

Maternal-Fetal Medicine

INFORMATION FOR OUR HIGH-RISK OB PATIENTS

This packet is intended to give you some additional information about our practice and to help answer some of the many questions that may arise during the coming months of your pregnancy. However, please know that it is not intended to discourage any questions at the time of your office visits but rather to be an aid during your pregnancy - so keep it as a reference while your pregnancy progresses. We want you to feel free to speak with our nurses, medical assistants, ultrasound technologists, or your doctors when you have questions.

PHYSICIAN COVERAGE

The physicians in our group who provide your obstetrical care are Dr. Vernon Cook, Dr. Stanley Gall, Dr. Jeffrey King, and Dr. Jonathan Weeks. We have specific training and experience in the care and treatment of women, their pregnancies, and the high-risk complications of pregnancy that may develop. Additionally, we collaborate and co-manage patients with the general obstetricians in the department – Dr. Carol Brees, Dr. Tanya Franklin, Dr. Sara Petruska, Dr. Elaine Stauble, and Dr. Rita Fleming along with some of the sub-specialty fellows. Essentially all of our clinical practice and obstetrical deliveries take place at University Hospital.

Patients may see their physician in our office for all their obstetrical visits. However, we encourage you to consider scheduling some visits with the other physicians since all unscheduled services for our obstetrical patients, including deliveries, will be provided by the physician-on-call in the hospital, which may not be your primary doctor.

HOURS AND TELEPHONE NUMBERS

Our **main office number to schedule an appointment, sonogram, or fetal test** is: (502) 271-5999 Fax: (502) 271-5994

This number is in operation 24 hours per day, seven days a week. During normal workday hours (8:30 – 4:00 M-F), it is answered by our office staff. You may call to ask questions or to speak with your OB care providers.

Depending on the medical urgency of your call, we will respond appropriately. Messages left on the medical assistant's line after 4:00 PM will be answered the following day. At night and during holidays or weekends, the phones are forwarded to our Answering Service. They will take a message and page the on-call doctor for emergencies only. To have a prescription refilled or obtain test results, please call during normal business hours since the physician on-call will not be able to handle this for you.



University Women's HealthCare follows UofL guidelines for closing during inclement weather. Please listen to you local news stations for University of Louisville Health Sciences Center "staff" postponements or closings.

In emergency circumstances,

If you are unable to reach our office at (502) 271-5999 or do not reach our answering service, go directly to the Labor and Delivery Triage area on the 3rd Floor at University Hospital. The attending doctor in the hospital will begin any necessary emergency treatment. **Please remember that if you call an ambulance, they MAY only take you to the nearest hospital.**

To **discuss billing, insurance questions, or insurance statement problems**, call (502) 271-5996. This is to our billing office's number and is answered during normal business hours.

RESIDENT and MEDICAL STUDENT INVOLVEMENT

University Hospital is the main teaching hospital for The University of Louisville School of Medicine. As full-time University of Louisville faculty, we are responsible for the clinical instruction of medical students in the area of Obstetrics and Gynecology. Additionally, The University of Louisville provides post-doctoral residency training in Obstetrics and Gynecology. Training of both medical students and residents is part of our faculty responsibility and we take that responsibility seriously.

In our private office, you will be seen by your doctors; however, when hospitalized, residents and students will participate in your care. Residents and students do not act independently but only after discussion with us and at our direction. Without your help in the medical education process, there will not be an experienced physician to care for you and your family in the future. We appreciate your understanding of our very important teaching role.

If you have questions about this arrangement, please speak with us early in your care.

OFFICE VISITS

At one of the early obstetrical visits, we will review your medical and obstetrical history and prepare a record that will eventually be sent to the hospital as part of your delivery chart. This visit will include a general physical examination, Pap smear, basic laboratory tests, and a discussion of the general recommendations for the months ahead.

From the time that pregnancy is first suspected, it might take several additional weeks before the pregnancy can be confirmed to be progressing normally. Once the fetal heartbeat has been heard, most pregnancies continue without major problems. We are usually able to see the heartbeat around six to eight weeks during a sonogram and hear it by 12 weeks using a handheld Doppler device.

Follow-up visits generally will be at monthly intervals until 28 weeks, every two - three weeks until 36 weeks, and then weekly until delivery. Depending on the specific circumstances of your pregnancy, we may recommend more frequent visits.

During at least one visit, you should review with our billing staff the requirements of your insurance coverage regarding referrals and pre-certification for your care. If your insurance plan requires a referral form, it is critical that you obtain it from your primary care physician (internist or family physician).

At follow-up prenatal visits, our staff will first determine weight, blood pressure, and perform urine testing. Then, the doctor will examine you, check the baby's heartbeat, size, and position. We will review your progress, answer any questions you may have, and make recommendations for the management of your pregnancy. Please remember that our entire staff is a valuable resource for answering your questions.

You may consider having First Trimester Screening between 11 and 13 weeks. This "screening test" includes a sonogram to measure the thickness of tissue on the back of the baby's neck plus

measurement of some substances in the maternal blood. Using the results, the chance of your baby having a chromosomal anomaly (such as Down syndrome) is determined.

You may also consider maternal serum alpha-fetoprotein testing (AFP) or "Multiple Marker Testing (Quad Test)" between 15 and 20 weeks. This test was developed not only to help detect some brain and spinal cord (neural tube) abnormalities but also to help detect some, but not all, chromosomal abnormalities. An information pamphlet is available to describe these tests.

Sonograms or ultrasounds are performed for specific and indicated medical reasons only. An "anatomic sonogram" is usually done at about 20 weeks to verify, as best as possible, that the structures and organs of the baby appear normal as of that time. Sonograms are not performed "just to take a look and see if it is a boy or girl". A normal report only indicates that things appeared normal at the time of the sonogram but does not guarantee that some problem will not develop during the remainder of your pregnancy.

Between 24 - 28 weeks, we will check you for evidence of diabetes and may re-test for anemia (low blood count). If you are Rh negative, we will generally recommend that you receive an Rh Immune Globulin injection. At 35-36 weeks, we will usually obtain a vaginal culture for Group B Strep.

We try our best to establish an accurate due date for your delivery. This is often referred to as the estimated date of confinement (EDC) or estimated delivery date (EDD). REMEMBER, up to 25% of women will deliver 2-7 days AFTER that date.

LAB/TEST RESULTS

If you have had any lab work or diagnostic tests, please allow 7-10 business days before calling to request the results. Even though you may have been told that the results would be ready in 1-2 days, we need to receive the written report and your doctor still needs to review it. **Office staff is not able to provide you with the results of your tests until your doctor has reviewed the report and signed off on the results.**

PRESCRIPTIONS

If you are an established patient and need a refill on your medications, please contact your pharmacy and have them fax us a refill request. Our fax # is 271-5994.

Please allow at least 24-48 hours to refill your medications as your doctor may not be immediately available for authorization. Be aware that the on-call physician will not refill your medications. We are happy to provide you with mail order prescriptions. Please allow 1 week from the time we receive your request for these to be written and mailed to you. It is your responsibility to forward the prescriptions to your mail-order pharmacy.

KEEPING NOTES

We recommend that you keep a notebook throughout the pregnancy as a record of the questions you have and the advice we have given. This may serve as a reference for the future.

SYMPTOMS TO LOOK FOR

We should be notified any time that vaginal bleeding, pain, suspicion of amniotic fluid leakage, severe headache, or unusual swelling occurs. Also, any other symptoms that are of concern to you are best discussed with us so we can determine what course of action is appropriate. Any symptoms that appear to be persistent and not resolving could be an indicator of a more serious condition.

CHILDBIRTH PREPARATION CLASSES and LITERATURE

We encourage you to buy a general book about pregnancy to help answer some of your questions. Currently, the one we recommend is "**Your Pregnancy and Birth (5th Edition)**". This book was developed by The American College of Obstetricians and Gynecologists (ACOG) and contains a lot of verified information about pregnancy and the care of your baby. It is also available in Spanish. It costs \$14.95 and can be ordered by calling ACOG's toll free number 800-762-2264 or by visiting their web site at www.acog.org. Alternatively, you can order it through www.barnesandnoble.com

Many countries developed maternal and child health care handbooks. In 1993, then Health and Human Services Secretary Donna E. Shalala said, "it's time for America to do the same. Every mother wants a healthy pregnancy and every baby needs a healthy start". As a result, the **Health Diary** was developed as a handbook to educate pregnant women and new mothers about fetal development, nutrition, what to avoid during pregnancy, scheduling doctor visits and vaccines, and newborn care. Download a copy of Health Diary at www.ask.hrsa.gov/Downloads/BABYBK1.PDF

The U.S. Department of Health and Human Services also has a great resource about pregnancy that can be accessed at <http://www.womenshealth.gov/pregnancy>. It offers healthful recommendations for women to follow before and during pregnancy, including dietary tips and precautions against alcohol and drug usage.

An additional resource entitled "**HealthLife Prenatal Self-Care Guide**" offers easy-to-follow flow charts to help you determine what is a real emergency, when to call the doctor and when self-care is appropriate. It costs about \$6.49 and is available from The American Institute for Preventive Medicine by calling 800-345-2476. A specific book on nutrition is available, "**Eating Healthy for a Healthy Baby**". It discusses the importance of general nutrition on the developing baby and provides over 100 recipes. The book is available for about \$27 through Amazon.com.

The electronic age has a lot of information, but be careful! Most of it on the Web is not reviewed or validated. As a starting point, there is patient information available at www.acog.org. There are a number of other Internet sites for information about pregnancy. We certainly have not seen them all nor do we review their content or advice. Feel free to explore these sites or other areas of interest. In general, the more you know about pregnancy the better. But remember that much of the information on other sites is opinion and not scientifically validated. One site that has a number of fun areas is www.parenting.ivillage.com. However, always bring your questions back to the office for discussion and resolution.

Lastly, we believe that Prenatal Classes will increase your awareness of the changes that occur during pregnancy. They also help prepare you for the birth process and your new role as a parent. *Since they tend to fill-up early, we advise you to sign-up for prenatal classes no later than the 20th week of your pregnancy.* FREE classes at University Hospital can be arranged by calling (502) 562-3325. If you take classes outside of University Hospital, we would advise you to take a tour of our Labor & Delivery facility. Tours of L&D can be arranged by calling the same number 562-3325.

A FEW HELPFUL SUGGESTIONS

You may continue any recreation in which you have been participating such as golf, tennis, swimming, and bowling provided we have not recommended specific restrictions on your activities. Swimming is probably the best due to the benefits of buoyancy from the water. Running should probably be stopped by 20 weeks. It is always best to check with us before starting any vigorous or new activity.

Baths and showers are permitted throughout pregnancy, although we advise that you avoid saunas and hot tubs. Intercourse is usually safe during pregnancy unless there is bleeding, a question of

ruptured membranes, or other reason for restriction. Use of a condom may reduce possible infection risk.

Up to 28 weeks, travel during pregnancy is acceptable unless there are specific medical complications. When traveling by air, increase your fluid intake and make sure you walk around during the flight at least each hour. If traveling by car, you should stop every 1 – 1 ½ hour and walk around. These recommendations are to decrease the risk of developing a blood clot in your legs. Our general suggestion is to stay within the immediate Louisville area (within 1 - 1½ hours) for the last six - eight weeks of pregnancy since the onset of labor is unpredictable. Questions about long distance travel should be discussed with your doctor.

No matter how you are traveling, **WEAR YOUR SEATBELT.**

- Always wear both the lap and shoulder belt.
- Buckle the lap belt low and tight on your hipbones, below your belly.
- Never put the lap belt across your belly.
- Place the shoulder belt off to the side of your belly and across the center of your chest (between your breasts)—never under your arm.
- Make sure the belts fit snugly.

A well-balanced, high protein diet during pregnancy is important. Women of normal weight should have a total weight gain about 25 pounds during pregnancy. After the first trimester, a three to four pound weight gain per month is appropriate for these women. Women who are overweight or underweight need individual recommendations. Individual consultation with a nutritionist can be arranged by contacting one of our staff. Prenatal vitamins should be taken each day during your pregnancy and for at least six weeks post-partum. If you are breastfeeding, we advise that you take a prenatal vitamin for as long as you breastfeed.

Recently, there has been some research suggesting that excessive weight gained during pregnancy, that is not lost, places the woman at increased risk of developing breast cancer in her later years. The additional pounds may induce changes in breast tissue that increase susceptibility to breast cancer. Alternatively, the increased risk may be due to elevated levels of circulating estrogen that results from the additional fat cells.

Smoking and all alcohol consumption should be eliminated during pregnancy. All "recreational drugs" should be stopped. One - two servings of caffeine containing beverages per day (coffee, tea, Coke, etc.) are thought to be safe during pregnancy. The use of any prescription medication or non-prescription supplements, including herbs, should be discussed with us and approved before use in pregnancy.

Dental care should not be changed by pregnancy. You should brush, floss and have your teeth cleaned regularly. There is no reason to delay any recommended care by your dentist due to your pregnancy. Local anesthetics are completely safe during pregnancy.

You can treat minor illness such as a cold with Plain or Extra-Strength Tylenol, Sudafed, and Robitussin DM, or a sore throat with Chloraseptic or Cepacol lozenges. A complete listing is available from our nursing staff.

Maternity clothes that look good and fit can be a real problem to find. Liz Lange has a line of maternity clothes at Target or try 'a pea in the pod' stores. Some additional suggestions for shopping on-line are:

- www.motherhood.com
- www.duematernity.com
- www.gap.com
- www.MaternityMall.com

FOOD ADDITIVES, HERBS, ALTERNATIVE MEDICINES, and NUTRITIONAL SUPPLEMENTS

In general, we do not advise you to take any these substances during pregnancy. Extensive clinical trials have not been preformed on pregnant patients. Additionally, there may be wide variations in the printed content of some capsules or tablets. Lastly, there have been no studies on any potential harmful effects for your baby. "Natural" does not necessarily mean safe and tested!

PREVENT FOODBORNE DISEASE

Foodborne disease can be deadly during pregnancy. Therefore, we recommend that you follow these basic guidelines during your pregnancy:

1. Cook thoroughly all food from animal sources, such as beef, pork, and poultry.
2. Wash raw vegetables before eating.
3. Avoid unpasteurized milk or foods made from raw milk.
4. Wash hands, knives, and cutting surfaces with hot, soapy water after handling uncooked foods.
5. Avoid soft cheeses such as feta, Brie, Camembert, blue-veined, and Mexican-style cheese.
6. Avoid cold cuts or reheat them before eating.
7. Cook hot dogs, other ready-to-eat foods, and leftovers to steaming-hot temperatures.

While fish is an important part of a healthy diet, some fish from certain areas may have harmful amounts of chemical contaminants such as mercury; PCBs, and pesticides. Therefore, we recommend that pregnant women, women who may become pregnant, nursing mothers, and young children not eat shark, swordfish, king mackerel, or tilefish.

You may eat up to two meals per week of fish or shellfish low in mercury such as shrimp, canned light tuna, salmon, pollock, or catfish. Albacore or "white" tuna has more mercury than canned light tuna.

PAYMENTS and INSURANCE

It is important that **ALL** patients discuss their insurance coverage with our billing staff early in their prenatal care AND after any change in your insurance card, company or plan since this might affect your insurance coverage, co-pay requirement, or you financial responsibility. If required by your insurance company, you must obtain the necessary referral forms - so that you qualify for coverage of our care. Most insurance plans have pre-certification and other requirements that you must know about and follow. By contract, we are required to collect any co-pay that you are obligated to pay. We ask that you pay your determined responsibility for obstetrical services by the 28th week of pregnancy. If you have any problems or questions regarding your account, please call (502) 271-5996. If you should leave our care before delivery, you will be charged only for office visits, lab tests, and any other services performed. Any overpayment will be refunded.

The Basic Obstetrical Fee includes:

- Initial complete history and physical examination
- Normal prenatal visits to our office
- Uncomplicated labor and vaginal delivery
- Post partum care and examination

The Basic Obstetrical Fee does NOT include:

- Hospital charges
- Anesthesia charges

- Extra visits for care of “non-obstetric” conditions such as colds, sore throats, twisted ankles, vaginal or urinary tract infections
- Special services

Additional charges will be submitted to your insurance carrier for:

- All laboratory tests (including Pap smear)
- Fetal tests
- High-risk classification
- Amniocentesis
- Complications during pregnancy, labor, or delivery
- Cesarean delivery
- Sonograms or Ultrasounds
- Biophysical Profiles, Amniotic Fluid evaluations
- Non-stress Tests
- Newborn Circumcision
- Injections or infusions of medications
- Cord blood collection for banking of stem cells
- Non-obstetric visits during pregnancy such as sore throats or urinary tract infections

We will be happy to fill out any forms that you may need for **medically recommended** disability or Family Medical Leave Act during or after your pregnancy. There will be a \$25 processing fee for all forms, letters, and updates.

IMPORTANT: If you have **ANY** change in your insurance coverage during your pregnancy, you must notify our billing staff promptly. We must submit your obstetrical claim to the correct carrier and we may need to precertify with your new carrier. However, you should know about the requirements of your policy regarding precertification, approved length of hospital stay, and requirements for notification of your carrier following admission to the hospital. Remember that the insurance policy is between you and your carrier. You should anticipate receiving separate bills for anesthesia services, consultations with other physicians, pediatric and nursery care, outpatient laboratory services, and University Hospital for in-patient care.

DISABILITY DURING PREGNANCY

The great majority of expectant mothers can continue to work until delivery without any problem. Sometimes, however, the physical changes of pregnancy, the demands of a woman’s job, or medical complications during pregnancy can create workplace difficulties.

Please let us know if you have any concerns in that regard. We usually are able to suggest simple steps to deal with the fatigue, “morning sickness”, or aches and pains of normal pregnancy that can be particularly challenging while you’re at work. You should inform your Human Resources Department that you are pregnant and they may be very helpful to proactively resolve any problems. If you have more serious symptoms or concerns about potential workplace hazards to you or your baby, we will evaluate the situation and respond accordingly.

When **medically indicated**, we will recommend that a pregnant woman be placed on disability leave from her job. However, such leave is rarely required and, in the absence of a serious condition that would endanger the health of the mother or baby, medical ethics prevent us from making such a recommendation. Although, we will do everything we can to reduce or eliminate pregnancy-related difficulties you may be having at work. This includes a written statement or contacting you employer, when appropriate, to recommend helpful adjustments or alterations to your duties.

FLU SHOTS

The Centers for Disease Control and Prevention recommends flu vaccination for all pregnant women during the flu season (October through March). For this reason, we also recommend that you get this vaccination. The injectable vaccine is safe for you and your baby. The flu vaccine reduces the chances of developing complications associated with the flu and helps protect your baby. If we are able to obtain the vaccine, we will make it available through our office. However, the nasal spray vaccine should NOT be used during pregnancy.

BACK PAIN

Low back pain is a common complaint during pregnancy. In general, it is due to the loosening of the back and pelvis joints secondary to the hormonal changes of pregnancy. You may try Tylenol, heating pad on low, or Dr. Scholl's For Her Comfort Insoles. Additionally, a warm bath and/or massage may be helpful. If the pain is rhythmic, it may represent preterm labor and you should call us to discuss that possibility.

PRENATAL TESTING

Some fetal problems can be identified during pregnancy and the following narrative briefly describes some of the possible tests. For specific indications, such as an unusual syndrome or condition, we will usually refer you for genetic counseling. However, if you would like a consultation regarding any aspect of prenatal diagnosis or medication/environmental exposure, please discuss it with your doctor. An appointment with a Genetic Counselor can easily be arranged.

1) **AMNIOCENTESIS**: an ultrasound is used to guide the insertion of a needle through the abdomen, uterus, membranes, and sometimes placenta, into the fluid filled sac surrounding the fetus so that a sample of the fluid (about a tablespoon full) may be withdrawn and tested. For genetic testing, it is usually performed between the 15th and 18th menstrual weeks. The fluid contains fetal cells that are examined for the genetic or chromosome makeup of the fetus to detect problems such as Down syndrome (Trisomy 21). Results are generally available in about 7-10 days. Amniotic fluid is also tested for alpha-fetoprotein level that may be elevated in the presence of a neural tube defect, which is an abnormal development of the skull or spinal column. Lastly, amniocentesis may be necessary, particularly for diabetic patients, to confirm the maturity of the baby's lungs just prior to delivery.

While bleeding, infections, pregnancy loss, rupture of membranes, preterm labor, and other technical problems are among the possible complications of this procedure, they occur uncommonly - about 1 out of 300-500 procedures.

2) **CHORIONIC VILLUS SAMPLING (CVS)**: is done earlier in pregnancy than amniocentesis, usually during the 10th through the 14th week. Either a small catheter is placed through the vagina and cervix into the uterus or a needle is inserted through the lower abdomen and uterus to obtain a small sample of the placental tissue to study the baby's chromosomes.

Similarly, bleeding, infection, pregnancy loss occur with about the same frequency as amniocentesis. Rarely, failure to obtain placental tissue or other technical problems can occur with this method.

3) **MATERNAL SERUM ALPHA-FETOPROTEIN (MSAFP)**: is measured in a sample of mother's blood taken between the 15th and 20th week. This protein from the fetus enters both the amniotic fluid and the mother's blood. Maternal blood levels may be high in the presence of a neural tube defect such as when the skull or spinal column does not develop normally; alternatively, it may be elevated when there are twins or the dates are incorrect.

Studies indicated that maternal blood levels of AFP were abnormally low with some chromosome abnormalities such as Down syndrome or Trisomy 21. Therefore, the “**Multiple Marker or Quad Test**” was developed to more accurately determine the risk of delivering a genetically abnormal child. However, none of these tests provides a precise answer. False positive results (about 5% of tests) may occur that suggest an increased risk when the fetus is perfectly normal. Alternatively, a level that is considered normal may not identify a problem with the baby - a false negative test.

Abnormal results usually necessitate additional testing that may include repeat blood testing, a sonogram to confirm gestational age, or amniocentesis. If you have an abnormal test, we will call to discuss the results and schedule you for an appointment to review your particular circumstance.

4) **TAY SACHS DISEASE**: is an inherited genetic disorder that causes destruction of the nervous system and mental retardation. It is caused by the lack of an enzyme known as hexosaminidase-A. Testing their blood for levels of Hex-A can identify Tay Sachs carriers. The carrier frequency is 1 of 30 in people of Ashkenazi Jewish (Eastern European) or Russian descent resulting in an affected offspring occurring 1 in 3,600 births. Carrier frequency is 1 of 300 in the general population. **Canavan Disease** is a severe progressive neurologic disorder for which there is no cure. It is rare outside the Ashkenazi community. It is estimated that the carrier frequency in the Ashkenazi Jewish population is approximately 1 in 40. Thus, the risk for an affected offspring in this population approximates 1 in 6,400 births. Carrier testing is also available for **Gaucher Disease**. For all of these diseases, if both parents are identified as carriers the risk that the child will have the disease is 25%.

5) **SICKLE CELL DISEASE**: is an inherited disease that destroys red blood cells. Approximately 8% of African-Americans carry the sickle cell gene. Doing a simple blood test can screen the parents. If both parents have the gene, the infant will have a 25% chance of being affected with sickle cell disease. Tests can then be performed to determine if the fetus is affected.

6) **CYSTIC FIBROSIS**: is an inherited genetic disorder that results in excessive mucus production within the lungs and pancreas. Affected individuals are more prone to pneumonia and diabetes. Approximately, 1 of 29 Caucasians (Northern and Southern Europeans or Ashkenazi Jewish individuals) carry this abnormal gene. The Hispanic-Latino frequency is 1 of 46 while it is carried by 1 of 65 with African-American heritage. Asian-Americans uncommonly carry this gene, approximately 1 out of 90. A test can screen for the presence of this gene. Current screening tests identify the most common mutations but not every mutation of the gene can be identified. Therefore, even patients with a negative test could have a child with CF, although very rarely. If both patients have the gene, the infant will have a 25% chance of being affected with cystic fibrosis.

CORD BLOOD BANKING or STORAGE - checking with Kosair Children’s Hospital

After delivery, the blood left in the placenta and umbilical cord contains special cells (stem cells) that can be stored and used to treat a variety of life-threatening diseases including leukemia and other blood or immune disorders. Fortunately, these diseases are uncommon and the cost for storage is significant. It is estimated that the likelihood that you will ever need the stem cells is 1 in 400 to 1 in 8,000. Arrangements must be made long (weeks) before the onset of labor. Some companies require that specific and expensive tests be done before the blood can be accepted for storage. We recognize that the decision to store your baby’s blood is a difficult and personal one. Feel free to discuss your concerns with us.

Companies that can be contacted by telephone or on the web for additional information on cord blood banking are:

American Cord Blood Program	508-756-3076
Cord Blood Registry	888-267-3256
Cord Blood Donor Foundation	650-635-1456
CRYO-CELL	800-786-7235
Lifebank	877-LIFEBANK
New York Blood Center	800-933-BLOOD
ViaCord	866-668-4895

WHEN TO CONSIDER GOING TO THE HOSPITAL

In normal situations expect that strong, regular, and persistent contractions of the uterus occurring more frequently than every 10 minutes for greater than 1 hour and/or leakage of amniotic fluid from the vagina will signal that the time for delivery is approaching. While the timing for going to the hospital depends on the individual circumstances, please call us to help clarify the situation.

In addition, abnormal events such as bleeding, steady pain, fainting, and any other symptoms that are of concern to you should be reported to us promptly. In most cases, there will be adequate time to call our office or answering service and for us to get back to you to discuss what to do.

However, in emergency circumstances, such as the occurrence of heavy bleeding or constant pain, you may leave a message with our answering service or office and proceed directly to the hospital where necessary care will be started while they contact us.

Sometimes, when the situation is more uncertain as to whether or not it is time to go to the hospital, several phone conversations or visits to the office or hospital for examination may be necessary. Under no circumstances should you refrain from calling us out of embarrassment or uncertainty. Remember, if you call an ambulance, they MAY take you to the nearest hospital.

WHAT TO LOOK FOR

The active labor process which results in delivery usually requires a regular pattern of contractions which, especially in first pregnancies, come every five to six minutes and persist at that interval or closer for more than an hour.

In second and subsequent pregnancies, the frequency of contractions is not as important as the intensity and the duration of the contractions.

Significant contractions will last progressively longer, up to a minute or more, and continue despite changing from one position to another. During these contractions you will find it difficult to indent the wall of the upper uterus with your fingertips. Also, there is often a low backache, often extending around to the front, associated with the contractions of true labor.

On the other hand, false labor contractions will usually last less than a minute, come at irregular intervals, and tend to become more irregular as you walk around or change position. These may come and go many times before true, active labor begins. The best advice is to call when you feel you have the need to do so based on the above guidelines, your previous history for labor, your distance from the hospital, and driving conditions.

BLEEDING

When the cervix begins to open, sticky mucus may be passed and occasionally it will be blood stained. This is called "bloody show" and it can occur hours, days, or weeks before the actual onset of active or true labor. You do not need to call us if you have bloody show unless you are less than 34 weeks gestation.

Of more serious importance is continuous bright red bleeding which may be similar in amount to a heavy menstrual period. This is always a reason to call us and immediately proceed directly to the hospital.

FLUID LEAKAGE

The amniotic fluid, which is contained in a sac surrounding the baby, may begin to leak any time during the pregnancy either before or after the onset of contractions. Usually it is clear but sometimes may be yellowish, greenish, or bloody. It is watery rather than thick in consistency, and usually without odor. There may be a continuous small trickle of fluid or a big gush. In any case, at anytime during pregnancy when this has either definitely or questionably happened, be sure to call us. We always want to know when this has occurred and we will usually send you directly to the hospital.

PRETERM LABOR

Accurate identifying who is at risk for developing preterm (<37 weeks) labor is almost impossible. Approximately 1 in 8 babies is born prematurely. Certain historical risk factors may be helpful such as prior preterm delivery, cervical insufficiency, or uterine anomalies. We suggest that every patient be aware of any changes in their "feelings" during pregnancy as certain changes may suggest the development of preterm labor. Particular symptoms that may be important are increased urinary frequency, increased vaginal discharge (particularly if it is watery), increased pelvic pressure, low back ache or thigh pain, or a pattern of uterine contractions or cramping that occur more frequently than 4 times per hour. If these symptoms develop, please call the office immediately so that you and your pregnancy can be evaluated.

FETAL MOVEMENT

Every baby has its own pattern of fetal movement. You should get to know your baby's pattern. We suggest that every woman begin to "count" fetal movements when they reach 32 weeks gestation, sometimes earlier if you have medical problems. While every baby does sleep for varying periods of time during pregnancy, fetal activity is a general sign of fetal health and well-being. We suggest that you time how long it takes to count 10 fetal movements each day. If the baby has 10 or more movements in a 60-minute counting period, the baby is fine and you can wait until the next fetal movement counting session. If the baby does not move 10 times during the 60 minutes, you should call the office promptly. While most often everything is all right, we will ask you to come to the hospital for a test to make sure the baby is healthy and happy but just asleep.

Remember to ask our staff for a sheet that also explains this and provides an easy counting method.

ADMISSION TO THE HOSPITAL

You should have a plan for the best way to arrive at the hospital. You should be familiar with routes, parking, hospital entrance, and the location of the Information Desk inside the main entrance of the hospital and the Labor and Delivery area on the 3rd Floor.

In emergency circumstances or when you think wheelchair assistance is needed, go directly to the Emergency Department. However, when you feel the labor process is progressing normally and you can walk, you may proceed directly to Labor and Delivery.

Pre-admission forms will be given to you in our office. These should be completed and mailed to the hospital at least one month before your expected date of delivery. Submission of this form will expedite your admission to the hospital and allow for pre-certification by the hospital.

In some circumstances, we may ask you to go to Labor and Delivery Triage Area for evaluation to decide if admission is appropriate. If we are not at the hospital we will be notified and plan your care according to your special circumstances. Our presence in the labor suite will be timed to the medical requirements of your particular situation, which will vary from patient to patient. Rest assured, there is an attending physician in Labor and Delivery 24 hours a day, 7 days a week. Some patients, after evaluation at the hospital, may be in an early phase of labor and can benefit from walking around or resting and allowing the natural labor process to develop. Some may be allowed to go home.

Admission will consist of an assessment by the admitting nurse and a resident physician. It will include a list of questions, an evaluation of the vital signs (e.g., blood pressure, temperature, etc.), the fetal heart rate, the labor pattern, the amount of dilation of the cervix, and other important data. This is a good time to indicate to the nurse any special preferences you may have for your labor and delivery. You will be asked to sign a "Consent for Obstetrical Care and Delivery" and a "Consent for Cesarean Delivery" if an emergency should develop. If you have any questions, please ask your nurse. You will be asked if you have a Living Will or Advanced Directives. They deal with what you want us to do in the unlikely event you are unable to tell us. If you need information on these issues, your nurse can contact someone to help you.

ORAL INTAKE

When there is a question of whether or not you are in labor, the best advice is to avoid solid food and take only clear liquids. Once active labor is underway, food should be avoided and liquids should be minimized since digestion is slowed and the stomach tends to fill, aggravating any tendency toward vomiting. However, ice chips, sips of juice, Popsicles, hard candy, and lollipops are usually permitted depending on the circumstances.

It is important to remember that during labor, unplanned situations may occur which require emergency anesthesia and it is always best under these circumstances that the stomach be empty. This recommendation is made to help protect your health.

GROUP B BETA STREP

Over the past few years, physicians and the public have focused on group B streptococci (GBS) as an important cause of poor pregnancy outcome, newborn infection, and even newborn death. This organism is present in the vagina and/or rectum of between 10% and 40% of all pregnant women. Therefore, these women are said to be "colonized" and referred to as "carriers". The organism cannot be eliminated by antibiotic therapy. There is no reason to treat this organism during pregnancy unless it is present in the urine/bladder. Serious complications can occur when the newborn baby develops infection caused by this organism. GBS infection occurs in about 7,600 cases yearly in the United States (rate of 1.8/1,000 deliveries) and results in about 300 newborn deaths.

No strategy is 100% effective in eliminating the possibility of newborn infections. We recommend obtaining a culture from each pregnant woman at 35-37 weeks and treating all women with positive cultures with antibiotics during labor. You should speak with your provider if you have questions.

HUSBANDS OR SIGNIFICANT OTHERS

Patients are encouraged to prepare for labor and delivery through the various classes, literature, and other sources of instruction that are available. In addition to the support given by the physician and nurses, the father of the baby is encouraged to be present during the labor and delivery if he wishes.

Individuals who are not so inclined should feel comfortable about their decision. Occasionally you may wish to have other family members or friends present during the labor. Generally, the father of the baby or another significant person is allowed to be present for a Cesarean delivery as long as an epidural or spinal anesthetic is used.

INTRAVENOUS FLUIDS (IVs)

IV access can be lifesaving in emergency situations. Therefore, an IV is usually started during active labor and must be in place prior to the administration of epidural or any other pain control medicines. When you have gone for long periods without eating or drinking or when you are bleeding, an IV is usually advised.

ACTIVITY

Either at home or in the hospital, it is often best to walk around during the early phase of labor for as long as it is comfortable for you to do so. This may enhance the quality of contractions and shorten the total length of time in labor.

PREPS and ENEMAS

Routine shaving is not done except in the area of the incision if a Cesarean delivery becomes necessary. Routine enemas are not given on admission to the hospital. An enema may be indicated in situations where the lower bowel needs to be cleared to make room for the baby. In general, if you feel it is necessary and are not bleeding, you may administer a Fleets enema before coming to the hospital. Feel free to discuss this with us when we call.

FETAL MONITORS

It is generally recommended that continuous electronic fetal monitoring be performed during labor to evaluate the health of the baby. External fetal monitors provide information about the frequency of uterine contractions and the fetal heart rate from two small flat instruments placed over the mother's lower abdomen. Internal monitors have two components, a soft thin plastic tubing which is placed alongside the baby to reflect uterine contractions and a tiny spiral tipped wire that transmits the fetal heart rate directly from the baby. For the internal system to be used the cervix must be dilated and the membranes ruptured. With either system, adjustments can usually be made so that patients can change position and not feel restricted. It has been our experience that when patients see how the monitor works, they find it helpful and reassuring.

MEDICATIONS and ANESTHESIA

Our intent is for most patients to be able to enter the final stages of labor reasonably comfortable while maintaining the ability to deliver the baby through their own efforts and to be awake. However, circumstances will vary in each labor and with each woman.

Many patients, using breathing and relaxing techniques, can do well with no medication at all or simply local anesthesia if sutures are necessary. Others, for various and unpredictable reasons, such as the position of the baby's head, may need one or more medications or anesthetic techniques to allow them to manage their labor. Epidurals may slow the labor process and increase the need for a forceps/vacuum delivery or cesarean section. Prolonged pushing and forceps/vacuum delivery may result in future pelvic floor dysfunction (bladder problems, fallen uterus, etc).

We may recommend using small amounts of injectable pain relief medications, local anesthesia such as pudendal block, or regional anesthetics such as epidural. Usually, epidural or spinal is the anesthesia of choice for Cesarean delivery.

It is very uncommon for patients to be asleep for delivery. But when the need for rapid delivery arises, such as when a Cesarean delivery must be accomplished very quickly, general anesthesia is often the safest method.

The circumstances at the time will dictate which of the various methods is necessary or preferable. That is the best time to discuss these options and make choices with the Anesthesiologist or us. If you wish to speak with an Anesthesiologist in preparation for your labor, please let us know and a consultation can be arranged.

EPISIOTOMY

Our philosophy is to perform an episiotomy ONLY when it is necessary. An episiotomy may be necessary in some cases in order to create adequate space for delivery without vaginal or pelvic muscle/support tears. It is usually preferable to a tear which can be more difficult to repair, more uncomfortable healing, and more unpredictable as to where it will occur. In many first pregnancies, a tear will occur if an episiotomy is not performed.

DELIVERY

Delivery tables/beds and pillows can be usually arranged so that the patient's legs, head, and shoulders are positioned to allow maximal efficiency for the birth process with reasonable comfort and ultimate safety for the baby and mother. Restraints are not used. Supports for the feet and legs are available. While most deliveries take place in the Labor Room, complicated deliveries may take place in the Delivery/Operating Room.

Preferences such as subdued lighting during the delivery or delay of cord clamping can be provided in most cases. Remember that you should discuss your wishes during labor with the doctor who will be delivering your baby.

EARLY BREAST FEEDING

We support breastfeeding and encourage beginning breastfeeding as soon as the baby and mother are in stable condition. The mother should certainly hold her infant as soon as possible but actual nursing may not be comfortable while any suturing is being completed. Immediately after this, nursing can be initiated in peace and quiet (and privacy). Additionally, until you can be positioned appropriately, both you and your baby may become frustrated with attempts at breastfeeding. Similar arrangements can usually be made after Cesarean delivery when you are in the Recovery Room. A Certified Lactation Consultant is available to each mother to provide support and advice with breastfeeding through individual instruction and/or films and literature during and after your stay on our postpartum unit.

If you have problems with breastfeeding after discharge from the hospital, you may call us at (502) 562-3325 and ask to speak with a Lactation Nurse.

CESAREAN DELIVERY

Last minute things can happen during any labor that might indicate a Cesarean delivery is the best way to deliver your baby. If speed is essential, general anesthesia (going to sleep) may be necessary. However, in most cases, there is ample time to review the options, to discuss why a Cesarean may be necessary and preferable, and to permit epidural or spinal anesthesia to be administered. The area of the incision is shaved, a catheter is placed to empty your bladder, and then the surgery is performed. It generally takes about 60 to 90 minutes from the start to finish. Under normal circumstances, the father of the baby or your support person may be present for the delivery.

After the operation, the mother spends an hour or more in the Recovery Room where the father and often the baby may visit and nursing may usually be initiated.

CHOOSING A PEDIATRICIAN

You should start your search for a pediatrician during the last half of your pregnancy. Speak with your friends and neighbors about their pediatrician. Questions you should consider are: is the doctor readily available, what about emergency care, are there multiple doctors in the practice, and do they support breast feeding or bottle feeding. In general, you will want a pediatrician that is relatively close to home since you will probably be seeing him or her frequently. You may want to visit with or "interview" your potential pediatrician. You are welcome to ask the doctors or nurses for recommendations as there are several excellent Pediatricians and Family Physicians associated with University Hospital.

Upon admission to the hospital, the nurses will ask you to designate who the pediatrician will be. It is important for your baby's health that you are able to give them an answer. If you remain undecided, the UofL Pediatrics department will care for your baby while in the hospital. They will forward all records and communicate with your chosen Pediatrician for on-going care. After your baby is born, any questions you have about your baby should be directed to doctors and nurses caring for your baby.

CIRCUMCISION

If you have a boy, the performance of a circumcision is an elective procedure that has no proven medical necessity. You should decide before labor if you want it done for your son. Discuss the procedure with your doctor so you are comfortable with the choice. The pediatrician or obstetrician usually performs the circumcision on the day following delivery. You will be asked to sign a Consent Form prior to the procedure being done. Since the procedure is elective, your health insurance may or may not reimburse the doctor's fee for performing the procedure. Please check with your insurance carrier so you will not be surprised.

CAR SEATS

It is a law that all babies be secured in a car seat while in the car. Your baby will not be released from the hospital unless you have a car seat to carry the baby home.

POST-PARTUM INSTRUCTIONS

A Discharge Instruction Sheet is included in the packet you are given on the postpartum floor. You are advised to review it before leaving the hospital. This sheet will provide general information regarding the post partum period. If you have any questions after reviewing this Information Sheet, please ask your nurse while hospitalized or call our office. The following specific suggestions may be helpful. If you are breastfeeding, eat a regular diet with extra protein (meat and dairy products, especially milk) and drink generous amounts of fluid. In general, you should not diet while breastfeeding, as calories are necessary for the baby. If you are not breastfeeding, eat a regular diet. Weight loss following a delivery should be gradual. Don't be discouraged. Generally, weight reduction should be over a period of several months. After all, your weight gain did not happen all at once. Give yourself time to adjust to your new environment.

POSTPARTUM VISIT

Your postpartum visit should be approximately four (4) to eight (8) weeks following delivery. Please call the office as soon as possible to schedule this appointment. If you have any problems before

your visit, call the office for advice. If you have had a Cesarean delivery, we usually want to see you in about 2 weeks to check on the incision.

BOWEL HABITS

You should usually have a bowel movement each day. Drink more water and eat more fiber, including bran and fresh fruits and vegetables. Metamucil, Citrucel, Colace, Miralax, Benefiber, or other bulk formers are available over the counter at the drug store to help prevent or treat constipation. If you need a laxative, try one of the following at bedtime:

Milk of Magnesia	2 tablespoons
Agarol	2 teaspoons
Senokot Granules	1 teaspoon
Senokot Tablets	1-2 tablets

MEDICATIONS

It is recommended that you continue your prenatal vitamins for at least one month after delivery. Additionally, they should be continued them as long as you are breastfeeding. Generally, Plain or Extra-Strength Tylenol or Advil is sufficient to alleviate mild discomfort once you are home. If you have had a Cesarean Delivery or feel that something stronger is necessary for a few days, be sure you get a prescription before you are discharged from the hospital since it cannot usually be called in to your pharmacy.

BREAST CARE

Breastfeeding: Always nurse in a comfortable position. Wear a nursing bra. Be sure the infant gets your entire nipple in the mouth. Increase your fluid intake if you are breastfeeding. Be sure to break the suction before removing the infant from the breast. Pushing down on the infant's chin with your thumb does this. If your breasts become over full, try to express some milk either by hand, pump, or by standing in a warm shower. Any reddened areas of the breast should be reported to us; as should chills or fever.

If Not Breastfeeding: Wear a tight bra that gives good support to the breasts. Wear it day and night for at least two weeks. Try to limit your intake of fluids for the first few days. If the breasts become tender and full, DO NOT squeeze, manipulate, let the shower spray on your chest, or try to express the milk – this will only increase the milk. Try intermittent ice packs to decrease the engorgement. If your breasts become painfully swollen, try standing in a shower and let a little warm water run on your chest. This will often release some of the milk without stimulating additional milk formation. Any reddened or tender areas of the breasts should be reported to us.

When You Discontinue Breastfeeding: No medications are completely effective in stopping your milk flow. The general approach is: stimulation of the breast will continue to bring in milk, so once the decision is made to stop nursing substitute bottle feeding for breastfeeding gradually. Add a bottle-feeding every 2 days or so as you decrease the frequency of breastfeeding. Keep the breasts well supported with a comfortable support bra. During this time, aspirin or Tylenol every four hours may be necessary for discomfort. Limit fluid intake moderately. After the lessening of engorgement, milk may leak from the breasts for days so keep clean, absorbent pads inside your bra.

EXERCISE

Pelvic Muscle Exercise (Kegel Exercise): These should be started immediately. This is an isometric type of exercise and consists of tightening (contracting) and relaxing the muscles of the pelvic floor. The key to learning the exercise is developing an awareness of the tightening of the muscles. During

the learning period, each time you urinate, try to stop the flow of urine midstream. In order to do so, you must "pull up" or tighten certain pelvic muscles. You may relate the same tightening sensation also to preventing a bowel movement. Once you have learned the exercise, the more it is practiced, the stronger the muscles become and the more you will be aware of the tightening or contracting as you exercise. The exercise can be done sitting, lying, or standing.

Points to remember about exercise:

1. Try to hold each contraction at least 3 seconds and relax 3 seconds.
2. Do not strain down.
3. Do the strong contraction at least 5-10 times each exercise period.
4. Have several exercise periods each day.
5. Make the exercise a habit. Select daily activities that will remind you to do the exercise.

Additional Exercises. (After a VAGINAL delivery only.) Each of the following exercises may be started in the hospital, repeated a few times daily, and then continued with greater repetition at home to help restore abdominal muscle tone:

- Modified sit-ups with the hands along the legs.
- Modified leg lifts - first one leg at a time.
- While lying flat, bring both knees up toward the chin then back down.

After a Cesarean delivery, we do not recommend abdominal exercises for at least 6-8 weeks. In general, if any exercises that you are doing cause pain, you are doing too much too early.

EPISIOTOMY STITCHES

The sutures will dissolve on their own within 3 to 6 weeks. Do not be alarmed if you see small pieces of thread or feel a sticking or pulling sensation around the vaginal area at this time - it is entirely normal. To become comfortable more quickly, try sitting in a small amount of warm water in the tub for 15 or 20 minutes once or twice daily (sitz baths) for a week or so following delivery.

MARITAL RELATIONS

Four weeks following either vaginal or cesarean delivery, healing is usually sufficient to permit resumption of intercourse. You may be uncomfortable or overly dry, so go slow. Because of low hormone levels, you may find that a vaginal lubricant such as KY Jelly, Surgilub, or Astro-Glide is necessary.

It is important that you make a decision about family planning since pregnancy may be possible even if you are breast feeding completely. You should discuss your desires with your doctor before leaving the hospital.

AFTER CESAREAN DELIVERY

Your first visit to the office should be scheduled about two weeks after discharge from the hospital, unless an earlier visit is recommended. If the adhesive strips (Steri-Strips) placed over the incision have not fallen off after being home for a week or so, they should be carefully removed and the area cleansed with soap and water.

Rest periods at least twice daily are especially important since the loss of regular sleep at night adds to the usual fatigue that accompanies recovery from any type of major surgery. You should postpone starting the abdominal exercises listed above until the incision is comfortable - about six – eight weeks. In the meantime, try to increase the amount of daily walking you do and stand as straight as possible.

Congratulations on your pregnancy!

PERSONAL NOTES: