

Prenatal Care Information and Resources

Prenatal care is the health care that a woman receives before her baby is born. Ideally, it should begin before conception with an evaluation, physical exam and prescription for prenatal vitamins. Prenatal care is an ongoing educational process, which focuses on pregnancy, birth, infant care and parenting skills. Very early in prenatal care you should decide where your baby will be born and whom you want as your health care provider.

TAKING GOOD CARE OF YOURSELF: THE MOST IMPORTANT PART OF PRENATAL CARE

Good, basic guidelines:

- Stop all alcohol and recreational drug use.
- Stop smoking and avoid consistent or prolonged exposure to second-hand smoke.
- Limit your caffeine intake to the equivalent of one cup of coffee a day.
- Eat a healthy, well balanced diet; maintain a good fluid intake (8 glasses of water daily).
- Participate in moderate exercise regularly.
- Sleep 7-8 hours a night.
- Take your prenatal vitamins daily.
- Acetaminophen use for occasional minor aches or pains is acceptable.
- Otherwise, avoid taking any over-the-counter or prescribed medication unless your health care provider knows you are taking them.
- Avoid contact with noxious chemicals such as household cleaners, paint, varnish and hair dye.
- Avoid changing kitty litter and wear gloves when gardening to decrease exposure to infections that may be present in cat litter and soil.
- All meat, poultry, fish and seafood should be well cooked. Fish may contain high levels of mercury that could cause brain damage in a developing fetus. Limit your intake of fish purchased in stores and restaurants to an average of 12 ounces per week (6 ounces/week if the fish are caught by friends or family). Women who are planning pregnancy or are pregnant and/or nursing should not eat shark, swordfish, king mackerel or tilefish.

Report these signs to your **obstetrical** health care provider:

- Pain or urgency with urination or the sensation of incomplete bladder emptying.
- Blood in the urine.
- Vaginal discharge that changes in color; has an unusual odor or causes external vaginal irritation.
- Fever above 100 degrees.
- Pain anywhere in the body that causes interference with daily activities or sleep, and does not respond to brief rest and/or Acetaminophen.
- Any episode of vaginal bleeding - sudden onset of heavy bleeding (saturating a pad every 1-2 hours) or pain may require evaluation in an emergency department.

YOUR FIRST PRENATAL CARE VISIT

The first prenatal visit will be longer and more involved than other visits. It will include a detailed personal and family medical and genetic history for both you and your partner, a review of your diet and lifestyle, and a complete physical exam. A panel of laboratory tests will be ordered. Screening tests for cystic fibrosis and other genetic conditions may be discussed and/or recommended. A treatment plan will be developed outlining your future visits. Usually prenatal appointments are scheduled once a month for the first seven months, then twice a month in the eighth month of pregnancy, and every week after that until your baby is born. Additional visits or tests are sometimes necessary if special concerns or risks are identified.

Your health care provider will be responsible for notifying you of the test results.

LATER VISITS

After your first prenatal visit, successive visits are usually shorter. At each visit your health care provider will check your weight and blood pressure, test your urine for protein and sugar, measure the growth and position of the baby, and monitor the baby's heartbeat. Take this opportunity to ask questions about labor and delivery, childcare and parenting. You will receive information about problems to be alert for and you will have periodic additional testing. It is easy to forget questions that you think of between prenatal visits. Keep a notebook handy to write down your questions as they come up; take the list with you when you see your health care provider.

PRENATAL/PARENTING CLASSES

You and your partner are encouraged to attend classes to prepare for having a baby. Childbirth preparation classes will help you get ready for labor and delivery. Parenting classes can teach you basic skills to care for a baby's needs. Breast-feeding classes, sibling classes, and grand parenting classes may be offered by the hospital. Your health care provider will let you know what classes are offered and provide information about fees.

THE EMOTIONAL AND PHYSICAL CHANGES OF PREGNANCY

The idea of actually being pregnant and becoming a parent takes some adjustment. Some anxieties and conflicted feelings about your new condition are natural. Share your concerns, feelings and your expectations for the future with your partner or support person. Physically, the first 12 weeks (first trimester) of pregnancy bring about subtle changes in the breasts and skin. Nausea is common during this time and you suddenly find that afternoon naps become very appealing. Throughout pregnancy emotional changes may occur unexpectedly.

During the second trimester you become visibly pregnant and start to feel the baby move, making the pregnancy much more of a reality. This is time for anticipatory planning and problem solving related to the realities of parenting - sharing household tasks, childcare, etc. A problem in any area, whether related to sex, money, issues of responsibility, or respecting personal boundaries, can impact other aspects of life. All problems are best solved sooner rather than later, and communication skills are the key to solving many of them. Sometimes it helps to seek out counseling. In the first months after your baby is born, it will be much harder to find the time and energy to go for counseling.

During the third trimester you are pleased to know that the baby will soon be here, but these final three months are physically less comfortable for you. Emotions can be very intense for you and for your partner. It is a time of growing excitement and looming anxiety - the added stress will take a toll on both of you. Now is the time to center yourselves around each other. A frenzy of preparation can cause fatigue and create a wedge between you and your partner that can expand after the baby arrives. As with the first two trimesters, the key is communication and sensitivity to each other's emotions. You can sometimes decrease anxiety by talking with your partner/support person, your health care provider, or a close friend.

Initial prenatal visit

Once your pregnancy has been confirmed, the prenatal period officially begins. Prenatal care involves a series of regular examinations and tests by a physician or midwife. In an uncomplicated pregnancy, most women will see their practitioner once a month until the 32nd

week of pregnancy. At this point, you will be seen every two weeks in the final month of pregnancy (37 weeks until delivery) your visits will be seen every week.

The prenatal period not only gives the expectant mom time to get ready for the baby's arrival, but it is also an opportunity for the expectant parents to get to know the people who will be directly involved in care during labor and delivery. The initial prenatal visit is often the longest. During this first visit, a complete physical examination along with a detailed family history and blood and lab work will be performed. The physician or midwife will calculate your baby's due date and that date will serve as a reference point in future visits when the baby's growth is assessed.

During the first prenatal visit, the physical examination involves an overall assessment of the mother. This includes an assessment of heart, lungs and thyroid function along with an examination to rule out any other infection. Next, the practitioner will perform an obstetrical exam that includes a look at the mother's abdomen and measurement of the height of the uterus, along with an internal or pelvic exam.

All prenatal visits include a measurement of the mother's weight, recording of the mother's blood pressure and urine testing. A series of blood tests are also performed during the initial prenatal visit. The blood and laboratory tests that are most often recommended during the first visit include:

Hemoglobin: This test checks the mother's blood to determine if she is anemic. Women usually become slightly anemic as the pregnancy progresses, but very low levels of iron will need to be treated.

Blood type and RH with antibody screening: This test determines the mother's blood RH type and antibody factor. If the mother's blood type is RH negative and her partner's is RH positive, special monitoring of the fetus is necessary to check for RH incompatibility.

Rubella titer: This test checks the level of antibodies to the German measles virus that are present in your blood. If a woman becomes infected with German measles (rubella) during her pregnancy, her developing fetus could be at risk.

Syphilis screen: This test checks for the presence of syphilis infection. If present, treatment can be initiated so that the fetus is not harmed.

Hepatitis B screen: This test checks for infection with the Hepatitis B virus, which can be passed to an unborn child.

HIV screen: This test checks for the AIDS virus. If a woman is found to have HIV infection, she can be treated during pregnancy, which will reduce the chances of her passing the virus to her unborn child.

Pap smear: This test checks for abnormal cervical cells, which could indicate cervical cancer.

Gonorrhea and chlamydia cultures: Both of these infections, if present in the mother, must be treated to prevent infection of the baby at birth.

Urinalysis: This test examines the urine for the presence of bacteria, sugar or protein. It is usually performed at each prenatal visit.

Subsequent prenatal visits

Subsequent prenatal visits are usually shorter than the initial visit. During each visit the mother's weight will be recorded. The mother will gain about 10 to 12 pounds in the first half of pregnancy and another 15 to 17 pounds during the second half. Experts believe that a sensible and safe weight gain during pregnancy is 25 to 35 pounds.

A blood pressure measurement also is recorded at each visit. Sudden rises in blood pressure can indicate complications during pregnancy.

Urine testing is performed at all prenatal visits. Specifically, the urine is checked for the presence of sugar and protein. Sugar in the urine could indicate gestational diabetes and the presence of protein could indicate toxemia, a pregnancy complication.

Your physician or midwife will measure the height of the uterus during each visit. As the baby grows, the fundus or top of the uterus begins to rise in the abdomen. By comparing the monthly or weekly measurements, your practitioner can evaluate the overall growth of the baby. Toward the later part of your pregnancy, your practitioner will check the baby's positioning by feeling around your abdomen and identifying different parts of the baby's body. As your baby's due date approaches, your practitioner may perform an internal examination to look for signs that labor is getting closer.

Each prenatal visit also should include a discussion about how the mother feels overall and whether or not she has any concerns. Your practitioner will probably ask you specific questions about symptoms such as headaches, visual problems, dizziness or swelling of the ankles, face and hands. Any of these symptoms could indicate a pregnancy complication. Also, your practitioner will check to be sure that you do not have any vaginal bleeding or abdominal cramping.

Somewhere between nine to 12 weeks of pregnancy, the baby's heartbeat can be heard with a special device called a doppler. The fetal heart tones, once identified, are recorded at each visit.

As your pregnancy advances, the following blood and laboratory tests most likely will be recommended:

Maternal Alpha-Fetoprotein (AFP) or expanded Alpha-fetoprotein testing which also includes measurements of estriol and HCG: This series of blood tests is usually performed between the 16th and 18th week of pregnancy. AFP is often elevated in the blood of mother carrying a baby with a neural tube defect in which the spinal cord does not close normally. Currently, AFP is also being combined with measurements of estriol and HCG levels to screen for Down's syndrome and other chromosome abnormalities like trisomy 13 and trisomy 18. If the AFP is low and if the other tests are low and high, respectively, an increased risk of Down's syndrome is present. Remember, this blood test only tells you if you are at risk for having a baby with any of these disorders. Follow-up testing is needed to confirm neural tube defects or chromosome disorders. Much controversy surrounds AFP testing because the test can produce many false-positive results. At times, woman carrying normal fetuses might get false results. Your health care provider will urge you to get more testing to see if the initial AFP screening is correct. It is best to talk to your practitioner about your individual risks and concerns regarding AFP testing, before consenting to this blood test.

Diabetes screening: During the 24th to 28th week of pregnancy, a glucose tolerance test is usually performed. Following ingestion of a sugary drink, a woman's blood sugar level is measured to check for a condition of pregnancy called gestational diabetes. If gestational diabetes is present, special efforts will be necessary to maintain the mother's blood sugar at a normal level. This can often be accomplished with dietary restrictions but may, at times, require the mother to take insulin. In the vast majority of cases, gestational diabetes resolves following

delivery, although women who develop diabetes during pregnancy should be monitored later in life for the development of diabetes.

Hemoglobin: Most practitioners will recommend a repeat screening to check a woman again for evidence of anemia somewhere around the 26th to 28th week of pregnancy.

Group B streptococcus swab: This test involves a culture of the lower vagina to check for the presence of strep B infection. It is usually performed toward the end of pregnancy between the 32nd and 36th week. If the infection is present, the mother can be treated during labor to prevent infection of the baby during the birthing process.

Other diagnostic tests sometimes used during pregnancy

Medical technology has made significant advances during the last 30 years. It is now possible to detect potentially serious problems in a developing fetus prior to birth. Your practitioner will take many factors into consideration before advising you to undergo additional testing in pregnancy. Some of these considerations include maternal age, pre-existing maternal health problems, experiences and outcomes of previous pregnancies, history of genetic or congenital disorders, presence of multiple fetuses or other high-risk conditions during pregnancy.

All decisions to undergo diagnostic testing during pregnancy should be made jointly by both the parents and the practitioner. Before consenting to any procedure, you should feel comfortable that all of your questions have been satisfactorily answered and the risk and benefit of each test has been thoroughly explained.

The most common diagnostic tests used in pregnancy include:

Ultrasound: An ultrasound or sonogram test is often recommended at various stages throughout pregnancy. It allows the practitioner to evaluate the fetus at different stages of development. An ultrasound exam uses high-frequency sound waves to create a visual image of the fetus. Ultrasound exams are considered noninvasive, and they do not involve any exposure to radiation. During the test, a special gel is applied to the woman's abdomen and a transducer is then placed on the belly so that sound waves can be conducted directly into the uterus. Often, pictures of the developing fetus are printed and given to the parents. Sometimes the sex of the fetus can be determined during an ultrasound procedure. Many practitioners are now routinely recommending ultrasound to monitor otherwise normal pregnancies.

Amniocentesis: Amniocentesis is a procedure in which amniotic fluid is taken from the uterus using a long needle that is inserted through the abdominal wall. It is usually performed between the 16th and 18th week of pregnancy. It is currently the most popular technique used to screen for genetic and chromosomal disorders. Amniocentesis is preceded by an ultrasound exam to determine the baby's position and the location of pockets of amniotic fluid. Once the amniotic fluid is obtained, the cells are cultured and stimulated to grow for one to two weeks. After that, the cell chromosomes can be examined and test results determined. Amniocentesis does carry a slight risk of miscarriage (about one in 200) so the risk/benefit ratio of the test must be considered before consenting to this procedure. Most practitioners routinely offer amniocentesis to pregnant women age 35 and older because they have an increased risk of having a baby with Down syndrome.

Chorionic villus sampling (CVS): CVS was developed in the 1970s as an alternative to amniocentesis to detect genetic or chromosomal abnormalities. It can be performed earlier in the pregnancy (usually between the 9th and 13th week) than amniocentesis, thus providing earlier results. CVS involves the sampling of chorionic cells (obtained either by placing a catheter through the cervix or through the abdominal wall) that can provide a complete picture of the

genetic make-up of the developing fetus. CVS does slightly increase the risk of both miscarriage and infection, so it is important to weigh the risk/benefit ratio before consenting to this procedure. Your practitioner can help you in evaluating your individual risk for genetic or chromosomal abnormalities.

Non-stress test (NST): During a NST, the fetal heart rate is observed by hooking the mother up to a fetal monitor. Evidence of accelerations in the heart rate that correlate with fetal movement are looked for. A reactive tracing in which the heart rate of the fetus varies is considered a good finding. A NST may be recommended when a woman notices a decrease in fetal movement or when the due date has passed.

Stress test (OCT): The oxytocin challenge test is usually performed when results of the stress test are questionable. This test is very similar to the non stress test, except that the woman is given a small amount of medication to induce uterine contractions. The purpose of the OCT is to see how the fetus will respond to the normal stresses of labor.

Bio-physiological profile: This test is also used to determine fetal well-being. It involves an ultrasound examination of the fetus to determine the type of fetal movement and muscle tone that is present, along with the amount of amniotic fluid.

Fetoscopy: This invasive test involves the insertion of a lighted instrument through the abdomen and uterus into the amniotic sac, where the fetus can be seen and photographed. The risk of fetal loss is estimated to be three percent to five percent. Therefore, the test is indicated only for those women who will benefit from having a fetal disorder identified and possibly treated during pregnancy.

Percutaneous umbilical cord sampling (PUBS): This test involves the removal of blood from the umbilical cord for further study. It is performed under ultrasound guidance and makes it possible to detect several blood diseases not detectable by amniocentesis.

Although the vast majority of pregnancies do not have complications, a small percentage of women do experience problems. Special testing during pregnancy often can identify problems early on, when effective treatment could resolve the problem. If your practitioner recommends any special testing in pregnancy, don't be afraid to ask questions about the test and the risk involved to both the mother and baby. The more information that you have, the better you will feel about making a decision to undergo testing during your pregnancy.