NorthShore Obstetrics and Gynecology

A Guide for Your Pregnancy

NorthShore University HealthSystem
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Welcome to our NorthShore University HealthSystem Medical Group for all of your prenatal care! We are honored that you have chosen us as your healthcare providers during this exciting time of your lives and hope this will be the start of many years of caring for your growing family.

In this Prenatal Packet, you will find useful information about pregnancy in general, our hospitals, convenient digital health communication through NorthShoreConnect, and specialized advice about our group’s services and recommendations for pregnancy. We recommend that you keep this packet handy as a trusted resource, so you can refer to this information whenever you have a question or need a refresher on a particular topic.

Our team is committed to giving you individualized care. We want to help you feel comfortable with us, so first, let’s start with a brief description of how our physicians will work with you. You will rotate with each physician throughout your prenatal visits. The physician on call the day you go into labor will likely deliver your baby. Likewise, if you have an emergency during your pregnancy, the physician on call will take care of you.

If you have questions or concerns, please contact us at any time by calling our office or by accessing the NorthShoreConnect patient portal through your computer and our mobile app. If you haven’t yet set up your NorthShoreConnect account, visit northshoreconnect.org and follow the instructions. There is additional information about the benefits and use of NorthShoreConnect in this Prenatal Packet in the Online Maternity Pre-Registration and NorthShoreConnect section.

NorthShoreConnect

**NorthShoreConnect:**
To better manage your and your baby’s ongoing care, we request that you enroll in NorthShoreConnect, our secure online portal. If you have a NorthShoreConnect account when you come to the hospital for delivery, your baby’s medical record will automatically be linked to your account, giving you immediate access from your computer or mobile device to care instructions and hospital discharge information for both you and your newborn.

NorthShoreConnect allows you to:
- Schedule NorthShore physician visits
- Review test results
- Receive email and text message reminders for upcoming appointments
- Use Family Access to manage your loved ones’ health
- Pay NorthShore medical bills and view balances
- Review your medical records

**To sign up for NorthShoreConnect, please visit northshoreconnect.org, ask your provider at your next appointment or call (847) 425-3900.**
Emmi® Health Education Programs

After you leave your doctor’s office, you may have additional questions that arise surrounding your pregnancy. Often, there is a lot of new information to absorb in order to be best prepared. This Prenatal Packet is filled with information to use as a resource throughout your pregnancy. In addition, we’d like to tell you about an additional, excellent resources known as Emmi® programs.

NorthShore University HealthSystem strives to help patients take an active role in their healthcare which is why we are proud to offer a unique, engaging, educational program for our patients. Emmi® programs take complex health topics and make them easy to understand for you and your family. The programs help educate you on what to expect with your pregnancy and childbirth.

How Does It Work?
The programs are entirely web based, so you can view them at your own pace, in the comfort of your own home and you can share them with friends or loved ones anywhere in the world. You may view them as many times as you like. Each program takes about 20 minutes to watch. Your physician will provide you with an access code to kick off your Emmi® program. The programs are free of charge.

Available Programs
Emmi® programs are available for each trimester of your pregnancy, as well as delivery.

9 weeks:
- Pregnancy Symptoms: 1st Trimester
- Prenatal Genetic Testing
- Nutrition and Exercise During Pregnancy

24 weeks:
- Pregnancy Symptoms: 2nd Trimester
- Gestational Diabetes
- Cord Blood Storage Options

28 weeks:
- Breast Feeding
- Postpartum Depression

34 weeks:
- Medication for Pain Management During Labor
- Childbirth

37 weeks:
- Hospital Visit Expectations: Birth Center, Labor and Delivery Expectations
- Hospital Discharge Expectations

38 weeks:
- Newborn Care and Basics
- Newborn Health and Safety

View Your Program
If you have already received your access code from your physician, click on the Emmi® button to begin on the NorthShore University HealthSystem website at http://www.northshore.org/health-resources/patient-education.
Online Maternity Pre-Registration

Maternity patients can now complete Maternity Pre-Registration Forms online, using a personal computer. The NorthShore University HealthSystem Admitting Offices created this new service to minimize problems with forms that are lost or delayed in the mail, and to help assure that patients are pre-registered prior to their delivery.

When to Pre-Register:
Please complete your pre-registration three months prior to your expected due date.

How to Pre-Register Online:
From any computer that has Internet access:
1. Go to www.northshore.org/maternityservices
2. Click on “Pre-Register for Your Delivery”
3. Enter the requested information and click “submit”

Insurance Information:
The Admitting Office will need photocopies of your insurance ID card(s) in addition to the information you submit online. Please send or fax the photocopies to the Admitting Office at the appropriate hospital prior to delivery.

Evanston Hospital
Admitting Office
2650 Ridge Avenue
Room 1222
Evanston, IL 60201
Phone: (847) 570-2130
Fax: (847) 733-5364

Highland Park Hospital
Admitting Office
718 Glenview Avenue
Highland Park, IL 60035
Phone: (847) 480-3779
Fax: (847) 480-3946

If you have questions about the pre-registration process, please call the phone number listed above for the hospital where you plan to deliver.
Evanston Hospital
2650 Ridge Avenue
Evanston, IL 60201
(847) 570-2222

Highland Park Hospital
777 Park Avenue West
Highland Park, IL 60035
(847) 480-3714
Routine Prenatal Testing:
At your first prenatal visit or soon after, we ask that you proceed with some routine blood and urine tests, generally recommended for all women in the United States. These include:
1. A complete blood count
2. Blood type, RH factor, and antibody testing for blood cell antibodies
3. Blood testing for syphilis
4. HIV screen
5. Screen for immunity to rubella (German measles)
6. Hepatitis B virus screen
7. Urine sample

Rhogam:
We will check your blood type at the beginning of your pregnancy. If you have an “Rh negative” blood type (A negative, B negative, AB negative or O negative), then you will need a shot of medicine called Rhogam at 28 weeks. We will check the baby's blood type after birth and give you an extra dose if the baby has an “Rh positive” blood type. We may also give extra doses during pregnancy if you experience any bleeding or trauma during the pregnancy. This medicine will prevent you from developing an immune reaction against your baby’s blood type.

If no Pap smear has been done in the past 3-5 years, this will also be done.

Immunizations:
Before becoming pregnant, a woman should be up-to-date on routine adult vaccines. This will help protect her and her child. Live vaccines should be given a month or more before pregnancy. Inactivated vaccines can be given before or during pregnancy, if needed.

Flu Vaccine
It is safe, and very important, for a pregnant woman to receive the inactivated flu vaccine. A pregnant woman who gets the flu is at risk for serious complications and hospitalization. To learn more about preventing the flu, visit the CDC website www.cdc.gov/flu.

Tdap Vaccine
Women should get adult tetanus, diphtheria and acellular pertussis vaccine (Tdap) during each pregnancy. Ideally, the vaccine should be given between 27 and 36 weeks of pregnancy.

Travel
Many vaccine-preventable diseases, rarely seen in the United States, are still common in other parts of the world. A pregnant woman planning international travel should talk to her health professional about vaccines. Information about travel vaccines can be found at CDC’s traveler’s health website at www.cdc.gov/travel.

Childhood Vaccines
Pregnancy is a good time to learn about childhood vaccines. Parents-to-be can learn more about childhood vaccines from the CDC parents guide and from the child and adolescent vaccination schedules. This information can be downloaded and printed at www.cdc.gov/vaccines.

It is safe for a woman to receive routine vaccines right after giving birth, even while she is breastfeeding. A woman who has not received the new vaccine for the prevention of tetanus, diphtheria and pertussis (Tdap) should be vaccinated right after delivery. Vaccinating a new mother against pertussis (whooping cough) reduces the risk to her infant too. Also, a woman who is not immune to measles, mumps and rubella and/or varicella (chicken pox) should be vaccinated before leaving the hospital. If inactivated influenza vaccine was not given during pregnancy, a woman should receive it now because it will protect her infant. LAIV may be an option.
Course of Prenatal Care:

Pregnancy is a time of many changes, which can be both exciting and intimidating. As your care team, we want to help you know what to expect so you’ll feel comfortable and informed. Below is a brief outline of what to anticipate during your pregnancy. We suggest that you refer to this handy reminder list periodically.

First prenatal visit—Here, a medical history is reviewed, a physical exam and laboratory tests are performed. The doctor will review some of the information in this packet, mainly that which you need to know early on. An ultrasound to confirm your due date may be performed.

Visits will be about every 4 weeks until you are about 28 weeks pregnant.

11–12 weeks—Usually can hear the heartbeat for the first time. Chorionic villus sampling (CVS) is done if indicated.

11–14 weeks—First trimester genetic screen can be done only during this time period.

15–16 weeks—Amniocentesis is done at this time if indicated.

15–18 weeks—Alpha-Fetoprotein (AFP) Test or Multiple Marker AFP for Down Syndrome can be done.

18–22 weeks—Mid-trimester ultrasound to evaluate fetal growth and anatomy.

24–28 weeks—Blood test for diabetes, blood count and antibody testing (if Rh negative). A shot of Rhogam will also be given at about 28 weeks for Rh negative individuals. During this month, a brief survey will be given to you to screen for post-partum depression risk factors.

Visits will now be every 2 weeks until 36 weeks, and then every week until delivery.

27–35 weeks—Group B Strep Culture. Flu shot and Tdap will be administered at this time as well.

A full-term pregnancy lasts about 40 weeks. If you do not deliver by about a week after this date passes, your physician will discuss further testing, more frequent visits or induction of labor with you.

Nutrition and Weight Gain:

As you have probably noticed, your appetite has changed since you became pregnant. You still need a nutritious, well-balanced diet, but minor alterations may be needed. Once you overcome your nausea, you may be hungry more frequently, but you will feel full more quickly; thus, you will feel best if you eat small frequent meals and snacks. The absolute calorie requirement during pregnancy is only 300 additional calories a day, so try not to go overboard.

Dietary requirements are similar to a typical food pyramid, but here are a few requirements that are unique to pregnancy:

- Your calcium requirement is much higher—about 1200 milligrams (mg) a day. An 8-ounce glass of milk has about 300 mg, a 4-ounce glass of calcium-fortified orange juice or 4 ounces of cottage cheese has 150 mg, and 1 ounce of hard cheese has about 175 mg. There are other great sources of dietary calcium, but if you are unable to get this in your diet, we do advise a supplement.

- The Environmental Protection Agency (EPA) recommends limiting certain fish intake during pregnancy, due to potentially high levels of mercury. You should completely avoid albacore tuna, swordfish, shark, tilefish and king mackerel. Limit chunk light or brown tuna to 6 ounces per week.

- All animal proteins should be cooked. Any red meat should be cooked to at least medium, and be sure pork and poultry are thoroughly cooked.

A specific type of food poisoning called listeriosis (Listeria) is very dangerous to developing fetuses. Listeria is a harmful bacterium that can be found in refrigerated, ready-to-eat foods (meat, dairy), and in produce harvested from soil contaminated with listeria. It is recommended that you avoid all soft cheeses made from unpasteurized milk and cold deli salads and luncheon meats. If there is a listeria outbreak reported, avoid this food as well. If you think you have been exposed to listeria and feel ill (high fever, body aches, diarrhea), please contact your doctor.
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.

Use this chart!
You can use this chart below 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.

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

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

### Choices to Avoid
- King mackerel
- Marlin
- Orange roughy
- Shark
- Swordfish
- Tilefish (Gulf of Mexico)
- Tuna, bigeye

*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.

To find out, use the palm of your hand!
For an adult
4 ounces
For children, ages 4 to 7
2 ounces

For information on fish advisories, visit
- www.FDA.gov/fishadvice
- www.EPA.gov/fishadvice

This advice refers to fish and shellfish collectively as “fish.”
**Toxoplasmosis Precautions:**
Toxoplasmosis is a disease that can be transmitted to a pregnant woman and thus to her fetus. It has been found in cat feces, especially from outdoor cats. It is recommended that someone else clean and change the cat litter in your home if you own a cat, and you should consider getting tested for immunity to toxoplasmosis. This can also be transmitted through undercooked meat.

**Sexual Activity:**
Sexual activity is usually safe during pregnancy, but your physician may ask you to restrict sexual activity under certain circumstances. If you have vaginal bleeding, premature labor, premature cervical dilation or placenta previa, usually nothing is allowed in the vagina.

**Exercise:**
Most healthy pregnant women can and should exercise regularly. Regular exercise helps reduce pregnancy aches and pains, gets women in condition for the “marathon” of labor and can help keep weight gain in a healthy range. Be sure to stay well hydrated. Excellent forms of exercise include:
- Walking
- Biking—stationary or recreational, not extreme
- Swimming
- Prenatal exercise classes
- Yoga or Tai Chi

Since you are pregnant, your joints and ligaments loosen and your center of gravity shifts. Falls as well as ankle, knee, hip and back problems can be triggered by an overly ambitious exercise program. We recommend caution. Due to balance and risk of injury, skiing and some competitive sports should be approached with caution and discussed with your physician. Under no circumstances should a pregnant woman go scuba diving.

**Exercise Precautions:** If you develop severe shortness of breath, joint or back pain, abdominal cramping, or vaginal bleeding, stop the exercise—this is your body telling you that you are overdoing it. Most pregnant women feel a little short of breath just from being pregnant, and some uterine crampiness during pregnancy is normal. Bleeding or painful regular cramping should be reported to your physician promptly. Women with high-risk pregnancies should discuss special restrictions with their caregivers. Also, avoid elevation of core body temperature, which can occur in hot tubs, saunas or with extreme, prolonged exercise.

**Environmental or Work Hazards:**
Please let your doctor know if you have any unusual hazardous exposure in the workplace, such as toxic materials or solvents. Some of these may be harmful to a developing fetus and may need to be avoided. If you suspect that your home is an at-risk area for toxic chemicals, you should arrange for an inspection. This is also a good time to make sure you have fresh batteries in your smoke and carbon monoxide detectors.

Some professions may also pose risks, such as teaching young children. Please make sure that you have either had chickenpox or the vaccine, and if not, please stay away from school children if there is an outbreak. If you hear of an outbreak of Fifth Disease (also known as Parvovirus) let us know as soon as possible as this may have some risks that can potentially be prevented.

This is an incomplete list—please consider any hazards that may be in your environment.

**Travel:**
Whether for business or pleasure, many women will need to travel during their pregnancy. As long as no significant risks exist, this can be done safely until the last several weeks. One concern to remember is that high estrogen levels during pregnancy can increase the risks of blood clots, so prolonged sitting should be avoided. If in a plane or a car, make sure you get up every 90 minutes to stretch your legs and walk around. Airplane travel can dehydrate you, so drink extra fluids. A short trip is usually safe until one month before your due date, but be sure to avoid long trips after 32 weeks.

If in the sun, use sunscreen. If in a warm climate, use bug spray with DEET. Your physician can give you more personalized instructions for specific travel needs.
Tobacco, Alcohol, and Recreational Drug Use:
If you smoke, the best advice is to quit. If you are unable to quit, cut down as much as possible. Smoking is detrimental to pregnancy and continued smoking after pregnancy is detrimental to your child via secondhand smoke. If your husband or partner is a smoker, both you and your child are being subjected to secondhand smoke, so they should also quit. We are happy to help you in any possible way.

Alcohol is one of a few drugs proven to cause birth defects. There is no amount of alcohol that one can safely consume. Fetal Alcohol Syndrome has been known to result from as few as two drinks a day. Advise your physician about any alcohol that you have consumed to date and avoid it for the rest of your pregnancy.

Recreational drugs are not safe during pregnancy. One marijuana cigarette contains several times the amount of cancer-causing chemicals as one standard cigarette, and cocaine has been shown to cause strokes in fetuses and induce premature labor. We don’t want you using these substances, but we do ask you to be honest with us about their use. We are your advocates, and can help in many ways.

Dental Work:
It is okay to go to the dentist. You should in fact have normal dental care and get your teeth checked on a regular schedule. If you can avoid the first trimester, that is preferred. Gums can get swollen in pregnancy and are more likely to need regular brushing, and flossing helps. If you need x-rays, ask the dentist or dental technician to shield your abdomen.

Hair Care:
There are no studies that show harmful affects to hair coloring or perms. Waiting until the 2nd trimester is preferred.

Medications:
The following are recommended during pregnancy:

Prenatal Vitamins: Can be either prescription or over-the-counter and should be taken once daily. A supplement of DHA—a fatty acid—which should be taken once daily. This is in some prenatal vitamins, but can also be found as a supplement (one brand is Expecta). Some women may need to take additional supplements such as iron, but we will advise you if this is necessary.

Prescription Drugs: In general, you should avoid unnecessary medications. Almost any medication you take is passed on to your developing fetus, so we advise that you review any and all medications with your obstetrician at your initial visit (even better, review them with a pregnancy plan before you get pregnant). Any other prescribing physicians should be prescribing medications to childbearing-aged women only with a full review of potential risks during pregnancy, and plan for both planned and unplanned pregnancy. Do not either initiate or stop prescription medications during pregnancy without specific advice from the prescribing physician and/or your obstetrician. For some medications, there can be greater risk in stopping abruptly than in using them at all. A rating system used by the FDA categorizes risk of drugs during pregnancy in the following classes:

<table>
<thead>
<tr>
<th>Category</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Human studies indicate no risk. (Very few drugs have been formally studied)</td>
</tr>
<tr>
<td>B</td>
<td>No evidence of human risk; no controlled human studies. (Many drugs are in this category)</td>
</tr>
<tr>
<td>C</td>
<td>Risk to humans has not been ruled out. (Common with new drugs, this does not necessarily mean there is a problem.)</td>
</tr>
<tr>
<td>D</td>
<td>Evidence of risk to humans from human and/or animal studies.</td>
</tr>
<tr>
<td>X</td>
<td>Contradicted in pregnancy, known risks exist.</td>
</tr>
</tbody>
</table>

There are a number of problems with this categorization. Many class C drugs are widely used and one class X drug has been widely used to help prevent miscarriage, though that is not the drug’s approved use by the FDA. A new system is being developed, but the current system gives physicians and consumers a general sense of a medication’s safety for use during pregnancy. Specific medication questions can be addressed via TOXLINE, National Library of Medicine at (800) 638-8480, or several other online services.
### Over-the-Counter (OTC) Medications

Several OTC medications are generally regarded safe to take during pregnancy at standard doses. You may want to post the following table on your refrigerator for quick reference:

<table>
<thead>
<tr>
<th>Problem</th>
<th>Medication</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acne</td>
<td>Any standard OTC agent, following instructions</td>
<td>Benzoyl peroxide, salicylic acid, and Resorcinol can all be absorbed through the skin, but are not hazardous in standard doses.</td>
</tr>
<tr>
<td>Constipation</td>
<td>Stool Softeners (Senokot, Metamucil)</td>
<td>Minimally absorbed and okay to use on a regular basis. Some prenatal vitamins contain stool softeners.</td>
</tr>
<tr>
<td></td>
<td>Docusate Sodium (Colace)</td>
<td>Minimally absorbed, but could interfere with vitamin absorption if used regularly.</td>
</tr>
<tr>
<td></td>
<td>Mineral oils and Castor oils</td>
<td></td>
</tr>
<tr>
<td>Contact Dermatitis</td>
<td>Cortisone Creams</td>
<td>While cortisone is absorbed, the low concentration in OTC products makes these agents safe with standard use.</td>
</tr>
<tr>
<td>Cough</td>
<td>Dextromethorphan codein (Robitussin DM)</td>
<td>These agents are not associated with pregnancy problems when used at standard doses.</td>
</tr>
<tr>
<td></td>
<td>Calcium Carbonate</td>
<td>Use at moderate doses up to twice a day (1000 mg). Supplemental calcium is an extra benefit.</td>
</tr>
<tr>
<td></td>
<td>Heartburn (Tums, Rolaids)</td>
<td>Heartburn, Cimetidine (Tagamet). Ranitidine (Zantac), Pepcid, Prilosec, Nexium. Widely used at higher than OTC doses for women with ulcers; reasonable levels of OTC use is fine.</td>
</tr>
<tr>
<td>Hemorrhoids</td>
<td>Preparation H, Anusol, Tucks with or without hydrocortisone</td>
<td>Hemorrhoids are common during pregnancy. A high fiber diet, plenty of fluid, and OTC products can be used to alleviate discomfort and bleeding. These can all be used safely as creams, ointments or suppositories.</td>
</tr>
<tr>
<td>Minor Diarrhea</td>
<td>Imodium AD, Standard OTC</td>
<td>Use as directed.</td>
</tr>
<tr>
<td>Nasal Congestion, Allergies</td>
<td>Pseudoephedrine (Sudafed)</td>
<td>Commonly used decongestant not associated with congenital abnormalities. Class C, but extensive epidemiological studies do not indicate any problems. Can raise your blood pressure and may keep you up at night.</td>
</tr>
<tr>
<td></td>
<td>Chlorpheniramine (Chlor-trimeton)</td>
<td>No evidence that these drugs cause any problem at standard doses. Class B. Antihistamines may make you sleepy.</td>
</tr>
<tr>
<td></td>
<td>Diphenhydramine (Benadryl, Zyrtec, Claritin)</td>
<td>Minimally absorbed; safe at standard doses.</td>
</tr>
<tr>
<td>Pain Fever &lt;100.4</td>
<td>Acetaminophen (Tylenol)</td>
<td>No records of problems during pregnancy with standard doses (up to 8x 500mg tablets/day). Overdose or use in conjunction with excessive alcohol can result in liver or kidney failure.</td>
</tr>
<tr>
<td>Vaginal Yeast</td>
<td>Monistat</td>
<td>Can be used during pregnancy; report unusual vaginal symptoms so your doctor can check for other infections if indicated.</td>
</tr>
</tbody>
</table>

Avoid aspirin and non-steroidal anti-inflammatory drugs (Bayer, Advil, Ibuprofen, Naprosyn, Aleve) as well as Pepto-Bismol (contains aspirin) unless specifically directed for obstetrical reasons.
**Herbals:** While herbal remedies have been widely used in many cultures for thousands of years, the manufacturing standards for herbs are not as tightly regulated as those for pharmaceutical agents. Therefore, the potential for contaminants and toxins is greater with herbal remedies than with pharmaceutical agents. We have no philosophic objections to herbal use, but it is probably safest to avoid herbal drugs during pregnancy—and if you insist on using such drugs, do so under the guidance of an experienced herbalist who knows you are pregnant and use reputable manufacturer’s products at recommended doses.

**Miscellaneous:** Caffeine, “diet” drinks, aspartame, saccharine: While none of these items have nutritional value, there has been no indication that modest use poses any risk to pregnancy.

**Treatment of Common Medical Complaints:**

During this time, you may be so focused on the physical changes from pregnancy, you may forget that common illnesses and ailments may still occur. When you catch a cold or get a headache while pregnant, it’s important to think about how to help yourself feel better and recover, but also how any remedies may affect your baby. The following are helpful guidelines for treating common ailments while pregnant.

**Colds:** First line of treatment is fluids, a humidifier at your bedside, and lots of rest. It is alright to use recommended doses of acetaminophen (Tylenol) for aches and to keep your temperature under 100.4, Robitussin, Robitussin DM, or similar for congestion and cough, and simple decongestants as needed. Call us for advice if your temperature is 102 degrees or higher, the cold seems to be running an unexpectedly severe course, or if you have significant shortness of breath or wheezing. Women with asthma or lung disease need prompt care for asthma attacks not controlled by their usual medications.

**Constipation:** Constipation is very common during pregnancy. It can be combated with lots of fluids, a high-fiber diet, and stool softeners such as Metamucil, Colace or Senokot. Avoid stimulants and cathartics as they can cause cramping. Some prenatal vitamins include stool softeners.

**Headaches:** Headaches are common during pregnancy, especially at times when hormone levels may be very high (9-11 weeks) or your body is going through rapid fluid shifts (16-18 and 26-28 weeks). Staying well rested, drinking plenty of fluids, reducing stress and moderate acetaminophen use are sufficient for most women. Women with migraines should consult their physician about appropriate medications. Severe new onset headaches in later pregnancy can be a sign of preeclampsia, high blood pressure or even an impending stroke. Please call us immediately to report unusually severe or worsening frequent headaches, especially if you are close to term.

**Stomach Flu:** Simple stomach upsets (commonly called “the flu”) are characterized by aches, nausea, vomiting and diarrhea. Most of these illnesses do not pose unusual risks to the mother or fetus, and simply pushing fluids, taking acetaminophen for aches, and waiting a day to let it pass is fine. We do want you to call if you are unable to keep anything down for more than 24 hours (you may need intravenous hydration) and/or it seems like a more serious illness than the normal upset stomach.

**Viral Influenza:** Viral influenza carries higher-than-usual risk of life-threatening complications in pregnant women, and may also cause premature labor and delivery. Therefore, the Centers for Disease Control and Prevention (CDC) recommends a flu vaccine is given to all pregnant women, especially those with chronic medical conditions, immune system compromise, and individuals likely to be exposed occupationally or by household
members. Flu vaccine may be given during breastfeeding. Contraindications to flu vaccine include allergy to eggs, and any active infection or unstable neurological condition. Please discuss the advisability of flu vaccine with your physician if you are pregnant during the months of September-December. Additional information can be obtained from the CDC at (800) 232-3228 or at www.cdc.gov/flu/protect/vaccine/pregnant.htm.

Nausea and Vomiting:
The incidence of nausea and vomiting in pregnancy has been estimated at 80%. Although there are many theories, the exact cause is unknown. Symptoms usually occur around 7 weeks of pregnancy and usually begin to subside in the second trimester (after 12 weeks).

Here are some helpful ideas you may consider:

• Temporarily discontinue your prenatal vitamin. Sometimes the vitamins can make the nausea worse. You should resume taking vitamins when you are able to tolerate it.
• Do not allow yourself to become overly hungry or overly full. Eating smaller amounts more frequently may help alleviate nausea.
• Eat low-fat foods. Low-fat foods move through your body more quickly, which can reduce nausea and help your body get the nutrients it needs. This includes foods high in carbohydrates such as bread, cereal and potatoes. Avoid fast food and pizza.
• Food should either be very hot or very cold, lukewarm foods are not usually well tolerated.
• Drink liquids between meals and limit fluid intake during meals. Drinking liquid with meals makes the stomach expand and can increase nausea.
• Put plain crackers, popcorn, dry cereal or vanilla wafers in a container next to your bed. Eat something when you wake up, before you get out of bed. Get up slowly in the morning and avoid sudden movement.
• Avoid heavy spices such as garlic, pepper or chili.
• Avoid cooking odors.
• Eat high-protein snacks (meat, cheese, eggs) before bedtime to stabilize blood sugar.
• Sipping on Kool-Aid during the day and if you get up in the middle of the night may help.
• Drinking ginger tea or Ginger Ale may help.
• Take Vitamin B6 (50 mg 1-3 times daily) and/or Unisom (half a tablet every 12 hours). Take caution as Unisom may make you drowsy.
• If the symptoms are severe, contact your physician for medical advice.

Foods which are usually well tolerated include:
Animal crackers, bread sticks, dry cereal (excluding granola cereal), fresh fruit, frozen yogurt, fruit juice bars, graham crackers, hard candy (especially Sweet Tarts), hot baked potato, milk shakes made with yogurt and skim milk, plain hard rolls or French bread, plain toast, English muffins, bagels with a small amount of jelly, popcorn, popsicles, pop tarts, pretzels, rice, vanilla wafers, warm pasta with a small amount of parmesan, frozen slush drinks.
Ultrasound:
Ultrasounds may be indicated at any time during pregnancy—your provider will discuss this with you. An early ultrasound will often be done if dating of the pregnancy is uncertain, such as a woman with irregular cycles. Bleeding during pregnancy may also prompt us to order an ultrasound. We usually recommend one “routine” scan in the middle of pregnancy to assess growth, anatomy and placental location. High-risk conditions, unusual growth patterns and multiple fetuses are some reasons for ultrasounds later on. Please note that only certain insurers will cover these tests. Make sure you know your insurance policy requirements. Additionally, we may recommend an ultrasound or any other test that your insurance company does not cover. These are still your financial responsibility, so please always know your coverage.

Domestic Violence:
Domestic battery is the most obvious form of abuse, but subtler forms can occur. These can include not allowing you to go out with friends or to doctor appointments without your partner, withholding financial support, not allowing you to function independently and emotional abuse. Abuse is often more severe during pregnancy and the immediate postpartum period. Please discuss any concerns with your doctor.

Seat Belt Use:
During your pregnancy, the lap belt goes across your waist and under your belly, and you should use the shoulder belt. If you are not already using seat belts every time you are in a car, now is the time to be 100% compliant. Although we know seat belt injuries can occur in an accident, the chance of a fatal accident is much higher without them.

Depression:
It is common for women to have emotional changes during and after pregnancy. These changes range from anxiety to mild or severe depression. Baby blues are mild changes in mood and are short lived. Depression, whether mild or severe, should be addressed. On rare occasions, depression can include psychosis. There is help available for any level of emotional change you may experience. At NorthShore, patients are screened twice; once during pregnancy and once postpartum. Please let us know at any time if you are noticing any uncomfortable emotional changes. We have support groups, individual counseling and medication if needed. Our Hot Line number is 866.364.MOMS.
If you have never given birth before, you may assume that you will just “know” when the time has arrived to have your baby. In reality, onset of true labor is not always easy to identify, and events leading up to it can go on for days.

Remember, too, that your due date is simply a point of reference—it is normal for labor to start any time between three weeks before and two weeks after this date.

So how will you know that labor is starting? First, you will need to understand the birth process. In a nutshell, here is what happens during labor: The uterus repeatedly contracts (tightens and relaxes), causing the cervix to thin (efface) and open up (dilate), so you can push your baby into the world.

Calling Your Caregiver:
Let your healthcare provider known when regular contractions are about 5 minutes apart. These may feel like your uterus is “knotting up” and be relatively painless at first, but gradually build in intensity, starting at the top of your uterus radiating through your belly and lower back. Your caregiver will want to know what other symptoms you’re feeling, how far apart your contractions are, and whether you can talk during them.

Also notify your provider if your bag of water breaks (either a large gush or a consistent small leak) or if you have bleeding similar to a period (or more).

Once labor has started in earnest, when should you go to the hospital? Every situation is different, so talk to your caregiver well ahead of delivery day about the best plan for you. In general, though, expectant mothers should head to the hospital when their contractions are too painful to talk, last 60 seconds or more, and have been coming three-to-five minutes apart for at least an hour. If you’re not sure, call your healthcare provider and talk about when to come in.

Labor May Be Nearing if You Notice One or More of These Signs:
• **Bloody show:** If you have blood-tinged or brownish vaginal discharge, it means your cervix has dilated enough to expel the mucus plug that sealed it for the last nine months. This is a good sign, but active labor may still be days away.

**False Labor:**
Most expectant mothers feel mild contractions before they’re actually in labor. These are called “Braxton Hicks” contractions. It can be hard to distinguish Braxton Hicks contractions from the real deal, especially if you’re near your due date. If contractions aren’t causing your cervix to dilate though, it’s known as “false” labor. While true labor contractions get longer, stronger and closer together as time goes on, false labor contractions tend to be:

- **Irregular:** Braxton Hicks contractions are sporadic, have no predictable pattern, and usually stop if you rest or change positions.

- **Felt in your belly and your groin:** True labor contractions, on the other hand, usually “wrap around” from your back to your belly. If Braxton Hicks contractions are making you uncomfortable, take a warm bath and drink plenty of fluids to ease discomfort.

**Preterm Labor:**
Sometimes contractions cause the cervix to efface and dilate before 37 weeks of pregnancy. This is called preterm labor. A uterine or vaginal infection, or a host of other health problems, can bring on preterm labor. For unknown reasons, some women are more prone to it than others.

The symptoms of preterm labor are similar to the symptoms of labor that begins at term. If you notice any of the labor signs listed above or feel strong, regular contractions before 37 weeks, call your caregiver right away. After examining you to see if your cervix is effecting or dilating, it may be recommended that you avoid intercourse, exertion and stress, and get as much rest as possible to stave off further contractions. In some cases you may be admitted to the hospital for observation or medications.
A Guide for Your Pregnancy

Prenatal Screening

NorthShore University HealthSystem
Carrier Screening

Carrier screening is a test on you, the patient, to see if you are a carrier for any genetic mutations that you can pass on to the baby. Carrier screening is recommended to be offered to all women who are planning a pregnancy or are currently pregnant. Carriers generally have no symptoms and no family history of the specific condition. If you and your partner are both carriers of the same genetic condition, there is an increased chance for each pregnancy together to be affected with that condition. The following options are simple blood tests:

**Fundamental Panel**—Tests for three genetic conditions: Cystic Fibrosis, Spinal Muscular Atrophy (SMA), and Hemoglobinopathies (red blood cell disorders such as sickle cell anemia, Beta-thalassemia, or Alpha-thalassemia). In general, the risk of being a carrier for cystic fibrosis is about 1 in 25 and the risk of being a carrier for SMA is about 1 in 50.

**Expanded Panel**—Tests for up to 176 genetic conditions with a wide range of severity, including all the conditions tested in the Fundamental Panel. This panel is recommended for couples who want to have the most comprehensive carrier screening available or for couples who have at least one partner with Ashkenazi Jewish ancestry.

**Individual Tests**—In certain circumstances, screening for individual conditions may be ordered, but in general panel screening is recommended.

**How to Obtain Carrier Screening**

Please let us know if you are interested in one of the carrier screening options listed above. These tests are run by an outside lab called Counsyl. Counsyl will be provided with your cell phone number so that they can contact you and let you know your out-of-pocket cost via text message. If you do not respond to their text message within 48 hours of their notification, they will automatically run the test and you will be responsible for the out-of-pocket cost.

Ideally, prior to screening, you can contact Counsyl directly at (888) 268-6795 to get an estimate of your out-of-pocket costs for this screening.

Here are some important things about carrier screening that you should know:

- You only need to do this testing once in your lifetime. If you have been tested before and know the results—you do not need to repeat the test. However, as technology improves, we may have the ability to offer screening for new conditions.
- If carrier screening is desired, our group believes that it is of "medical necessity" that all of our pregnant patients, regardless of their ethnic or racial background, should at least receive the Fundamental Panel.
- If you are of Ashkenazi Jewish background, the Expanded Panel is the "medically necessary" test that you should receive.
- If you test POSITIVE as a carrier for a condition, it does not mean that your baby will be affected. However, the next step will be testing the father of the baby to see if he is a genetic carrier of the same condition. If he is found to be a carrier of the same condition, there is a 25% chance the baby will be affected. This will be the risk for any future pregnancies as well.
- In rare cases, you may still be a carrier of a condition even though your testing results were normal. For example, testing for cystic fibrosis through Counsyl is 99% sensitive, meaning that if testing is negative, you can be 99% sure that you are not a carrier.
Prenatal Genetic Screening

You have the option of screening to see if your baby is at higher risk for an abnormality in the number of chromosomes such as Down syndrome. The normal number of chromosomes is 46. With prenatal genetic screening, we can screen for up to five of the most common disorders of chromosome numbers:

- Down Syndrome (Trisomy 21) – 47 chromosomes
- Trisomy 18 – 47 chromosomes
- Trisomy 13 – 47 chromosomes
- Turner Syndrome – 45 chromosomes
- Triploidy – 69 chromosomes

The following are screens. It is important to know that screening cannot give you a yes-or-no answer. Instead, it tells you whether the fetus is at low risk or high risk for the condition. If you are found to be at high risk, there are other tests that are available to you to provide a definitive answer (prenatal diagnostic testing). It is generally recommended that a woman only have one, not all, of these screens during pregnancy.

The screens that are available are as follows:

Non-Invasive Prenatal Screening (NIPS, also known as Panorama)—This test can be done as early as 10 weeks to screen for the five most common chromosome disorders. It involves a simple blood test and measures fetal DNA that is in your bloodstream. It poses no risk to you or your baby. It is 94-99% sensitive, and you may also be able to determine the sex of the baby based on the results. If you weigh more than 200 lbs., there is an increased chance that the lab may not be able to get enough fetal DNA to run the test, and you may need to repeat the test or do a different test. The blood test can be done at any NorthShore outpatient lab and requires paperwork provided by your healthcare provider. The CPT code for the test is 81420 or 81507, depending on your insurance plan. You may contact the performing lab Natera at (650) 249-9090 if you have additional billing questions.

Nuchal Translucency Ultrasound and First Trimester Screening (BUN Screen)—This test can only be performed from 11 weeks 3 days until 13 weeks 6 days gestation to screen for three chromosome disorders (Down syndrome, Trisomy 18, and Trisomy 13). It involves an early ultrasound to measure the skin fold thickness of the fetal neck and to determine the presence of a nasal bone, as well as a finger stick blood test from you to measure three chemical markers. This test has a sensitivity of 90-96%. It also poses no risk to you or the baby. The CPT codes for the ultrasound portion of this test are 76813 and 76801, and the CPT codes for the blood portion of this test are 84163 and 84704.

Quad Screen—This test is done between 15 to 21 weeks to screen for Down syndrome, Trisomy 18, and spina bifida. It involves a simple blood test and involves no risk to you or the baby. The test has a sensitivity of 60-75%. The CPT code for the test is 81511.

Insurance Coverage

These tests may or may not be covered by your insurance. Some insurance plans cover all the tests, some may cover one or two of the tests, and some do not cover any of them. Medical insurance plans are specialized and unique and are dependent on what your specific employer negotiated and contracted as part of your coverage. It is up to you to learn whether these tests are covered by your insurance.

When it comes to insurance coverage for pregnancy, the following statements are generally observed, but are not true for everyone across the board:

- The BUN Screen and Quad Screen are generally covered by most insurance plans regardless of your age.
- NIPS is often covered by insurance plans if you will be 35 years or older at the time of delivery.
- NIPS may be covered by your plan even if you are younger than 35—you will need to call your insurance to determine coverage.

NIPS, If You Are Under Age 35

NIPS may be covered by your insurance even if you are younger than 35 years. You need to call your insurance company and ask whether NIPS (CPT code 81420 or 81507, depending on your plan) is covered for you. Some insurance companies will ask for a letter stating "medical necessity" in order to cover the NIPS test. We will issue a letter stating medical necessity for the following conditions:

- Moms 35 years or older at the time of expected delivery (due date)
- Abnormal BUN Screen or Quad Screen
- Abnormal ultrasound
- Prior pregnancy with an outcome of abnormal chromosomes

If you do not meet one of these conditions, we can issue a letter stating it is "medically appropriate" for you to have NIPS as a prenatal screen. If you would like to pay for NIPS on your own, we can order the test for you and you can call the company that performs the test (Natera) to discuss payment options at (650) 249-9090.
Diagnosis Codes
When checking on insurance coverage, you can use the following diagnosis code that is appropriate to you:
Z34.90—If you are less than 35 years old
O09.529—If you will be 35 years or older at the time of delivery

How to Obtain Prenatal Genetic Screening
Please let us know that you are interested in receiving one of the prenatal genetic screening tests.

NIPS—This test can be ordered either by your provider or a genetic counselor. You will be required to bring paperwork with you to the lab. Let your provider know if you are interested in this screen, and they will provide you with the paperwork or refer you to genetic counseling.

BUN Screen—Your provider will place an order for the test and you will need to call Fetal Diagnostics at 847-570-2860 to schedule the ultrasound and blood work. Be prepared to tell them your estimated due date and they will give you a range of dates and locations. You will meet with a genetic counselor at the time of this appointment.

Quad Screen—This blood test can be drawn at a routinely scheduled prenatal visit between 15-21 weeks. No other arrangements need to be made.

Prenatal Diagnostic Testing
Developed for pregnancies at “high risk” for a chromosome abnormality or other genetic disorder, diagnostic testing can provide a yes-or-no answer about whether the fetus is affected. Women who are considered at “high risk” to have a baby with a chromosome disorder include women who will be 35 years or older at the time of delivery, women who have had an abnormal screening result (NIPS, BUN, or Quad Screen), and pregnancies in which abnormalities are identified on ultrasound. Diagnostic testing is considered invasive, and therefore there is an increased rate of miscarriage associated with these procedures (0.3-0.5% risk). Diagnostic tests for chromosome abnormalities include:

Chorionic Villus Sampling (CVS)—This procedure is performed between 10-13 weeks of pregnancy. During the procedure, a small sample of the placenta is removed under ultrasound guidance. The cells from the placenta can be studied to analyze the fetal chromosomes. There is a small increased risk of miscarriage associated with CVS, which is thought to be approximately 1 in 200 (0.5%) above the background risk of miscarriage in the first trimester.

Amniocentesis—This procedure is performed after 15 weeks gestation. During the procedure, a small sample of amniotic fluid is removed with a needle under ultrasound guidance. The sample contains fetal cells floating in the amniotic fluid, which can be studied to analyze fetal chromosomes. There is a small increased risk of miscarriage associated with amniocentesis, which is thought to be approximately 1 in 300 or less (<0.3%) above the background risk of miscarriage. In addition to testing fetal chromosomes, the amniotic fluid can also be tested to measure the amount of alpha-fetoprotein (AFP), which can detect the presence of open neural tube defects (such as spina bifida).

Any woman may elect diagnostic testing if desired, regardless of being at a high or low risk. If you are interested in a CVS or amniocentesis, your provider can place an order for you and you must call 847-570-2860 to schedule the procedure. On the day of the procedure, you will also meet with a genetic counselor.
What are the baby blues?
Most women get the baby blues after they deliver. Because they are so common, the baby blues are considered a normal part of the postpartum experience. A woman experiencing the baby blues feels mostly happy, but also may experience the following symptoms:
- Mood swings
- Crying for no particular reason
- Irritability
- Exhaustion
- Restlessness
- Anxiety

This typically begins about 3-4 days after delivery and lasts for up to two weeks. The suspected reason for getting the baby blues is that your body and mind are making you more emotional so that you can bond with and take care of the baby. Symptoms of baby blues that do not get better after two weeks or so—or become worse over time—are more likely a sign of postpartum depression or anxiety.

What is postpartum depression?
Women can experience depression during and after pregnancy. Depression after pregnancy is called “postpartum depression” and can start anytime during the year after delivery. Women with depression during pregnancy or postpartum may feel some of the following symptoms most of the day for at least two weeks:
- Irritability or Crankiness
- Trouble sleeping even when you have the chance to sleep
- Trouble concentrating, remembering things or making decisions
- Frequent crying
- Loss of appetite, or overeating
- Withdrawal from family and friends
- Loss of pleasure or interest in things you used to enjoy
- Not feeling like yourself
- Showing too much, or not enough, concern for the baby (not bonding or forming an attachment)

Some women may also experience thoughts of harming themselves and/or their baby. For some women the thoughts come and go; for others the thoughts may be more serious and may require help.
Do women also experience anxiety during pregnancy and postpartum?

Most women experience some degree of anxiety about becoming a mother, but some women develop anxiety disorders during this time. Women may experience:

- Panic attacks
- So much worrying or nervousness that you can’t do day-to-day tasks
- Compulsive behavior like excessive cleaning and hand washing
- Fears of intentionally or accidentally harming the fetus or baby

How long does depression or anxiety during pregnancy or postpartum last?

This greatly depends on how quickly women seek treatment. If you are concerned that you may be experiencing symptoms of depression or anxiety, contact your doctor or midwife or 1-866-364-MOMS as soon as possible to discuss how you are feeling and ways you can be supported.

Remember that you are not alone and that you are not to blame if this is happening to you. This is not a personal weakness, and does not make you a bad mother. It is very important that you get the help you deserve so you can feel better. And you CAN feel better with help.

What is postpartum psychosis?

Postpartum psychosis is a much rarer—and more serious—disorder that affects about 1 or 2 in 1,000 new mothers. Women with postpartum psychosis may experience:

- Hallucinations (seeing or hearing things that aren’t really there)
- Delusions (strange or unusual beliefs about their baby, themselves, or others)
- Insomnia
- Confusion, disorientation or illogical thoughts
- Extreme anxiety and agitation
- Rapid mood swings
- Thoughts of harming yourself and/or the baby

These symptoms usually begin within the first 2-3 weeks after giving birth. A woman with postpartum psychosis may have times when the symptoms seem better. Postpartum psychosis is an emergency and it is important to get help as quickly as possible by calling 911 or going to the nearest emergency room.

Why do women get depression or anxiety during pregnancy and postpartum?

There are many theories about what causes depression or anxiety during and after pregnancy. Research suggests that some women may be naturally more vulnerable to becoming depressed or anxious when they are experiencing the stressors of adjustment to pregnancy or motherhood. Other women may be vulnerable to depression or anxiety as a result of the hormonal changes that occur in pregnancy and in the postpartum time, regardless of their stress level.
If women have a history of depression, what are the chances of getting postpartum depression?

Women with a family history or personal history of depression or anxiety have an increased risk of developing postpartum depression or anxiety. Women with a history of bipolar disorder have an increased risk of developing postpartum psychosis. If you are concerned about your risk, let your doctor or midwife know so you can receive all the support you deserve during pregnancy and the postpartum period.

What can women do to prevent or cope with postpartum depression or anxiety?

Unfortunately, there is no way to prevent it, but there are some things you can do to decrease your risk:

- You may want to begin counseling so that you will have some extra support during pregnancy and the postpartum time
- Talk to your partner, friends and family about getting support from them both during and after pregnancy
- Consider joining play groups or parent support groups
- For some women who have a history of depression, talking with your doctor or midwife about starting or continuing antidepressant medication during pregnancy or immediately postpartum can help decrease risk

What treatment resources are available?

The good news about depression or anxiety during pregnancy and postpartum is that it is treatable. Treatment options include:

- Medication
- Counseling
- Support groups

Besides these treatment options, changes in diet, sleep, and exercise can also help alleviate depression or anxiety. Talk to your doctor or midwife about changes you can make to help yourself feel better. Let your spouse or partner, family, friends and others know what you need and how they can help.

If your mood is affected in pregnancy or postpartum, you are not alone. Help is available. Call 1-866-364-MOMS (866-364-6667). This hotline is staffed by mental health professionals who are there to provide comfort and referrals.http://www.mededppd.org/mothers/get_help.asp.

The information in this document comes from a number of original sources. Any reproduction of this document must include source citations.
Cord Blood

A Guide for Your Pregnancy

NorthShore University Health System
**Frequently Asked Questions**

**What is cord blood?**

Cord blood is the blood remaining in your child’s umbilical cord following birth. It is a rich, non-controversial source of stem cells that must be collected at the time of birth.

**What are stem cells?**

Stem cells are the building blocks of our blood and immune systems. They are found throughout the body including bone marrow, cord blood, and peripheral blood. They are particularly powerful because they have the ability to treat, repair, or replace damaged cells in the body.

**Why do families choose to bank their newborn’s stem cells?**

Today, cord blood stem cells have been used in the treatment of nearly 80 diseases. Banking your baby’s stem cells guarantees the cells will be available to your family should you need to use them. Cord blood is also being used in emerging treatments, for diseases like Type 1 Diabetes and Cerebral Palsy, which require a child’s own cord blood. Stem cells from a related source are the preferred option for all treatments, and transplants using cord blood from a family member are more likely to be successful than transplants using cord blood from a non-relative (i.e., a public source).

**How is cord blood collected?**

The collection process is safe, easy, and painless for both mother and baby and does not interfere with the delivery. After the baby is born, but before the placenta is delivered, a medical professional will clean a 4 to 8 inch area of the umbilical cord with antiseptic solution and insert a needle connected to a blood bag into the umbilical vein. The blood flows into the bag by gravity until the umbilical vein is emptied. The blood bag is clamped, sealed, labeled, and shipped by courier to a processing lab. The collection itself typically takes about 2 to 4 minutes.

**Who can use my newborn’s stem cells?**

Your newborn’s stem cells have the potential to be used by the child, and, if there’s an adequate match, by siblings and sometimes parents. An adequate match using related cord blood is defined as a 3 of 6 HLA Match. When two people share the same HLAs, they are said to be a ‘match’ which means their tissues are immunologically compatible. Your newborn’s cord blood will always be a 100% for him or herself and there is up to a 75% probability of a match for a sibling.

**How long do cord blood stem cells last?**

Stem cells have been shown to be viable after more than 20 years of storage and the FDA does not require cryopreserved stem cells to have an expiration date. When stored in an undisturbed manner using liquid nitrogen vapor storage tanks, the stem cells do not age. If preserved and stored correctly, these cells are likely to be useful indefinitely.

**What are the odds of having a stem cell transplant?**

It is estimated that 1 in 217 people may need a stem cell transplant by the age of 70 using stem cells from the umbilical cord or bone marrow. The odds that someone would use the cells for regenerative medicine have been estimated to be 1 in 3.

**How much does it cost to preserve cord blood with a Family Banks?**

Generally, the cost for cord blood stem cell preservation has a one-time charge of about $2200 and an annual storage fee of about $125. Some companies offer payment plans and gift registries to help make banking affordable.

**What is cord tissue banking?**

Cord tissue banking is an additional service that some cord blood banks offer. Cord tissue, used with cord blood in transplant, has shown to improve engraftment in preclinical studies. Cord tissue stem cells also have the potential to treat additional disorders, like stroke, lung cancer, and rheumatoid arthritis. Some banks offer ‘bundle and save’ options when you bank both cord blood and cord tissue.

**Cord Blood Information**

**Family Banking vs. Public Banking**

**Family Banking**

- **Family Banking**
  - www.parentsguidecordblood.com
  - 1-877-LIFESOURCE

**Life Source**

- 1-847-298-9660
- 1-800 Marrow-2
- www.BeTheMatch.org/cord

**ITxM**

- 1-888-258-5384

**Cord Blood Registry**

- www.cordblood.com
  - www.viacord.com
  - 1-866-835-0968

**Public Banking**

**Must Enroll 4-6 Weeks in Advance**

**Outside Chicagoland:**

**National Marrow Donor Program**

- www.marrow.org
  - 1-800-MARROW-2

**Cord Blood Registry**

- www.cordblood.com
  - www.viacord.com
  - 1-888-258-5384

**Viacord**

- www.viacord.com
  - 1-866-835-0968
Breastfeeding offers physical and emotional health benefits for your baby as well as for you. We are here to help educate and support you in learning to provide nourishment to your newborn, and NorthShore offers numerous resources to help you breastfeed your baby successfully. We realize that not all new mothers may choose to breastfeed due to their own medical situation or medications they are on, or even scheduling difficulties, so we are here to support you whether you breastfeed or bottle-feed your newborn. For those of you who will be able to breastfeed, here is important information on the benefits as well as recommendations for encouraging the most successful breastfeeding techniques.

**Importance of Breastfeeding:**

**Benefits for baby:**
- Presence of antibodies in breastmilk help fights viruses and bacteria
- Reduced risk of gastroenteritis, diarrhea, urinary track, respiratory and ear infections, obesity and diabetes, SIDS, childhood cancers, asthma and allergies
- Digests easier than formula
- Physical contact and bonding help baby feel secure

**Benefits for mother:**
- Reduced risk of ovarian and breast cancer and osteoporosis
- May reduce risk of type 2 diabetes, rheumatoid arthritis and cardiovascular diseases. Burns extra calories, helps to lose pregnancy weight
- Hormones released help promote sense of attachment to baby and return uterus to pre-pregnancy size more quickly
- Reduce risk of postpartum hemorrhage
- Delays return of menstrual cycle
- Economically and environmentally friendly

**Getting off to a good start:**
- Importance of early skin-to-skin contact in the first hour after birth
  - Keeps baby warm and calm
  - Promotes bonding
  - Encourages exclusive breastfeeding
- Feeding cues and baby-led feedings
  - Ensure adequate milk intake and production
  - Frequent feedings encourage your body to make more milk
- Encourage rooming in/bonding
  - Recognize feeding cues
  - Physical closeness, skin-to-skin helps bonding and the baby feel safe
- Education
  - We encourage attendance at our prenatal baby basics and breastfeeding class—offered at both Highland Park and Evanston Hospitals (see northshore.org for class schedules and registration).
  - We encourage you to watch Emmi® video on breastfeeding. Ask us for information about the video or see the earlier sections of this packet.
- If you and your baby are separated after birth, we suggest that you begin pumping within six hours to stimulate hormones and increase milk production.

If you plan on using a breast pump in the future, check with your insurance for providers in your network.
Choosing a Physician for Your Newborn

As your pregnancy progresses, choosing a physician for your newborn is another important step. If this is your first child, you need to understand the importance of this decision. A good physician is more than a person to call when your baby has a fever. It is someone who will chart your child’s development, address concerns, answer questions about your child’s health, and see your child regularly for well and sick visits.

There are multiple resources available for choosing a physician for your newborn. The best place to begin your journey for choosing a physician is with your obstetrician, physician, family, friends and colleagues. Ask them for recommendations and start gathering a list of names. After you collate this information, write up some questions and call to set up an interview. When choosing a physician, you should take into account the following:

- Professional qualifications
- Healthcare viewpoints on various issues such as proactive/preventative medicine and nutrition
- Office hours—weekends, evenings, emergencies and after-hours answering service
- Physician cross-coverage and triage—who are the other physicians on the team when your physician is not available
- Location—more than one office
- Connection—online access to your child’s medical records
- Health insurance coverage—HMO/PPO—how do you pay for the visits?

Please visit northshore.org to learn more about our physicians and services, where you can view their video profiles and educational experience.

Also, see the list of NorthShore Medical Group Pediatricians and Family Medicine physicians included at the end of this packet.
Annual Well-Woman Exam

Top reasons why you should have an annual well-woman examination

**Birth Control**
Learn about choosing the right birth control method for you. Some examples include the birth control pill, intrauterine device (IUD), patch, condom, or implant.

**Cancer Screening**
Learn more about breast cancer, colon cancer, or other types of cancer.

**Vaccinations**
Get vaccinations against the flu, human papillomavirus (HPV), and more.

**Health Screening**
Get screened for high blood pressure, diabetes, bone density for osteoporosis, and more.

**Depression Screening**
Depression is a common but serious illness. Depression can be mild, moderate, or severe. To diagnose depression, your Obstetrician–Gynecologist or other health care provider will discuss your symptoms, how often they occur, and how severe they are.

**Sexually Transmitted Infections Screening**
Sexually transmitted infections (STIs), such as chlamydia, gonorrhea, and genital herpes are infections that are spread by sexual contact.

**Concerns About Sex**
Discuss what happens during intercourse, pain during sex, hormonal changes that change interest or response to sex, or different forms of sex.

**Weight Control**
Learn about body mass index (BMI), exercise, obesity, diet, surgery, and health problems associated with being overweight.

**Issues With Your Menstrual Period**
Discuss premenstrual syndrome (PMS), painful periods, your first period, heavy bleeding, or irregular periods.

**Preconception Counseling**
If you are planning to become pregnant, it is a good idea to have preconception counseling. Your Obstetrician–Gynecologist or health care provider will ask about your diet and lifestyle, your medical and family history, medications you take, and any past pregnancies.

**Other Reasons**
Get help with menopause symptoms, urinary incontinence, getting pregnant, or relationship problems.
Your Body After Baby: Stay Fit and In Control

After having a baby, it’s natural for all focus to be on the newborn, the new center of your universe. But it’s important to remember your body has just gone through a major physical event. Did you know that between 30 to 50 percent of moms report some loss of bladder control by age 40? Or that 25 percent of women notice some change in sexual function after six-months postpartum? These are problems that can diminish quality of life at home, in the bedroom or at work. And in most cases, these problems are preventable. Now is the best time to take control of your body and optimize your pelvic and core fitness, starting with a better understanding of “what’s going on down there”.

**Pelvic Floor:** A group of supportive muscles and connective tissues that keep your pelvic organs (uterus, bladder, bowels) in their proper positions.

A strong and healthy pelvic floor helps you maintain control over your bladder and bowels, and helps you to feel normal “tone”. Even during a ‘normal’ pregnancy and delivery, the pelvic floor undergoes enormous strain and can become stretched and weakened. After childbirth, it’s important to rehabilitate your pelvic floor.

**What Happens When the Pelvic Floor is Injured or Weak?**

- **Pelvic Organ “Prolapse”:** Weakened tissues can lead to a feeling of looseness, “dropping,” or pressure in the pelvic area and vagina.

- **Perineal Injury:** The perineum is the skin and muscle just below the vaginal opening. It has a lot of nerve endings and is sometimes affected by childbirth and/or episiotomy, leading to “looseness” or tenderness.

- **Stress Urinary Incontinence:** Accidental urine leakage occurring at the moment of a cough, sneeze, exercise or physical exertion. This impacts nearly 50 percent of moms by age 40, and if you have it—don’t worry, just get help. Over 90 percent of cases can be completely cured.

- **Overactive Bladder (“OAB”):** Strong urges to urinate, frequent trips to the bathroom and, sometimes, leakage. Do you “map” the next bathroom when you’re out of the house, anticipating the next sudden urge? If so, you may have OAB, a highly treatable condition.

- **Sexual Dysfunction:** Sexual changes after childbirth are common and often resolve with time and healing. But if not, there is help to be found, starting with a pelvic floor assessment.

We are here to help. If you have any of the above issues, please follow up with your physician.
## Your Birth Control Choices

<table>
<thead>
<tr>
<th>Method</th>
<th>How well does it work?</th>
<th>How to Use</th>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The Implant</strong></td>
<td>&gt; 99%</td>
<td>A health care provider places it under the skin of the upper arm. It must be removed by a health care provider</td>
<td>Long lasting (up to 3 years). No pill to take daily. Often decreases cramps. Can be used while breastfeeding. You can become pregnant right after it is removed.</td>
<td>Can cause irregular bleeding. After 1 year, you may have no period at all. Does not protect against human immunodeficiency virus (HIV) or other sexually transmitted infections (STIs).</td>
</tr>
<tr>
<td><strong>Progestin IUD</strong></td>
<td>&gt; 99%</td>
<td>Must be placed in uterus by a health care provider. Usually removed by a health care provider. Mirena® and Kyleena® may be left in place for 5 years. Skyla® and Liletta® may be left in place up to 3 years. No pill to take daily. May improve period cramps and bleeding. Can be used while breastfeeding. You can become pregnant right after it is removed.</td>
<td>May cause lighter periods, spotting, or no period at all. Rarely, uterus is injured during placement. Does not protect against HIV or other STIs.</td>
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</tr>
<tr>
<td><strong>Copper IUD</strong></td>
<td>&gt; 99%</td>
<td>Must be placed in uterus by a health care provider. Usually removed by a health care provider. May be left in place for up to 12 years. No pill to take daily. Can be used while breastfeeding. You can become pregnant right after it is removed.</td>
<td>May cause more cramps and heavier periods. May cause spotting between periods. Rarely, uterus is injured during placement. Does not protect against HIV or other STIs.</td>
<td>May cause more cramps and heavier periods. May cause spotting between periods. Rarely, uterus is injured during placement. Does not protect against HIV or other STIs.</td>
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<tr>
<td><strong>The Shot</strong></td>
<td>94-99%</td>
<td>Get a shot every 3 months. Each shot works for 12 weeks. Private. Usually decreases periods. Helps prevent cancer of the uterus. No pill to take daily. Can be used while breastfeeding.</td>
<td>Private. Usually decreases periods. Helps prevent cancer of the uterus. No pill to take daily. Can be used while breastfeeding.</td>
<td>May cause spotting, no period, weight gain, depression, hair or skin changes, change in sex drive. May cause delay in getting pregnant after you stop the shots. Side effects may last up to 6 months after you stop the shots. Does not protect against HIV or other STIs.</td>
</tr>
<tr>
<td><strong>The Pill</strong></td>
<td>91-99%</td>
<td>Must take the pill daily. Can make periods more regular and less painful. Can improve PMS symptoms. Can improve acne. Helps prevent cancer of the ovaries. You can become pregnant right after stopping the pills.</td>
<td>Can make periods more regular and less painful. Can improve PMS symptoms. Can improve acne. Helps prevent cancer of the ovaries. You can become pregnant right after stopping the pills.</td>
<td>May cause nausea, weight gain, headaches, change in sex drive – some of these can be relieved by changing to a new brand. May cause spotting the first 1-2 months. Does not protect against HIV or other STIs.</td>
</tr>
<tr>
<td><strong>Progestin-Only Pills</strong></td>
<td>91-99%</td>
<td>Must take the pill daily. Can be used while breastfeeding. You can become pregnant right after stopping the pills.</td>
<td>Can be used while breastfeeding. You can become pregnant right after stopping the pills.</td>
<td>Often causes spotting, which may last for many months. May cause depression, hair or skin changes, change in sex drive. Does not protect against HIV or other STIs.</td>
</tr>
<tr>
<td><strong>The Patch</strong></td>
<td>91-99%</td>
<td>Apply a new patch once a week for three weeks. No patch in week 4.</td>
<td>Can make periods more regular and less painful. No pill to take daily. You can become pregnant right after stopping patch.</td>
<td>Can irritate skin under the patch. May cause spotting the first 1-2 months. Does not protect against HIV or other STIs.</td>
</tr>
<tr>
<td><strong>The Ring</strong></td>
<td>91-99%</td>
<td>Insert a small ring into the vagina. Change ring each month. One size fits all. Private. Does not require spermicide. Can make periods more regular and less painful. No pill to take daily. You can become pregnant right after stopping the ring.</td>
<td>One size fits all. Private. Does not require spermicide. Can make periods more regular and less painful. No pill to take daily. You can become pregnant right after stopping the ring.</td>
<td>Can increase vaginal discharge. May cause spotting the first 1-2 months of use. Does not protect against HIV or other STIs.</td>
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# Your Birth Control Choices

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<td>Male/External Condom</td>
<td>82-98%</td>
<td>Use a new condom each time you have sex</td>
<td>Can buy at many stores. Can put on as part of sex play/foreplay. Can prevent early ejaculation. Can be used for oral, vaginal, and anal sex. Protects against HIV and other STIs. Can be used while breastfeeding.</td>
<td>Can decrease sensation. Can cause loss of erection. Can break or slip off.</td>
</tr>
<tr>
<td>Female/Internal Condom</td>
<td>79-95%</td>
<td>Use a new condom each time you have sex</td>
<td>Can buy at many stores. Can put in as part of sex play/foreplay. Can be used to prevent anal and vaginal sex. May increase pleasure when used for vaginal sex. Good for people with latex allergy. Protects against HIV and other STIs. Can be used while breastfeeding.</td>
<td>Can decrease sensation. May be noisy. May be hard to insert. May slip out of place during sex.</td>
</tr>
<tr>
<td>Withdrawal/Pull-out</td>
<td>78-96%</td>
<td>Pull penis out of vagina before ejaculation (that is, before coming)</td>
<td>Costs nothing. Can be used while breastfeeding.</td>
<td>Less pleasure for some. Does not work if penis is not pulled out in time. Does not protect against HIV or other STIs. Must interrupt sex.</td>
</tr>
<tr>
<td>Diaphragm</td>
<td>88-94%</td>
<td>Must be used each time you have sex. Must be used with spermicide</td>
<td>Can last several years. Costs very little. May protect against some infections, but not HIV. Can be used while breastfeeding.</td>
<td>Using spermicide may raise the risk of getting HIV. Should not be used with vaginal bleeding or infection. Raises risk of bladder infection.</td>
</tr>
<tr>
<td>Fertility Awareness</td>
<td>76-95%</td>
<td>Predict fertile days by: taking temperature daily, checking vaginal mucus for changes, and/or keeping a record of your periods. If you use more than one of these, avoid sex or use condoms/spermicide during fertile days.</td>
<td>Costs little. Can be used while breastfeeding. Can help with avoiding or trying to become pregnant.</td>
<td>Must use another method during fertile days. Does not work well if your periods are irregular. Many things to remember with this method. Does not protect against HIV or other STIs.</td>
</tr>
<tr>
<td>Spermicide</td>
<td>72-82%</td>
<td>Insert spermicide each time you have sex</td>
<td>Can buy at many stores. Can be put in as part of sex play/foreplay. Comes in many forms: cream, gel, sponge, foam, inserts, film. Can be used while breastfeeding.</td>
<td>May raise the risk of getting HIV. May irritate vagina, penis. Cream, gel, and foam can be messy.</td>
</tr>
<tr>
<td>Emergency Contraception</td>
<td>58-94%</td>
<td>Ulipristal acetate EC works better than progestin EC if you are overweight. Ulipristal acetate EC works better than progestin EC in the 2-5 days after sex.</td>
<td>Works best the sooner you take it after unprotected sex. Can take EC up to 5 days after unprotected sex. If pack contains 2 pills, take both together.</td>
<td>Can be used while breastfeeding. Available at pharmacies, health centers, or health care providers. Call ahead to see if they have it. People of any age can get some brands without a prescription. May cause stomach upset or nausea. Your next period may come early or late. May cause spotting. Does not protect against HIV or other STIs. If you are under age 17 you may need a prescription for some brands. Ulipristal acetate EC requires a prescription. May cost a lot.</td>
</tr>
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</table>
Effectiveness of Family Planning Methods

Most Effective

Less than 1 pregnancy per 100 women in a year

Reversible

Implant

0.05%*

Intrauterine Device (IUD)

LNG - 0.2%  Copper T - 0.8%

Permanent

Male Sterilization (Vasectomy)

0.15%

Female Sterilization (Abdominal, Laparoscopic, Hysteroscopic)

0.5%

How to make your method most effective

After procedure: little or nothing to do or remember.

Vasectomy and hysteroscopic sterilization: Use another method for first 3 months.

Injectable: Get repeat injections on time.

Pills: Take a pill each day.

Patch, Ring: Keep in place, change on time.

Diaphragm: Use correctly every time you have sex.

Fertility awareness-based methods: Abstain or use condoms on fertile days. Newest methods (Standard Days Method and Two-Day Method) may be the easiest to use and consequently more effective.

Male Condom 18%

Female Condom 21%

Withdrawal 22%

Sponge 24% parous women 12% nulliparous women

Fertility-Awareness Based Methods

1234567 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4

JANUARY

24%

Spermicide

28%

Least Effective

* The percentages indicate the number out of every 100 women who experienced an unintended pregnancy within the first year of typical use of each contraceptive method.

Condoms, sponge, withdrawal, spermicides:

Use correctly every time you have sex.

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Condoms, Sponge

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