alcohol in the milk. Pumping and discarding, drinking water, taking caffeine, or exercising do not help your body to get rid of the alcohol faster. It takes about 2 to 2.5 hours for each standard drink to clear from breast milk. For each additional drink, a woman must wait another 2-2.5 hours per drink.

The infant brain continues to grow after birth. Effects on the baby from alcohol in breast milk are not well studied. However, some reports found that babies whose mothers drink alcohol while breastfeeding may eat less and/or have changes in their sleeping patterns. One study suggested problems with motor development following exposure to alcohol in breast milk, but other studies did not show the same results. Since breastfeeding has documented benefits for the baby, speak with your pediatrician about your specific alcohol intake before avoiding breastfeeding.

What if the father of the baby drinks alcohol?

There is no evidence to suggest that a father's exposure to alcohol causes birth defects. In general, exposures that fathers have are unlikely to increase risks to a pregnancy. For more information, please see the MotherToBaby fact sheet Paternal Exposures and Pregnancy at <https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/pdf/>.

References Available By Request

October, 2016



FAQ196, May 2018

Marijuana and Pregnancy

- What is marijuana?
- What is medical marijuana?
- Is marijuana use legal?
- Is edible marijuana safer than smoked marijuana?
- Is marijuana safe to use during pregnancy?
- Is marijuana an effective treatment for morning sickness?
- I use medical marijuana. Should I use it during pregnancy?
- I'm planning to get pregnant. Do I need to stop using marijuana?
- What does current research suggest about the effects of marijuana during pregnancy?
- What does current research suggest about the effects of marijuana on children?
- How can marijuana use affect my own health, especially if I am pregnant?
- How does marijuana affect breastfeeding babies?
- Is marijuana addictive?
- Will my ob-gyn or other health care professional ask if I use marijuana?
- How can I get help for marijuana use disorder or addiction?
- Glossary

What is marijuana?

Marijuana is a plant that contains a chemical called tetrahydrocannabinol (THC). THC can cause relaxation and the typical "high" associated with marijuana use. Marijuana has other chemicals that affect different organs in the body, including the brain, lungs, blood vessels, heart, and liver.

What is medical marijuana?

Medical marijuana is the use of marijuana that is prescribed by a doctor. The U.S. Food and Drug Administration (FDA) has not approved medical marijuana for the treatment of any medical condition.

People may confuse medical marijuana with FDA-approved drugs that contain a form of THC. These FDA-approved drugs have a form of THC that does not produce a high. These drugs also require a doctor's prescription.

Is marijuana use legal?

Recreational marijuana use is legal in some states, and 20 states have legalized medical marijuana. But both are illegal under federal law.

Is edible marijuana safer than smoked marijuana?

Edible marijuana is processed differently in the body than marijuana that is smoked. Because edible marijuana is eaten and digested, the effects take longer to be felt. This leads some users to eat more marijuana to feel the

effects more quickly. It is not possible to tell how strong the marijuana is before eating it. For these reasons, there is a higher risk of overdose with edible marijuana than with marijuana that is smoked.

Is marijuana safe to use during pregnancy?

When marijuana is smoked or eaten, the chemicals reach the *fetus* by crossing the *placenta*. Research is limited on the harms of marijuana use during pregnancy. But there are possible risks of marijuana use, including babies that are smaller at birth and *stillbirth*. Using marijuana also can be harmful to a pregnant woman's health. The American College of Obstetricians and Gynecologists recommends that pregnant women not use marijuana.

Is marijuana an effective treatment for morning sickness?

There is no evidence that marijuana is helpful in managing morning sickness. If you have morning sickness, tell your *obstetrician-gynecologist (ob-gyn)* or other health care professional. Diet and lifestyle changes may help. There also is a drug approved by the FDA to treat the nausea and vomiting of pregnancy.

I use medical marijuana. Should I use it during pregnancy?

No. Medical marijuana is no different than nonmedical marijuana. It is not safer. It has all of the harmful effects of nonmedical marijuana. It is important to let your ob-gyn or other health care professional know if you are using medical marijuana and to discuss other treatments you can try that are safe to use during pregnancy.

I'm planning to get pregnant. Do I need to stop using marijuana?

Yes, it is recommended that you stop using marijuana before trying to get pregnant. The effects of marijuana on the fetus may occur even during the first *trimester*.

What does current research suggest about the effects of marijuana during pregnancy?

Researchers are still learning about the effects of marijuana during pregnancy. Studies are not always clear, but researchers and doctors think the following:

- Marijuana exposure may disrupt normal brain development of a fetus.
- Babies whose mothers used marijuana during pregnancy may be smaller at birth.
- Research suggests an increased risk of stillbirth. It is not known if this is only because of marijuana use or due to use of other substances, such as cigarettes.
- Some studies suggest that using both marijuana and cigarettes during pregnancy can increase the risk of *preterm* birth.

What does current research suggest about the effects of marijuana on children?

Research suggests the following:

- Children whose mothers used marijuana during pregnancy may have learning and behavioral problems later in life.
- Secondhand smoke from marijuana may be as harmful as secondhand smoke from cigarettes, especially for young children.

How can marijuana use affect my own health, especially if I am pregnant?

Marijuana can make people dizzy and fall. Falls can be dangerous for pregnant women. Marijuana also can alter your judgment, putting you at risk of injury. Smoking marijuana lowers your body's level of *oxygen*, which increases the risk of breathing problems. Smoking marijuana also can damage your lungs.

How does marijuana affect breastfeeding babies?

Little is known about the effects of marijuana on breastfeeding babies. Because it is not clear how a baby may be affected by a woman's marijuana use, the American College of Obstetricians and Gynecologists recommends that women who are breastfeeding not use marijuana.

Is marijuana addictive?

Yes, marijuana is addictive. Current estimates are that 1 in 10 marijuana users fit the definition of addiction. With addiction, a person has difficulty stopping use of a substance even though it causes problems with relationships, work, or school.

Marijuana users also can develop marijuana use disorder. This disorder can cause withdrawal symptoms when you try to stop using marijuana. Symptoms include irritability, trouble sleeping, cravings, and restlessness. About 1 in 3 users have a marijuana use disorder.

Will my ob-gyn or other health care professional ask if I use marijuana?

Your ob-gyn or other health care professional may ask about your use of substances, including alcohol, tobacco, marijuana, illegal drugs, and prescription drugs used for a nonmedical reason. Doctors ask about these substances to learn if you have any behaviors that could harm you or your fetus. If you are having trouble with substance use, your ob-gyn or other health care professional can offer advice or resources to help you quit. The American College of Obstetricians and Gynecologists believes women who have a substance use problem should receive medical care and counseling services to help them quit.

How can I get help for marijuana use disorder or addiction?

If you want to quit marijuana and need help, you can find resources on the website of the Substance Abuse and Mental Health Services Administration (SAMHSA): www.samhsa.gov. SAMHSA also has a 24-hour treatment referral line: 800-662-HELP (4357).

Glossary

Fetus: The stage of prenatal development that starts 8 weeks after fertilization and lasts until the end of pregnancy.

Obstetrician-Gynecologist (Ob-Gyn): A physician with special skills, training, and education in women's health.

Oxygen: A gas that is necessary to sustain life.

Placenta: Tissue that provides nourishment to and takes waste away from the fetus.

Preterm: Born before 37 weeks of pregnancy.

Stillbirth: Birth of a dead fetus.

Trimester: Any of the three 3-month periods into which pregnancy is divided.

If you have further questions, contact your obstetrician-gynecologist.

FAQ196: This information was designed as an educational aid to patients and sets forth current information and opinions related to women's health. It is not intended as a statement of the standard of care, nor does it comprise all proper treatments or methods of care. It is not a substitute for a treating clinician's independent professional judgment. Please check for updates at www.acog.org to ensure accuracy.

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Breastfeeding

The experience of breastfeeding is special for so many reasons: the joyful closeness and bonding with your baby, the cost savings, and the health benefits for both mother and baby. Every woman's journey to motherhood is different, but one of the first decisions a new mom makes is how to feed her child. Here, you'll find facts about breastfeeding and get practical tips on how to make breastfeeding work for you while getting the support you need.

Q: Why should I breastfeed?

A: Breastfeeding is normal and healthy for infants and moms. Breastmilk has hormones and disease-fighting cells called antibodies that help protect infants from germs and illness. This protection is unique and changes to meet your baby's needs. Some reasons to breastfeed are:

- Breastfeeding offers essential nutrients and a nutritionally balanced meal
- Breastmilk is easy to digest.
- Breastmilk fights disease

Q: How long should I breastfeed?

A: The American Academy of Pediatrics recommends breastfeeding for at least 12 months, and for as long as both the mother and baby would like. Most infants should drink only breastmilk for the first six months.

Q: Does my baby need cereal or water?

A: Until your baby is 6 months old, the American Academy of Pediatrics recommends feeding your baby

breastmilk only. Giving your baby cereal may cause your baby to not want as much breastmilk. This will decrease your milk supply. You can slowly introduce other foods starting around 6 months of age.

Q: Does my baby need more vitamin D?

A: Most likely, yes. Vitamin D is needed to build strong bones. All infants and children should get at least 400 International Units (IU) of vitamin D each day. To meet this need, your child's doctor may recommend that you give your baby a vitamin D supplement of 400 IU each day.

Q: Is it okay for my baby to use a pacifier?

A: If you want to try it, it is best to wait until your baby is at least 3 or 4 weeks old to introduce a pacifier. This allows your baby time to learn how to latch well on the breast and get enough milk. Once your baby is breastfeeding well, you should use the pacifier when putting your infant to bed to reduce the risk of sudden infant death syndrome (SIDS).

Q: Is it safe to smoke, drink, or use drugs?

A: If you smoke, the best thing you can do for yourself and your baby is to quit as soon as possible. If you can't quit, it is still better to breastfeed because it may protect your baby from respiratory problems and SIDS. Be sure to smoke away from your baby, and change your clothes to keep your baby away from the chemicals smoking leaves behind. Ask a doctor or nurse for help quitting smoking!

You should avoid alcohol in large amounts. An occasional drink is fine, but the American Academy of Pediatrics recommends waiting two hours or more before nursing. You also can pump milk before you drink to feed your baby later.

It is not safe for you to use an illegal drug. Drugs such as cocaine, heroin, and PCP can harm your baby. Some reported side effects in babies include seizures, vomiting, poor feeding, and tremors.

Q: Can I take medicines if I am breastfeeding?

A: Most likely. Almost all medicines pass into your milk in small amounts. Some have no effect on the baby and can be used while breastfeeding. Always talk to your doctor or pharmacist about medicines you are using and ask before you start using new medicines. This includes prescription and over-the-counter drugs, vitamins, and dietary or herbal supplements.

For some women, stopping a medicine can be more dangerous than the effects it will have on the breastfed baby.

Q: Do I still need birth control if I am breastfeeding?

A: Yes. Breastfeeding is not a sure way to prevent pregnancy, even though it can delay the return of normal ovulation and menstrual cycles. Talk to your doctor or nurse about birth control choices that are okay to use while breastfeeding.

Q: Does my breastfed baby need vaccines?

A: Yes. Vaccines are very important to your baby's health. Breastfeeding may also help your baby respond better to certain immunizations, giving him or her more protection. Follow the schedule your doctor gives you. If you miss any vaccines, check with the doctor about getting your baby back on track as soon as possible.

For more information...

For more information about breastfeeding, call the OWH Helpline at 800-994-9662 or contact the following organizations:

Centers for Disease Control and Prevention (CDC)

Phone Number: 800-232-4636 • www.cdc.gov

American Academy of Pediatrics (AAP)

Phone Number: 847-434-4000 • www.aap.org

La Leche League International

Phone Number: 800-525-3243 • www.llli.org

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Food Safety At-A-Glance

How to Protect Yourself and Your



How to Protect Yourself and Your Baby

What is foodborne illness?

- It's a sickness that occurs when people eat or drink harmful microorganisms (bacteria, parasites, viruses) or chemical contaminants found in some foods or drinking water.
- Symptoms vary, but in general can include: stomach cramps, vomiting, diarrhea, fever, headache, or body aches. Sometimes you may not feel sick, but whether you feel sick or not, you can still pass the illness to your unborn child without even knowing it.

Why are pregnant women at high risk?

- You *and* your growing fetus are at high risk from some foodborne illnesses because during pregnancy your immune system is weakened, which makes it harder for your body to fight off harmful foodborne microorganisms.
- Your unborn baby's immune system is not developed enough to fight off harmful foodborne microorganisms.
- For both mother and baby, foodborne illness can cause serious health problems — or even death.



Tips for a Lifetime

There are many bacteria that can cause foodborne illness, such as *E. coli* O157:H7 and *Salmonella*. Here are **4 Simple Steps** you should follow to keep yourself and your baby healthy during pregnancy and beyond!



1. CLEAN

- Wash hands thoroughly with warm water and soap.
- Wash hands *before* and *after* handling food, and *after* using the bathroom, changing diapers, or handling pets.
- Wash cutting boards, dishes, utensils, and countertops with hot water and soap.
- Rinse raw fruits and vegetables thoroughly under running water



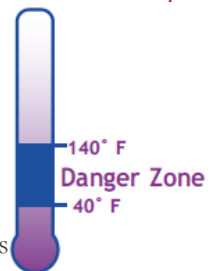
2. SEPARATE

- Separate raw meat, poultry, and seafood from ready-to-eat foods.
- If possible, use one cutting board for raw meat, poultry, and seafood and another one for fresh fruits and vegetables.
- Place cooked food on a clean plate. If cooked food is placed on an unwashed plate that held raw meat, poultry, or seafood, bacteria from the raw food could contaminate the cooked food.



3. COOK

- Cook foods thoroughly. Use a food thermometer to check the temperature. See the “Lifelong Food Safety” section of the Web site for the “Apply the Heat” chart of recommended cooking times for foods. Click on “Cook.”
- Keep foods out of the **Danger Zone**: The range of temperatures at which bacteria can grow — usually between 40° F and 140° F (4° C and 60° C).
- **2-Hour Rule**: Discard foods left out at room temperature for more than two hours



4. CHILL

- Your refrigerator should register at 40° F (4° C) or below and the freezer at 0° F (-18° C). Place an appliance thermometer in the refrigerator, and check the temperature periodically.
- Refrigerate or freeze perishables (foods that can spoil or become contaminated by bacteria if left unrefrigerated).
- Use ready-to-eat, perishable foods (dairy, meat, poultry, seafood) as soon as possible.

As a mom-to-be, there are **3 specific foodborne risks** you need to be aware of. These risks can cause serious illness or death to you or your unborn child. Follow these steps to help ensure a healthy pregnancy.

	What it is	Where it's found	How to prevent illness
1. Listeria	A harmful bacterium that can grow at refrigerator temperatures where most other foodborne bacteria do not. It causes an illness called listeriosis.	Refrigerated, ready-to-eat foods and unpasteurized milk and milk products.	<ul style="list-style-type: none"> Follow the 4 Simple Steps on previous page. Do not eat hot dogs and luncheon meats — <i>unless they're reheated until steaming hot.</i> Do not eat soft cheese, such as Feta, Brie, Camembert, "blue-veined cheeses," "queso blanco," "queso fresco," and Panela — <i>unless they're labeled as made with pasteurized milk. Check the label.</i> Do not eat refrigerated pâtés or meat spreads. Do not eat refrigerated smoked seafood — <i>unless it's in a cooked dish, such as a casserole.</i> (Refrigerated smoked seafood, such as salmon, trout, whitefish, cod, tuna, or mackerel, is most often labeled as "nova-style," "lox," "kippered," "smoked," or "jerky." These types of fish are found in the refrigerator section or sold at deli counters of grocery stores and delicatessens.) Do not drink raw (unpasteurized) milk or eat foods that contain unpasteurized milk.
2. Methylmercury	A metal that can be found in certain fish. At high levels, it can be harmful to an unborn baby's or young child's developing nervous system.	Large, long-lived fish, such as shark, tilefish, king mackerel, and swordfish.	<ul style="list-style-type: none"> Don't eat shark, tilefish, king mackerel, and swordfish. These fish can contain high levels of methylmercury. It's okay to eat other cooked fish/seafood, as long as a variety of other kinds are selected during pregnancy or while a woman is trying to become pregnant. She can eat up to 12 ounces (2 average meals) a week of a variety of fish and shellfish that are lower in mercury. Five of the most commonly eaten fish that are low in mercury are shrimp, canned light tuna, salmon, pollock, and catfish. Another commonly eaten fish, albacore ("white") tuna has more mercury than canned light tuna. So, when choosing your two meals of fish and shellfish, you may eat up to 6 ounces (one average meal) of albacore tuna per week.
3. Toxoplasma	A harmful parasite. It causes an illness called toxoplasmosis, which can be difficult to detect.	Raw and undercooked meat; unwashed fruits and vegetables; soil; dirty cat-litter boxes; and outdoor places where cat feces can be found.	<ul style="list-style-type: none"> Follow the 4 Simple Steps on previous page. If possible, have someone else change the litter box. If you have to clean it, wash your hands with soap and warm water afterwards. Wear gloves when gardening or handling sand from a sandbox. Don't get a new cat while pregnant. Cook meat thoroughly, see the "Apply the Heat" chart for the proper temperatures.

For More Information:

- See your doctor or health-care provider if you have questions about foodborne illness.
- FDA Food Information line: **1-888-SAFE FOOD**
- FDA Center for Food Safety and Applied Nutrition: www.cfsan.fda.gov
- Gateway to Government Food Safety Information: www.foodsafety.gov
- U.S. Partnership for Food Safety Education: www.fightbac.org

This fact sheet is a condensed guide to food safety. For more in-depth information, be sure to check out:

Food Safety for Moms-to-Be
www.cfsan.fda.gov/pregnancy.html

Advice About Eating Fish

What Pregnant Women & Parents Should Know

Fish and other protein-rich foods have nutrients that can help your child's growth and development.

For women of childbearing age (about 16-49 years old), especially pregnant and breastfeeding women, and for parents and caregivers of young children.

- Eat 2 to 3 servings of fish a week from the "Best Choices" list OR 1 serving from the "Good Choices" list.
 - Eat a variety of fish.
- Serve 1 to 2 servings of fish a week to children, starting at age 2.
- If you eat fish caught by family or friends, check for fish advisories. If there is no advisory, eat only one serving and no other fish that week.*

Use this chart!

You can use this chart to help you choose which fish to eat, and how often to eat them, based on their mercury levels. The "Best Choices" have the lowest levels of mercury!

What is a serving?



To find out, use the palm of your hand!

For an adult
4 ounces



For children, ages 4 to 7
2 ounces

Best Choices

EAT 2 TO 3 SERVINGS A WEEK

Anchovy	Herring	Scallop
Atlantic croaker	Lobster,	Shad
Atlantic mackerel	American and spiny	Shrimp
Black sea bass	Mullet	Skate
Butterfish	Oyster	Smelt
Catfish	Pacific chub mackerel	Sole
Clam	Perch, freshwater and ocean	Squid
Cod	Pickering	Tilapia
Crab	Plaice	Trout, freshwater
Crawfish	Pollock	Tuna, canned light (includes skipjack)
Flounder	Salmon	Whitefish
Haddock	Sardine	Whiting
Hake		

OR

Good Choices

EAT 1 SERVING A WEEK

Bluefish	Monkfish	Tilefish (Atlantic Ocean)
Buffalofish	Rockfish	Tuna, albacore/white tuna, canned and fresh/frozen
Carp	Sablefish	Tuna, yellowfin
Chilean sea bass/Patagonian toothfish	Sheepshead	Weakfish/seatrout
Grouper	Snapper	White croaker/Pacific croaker
Hallbut	Spanish mackerel	
Mahi mahi/dolphinfish	Striped bass (ocean)	

Choices to Avoid

HIGHEST MERCURY LEVELS

King mackerel	Shark	Tilefish (Gulf of Mexico)
Marlin	Swordfish	Tuna, bigeye
Orange roughy		

*Some fish caught by family and friends, such as larger carp, catfish, trout and perch, are more likely to have fish advisories due to mercury or other contaminants. State advisories will tell you how often you can safely eat those fish.

www.FDA.gov/fishadvice
www.EPA.gov/fishadvice



SHARE WITH WOMEN

BACK PAIN DURING PREGNANCY

Most women have back pain at some point during pregnancy. The pain can be mild or severe, but it can usually be treated. In some cases, it can be prevented.

Why Do Pregnant Women Have Back Pain?

Pregnancy hormones loosen all of your joints. Your growing abdomen changes your posture. These changes can increase the normal curves that are in your back which can cause back pain. Later in pregnancy the looser joints in the pelvis move more from the growing weight of your baby and this can cause general pain in your lower back and sometimes shooting pain in your buttock or upper legs.

What Makes the Pain Worse?

Lying on your back, sitting upright in a chair, rolling over at night or getting out of bed or out of a chair can cause back pain to be worse.

How Can I Avoid and Reduce Back Pain?

- Avoid sitting for long periods of time. Change positions and move frequently.
- Avoid bending; arching, and twisting motions, you will feel less discomfort.
- When lifting heavy things, keep your back straight and use your leg muscles instead of your back when picking things up.
- Whenever you are sitting, put your feet up on a stool or box so your hips tilt forward and the curve in your lower back flattens out.
- Many women get pain relief from using moist heat or cold packs, getting a massage, or sitting in a warm bath.
- Some women find wearing supportive, low-heeled shoes or an abdominal support binder can also help.
- Gentle exercise, along with walking 20 minutes most days, can relieve or lessen back pain. Exercise helps strengthen the back muscles, decrease muscle tightness and spasm, and keep the joints in good position.
- Sleeping on your side with a body pillow in your arms and between your knees may help as well.

What Strengthening Exercises Are Helpful?

The flip side of this sheet has exercises that will strengthen the back muscles. The exercises can be held for 3-5 seconds and repeated 10-30 times. Be sure not to hold your breath when you are doing them.

What Stretches Are Recommended?

Stretching the back and hamstring muscles after a warm shower or short walk can help reduce back pain. Hold each stretch for 20 seconds, and repeat 2-3 times. See the flip side for directions.

What is Sciatica?

The sciatic nerve is a large nerve that runs down the back across the buttocks and down the back of your legs. Sciatica is pain in the sciatic nerve which is caused by pressure on the nerve. The symptoms of sciatica that are different from normal back pain in pregnancy are: pain down the buttock and back of your leg past your knee, tingling, numbness, or if you have trouble moving your leg. The treatment for sciatica is the same as the treatment for back pain but your health care provider may also suggest bedrest, and physical therapy. Sciatic pain usually goes away in 1 to 2 weeks.

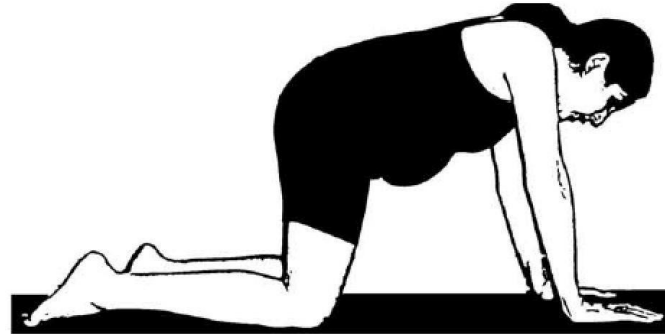
Exercises for Back Pain

Pelvic tilt start position: note arch in lower back.



Kneel on your hands and knees, you'll notice an arch in our lower back.

Pelvic tilt start position: note absence of arch in lower back.



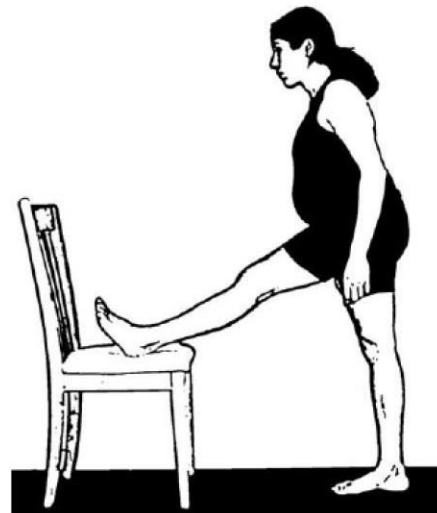
Tilt your pelvis backwards, so you flatten your back, keeping your buttocks relaxed.

Back stretch



Kneel on your hands and knees, with your legs spread apart, and a small pillow under your belly. Sit back and reach your arms forward to feel a stretch along your spine.

Hamstring Stretch



Face a chair and place one foot on it. Keep your back straight as you gently lean forward to stretch the back of the thigh.

FOR MORE INFORMATION

American Pregnancy Association (<http://www.americanpregnancy.org/>)

The National Women's Health Information Center (<http://www.4woman.gov/Pregnancy/>)

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SHARE WITH WOMEN

CORD BLOOD BANKING—WHAT'S IT ALL ABOUT?

What is Cord Blood?

After your baby is born and the umbilical cord is cut, the placenta—along with the rest of the cord—is usually thrown away. But there is still blood in the cord. Blood from the cord has lots of stem cells. Stem cells from the cord can be used to treat some serious illnesses that may occur later in the baby's life. For this reason, some people think it is a good idea to save the cord blood stem cells— or “bank” them.

What Illnesses Can Be Treated with Stem Cells?

Stem cells can be used to treat leukemia and other diseases that attack the immune system. Research is being done on using stem cells to treat illnesses like Parkinson's disease, diabetes, or Alzheimer disease, but these uses are still unproven.

How are the Stem Cells Collected from the Cord?

After the cord has been cut, a member of the health care team will insert a needle into the part of the cord that is still attached to the placenta which has not been delivered yet. Blood from the cord is collected in a tube just like when you have blood taken from your arm. This process does not cause you or your baby any pain, because there are no nerves in the umbilical cord. The blood that is collected has thousands of stem cells in it. The stem cells in the cord blood are packaged, frozen, and sent to be stored in a cord blood bank.

Are There Reasons I Wouldn't Want to Bank My Baby's Cord Blood?

- If you choose to bank your baby's cord blood, the cord will be clamped and cut right after the baby is born so the cord blood does not flow back from the placenta to your baby. Many health care providers think that it is best for your baby if you allow most of the cord blood to flow into your baby before cutting the cord. This can prevent anemia and may help your baby fight illness later.
- The chance that your baby will develop a disease that might be treated with cord blood stem cells is very low. Another concern is that if your child develops a disease that can be treated with stem cells, the cells collected and stored from birth may have the same disease and therefore they might not be recommended for use.

If My Child Needs Stem Cells, Can I Donate Some of Mine—Like Donating a Kidney?

Stem cells can be taken from the umbilical cord, from embryos, and also from adult tissues and organs, such as bone. There has been a lot of research done on adult stem cells and they are used to treat many diseases. If you or your child needs stem cells to treat a disease, the National Marrow Donor Program will help you find a donor if there is one available.

What is the Difference Between Public and Private Cord Blood Banks?

Public cord blood banks like the National Marrow Donor Program offer stored stem cells to anyone who needs them. These banks have stored cord blood donated by parents who want their baby's stem cells to be available to anyone who needs them. There is no fee to donate cord blood to a public bank.

Private cord blood banks store your baby's cord blood for possible future use for your baby or members of your immediate family. Private banks charge between \$1000 and \$2000 to collect the blood and about \$100 a year to keep stem cells frozen in the “bank.”

How Do I Decide?

The reverse side of this sheet has some questions to ask yourself as you decide whether to bank your baby's stem cells in the cord blood bank.

Things to Consider About Banking Cord Blood Stem Cells

At this time, the American Academy of Pediatrics does not recommend cord blood banking for everyone. There isn't a large enough chance that your baby will have an illness that can be treated with stem cells to justify the cost for every family. Below, you'll find some things to consider as you make your decision.

1. Is It Very Likely that Your Child Will Need His Stem Cells in the Future?

Some families have illnesses that “run in the family”—inherited illnesses that can only be cured with stem cells. If you already know that your child is at risk for such an illness, you may want to bank the cord blood stem cells.

2. Do You Have Another Child Who Already Needs Treatment with Stem Cells?

If you have a child who needs a stem cell treatment but does not have his own stem cells available, you may want to bank cord blood stem cells from your next child. This child's stem cells may be a match for the child who needs them.

3. Do You Want to Be Sure Your Baby's Stem Cells Will Always Be Available Only for Her?

Private cord blood banks will store stem cells for future use in your family only. The charges vary from one cord bank to another cord bank. The services provided vary, too. You will want to shop around for the best service and best price.

4. Are You Willing to Donate Your Baby's Stem Cells for Someone Else?

You can donate your baby's cord blood stem cells to one of the public cord blood banks for free if there is one in your area. Another person who matches your baby might use the cells. If your child needs to be treated using stem cells someday, he might be able to get his own cells from the bank, but you run the risk that he might not.

5. Would You Like to Make Your Own Stem Cells Available to Someone Who Might Need Them for Treatment of Illness?

If you would like to donate your own stem cells to help save someone's life, consider signing up as a potential donor with the National Marrow Donor Program. In order to sign up, you will need to get your cells typed. Your type will then be kept in a registry of types. When someone needs a stem cell or bone marrow transplant, his or her type will be checked against the registry. If you are a match, you may be asked to donate. You could save a life!

FOR MORE INFORMATION

The National Marrow Donor Program

This program maintains a national registry of potential stem cell donors as well as some state banks of cord blood stem cells, and can be visited at www.marrow.org

American Academy of Pediatrics

Frequently asked questions about cord blood banking from the American Academy of Pediatrics are available from www.aap.org/advocacy/releases/jan07cordbloodfaq.htm

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<http://www.womenshealth.gov>

1-800-994-9662

TDD: 1-888-220-5446

Depression During and After Pregnancy

Q: What is depression?

A: Depression is more than just feeling “blue” or “down in the dumps” for a few days. It’s a serious illness that involves the brain. With depression, sad, anxious, or “empty” feelings don’t go away and interfere with day-to-day life and routines. These feelings can be mild to severe. The good news is that most people with depression get better with treatment.

Q: How common is depression during and after pregnancy?

A: Depression is a common problem during and after pregnancy. About 13 percent of pregnant women and new mothers have depression.

Q: How do I know if I have depression?

A: When you are pregnant or after you have a baby, you may be depressed and not know it. Some normal changes during and after pregnancy can cause symptoms similar to those of depression. But if you have any of the following symptoms of depression for more than 2 weeks, call your doctor:

- Feeling restless or moody
- Feeling sad, hopeless, and overwhelmed
- Crying a lot
- Having no energy or motivation
- Eating too little or too much
- Sleeping too little or too much
- Having trouble focusing or making decisions
- Having memory problems
- Feeling worthless and guilty
- Losing interest or pleasure in activities you used to enjoy
- Withdrawing from friends and family
- Having headaches, aches and pains, or stomach problems that don’t go away

Your doctor can figure out if your symptoms are caused by depression or something else.

Call 911 or your doctor if you have thoughts of harming yourself or your baby!

Q: What causes depression? What about postpartum depression?

A: There is no single cause. Rather, depression likely results from a combination of factors:

Depression is a mental illness that tends to run in families. Women with a family history of depression are more likely to have depression.

Changes in brain chemistry or structure are believed to play a big role in depression.



<http://www.womenshealth.gov>

1-800-994-9662

TDD: 1-888-220-5446

- Stressful life events, such as death of a loved one, caring for an aging family member, abuse, and poverty, can trigger depression.
- Hormonal factors unique to women may contribute to depression in some women. We know that hormones directly affect the brain chemistry that controls emotions and mood. We also know that women are at greater risk of depression at certain times in their lives, such as puberty, during and after pregnancy, and during perimenopause. Some women also have depressive symptoms right before their period.

Depression after childbirth is called postpartum depression. Hormonal changes may trigger symptoms of postpartum depression. When you are pregnant, levels of the female hormones estrogen (ESS-truh-jen) and progesterone (proh-JESS-tur-ohn) increase greatly. In the first 24 hours after childbirth, hormone levels quickly return to normal. Researchers think the big change in hormone levels may lead to depression. This is much like the way smaller hormone changes can affect a woman's moods before she gets her period.

Levels of thyroid hormones may also drop after giving birth. The thyroid is a small gland in the neck that helps regulate how your body uses and stores energy from food. Low levels of thyroid hormones can cause symptoms of depression. A simple blood test can tell if this condition is causing your symptoms. If so, your doctor can prescribe thyroid medicine.

FREQUENTLY ASKED QUESTIONS

Other factors may play a role in postpartum depression. You may feel:

- Tired after delivery
- Tired from a lack of sleep or broken sleep
- Overwhelmed with a new baby
- Doubts about your ability to be a good mother
- Stress from changes in work and home routines
- An unrealistic need to be a perfect mom
- Loss of who you were before having the baby
- Less attractive
- A lack of free time

Q: Are some women more at risk for depression during and after pregnancy?

A: Certain factors may increase your risk of depression during and after pregnancy:

- A personal history of depression or another mental illness
- A family history of depression or another mental illness
- A lack of support from family and friends
- Anxiety or negative feelings about the pregnancy
- Problems with a previous pregnancy or birth
- Marriage or money problems
- Stressful life events
- Young age
- Substance abuse



<http://www.womenshealth.gov>

1-800-994-9662

TDD: 1-888-220-5446

Women who are depressed during pregnancy have a greater risk of depression after giving birth.

If you take medicine for depression, stopping your medicine when you become pregnant can cause your depression to come back. Before you stop any prescribed medicines, talk with your doctor. Not using medicine that you need may be harmful to you or your baby.

Q: What is the difference between “baby blues,” postpartum depression, and postpartum psychosis?

A: Many women have the baby blues in the days after childbirth. If you have the baby blues, you may:

- Have mood swings
- Feel sad, anxious, or overwhelmed
- Have crying spells
- Lose your appetite
- Have trouble sleeping

The baby blues most often go away within a few days or a week. The symptoms are not severe and do not need treatment.

The symptoms of postpartum depression last longer and are more severe. Postpartum depression can begin anytime within the first year after childbirth. If you have postpartum depression, you may have any of the symptoms of depression listed above. Symptoms may also include:

- Thoughts of hurting the baby
- Thoughts of hurting yourself

- Not having any interest in the baby
- Postpartum depression needs to be treated by a doctor.

Postpartum psychosis (seye-KOH-suhss) is rare. It occurs in about 1 to 4 out of every 1,000 births. It usually begins in the first 2 weeks after childbirth. Women who have bipolar disorder or another mental health problem called schizoaffective (SKIT-soh-uh-FEK-tiv) disorder have a higher risk for postpartum psychosis. Symptoms may include:

- Seeing things that aren't there
- Feeling confused
- Having rapid mood swings
- Trying to hurt yourself or your baby

Q: What should I do if I have symptoms of depression during or after pregnancy?

Call your doctor if:

- Your baby blues don't go away after 2 weeks
- Symptoms of depression get more and more intense
- Symptoms of depression begin any time after delivery, even many months later
- It is hard for you to perform tasks at work or at home
- You cannot care for yourself or your baby
- You have thoughts of harming yourself or your baby

Your doctor can ask you questions to test for depression. Your doctor can also refer you to a mental health professional who specializes in treating depression.



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Some women don't tell anyone about their symptoms. They feel embarrassed, ashamed, or guilty about feeling depressed when they are supposed to be happy. They worry they will be viewed as unfit parents.

Any woman may become depressed during pregnancy or after having a baby. It doesn't mean you are a bad or "not together" mom. You and your baby don't have to suffer. There is help.

Here are some other helpful tips:

- Rest as much as you can. Sleep when the baby is sleeping.
- Don't try to do too much or try to be perfect.
- Ask your partner, family, and friends for help.
- Make time to go out, visit friends, or spend time alone with your partner.
- Discuss your feelings with your partner, family, and friends.
- Talk with other mothers so you can learn from their experiences.
- Join a support group. Ask your doctor about groups in your area.
- Don't make any major life changes during pregnancy or right after giving birth. Major changes can cause unneeded stress. Sometimes big changes can't be avoided. When that happens, try to arrange support and help in your new situation ahead of time.

Q: How is depression treated?

A: The two common types of treatment for depression are:

- **Talk therapy.** This involves talking to a therapist, psychologist, or

FREQUENTLY ASKED QUESTIONS

social worker to learn to change how depression makes you think, feel, and act.

- **Medicine.** Your doctor can prescribe an antidepressant medicine. These medicines can help relieve symptoms of depression.

These treatment methods can be used alone or together. If you are depressed, your depression can affect your baby. Getting treatment is important for you and your baby. Talk with your doctor about the benefits and risks of taking medicine to treat depression when you are pregnant or breastfeeding.

Q: What can happen if depression is not treated?

A: Untreated depression can hurt you and your baby. Some women with depression have a hard time caring for themselves during pregnancy. They may:

- Eat poorly
- Not gain enough weight
- Have trouble sleeping
- Miss prenatal visits
- Not follow medical instructions
- Use harmful substances, like tobacco, alcohol, or illegal drugs
- Depression during pregnancy can raise the risk of:
 - Problems during pregnancy or delivery
 - Having a low-birth-weight baby
 - Premature birth
- Untreated postpartum depression can affect your ability to parent. You may:
 - Lack energy
 - Have trouble focusing



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- Feel moody
- Not be able to meet your child's needs

As a result, you may feel guilty and lose confidence in yourself as a mother. These feelings can make your depression worse.

Researchers believe postpartum depression in a mother can affect her baby. It can cause the baby to have:

- Delays in language development
- Problems with mother-child bonding

FREQUENTLY ASKED QUESTIONS

- Behavior problems
- Increased crying

It helps if your partner or another caregiver can help meet the baby's needs while you are depressed.

All children deserve the chance to have a healthy mom. And all moms deserve the chance to enjoy their life and their children. If you are feeling depressed during pregnancy or after having a baby, don't suffer alone. Please tell a loved one and call your doctor right away.

For more information

- For more information on depression during and after pregnancy, call womenshealth.gov at 1-800-994-9662 or contact the following organizations.

**National Institute of Mental Health,
NIH, HHS**

Phone: (301) 496-9576

Internet Address:

<http://www.nimh.nih.gov>

**National Mental Health Information
Center, SAMHSA, HHS**

Phone: (800) 789-2647

Internet Address: <http://www.mental-health.org>

American Psychological Association

Phone: (800) 374-2721

Internet Address: <http://www.apa.org>

National Mental Health Association

Phone: (800) 969-NMHA

Internet Address: <http://www.nmha.org>

Postpartum Education for Parents

Phone: (805) 564-3888

Internet Address: <http://www.sbpep.org>

Postpartum Support International

Phone: (800) 944-4PPD, (800) 944-4773

Internet Address:

<http://www.postpartum.net>



FAQ165, September 2019

Prenatal Genetic Screening Tests

What is prenatal genetic testing?

What are genetic disorders?

What are the two main types of prenatal genetic tests?

What are the different types of prenatal genetic screening tests?

What is first-trimester screening?

What is second-trimester screening?

What is combined first- and second-trimester screening?

What is cell-free DNA testing?

What do the different results of prenatal screening tests mean?

How accurate are prenatal genetic screening tests?

What should I consider when deciding whether to have prenatal genetic testing?

Glossary

What is prenatal genetic testing?

Prenatal genetic testing gives parents-to-be information about whether their *fetus* has certain *genetic disorders*.

What are genetic disorders?

Genetic disorders are caused by changes in a person's *genes* or *chromosomes*. *Aneuploidy* is a condition in which there are missing or extra chromosomes. In a *trisomy*, there is an extra chromosome. In a *monosomy*, a chromosome is missing. *Inherited disorders* are caused by changes in genes called *mutations*. Inherited disorders include *sickle cell disease*, *cystic fibrosis*, *Tay-Sachs disease*, and many others. In most cases, both parents must carry the same gene to have an affected child.

What are the two main types of prenatal genetic tests?

There are two types of prenatal tests for genetic disorders:

1. Prenatal **screening tests**: These tests can tell you the chances that your fetus has an aneuploidy and a few other disorders. This FAQ focuses on these tests.
2. Prenatal **diagnostic tests**: These tests can tell you whether your fetus actually has certain disorders. These tests are done on *cells* from the fetus or *placenta* obtained through *amniocentesis* or *chorionic villus sampling (CVS)*. [FAQ164 Prenatal Genetic Diagnostic Tests](#) focuses on these tests.
Both screening and diagnostic testing are offered to all pregnant women.

What are the different types of prenatal genetic screening tests?

Screening tests can tell you your risk of having a baby with certain disorders. They include *carrier screening* and prenatal genetic screening tests:

- Carrier screening is done on parents (or those just thinking about becoming parents) using a blood sample or tissue sample swabbed from inside the cheek. These tests are used to find out whether a person carries a gene for certain inherited disorders. Carrier screening can be done before or during pregnancy.

- Prenatal genetic screening tests of the pregnant woman's blood and findings from **ultrasound exams** can screen the fetus for aneuploidy; defects of the brain and spine called **neural tube defects (NTDs)**; and some defects of the abdomen, heart, and facial features. This FAQ focuses on these tests. They include first-**trimester** screening, second-trimester screening, combined first- and second-trimester screening, and **cell-free DNA** testing.

What is first-trimester screening?

First-trimester screening includes a test of the pregnant woman's blood and an ultrasound exam. Both tests usually are done together between 10 weeks and 13 weeks of pregnancy:

- The blood test measures the level of two substances.
- The ultrasound exam, called a **nuchal translucency screening**, measures the thickness of a space at the back of the fetus's neck. An abnormal measurement means there is an increased risk that the fetus has **Down syndrome (trisomy 21)** or another type of aneuploidy. It also is linked to physical defects of the heart, abdominal wall, and skeleton.

What is second-trimester screening?

Second-trimester screening includes the following tests:

- The "quad" or "quadruple" blood test measures the levels of four different substances in your blood. The quad test screens for Down syndrome, **Edwards syndrome (trisomy 18)**, and NTDs. It is done between 15 weeks and 22 weeks of pregnancy.
- An ultrasound exam done between 18 weeks and 22 weeks of pregnancy checks for major physical defects in the brain and spine, facial features, abdomen, heart, and limbs.

What is combined first- and second-trimester screening?

The results from first- and second-trimester tests can be combined in various ways. Combined test results are more accurate than a single test result. If you choose combined screening, keep in mind that final results often are not available until the second trimester.

What is cell-free DNA testing?

Cell-free DNA is the small amount of **DNA** that is released from the placenta into a pregnant woman's bloodstream. The cell-free DNA in a sample of a woman's blood can be screened for Down syndrome, **Patau syndrome (trisomy 13)**, Edwards syndrome, and problems with the number of **sex chromosomes**. This test can be done starting at 10 weeks of pregnancy. It takes about 1 week to get the results. A positive cell-free DNA test result should be followed by a diagnostic test with amniocentesis or CVS.

What do the different results of prenatal screening tests mean?

Results of blood screening tests for aneuploidy are reported as the level of risk that the disorder might be present:

- A positive screening test result for aneuploidy means that your fetus is at higher risk of having the disorder compared with the general population. It does not mean that your fetus definitely has the disorder.
- A negative result means that your fetus is at lower risk of having the disorder compared with the general population. It does not rule out the possibility that your fetus has the disorder.

Diagnostic testing with CVS or amniocentesis that gives a more definite result is an option for all pregnant women. Your **obstetrician** or other health care professional, such as a **genetic counselor**, will discuss what your screening test results mean and help you decide the next steps.

How accurate are prenatal genetic screening tests?

With any type of testing, there is a possibility of false-positive results and false-negative results. A screening test result that shows there is a problem when one does not exist is called a false-positive result. A screening test result that shows there is not a problem when one does exist is called a false-negative result. Your health care professional can give you information about the rates of false-positive and false-negative results for each test.

What should I consider when deciding whether to have prenatal genetic testing?

It is your choice whether to have prenatal testing. Your personal beliefs and values are important factors in the decision about prenatal testing.

It can be helpful to think about how you would use the results of prenatal screening tests in your pregnancy care. Remember that a positive screening test tells you only that you are at higher risk of having a baby with Down syndrome or another aneuploidy. A diagnostic test should be done if you want to know a more certain result. Some parents want to know beforehand that their baby will be born with a genetic disorder. This knowledge gives parents time to learn about the disorder and plan for the medical care that the child may need. Some parents may decide to end the pregnancy in certain situations.

Other parents do not want to know this information before the child is born. In this case, you may decide not to have follow-up diagnostic testing if a screening test result is positive. Or you may decide not to have any testing at all. There is no right or wrong answer.

Glossary

Amniocentesis: A procedure in which amniotic fluid and cells are taken from the uterus for testing. The procedure uses a needle to withdraw fluid and cells from the sac that holds the fetus.

Aneuploidy: Having an abnormal number of chromosomes. Types include trisomy, in which there is an extra chromosome, or monosomy, in which a chromosome is missing. Aneuploidy can affect any chromosome, including the sex chromosomes. Down syndrome (trisomy 21) is a common aneuploidy. Others are Patau syndrome (trisomy 13) and Edwards syndrome (trisomy 18).

Carrier Screening: A test done on a person without signs or symptoms to find out whether he or she carries a gene for a genetic disorder.

Cell-Free DNA: DNA from the placenta that moves freely in a pregnant woman's blood. Analysis of this DNA can be done as a noninvasive prenatal screening test.

Cells: The smallest units of a structure in the body. Cells are the building blocks for all parts of the body.

Chorionic Villus Sampling (CVS): A procedure in which a small sample of cells is taken from the placenta and tested.

Chromosomes: Structures that are located inside each cell in the body. They contain the genes that determine a person's physical makeup.

Cystic Fibrosis (CF): An inherited disorder that causes problems with breathing and digestion.

Diagnostic Tests: Tests that look for a disease or cause of a disease.

DNA: The genetic material that is passed down from parent to child. DNA is packaged in structures called chromosomes.

Down Syndrome (Trisomy 21): A genetic disorder that causes abnormal features of the face and body, medical problems such as heart defects, and mental disability. Most cases of Down syndrome are caused by an extra chromosome 21 (trisomy 21).

Edwards Syndrome (Trisomy 18): A genetic condition that causes serious problems. It causes a small head, heart defects, and deafness.

Fetus: The stage of human development beyond 8 completed weeks after fertilization.

Genes: Segments of DNA that contain instructions for the development of a person's physical traits and control of the processes in the body. The gene is the basic unit of heredity and can be passed from parent to child.

Genetic Counselor: A health care professional with special training in genetics who can provide expert advice about genetic disorders and prenatal testing.

Genetic Disorders: Disorders caused by a change in genes or chromosomes.

Inherited Disorders: Disorders caused by a change in a gene that can be passed from parents to children.

Monosomy: A condition in which there is a missing chromosome.

Mutations: Changes in genes that can be passed from parent to child.

Neural Tube Defects (NTDs): Birth defects that result from a problem in development of the brain, spinal cord, or their coverings.

Nuchal Translucency Screening: A test to screen for certain birth defects, such as Down syndrome, Edwards syndrome, or heart defects. The screening uses ultrasound to measure fluid at the back of the fetus's neck.

Obstetrician: A doctor who cares for women during pregnancy and their labor.

Patau Syndrome (Trisomy 13): A genetic condition that causes serious problems. It involves the heart and brain, cleft lip and palate, and extra fingers and toes.

Placenta: An organ that provides nutrients to and takes waste away from the fetus.

Screening Tests: Tests that look for possible signs of disease in people who do not have signs or symptoms.

Sex Chromosomes: The chromosomes that determine a person's sex. In humans, there are two sex chromosomes, X and Y. Females have two X chromosomes and males have an X and a Y chromosome.

Sickle Cell Disease: An inherited disorder in which red blood cells have a crescent shape, which causes chronic anemia and episodes of pain. The disease occurs most often in African Americans.

Tay-Sachs Disease: An inherited disorder that causes mental disability, blindness, seizures, and death, usually by age 5. It most commonly affects people of Eastern or Central European Jewish backgrounds, as well as people of French Canadian and Cajun backgrounds.

Trimester: A 3-month time in pregnancy. It can be first, second, or third.

Trisomy: A condition in which there is an extra chromosome.

Ultrasound Exams: Tests in which sound waves are used to examine inner parts of the body. During pregnancy, ultrasound can be used to check the fetus.

If you have further questions, contact your obstetrician-gynecologist.

FAQ165: Designed as an aid to patients, this document sets forth current information and opinions related to women's health. The information does not dictate an exclusive course of treatment or procedure to be followed and should not be construed as excluding other acceptable methods of practice. Variations, taking into account the needs of the individual patient, resources, and limitations unique to the institution or type of practice, may be appropriate.

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Exercise During Pregnancy

- Is it safe to exercise during pregnancy?
- Are there certain conditions that make exercise during pregnancy unsafe?
- What are the benefits of exercise during pregnancy?
- How much should I exercise during pregnancy?
- What changes occur in the body during pregnancy that can affect my exercise routine?
- What precautions should I take when exercising during pregnancy?
- What are some safe exercises I can do during pregnancy?
- What exercises should I avoid during pregnancy?
- What are warning signs that I should stop exercising?
- Why is it important to keep exercising after my baby is born?
- Glossary

Is it safe to exercise during pregnancy?

If you are healthy and your pregnancy is normal, it is safe to continue or start most types of exercise, but you may need to make a few changes. Physical activity does not increase your risk of miscarriage, low birth weight, or early delivery. However, it is important to discuss exercise with your obstetrician or other member of your health care team during your early prenatal visits. If your health care professional gives you the OK to exercise, you can decide together on an exercise routine that fits your needs and is safe during pregnancy.

Are there certain conditions that make exercise during pregnancy unsafe?

Women with the following conditions or pregnancy **complications** should not exercise during pregnancy:

- Certain types of heart and lung diseases
- **Cervical insufficiency** or **cerclage**
- Being pregnant with twins or triplets (or more) with risk factors for **preterm** labor
- **Placenta previa** after 26 weeks of pregnancy
- Preterm labor or ruptured membranes (your water has broken) during this pregnancy
- **Preeclampsia** or pregnancy-induced high blood pressure
- Severe **anemia**

What are the benefits of exercise during pregnancy?

Regular exercise during pregnancy benefits you and your fetus in these key ways:

- Reduces back pain
- Eases constipation
- May decrease your risk of **gestational diabetes**, preeclampsia, and **cesarean delivery**
- Promotes healthy weight gain during pregnancy

- Improves your overall general fitness and strengthens your heart and blood vessels
- Helps you to lose the baby weight after your baby is born

How much should I exercise during pregnancy?

The Centers for Disease Control and Prevention recommend that pregnant women get at least 150 minutes of moderate-intensity aerobic activity every week. An aerobic activity is one in which you move large muscles of the body (like those in the legs and arms) in a rhythmic way. Moderate intensity means you are moving enough to raise your heart rate and start sweating. You still can talk normally, but you cannot sing.

Examples of moderate-intensity aerobic activity include brisk walking and general gardening (raking, weeding, or digging). You can divide the 150 minutes into 30-minute workouts on 5 days of the week or into smaller 10-minute workouts throughout each day.

If you are new to exercise, start out slowly and gradually increase your activity. Begin with as little as 5 minutes a day. Add 5 minutes each week until you can stay active for 30 minutes a day.

If you were very active before pregnancy, you can keep doing the same workouts with your health care professional's approval. However, if you start to lose weight, you may need to increase the number of calories that you eat.

What changes occur in the body during pregnancy that can affect my exercise routine?

Your body goes through many changes during pregnancy. It is important to choose exercises that take these changes into account:

- **Joints**—The **hormones** made during pregnancy cause the ligaments that support your joints to become relaxed. This makes the joints more mobile and at risk of injury. Avoid jerky, bouncy, or high-impact motions that can increase your risk of being hurt.
- **Balance**—During pregnancy, the extra weight in the front of your body shifts your center of gravity. This places stress on joints and muscles, especially those in your pelvis and low back. Because you are less stable and more likely to lose your balance, you are at greater risk of falling.
- **Breathing**—When you exercise, **oxygen** and blood flow are directed to your muscles and away from other areas of your body. While you are pregnant, your need for oxygen increases. As your belly grows, you may become short of breath more easily because of increased pressure of the **uterus** on the diaphragm (a muscle that aids in breathing). These changes may affect your ability to do strenuous exercise, especially if you are overweight or obese.

What precautions should I take when exercising during pregnancy?

There are a few precautions that pregnant women should keep in mind during exercise:

- Drink plenty of water before, during, and after your workout. Signs of **dehydration** include dizziness, a racing or pounding heart, and urinating only small amounts or having urine that is dark yellow.
- Wear a sports bra that gives lots of support to help protect your breasts. Later in pregnancy, a belly support belt may reduce discomfort while walking or running.
- Avoid becoming overheated, especially in the first trimester. Drink plenty of water, wear loose-fitting clothing, and exercise in a temperature-controlled room. Do not exercise outside when it is very hot or humid.
- Avoid standing still or lying flat on your back as much as possible. When you lie on your back, your uterus presses on a large vein that returns blood to the heart. Standing motionless can cause blood to pool in your legs and feet. Both of these positions can decrease the amount of blood returning to your heart and may cause your blood pressure to decrease for a short time.

What are some safe exercises I can do during pregnancy?

Whether you are new to exercise or it already is part of your weekly routine, choose activities that experts agree are safest for pregnant women:

- **Walking**—Brisk walking gives a total body workout and is easy on the joints and muscles.
- **Swimming and water workouts**—Water workouts use many of the body's muscles. The water supports your weight so you avoid injury and muscle strain. If you find brisk walking difficult because of low back pain, water exercise is a good way to stay active.
- **Stationary bicycling**—Because your growing belly can affect your balance and make you more prone to falls, riding a standard bicycle during pregnancy can be risky. Cycling on a stationary bike is a better choice.
- **Modified yoga and modified Pilates**—Yoga reduces stress, improves flexibility, and encourages stretching and focused breathing. There are even prenatal yoga and Pilates classes designed for pregnant women. These classes often teach modified poses that accommodate a pregnant woman's shifting balance. You also should avoid poses that require you to be still or lie on your back for long periods.

If you are an experienced runner, jogger, or racquet-sports player, you may be able to keep doing these activities during pregnancy. Discuss these activities with your health care professional.

What exercises should I avoid during pregnancy?

While pregnant, avoid activities that put you at increased risk of injury, such as the following:

- Contact sports and sports that put you at risk of getting hit in the abdomen, including ice hockey, boxing, soccer, and basketball
- Skydiving
- Activities that may result in a fall, such as downhill snow skiing, water skiing, surfing, off-road cycling, gymnastics, and horseback riding
- "Hot yoga" or "hot Pilates," which may cause you to become overheated
- Scuba diving
- Activities performed above 6,000 feet (if you do not already live at a high altitude)

What are warning signs that I should stop exercising?

Stop exercising and call your obstetrician or other member of your health care team if you have any of these signs or symptoms:

- Bleeding from the vagina
- Feeling dizzy or faint
- Shortness of breath before starting exercise
- Chest pain
- Headache
- Muscle weakness
- Calf pain or swelling
- Regular, painful contractions of the uterus
- Fluid leaking from the vagina

Why is it important to keep exercising after my baby is born?

Exercising after your baby is born may help improve mood and decreases the risk of **deep vein thrombosis**, a condition that can occur more frequently in women in the weeks after childbirth. In addition to these health benefits, exercise after pregnancy can help you lose the extra pounds that you may have gained during pregnancy.

Glossary

Anemia: Abnormally low levels of blood or red blood cells in the bloodstream. Most cases are caused by iron deficiency or lack of iron.

Cerclage: A procedure in which the cervical opening is closed with stitches in order to prevent or delay preterm birth.

Cervical Insufficiency: Inability of the cervix to retain a pregnancy in the second trimester.

Cesarean Delivery: Delivery of a baby through surgical incisions made in the mother's abdomen and uterus.

Complications: Diseases or conditions that occur as a result of another disease or condition. An example is pneumonia that occurs as a result of the flu. A complication also can occur as a result of a condition, such as pregnancy. An example of a pregnancy complication is preterm labor.

Deep Vein Thrombosis: A condition in which a blood clot forms in a vein in the leg or other area of the body.

Dehydration: A condition that results from loss of water from the body.

Gestational Diabetes: Diabetes that arises during pregnancy.

Hormones: Substances made in the body by cells or organs that control the function of other cells or organs. An example is estrogen, which controls the function of female reproductive organs.

Oxygen: A gas that is necessary to sustain life.

Placenta Previa: A condition in which the placenta lies very low in the uterus, so that the opening of the uterus is partially or completely covered.

Preeclampsia: A disorder that can occur during pregnancy or after childbirth in which there is high blood pressure and other signs of organ injury, such as an abnormal amount of protein in the urine, a low number of platelets, abnormal kidney or liver function, pain over the upper abdomen, fluid in the lungs, or a severe headache or changes in vision.

Preterm: Born before 37 completed weeks of pregnancy.

Uterus: A muscular organ located in the female pelvis that contains and nourishes the developing fetus during pregnancy.