# A GUIDE FOR PREGNANCY

A manual for our pregnant patients

Eighteenth Edition

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# Congratulations!

## And welcome to
## Cheyenne Obstetrics and Gynecology!

Pregnancy is a time of excitement and wonder, but it can also be a time of anxiety about the unknown. Many questions are sure to arise as the pregnancy continues. The physicians at COG have written and assembled this manual in an attempt to allay some of your fears and to help answer some of the more common questions you may have as your pregnancy progresses.

Please feel free to call us at any time you have any problems or questions, but *refer to this manual first*, as many of your questions may be answered on the following pages.

For routine questions and non-emergencies, call:
**634-5216** between 9:00 AM to 5:00 PM, M-F.

For medical emergencies, call:
**634-5216** ***ANYTIME***.

For our out-of-town patients, or when you need to be away from Cheyenne, call our toll-free number:
**1-888-571-7184**

# PHONE CALLS

**Please call during office hours if possible, so we can refer to your medical record. The nurses will return your call and, after consulting one of the physicians, will help you with any questions. There is always a doctor on-call at night and on weekends for emergencies. (The doctor on-call will not be able to get test results or make appointments as they seldom have your chart available to them after hours.)**

When you need to call, please try to explain your problem briefly to the nurse. Make the call yourself rather than relaying information through another person. It may not be possible to make a diagnosis over the phone and we may ask you to come to the office, Labor & Delivery, or the Emergency Room to be seen. The nurse or ER doctor may see you first before consulting with us, but one of our physicians will always be available for emergencies.

Emergency calls receive immediate attention, but less urgent matters will be addressed as our schedule permits. Patients with scheduled visits in the office will have priority over non-emergent telephone calls. If your problem is not an emergency, please be patient, but if your problem is an emergency, be sure to explain that when you call.

If you cannot find the answer to your non-emergency questions in this manual, you can jot them down and ask us in person at your scheduled visit.

We will discuss your lab results at your next visit, unless there is an abnormality that we need to discuss before then. For abnormal results that need follow-up, we will call you.

Also, please have the name and phone number of your pharmacy available when you call.

# PRENATAL CARE

At your first prenatal visit, a thorough medical history will be taken and a complete physical exam, including a pelvic exam, will be performed by one of the providers. Any conditions or factors that might place your pregnancy at risk for complications will be identified, and a plan to manage them or prevent them will be developed. This plan might include the consultation of other medical specialists.

We will try to establish a due date at your first visit. A reliable last menstrual period is often the most helpful, but a pelvic exam and sometimes an ultrasound exam may be used to establish your due date. Once that date has been determined, it is usually not changed, despite future exams or ultrasounds.

Your first appointment will be the longest and most complex, but return visits are less time consuming. The frequency of follow-up visits will depend on the assessment of your risk factors. An uncomplicated pregnancy will be seen every 4 weeks for the first 28 weeks of gestation, every 2-3 weeks until 36 weeks gestation, and then weekly until you deliver. Flexibility is desired though, and your schedule might differ a little. At 36 weeks and beyond, a pelvic exam will often be done to see if your cervix has started to dilate.

If your pregnancy is high risk, you may need to be seen on a more frequent basis, and we will discuss that with you on an individual basis.

Our obstetric practice is truly a group practice. To take advantage of each of the doctor's strengths and special talents, we suggest that you rotate your prenatal visits among all of the providers so you will meet us all and we can all meet you.

However, if you have a favorite, we will try to accommodate your wishes to see them more frequently when schedules permit.

# PRENATAL TESTING

Prenatal labs and cultures are an integral part of every pregnancy. They provide your doctor an important tool to safeguard your pregnancy. The initial labs drawn after your first visit include a panel of tests that screen for abnormalities and risk factors. These labs, drawn for each and every pregnancy, include a complete blood count, blood type, and antibody screen. Also included are a test to check the effectiveness of your rubella vaccination, an RPR test to check for exposure to syphilis, and a test for exposure to Hepatitis B and HIV. Both of these viruses can be treated during pregnancy to protect the health of your baby and you during the pregnancy.

We offer a quad marker screen between 15 and 20 weeks to evaluate for increased risk for Down syndrome, open neural tube defects (open spinal cord abnormalities), and abdominal wall defects. This blood test is optional and will be discussed with you by your provider. (see chapter **QUAD MARKER SCREEN**)

We are now proud to be the first office in Wyoming certified to offer first trimester testing for genetic abnormalities. This includes a special ultrasound exam that measures nuchal translucency (clear space at the back of the baby's neck). Performed between 11 and 13 weeks, it can provide more information to determine your risk of carrying a baby with a chromosome problem or a few other birth defects. Please notify us early in your pregnancy if you are interested in this testing.

At 28 weeks gestation, we check for anemia and gestational diabetes with a one-hour glucola and hemagram. You do not need to be fasting for this exam.

(continued on next page)

# **PRENATAL TESTING** (cont.)

Cervical and vaginal cultures are also obtained to ensure the safety of your pregnancy. At your initial exam, gonorrhea and Chlamydia cultures are done along with your Pap smear. At 35-37 weeks gestation, a Group B streptococcus culture is taken. This test is discussed in more detail later in this book.

Genetic testing may also be offered depending on your medical history and your family history. Specific tests are mentioned in more detail later in this book.

Ultrasound screening will also be offered during your pregnancy. In addition to the nuchal translucency ultrasound mentioned on page 7, we offer a comprehensive screening ultrasound near 20 weeks gestation. Please refer to the more detailed information about screening ultrasound later in this book in the chapter **ULTRASOUND**.

# MORNING SICKNESS

"Morning sickness" is a very common symptom of early pregnancy that can actually be present at any time of day. Fortunately, it usually begins to subside by the second trimester, but there are a few things you can try before then:

- Soda crackers early in the morning may relieve some of the nausea.
- Smaller, more frequent meals are better than three large ones. Think of "grazing" during the day.
- If your prenatal vitamins cause nausea, try taking them at night before going to bed. If that doesn't work, it's O.K. to stop taking them for a while until you feel better.
- Stay well hydrated, especially in the summer. Drink plenty of fluids, including fruit juices, water, and Gatorade®.
- Solid foods that are easy on your stomach include Jello, plain toast or bagels, bananas, and applesauce. Try other solid foods only if you are able to keep them down, but don't force yourself to eat something that you can't.

If this doesn't help, you can try Emetrol®. This is a combination of syrups that can settle your stomach and it can be purchased without a prescription.

Another "home remedy" that is safe for your baby is vitamin B6 (50mg) taken once in the morning, once in the afternoon, and once at bedtime. It can be taken alone, or in combination with a half tablet of Unisom®, an over-the-counter sleep aid.

Unresolved vomiting may require more intense therapy including I.V. fluids and more powerful prescription anti-emetic medications to control the nausea.

But don't despair, things will get better. Hang in there!

# MILESTONES IN PREGNANCY

Pregnancies are dated in weeks, beginning with the first day of your last menstrual period. It may seem confusing at first, but all milestones and decisions regarding your care will be based on these dating criteria.

**The length of the average pregnancy is 40 weeks**. The first 12 to 13 weeks is the first trimester. By the end of the first trimester, the baby has developed all its parts but will be only 3 to 4 inches long. Using a device called a Doppler, the heartbeat can usually be heard for the first time between 10 and 12 weeks. During this period you will begin to notice the first changes in your body, such as breast tenderness and enlargement. Morning sickness usually resolves by the end of this trimester.

The second trimester includes the next 14 to 15 weeks of pregnancy. You will begin to show as your abdomen swells and by 20 weeks the top of the uterus will be at the level of your umbilicus or "belly button". If this is your first baby, you can expect to feel the first baby movements at 19 to 21 weeks but if you've already had a baby, you may feel movement 3 or 4 weeks earlier. By the end of the second trimester, the baby is about 12 inches long and weighs about 2 pounds.

The third trimester lasts from about 28 weeks until you deliver. The baby will gain the majority of its weight during this time, reaching an average weight of 6 to 8 pounds. The baby will eventually settle into position during the last 4 to 6 weeks, and 95% of the time will be head down. The discomforts of pregnancy tend to be more prominent during this time but eager anticipation for the arrival of the new baby helps you see light at the end of the tunnel.

# BLEEDING & MISCARRIAGE

Up to 30 - 40% of pregnancies can end in miscarriage, and many women will experience at least one during their reproductive life. Most occur in the first trimester, and by the second trimester, most of the risk has passed.

Persistent, painful cramps accompanied by heavy vaginal bleeding are the primary signs of a threatened miscarriage. This can also be a symptom of ectopic or tubal pregnancy. Risks for an ectopic pregnancy include women who have had a prior tubal pregnancy, infection, endometriosis, previous tubal surgery, or other abdominal or pelvic surgery.

Notify our office of any bleeding or severe cramping. You may need to be seen, but unfortunately there is no test available to determine who will miscarry and there is no *treatment* available to prevent a miscarriage. If we suspect that you might miscarry, the best course of action is to wait. If you pass tissue, save it so we can send it to the lab. If the cramping and bleeding resolve, the pregnancy may continue without problems. If an ectopic pregnancy is suspected, you may need special testing to rule out this diagnosis.

In most first trimester miscarriages, the baby is chromosomally or genetically abnormal. There is no proof that stress, lifting, exercise, or sexual activity will cause a miscarriage. It does not imply that you are abnormal or unhealthy, that you cannot become pregnant again, or that you will miscarry again. Most women will still have a normal pregnancy after a miscarriage.

Most important of all, ***a miscarriage is nobody's fault!*** You did not cause it to happen and you could not have prevented it.

Bleeding during the middle of the pregnancy may be caused by irritation or infection of the cervix. It may also be a sign of placenta previa, a condition in which the placenta overlies the cervix.

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# **BLEEDING & MISCARRIAGE** (cont.)

Cultures will help check for infection and an ultrasound may help locate the placenta. Sometimes, sexual intercourse will cause a brief episode of spotting that will resolve without treatment. You may be asked to refrain from intercourse if medical conditions exist that might make it dangerous.

Bleeding or spotting in the last few weeks of pregnancy may accompany contractions as "bloody show." This may be a normal sign of early labor.

You may also have some spotting after a vaginal exam is done in the office or in the hospital. This will not increase your risk of miscarriage.

If you have bleeding during your pregnancy, please notify us. We will help you determine if the bleeding is abnormal and needs to be investigated.

# DIET

Pregnant women do require additional calories but should avoid "eating for two." You will require 300-500 calories more per day than before you were pregnant. Common sense is the rule. Emphasize "healthy" food, including fruits & vegetables, and avoid indulging in frequent binges of "junk" food.

Constipation is extremely common during pregnancy. Fruit juices, extra water, Metamucil®, Citrucel®, Colace®, or Surfak® can be used for constipation when needed.

Average weight women should gain between 25 & 35 pounds during their pregnancy. (Women who weigh less than 100 pounds should gain between 30 & 40 lbs., and women who weigh more than 200 pounds should gain about 15 lbs.) Poor weight gain might affect fetal growth and well being, and excessive weight gain may lead to difficult childbirth and increase the need for cesarean sections. In addition, the extra weight is difficult to lose after the baby is born.

Drink 8 to 10 glasses of water every day. It is important to stay well hydrated to avoid constipation, and to decrease premature contractions and bladder infections.

We prescribe prenatal vitamins for all our patients. If you're having trouble with them, we can try a different brand. They can be taken any time during the day, and taking them with food may help to avoid stomach upset. And remember, taking them at bedtime might also help you to avoid nausea.

It is not unusual to become anemic (low blood count) while pregnant and we may also prescribe iron supplements for you if that happens.

Heartburn? --see ch. **COLDS & OTHER PROBLEMS**
Hemorrhoids? --see ch. **COLDS & OTHER PROBLEMS**

# MEDICATIONS

In general, you should try to avoid any medication during pregnancy, especially alcohol and tobacco. The first trimester of pregnancy is when the baby develops most of its organs and it is the time when it is most vulnerable to birth defects. It is during this time when medications should be avoided when possible.

There are some medical conditions that require the use of prescription medications even in the first trimester. In some cases, the medical condition itself is far more dangerous to the baby than the medications used to treat it. Your detailed medical history will help us to decide if you need to be on medications during your pregnancy. Asthma, seizures, thyroid disease, diabetes, and hypertension are examples of conditions that will require continuous treatment during your pregnancy.

While we cannot guarantee the safety of any medication, some over-the-counter medications that should be **safe** to take in pregnancy include **Tylenol®** for pain; **Sudafed®**, **Actifed®**, and **Chlortrimeton®** for cold symptoms; plain **Robitussin®** for a cough; **Cepastat®** or **Cepacol®** for a sore throat, and **Imodium**Ò or **Kaopectate®** for diarrhea.

**Aspirin** containing medications, **ibuprofen** products, and **Aleve® should *not* be used** in pregnancy unless specifically directed by the physicians. Also, **Alka-Seltzer®** and **Pepto-Bismol®** should be avoided.

***SEE PAGE 15 FOR A MORE COMPLETE LIST OF OVER-THE-COUNTER MEDICATIONS AND THEIR USE IN PREGNANCY.***

Try to keep caffeine to a minimum, although one to two caffeinated beverages per day are probably safe. **Nutrasweet®** and **Splenda®** are considered safe unless you have a family history of PKU.

Constipation? --see ch. **DIET**
Heartburn?—see ch. **COLDS & OTHER PROBLEMS**
Yeast infections? --see ch. **OTHER INFECTIONS**

# **OTC** (OVER-THE-COUNTER) **MEDICATIONS LIST**

There may be many times during your pregnancy when you will have questions about which over-the-counter medications are safe to use. Please keep this page bookmarked during your pregnancy so you can refer to this list when questions arise.

**<u>These medications are SAFE</u>**:

- **Actifed®**
- **Benadryl®**
- **Cepastat®** or **Cepacol®**
- **Chlortrimeton®**
- **Emetrol®**
- **Hall's®** Cough Drops
- **Imodium®**
- **Kaopectate®**
- OTC hemorrhoid medications
- OTC stool softeners
- OTC yeast infection medications
- **Pepcid®**
- **Prilosec®**
- **Robitussin®** (plain)
- **Sudafed®**
- **Tums®** with calcium
- **Tylenol®**
- **Tylenol Cold®** or **Tylenol PM®**
- **Zantac®**

**<u>These medications should be AVOIDED</u>**:

- **Advil®**
- Alcohol-containing cold and flu preparations
- **Aleve®**
- **Alka-Seltzer®**
- Aspirin
- Ibuprofen
- **Motrin®**
- **Pepto-Bismol®**

# INFLUENZA UPDATE
# FOR PREGNANT WOMEN

Many patients use the terms "cold" and "flu" interchangeably to refer to an upper respiratory viral illness that is usually short lived, mildly uncomfortable and rarely dangerous. Commonly these illnesses cause a low-grade fever, runny nose, watery eyes and a non-productive or dry cough. It is appropriate to treat these viral illnesses with rest, fluids and the pregnancy-approved over-the-counter medications listed in this book on page 15.

Influenza, on the other hand, can be a serious life-threatening illness, especially in pregnancy. The best way to deal with influenza is to try to prevent it by getting a yearly influenza vaccination or "flu shot". Women are often afraid to get a flu shot when they are pregnant, but it is safe to have a flu shot during any trimester of pregnancy. In fact, ACOG (The American College of Obstetrics and Gynecology) recommends that all pregnant women be encouraged to have a flu shot.

The nasal spray (FluMist), however, is not recommended in pregnancy.

Flu shots are usually available in our community at the beginning of influenza season in October or November from local pharmacies, the hospital, City/County Health Unit or at F. E. Warren Air Force Base for active duty personnel and dependants. Generally, the cost is minimal (under $20.00) or, in some cases, free. If you choose not to obtain the influenza vaccination, you can still be treated with Tamiflu if you are exposed to influenza or test positive on a flu swab within 48 hours of the onset of symptoms.

Symptoms of influenza are a high fever of 101 F or greater, and severe muscle aches. Once again, if you feel that you have symptoms of influenza, please notify us within the 48-hour window of when your symptoms began so that we may obtain a flu swab and treat you, if appropriate to do so.

# COLDS & OTHER PROBLEMS

Colds and the flu are caused by viruses and usually pose no threat to the pregnancy other than the discomfort that they cause. They will not respond to antibiotics and will run their course without treatment, often taking several weeks. Extra rest, lots of fluids, saline nasal spray, and a humidifier are recommended for symptom relief.

Many pregnant women notice more frequent headaches, especially if they have a history of migraines. Try plain **Tylenol®** and resting in a dark room. **Fioricet®** and **Tylenol with codeine®** are acceptable, but do not take cafergot or other ergot-containing medications. Notify us right away if the headaches become severe, frequent, or associated with symptoms such as weakness or vision loss.

You may also notice leakage of urine while laughing, coughing, or sneezing. Kegel exercises will help a little, but the problem may persist until after the delivery.

Pregnant women should wear seat belts. Keep the belt low across your lap and below the enlarging uterus. If you are in a car accident during the last 3-4 months of your pregnancy, you should be seen in Labor & Delivery.

Heartburn is common. **TUMS®**, **Mylanta®**, **Maalox®**, **Rolaids®**, **Pepcid®**, **Prilosec®**, and **Zantac®** are safe to use, and generally the liquids will give better relief than the chewables. Eating smaller, more frequent meals can also help. If your heartburn occurs mostly at night, avoid eating just before bedtime and prop your head and shoulders up with extra pillows.

Hemorrhoids are also common. Try to avoid constipation as mentioned previously. Sitz baths, **Tucks®** pads, and hemorrhoidal ointments may ease the discomfort.

***SEE PAGE 15 FOR A MORE COMPLETE LIST OF OTC MEDICATIONS AND THEIR USE IN PREGNANCY.***

# ACHES & PAINS

It is unlikely you will complete your pregnancy without some aches and pains that you may not have ever experienced before. Most of the pains are normal for pregnancy and don't present a danger to you or your baby.

Round ligament pain is a stretching of the ligaments and muscles that support your uterus. It can be sharp, stabbing, and/or crampy in the lower abdomen or groin areas. It usually occurs with movement like walking, getting in or out of a chair, rolling over in bed, etc. and can last from a few minutes to over an hour. Rest, **Tylenol®**, and time are the only treatments.

You may also note some tenderness near or on your pubic bone from the pressure of the growing baby. This may be associated with hip or low back pain. It usually is caused by loosening of the ligaments holding the hip and pelvic joints together in preparation for the birth process and will gradually improve after delivery.

Backaches are also common in pregnancy. As your pregnancy develops, good posture and comfortable shoes are a must. Try to avoid heavy lifting, and use your legs instead of your back to lift even small things. Exercises that stretch your legs and lower back muscles may help. Warm soaks in the bathtub or a heating pad on low heat may help, too. And back rubs are great, Dad!

You may also notice that it is difficult to get comfortable in bed at night. Sleep on your side with a pillow between your knees and your back may not hurt as much. A luke-warm bath at bedtime might help, too.

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# **ACHES & PAINS** (cont.)

You may experience discomfort as your feet or hands begin to swell towards the end of pregnancy. Many women will notice their rings becoming tight, and if this happens to you, consider removing them for the rest of the pregnancy. This will help you avoid needing to have them cut off later. Resting with your feet up will help with some of the ankle swelling.

If you develop right upper quadrant pain, especially if it is associated with unusual swelling of your face or rapid swelling of your hands and/or feet, headaches and blurred vision, please call us right away.

Remember, aches and pains go hand-in-hand with pregnancy and usually are not harmful. However, if your pain is severe, or associated with fever, chills, bleeding, or fainting, please call us and describe your pain for us.

# BIRTH DEFECTS

A small number of babies (2-3%) are born with a birth defect. You will complete a questionnaire to help us determine if you are at risk for having a baby with certain birth defects. Unfortunately, a screening test does not exist for many birth defects, and if one is available, *no test is perfect*. Your baby may be affected even if the test is negative, and your baby might be normal when the test is positive.

Birth defects caused by chromosomal abnormalities can often be diagnosed by a procedure called amniocentesis. We can provide you with more information about amniocentesis if necessary. If your baby is at risk for a chromosome abnormality, we will discuss and offer this test to you. Chromosomal abnormalities are not correctable, but you would have the option of terminating the pregnancy before 23-24 weeks if you chose to. We would refer you to a specialist who performs these procedures.

The most common autosomal chromosome defect is Down syndrome. It occurs in about 1 in 800 births, but the incidence increases with maternal age so that a woman at age 45 has a risk of 1 in 40. If you have a family history of Down syndrome, or you are 35 or older, you will be offered an amniocentesis or chorionic villus sampling. Also, as mentioned on page 8, COG now offers first trimester ultrasound screening to help improve the detection rate for Down syndrome for those at increased risk.

Some birth defects can recur in subsequent pregnancies. If you have had a previous child with a birth defect, you may be offered special screening tests if they are available, and you may be offered an ultrasound exam by a perinatologist (a specially trained high-risk obstetrician) to look for congenital defects. Since birth defects major enough to be seen by ultrasound exam are uncommon, a special perinatology ultrasound is not performed on everyone.

(continued on next page)

# **BIRTH DEFECTS** (cont.)

A family history of cystic fibrosis would warrant testing for the gene that causes the disease. Screening for CF is available for all patients and their partners as a blood test, but is often not a covered benefit under your insurance plan. Please check your insurance benefits and we will be happy to order the testing for you if you desire.

Patients of Jewish ancestry may be offered a screen for Tay-Sachs. Like CF, this is an autosomal recessive disease that gives your baby a 25% risk of being affected if both parents are carriers.

Other birth defects like spina bifida, gastroschisis, or omphalocele may be screened for with a blood test called a Quad Marker Screen, which is referred to in more detail in the chapter **QUAD MARKER SCREEN**.

If you are aware of any family member who has a birth defect or who has given birth to a child with a birth defect or specific genetic syndrome, please let us know.

# DIABETES TESTING

One of the hormones produced by the placenta during pregnancy has an "anti-insulin" effect making every pregnant woman at risk for developing gestational diabetes. Although the risk is relatively small, we test every patient for diabetes at approximately 28 weeks gestation. We may also test earlier than this if you have any other risk factors.

The test involves a one-hour glucose tolerance test. You will be given an orange-flavored liquid to drink that contains 50 grams of glucose, and your blood sugar will be checked exactly one hour later. It is not mandatory for the patient to be fasting, but the test does need to be performed before 4:30PM in the lab. If the test is abnormal, you will need to complete a longer, more specific glucose tolerance test. (That will be explained if the need arises.)

If you are diagnosed with gestational diabetes, you may only need a special diet for the rest of the pregnancy. Periodic blood tests will also be done to see how your body deals with the special diet. We may also have you consult with another physician specializing in endocrine problems like diabetes.

If your blood sugar control requires you to be on insulin during the pregnancy, your pregnancy is at increased risk for certain birth defects, extra large birth weight, and even stillbirth. Because of this increased risk, we will perform regular, specialized testing for both you and your baby. These tests will include frequent fetal heart rate evaluations (non-stress tests) and ultrasound exams to follow fetal growth.

# QUAD MARKER SCREEN

AFP or Alpha-fetoprotein is a compound made by all developing fetuses. A small amount crosses the placenta into the maternal blood where it can be detected. If it is detected in higher-than-expected amounts, this may be a signal that certain birth defects could be present. The most likely problem to be detected is spina bifida. If lower-than-expected amounts are detected, you have a higher risk of having a baby with certain chromosomal problems, like Down syndrome.

AFP is usually combined with three other tests and referred to as a quad marker screen. A high AFP alone will detect approximately 80% of fetuses with spina bifida and a low AFP alone will detect 20-30% of fetuses with Down syndrome. The quad marker screen will not improve detection of spina bifida significantly but it improves the detection of Down syndrome to approximately 80%. Some cases, however, will still not be detected!

This test is optional, but we offer it to everyone. The test is done between 15-19 weeks gestation by drawing a tube of blood from your arm at the lab and the results are usually available within a few days. We will notify you if the test results are abnormal so you need not call for the results.

The most common reason for an abnormal result is a wrong due date, so an ultrasound may be done when the test result is abnormal. Certain birth defects may be seen by ultrasound, but Down syndrome can only be confirmed by chromosome analysis obtained, in most cases, by an amniocentesis. Some abnormal results still result in a normal baby, but we will watch the pregnancy closely for signs of placental abnormalities.

First trimester screening for Down syndrome involves a very technical ultrasound exam that increases the detection rate to 45% in the first trimester. See chapter **PRENATAL TESTING** on page 7 for more information.

# SMOKING

## DON'T DO IT!!!

Smoking is one of the leading factors causing prenatal problems but it is, *by far*, the easiest to prevent. If you smoke, do everything you can to stop. If you don't smoke, *don't start now!*

Smoking increases your risk of bleeding, miscarriage, abnormal placental implantation, tubal pregnancy, premature delivery, premature placental separation, premature ruptured membranes, early delivery, low birth weight, emergency cesarean section delivery, and intrauterine fetal demise. There is also strong evidence that maternal smoking is linked to lower I.Q. scores in children!

It is also a good time for your partner to quit smoking as SIDS or sudden infant death syndrome has been linked to smoking in the household.

There may never be a stronger motivation in your life for you to quit smoking than during your pregnancy. If you can't do it for yourself, do it for your baby. After all, nine months is not a very long time to sacrifice when you can affect your baby's *entire life*.

# HIV & AIDS

HIV is the virus that causes AIDS. It is becoming more prevalent throughout the country, especially among women. Therefore, we are obligated to inquire about any possible risk factors for HIV in all of our patients to insure the welfare of you and your unborn baby.

Risk factors for acquiring the virus include multiple sexual partners, prior blood transfusions, IV drug usage, and occupations in which you are exposed to body fluids.

Our prenatal profile blood test includes the test for HIV. This is the national standard of care for pregnancy. You may refuse the HIV test if you desire, but the physicians caring for your baby will likely draw blood from your baby to test for HIV.

The results will be confidential and will only be used to protect you and your baby. While very unusual, false positive test results do occur. If the first test is positive, a second, far more sensitive test is automatically performed before the test results are even reported.

There is good evidence that aggressive treatment in HIV positive women during pregnancy can virtually eliminate the chances that a baby will contract the virus during the pregnancy and delivery.

We can provide more information about HIV and AIDS if needed.

# VIRAL INFECTIONS

Your baby is well insulated from chicken pox (varicella zoster) while in-utero. It cannot get the infection from anyone but you. If you have had varicella in the past, you are immune and the baby is protected. Even if you have never had varicella, the chances that you will become infected during your pregnancy are low. But if you think you have been exposed, and you have never had varicella, an injection of VZIG within 96 hours of exposure may be recommended. Although it isn't clear if the baby will become infected or not, the immune globulin should help minimize complications for you.

Fifth disease is caused by the human parvovirus B19 and can cause a fever and rash in young children. The symptoms are often very mild and can go unnoticed. Most women are already immune since they were likely infected as children. Infection in pregnant adults, however, can cause a non-immune hydrops or heart failure in unborn children. If you do become infected, periodic evaluation of the baby by ultrasound may be necessary.

Toxoplasmosis can be picked up by changing a cat litter box or by gardening in the soil where animals have been. You can also become infected by eating raw or undercooked meat. Only about 1 in 1000 women become infected with Toxoplasmosis during pregnancy, and symptoms are mild. The only reliable way to arrive at the diagnosis is with a series of blood tests. Infection in the first trimester is rare, but the risk of severe damage to the baby is high. Exposure in the third trimester is much more common, but serious damage to the baby is less likely. If you have become infected, you may need to be on special antibiotics for several months.

The CDC recommends that women who will be pregnant during the flu season be vaccinated with inactivated influenza vaccine. Talk to us at your next visit about receiving the flu vaccine.

# OTHER INFECTIONS

At your first prenatal appointment, you will be tested for both gonorrhea and chlamydia. These sexually transmitted diseases can be passed to the baby but can also be easily treated before delivery. If your culture for either or both is positive, you and your partner will be treated with antibiotics and your culture will be repeated at a later appointment to ensure adequate treatment.

Yeast infections are more common in pregnancy. Symptoms of a yeast infection may include burning, itching, and a white curd-like discharge. (A mucous discharge or a thin white discharge without other symptoms is normal during pregnancy.) Painful urination or vaginal spotting may also occur. There are several over-the-counter yeast infection medications (**Monistat®** or **Gyne-Lotrimin®** for example) that can be used if needed.

Urinary frequency (needing to urinate a lot) by itself is not uncommon in pregnancy. The expanding uterus in the first trimester and the fetal head in the third trimester compete with the bladder for the limited space in the pelvis. But frequency associated with other symptoms such as burning with urination, bloody or foul-smelling urine, or difficulty emptying your bladder, might be caused by a bladder infection. Bladder infections need treatment in pregnancy because of the increased risk of infection spreading to the kidneys. Flank pain, high fever, nausea, and flu-like symptoms might be present in kidney infections, which might require hospitalization for IV antibiotics.

Group B strep --see ch. **GROUP B STREP**

# GROUP B STREP

Group B streptococcus (GBS) is a normal bacterial flora in approximately 30-40% of all people, and in women it can colonize the vagina. Although the transmission of GBS from mother to infant during labor and delivery is only about 1-2%, the result may be serious. When a newborn is infected with GBS, it can cause a variety of problems including pneumonia, neurologic problems and even death.

A positive culture for GBS in pregnancy means only that the pregnant woman is colonized with GBS--not that she or her baby will definitely become ill. Colonized women should not be given oral antibiotics before labor because treatment at this time does not prevent GBS disease in the newborn. But antibiotics given *at the time of labor and delivery* **can** help prevent GBS disease in the newborn.

If a woman has previously given birth to a baby with GBS, or if she has a bladder infection with GBS, she should receive antibiotics during labor. All pregnant women with a positive antepartum culture for GBS should be offered antibiotics during labor. Despite this aggressive approach, some babies may still develop GBS disease.

We have screened every pregnant patient for GBS for years, however, only recently have guidelines actually been developed for prenatal screening for GBS. In November of 2001, the Centers for Disease Control updated their guidelines for prevention of neonatal GBS disease. It is recommended to screen every pregnant woman for GBS with a culture of the vagina and/or rectum during their pregnancy. Therefore, we will continue to culture every pregnant patient at COG, and will notify you if the result is positive so that proper treatment can be initiated when your labor begins. If you test positive for GBS your baby may need to be monitored for 48 hours after birth.

# ULTRASOUNDS

Ultrasound exams, or sonograms, use sound waves from a transducer to evaluate fetal anatomy. Ultrasounds can also be used to evaluate the uterus, tubes, and ovaries as well as placental anatomy and location. An ultrasound exam is a medical test, just like a CT scan or a barium enema. They are done for medical reasons only, and routine ultrasound exams done "just to see the baby" or for "baby's first pictures" are not done.

A recent large multi-centered study concluded that routine ultrasound exams of every pregnancy are not justified or warranted. We at COG feel, however, that there is certain information that can be obtained by ultrasound that will help us improve the quality of prenatal care you receive. Therefore, we will probably recommend an ultrasound exam to be performed between 16 & 22 weeks gestation. If you feel your insurance carrier will not pay for the exam, and you would rather not have one done, please discuss this with us and we will make other arrangements.

Ultrasound exams are screening tests, not diagnostic ones. Like any medical test, the exam is not perfect and results cannot be guaranteed. There can be errors of plus/minus 15% when estimating fetal weight, and many birth defects can be missed. Furthermore, an ultrasound exam does not imply that nothing bad can happen in the future.

***Remember, insurance companies and Medicaid are not interested in whether the baby is a boy or a girl, no matter how important it may be to you. Ultrasounds **will not be done simply to determine the sex of the baby** except in very rare cases of x-linked genetic defects. If you do want the exam simply to determine the fetal sex, you will need to **pay for the test in advance**.

# DENTAL WORK

**Oral hygiene is important during pregnancy because pregnant women are especially prone to dental caries (which cause cavities) and gum disease.** Continue to brush and floss as your dentist has instructed you. Slight bleeding from the gums after brushing is not unusual.

A dental checkup is encouraged during pregnancy, especially if you haven't had one in a year or so. Inform the dentist that you are pregnant so that special precautions can be taken, such as a lead apron for dental x-rays.

Cavities can be filled and teeth can be extracted safely during pregnancy using a local anesthetic. If needed, pain relievers containing codeine or antibiotics such as penicillin or cephalosporins can also be given. If there are any questions, have your dentist call us.

# SEX

Unless your provider instructs you otherwise, sex is usually safe during pregnancy. It does not cause harm to the baby and does not cause miscarriage.

There may be medical conditions that arise during the pregnancy that would cause us to recommend that sexual intercourse be avoided. Examples include frequent miscarriages, preterm contractions, placenta previa, or multiple gestations.

Both you and your husband may experience a change in your sex drive during pregnancy. In addition, as the pregnancy progresses, you may find sex to be more uncomfortable and you may want to try different positions.

Try not to let the decrease in frequency of sexual intercourse interfere with the other aspects of your relationship. Keep the emphasis on love, rather than on lovemaking. There may be other ways you can continue to enjoy each other even if sex is less satisfying.

# EXERCISE

Unless you are a high-risk pregnancy, exercise is both permitted and encouraged. Women taking medication for premature labor, having placenta previa or other bleeding late in pregnancy, or having twins are usually asked to avoid exercise, and may need to remain at bed rest. All others are encouraged to participate in a light exercise program.

If you are already doing regular exercise, you can continue at the same level of intensity. If just starting, begin slowly and increase the duration and intensity for your exercise gradually over several weeks. As your pregnancy progresses, you will most likely have to alter your exercise program due to the physical changes in your body. General guidelines for any exercise include wearing good support shoes & bra, drinking plenty of water, keeping your pulse below 140, and avoiding getting overheated.

Most activities are acceptable, but certain activities such as skiing, light weight lifting, and horseback riding are generally safe for only the first 3 to 4 months of pregnancy. Walking and low-impact aerobics are the best and swimming is excellent for pregnant women. Limit lifting to 40 pounds or less, but we may restrict you even more if risk factors dictate.

**Saunas and hot tubs** are discouraged during pregnancy, especially during the first trimester.

Prenatal exercise classes are offered in Cheyenne. They require your doctor's permission, which we will be glad to provide as long as you do not have any of the above risk factors.

# WORK & SCHOOL

**Most pregnant women may continue to work up until the time of delivery**. If you are carrying twins or have preterm labor you may need to be home at bed rest. Any hazards within the workplace such as toxic chemicals, fumes, or radiation should be discussed with us before you continue working. We may restrict the amount of heavy lifting or prolonged standing that you do, especially during the last few months of pregnancy.

Students are encouraged to continue attending classes unless we find a major medical problem during your pregnancy. We think it is important for you to remain in contact with your friends, teachers, and other people who provide support to you during this stressful time.

Also, make sure you discuss your plans for maternity leave with your employer or teacher well in advance of your due date.

# TRAVEL

Traveling during pregnancy should be safe unless you have high risk factors that we will discuss with you in advance.

As mentioned before, wear seatbelts across your hips at all times. Major injuries to unborn babies are more often the result of *failure to wear* seatbelts than injury *caused* by seatbelts.

If traveling by car, try to stop every hour or two to stretch your legs. If you are flying, move around the cabin every hour or two. Airlines may restrict your travel later in pregnancy to decrease the chances of making an unplanned stop for a woman in labor or with ruptured membranes.

If you plan to be away for some time, you may want a copy of your prenatal records. In the event of an emergency, a treating physician can use the information to help you with your problem.

In general, we encourage our patients to avoid long travels and to stay close to Cheyenne after 34 weeks gestation, unless under special circumstances.

# BIRTHING CLASSES

Nurses at the maternity unit of Cheyenne Regional Medical Center (the old Memorial Hospital/United Medical Center) offer birthing classes in which they discuss the labor and delivery process. They will cover aspects of the equipment that might be used to monitor labor, and they will teach breathing and relaxing techniques, which may help you get through labor. They will also show you the rooms in which you will deliver and where you and your baby will stay post-partum.

These classes are optional but first time parents may benefit the most from attending. They are offered frequently and last for six weeks. A schedule is included in the pregnancy kit you received at your first visit to our office, or you can call Community Outreach at 633-7666.

You can start the classes anytime during your pregnancy, but the best time might be between 28 and 30 weeks. This will insure that you complete the classes before your due date.

# LABOR

You may have mild contractions off and on throughout your pregnancy. As long as you have fewer than 4-6 contractions in an hour and the contractions remain mild and irregular, this is usually not concerning. If you have bleeding, pelvic pressure, and/or increased vaginal discharge with the contraction, this is more concerning and you should notify our office.

Most people deliver between 3 weeks before and one week after their due date. Your first labor may last 8-12 hours or longer, but subsequent labors may be shorter.

Labor which begins more than 4 weeks before your due date is premature, and we will attempt to stop it with medications. Making this diagnosis can be difficult and we seldom put you on medication for contractions alone. In general, treatment is indicated if your cervix begins to dilate with the contractions or if you have risk factors for a premature delivery.

Labor begins when the contractions get stronger and closer together, **and cause the cervix to dilate**. The contractions are usually regular, and get stronger and closer together as time goes by. In addition, your bag of water may break or you may have "bloody show". If the contractions stop after an hour or so, this is probably false labor. Most women will experience false labor so don't be frustrated by it.

If you go past your due date, we may need to induce your labor. We generally will wait a week past your due date before intervening unless there are other complicating factors. The decision to induce depends upon whether your cervix is "ripe" or ready to dilate or not. We seldom induce labor before your due date unless there are medical indications.

--see ch. **INDUCTION OF LABOR** on next page

# INDUCTION OF LABOR

The safest and most effective labor is one that starts naturally without the intervention on the part of your OB provider. However, sometimes it is necessary to start labor before it occurs naturally. Most inductions are done for medical reasons. For example, when your pregnancy is more than a week overdue, or if it is unsafe to continue a pregnancy for a variety of reasons, your labor might be induced. There are several ways to induce (or start) your labor, including sweeping your membranes, using a vaginal gel or tablet, or with IV medication.

Elective inductions are generally not done unless your provider determines there is minimal risk to your baby. This usually means that they won't be done before 39 weeks gestation. Elective inductions are done only when time and space are available in the hospital.

If you are scheduled for an elective induction, please call Labor and Delivery at 633-7884 at 7:00 to 7:15 AM the morning of your induction to confirm that there is a room available for you. Patients who are already in labor, and medically necessary inductions have first priority so an elective induction may occasionally need to be rescheduled.

Please try to understand this medical prioritizing, and be patient if your induction needs to be rescheduled. And please remember to refrain from becoming angry with the nurses in L&D (and COG J). They will do their best to get you on the induction schedule as soon as time permits.

# PAIN RELIEF DURING LABOR

Relaxation techniques are basic to childbirth. They involve altering your breathing pattern and using concentration to relieve tension, stress, and fear. They are taught in childbirth classes but your labor nurse will help you, too.

Narcotics (like Stadol®) are medications that can relieve or ease labor pain. They can be given intravenously. They generally won't be given when delivery is imminent, however, because they can cause a mild respiratory depression in some newborns. If an infant shows signs of a narcotic respiratory depression after delivery, there is a narcotic antagonist that can be given to the baby to reverse the effect of the narcotic.

Epidurals are considered the best method to relieve the pain of labor. They are performed by an anesthesiologist and involve injecting medication into the lower back to numb the nerves from the spine. They are safe, and, contrary to popular belief, rarely if ever cause chronic back problems, nerve damage, or paralysis. Epidurals have not been shown to slow labor, so if you are uncomfortable, ask for pain relief when *you* want it.

Each person has a different pain threshold so don't be afraid to ask for pain relief if you feel you need it. Don't let your friends or your family or anyone else decide what is right for *you*- it can and should be *your* decision. And if you choose to have something done for your pain, you are not a failure!

# EPISIOTOMY

An episiotomy is a small incision made during childbirth to enlarge the vaginal opening. *They are not done routinely*. They are only done for medical indications, and cannot be predicted prior to delivery. We try to assess every labor individually, and perform an episiotomy only when we feel that it is necessary.

Small tears frequently occur during delivery, however, and are repaired similarly to an episiotomy using dissolvable sutures. If this is your first birth, it is more common to have either an episiotomy or a tear.

Ice packs may be used immediately after the delivery to help decrease the swelling and in the following days, sitz bathes help to make you more comfortable. Stool softeners may be needed for several weeks after delivery to prevent constipation, which could lead to straining and the tearing of your stitches. You may also request pain medication, if needed, when you are discharged from the hospital.

# TUBAL LIGATION

If you are certain that you want no more children, then you may want to have a tubal ligation. Remember that the procedure is permanent, so if you have some doubt, it would be best to try another type of birth control.

If you are planning to have a tubal ligation, let us know at some point during the pregnancy. Women with Title XIX will need to sign a special form at least 30 days before the procedure is done.

The surgery can be done on the day following the delivery or after the six-week postpartum visit as an outpatient procedure using the laparoscope. For women with medical conditions that would make abdominal surgery a high-risk procedure, we can perform a non-incisional tubal sterilization procedure with a hysteroscope.

# BREASTFEEDING

After your baby is born, you have the option of bottle-feeding or breastfeeding. Breastfeeding has some advantages for both you and the baby. Most of the benefits to the baby probably occur in the first several months but some mothers opt to breastfeed for up to a year or more. You need to drink extra fluids (eight glasses per day) to maintain your milk production and you should continue to take your prenatal vitamins as long as you are nursing.

We strongly encourage you to breastfeed your baby, but occasionally a physical or social situation arises making that difficult. If you are unable to breastfeed, there is no reason for you to feel guilty or feel that you have failed.

If you decide not to breastfeed, the breast milk will dry up on its own. A degree of breast engorgement does occur but will resolve without treatment in a few days. A support bra, ice packs, and ibuprofen will help with the discomfort. Avoid the urge to pump because this will only promote further milk production. Medications used in the past to dry up breast milk have been taken off the market due to complications with high blood pressure, strokes, and seizures.

Mastitis is a breast infection caused by bacteria from the nursing baby's mouth. Symptoms include red, swollen, and tender areas in one or both breasts, fever, and flu-like symptoms. We should examine you if you think you have mastitis so that we can start the appropriate antibiotics. You can continue nursing with mastitis, as emptying the breast can help prevent blocked milk ducts.

If you have specific questions about breastfeeding, formulas for the baby, or difficulties while breast or bottle-feeding, call the pediatrician or family physician who will be caring for the baby.

Also, Cheyenne Regional Medical Center has certified lactation consultants available for any problems you may encounter with breastfeeding. You can reach them through the hospital operator.

# ELECTRIC BLANKETS, ETC.

Contrary to what you might have heard, sleeping with electric blankets or on a heated water bed during pregnancy does not appear to increase your risk of miscarriage.

A study published in 1998 in the journal ***Epidemiology*** showed no significant increase in miscarriage among the 2,967 pregnant women in the study who were exposed to electromagnetive fields (EMFs).

So go ahead and be "toasty" warm at night without the worry of the increased risk of miscarriage.

# FETAL MOVEMENT OR "KICK COUNTS"

Some babies are very active most of the time and others may be more "mellow". There are also times when even the most active baby slows down to get some rest. Every baby is different, and each pregnancy may be a different experience for you.

Usually, an active baby is a healthy baby. But babies *in-utero* are similar to babies after birth and they are lulled to sleep by rocking motions. That is part of the reason you may feel less movement when you are more active. That is also why you may notice more movements when you are ready for bed at night.

So how do you know when a baby is not active enough?

As long as there is no radical slowdown of movement or complete cessation of activity, variations of fetal movements are probably normal. But after the 28th week or so, you can reassure yourself by doing "kick counts" twice per day:

- Check the clock before you start counting movements.
- Count movements of any kind (kicks, flutters, rolls).
- Stop counting when you reach 10 movements.
- If you haven't reached 10 after an hour; have a snack, drink something cold, lie down, relax, and keep counting. **If you don't get 10 movements after another hour, call us right away.**

Although failure to reach 10 movements in an hour after resting and after a snack may be concerning, further testing will, in most cases, determine that the baby is just fine.

# AFTER THE DELIVERY

On the average, most women will stay in the hospital for 2 to 3 days after a vaginal delivery and 3 to 5 days after a c-section. Generally, newborns stay at least 24 hours before being released but this decision is made by the baby's doctor.

Before you leave the hospital, take advantage of the teaching sessions offered by the nursing personnel, which include breastfeeding, bathing the baby, and infant CPR.

Your postpartum visit will be 4 to 6 weeks after a vaginal delivery, and earlier after a c-section, unless we tell you otherwise. The baby's doctor will give a separate schedule of postpartum visits for the baby.

You may have spotting or bleeding for up to 6 to 8 weeks after your delivery. Regular menstrual periods may not resume for several months and the first one may be heavier than usual. If you are breastfeeding, your periods probably will not return until you decrease feedings or wean the baby altogether. You may ovulate before your periods return, however, so you should decide on a method of birth control even if you are breastfeeding. We will discuss the options for birth control at your postpartum visit.

If you had a vaginal delivery, you may begin exercising again at your own discretion. Begin slowly, and gradually increase the duration and intensity of your workouts. After c-sections, you should not do any heavy lifting (nothing more that 20 pounds) for at least 6 weeks! You may begin walking for exercise after the surgery, however.

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# **AFTER THE DELIVERY** (cont.)

Don't forget that you will need an approved infant car seat to take your new baby home from the hospital!

If you would like written information about a particular topic regarding you pregnancy, we would be happy to provide you any pamphlets that we have.

Suggested Reading:

What to Expect When You're Expecting
by Arlene Eisenberg, Heidi E. Murkoff,
& Sandee E. Hathaway, BSN

While Waiting
by George E. Verrilli, MD & Anne Marie Mueser, EdD

What to Eat When You're Expecting
by Arlene Eisenberg, Heidi E. Murkoff,
& Sandee E. Hathaway, BSN

The Womanly Art of Breastfeeding
by La Leche League International

The Complete Book of Breastfeeding
by Marvin S. Eiger, MD & Sally Wendkos Olds

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# **INDEX** (cont.)

# OUR CLINICIANS

***Sharon K. Eskam, MD*** grew up in Nebraska, attended Hastings College, and graduated from the University of Nebraska School of Medicine. She did her internship and residency in OB/GYN at Cook County Hospital in Chicago, Illinois. Dr. Eskam is married and has two sons and two stepsons. Her special interests include abnormal pap smears, infertility, high-risk obstetrics, first trimester genetic testing, and menopause.

***Mary-Ellen Foley, MD*** grew up in Massachusetts and Florida. She graduated from the University of South Florida and from the University of South Florida College of Medicine. She did her internship and residency in OB/GYN at East Carolina University School of Medicine in Greenville, North Carolina. Her special interests include obstetrics, infertility, and menopause.

***David. M. Lind, MD*** grew up in Cheyenne. He attended the University of Wyoming and Creighton University School of Medicine. He did a Family Practice residency before completing his residency in OB/GYN at Good Samaritan Hospital in Phoenix, Arizona. Dr. Lind and his wife Kathy have six children. His special interests include general gynecology and surgery.

***Michael R. Nelson, DO*** grew up in various places with an active duty Air Force family. He graduated from Oral Roberts University and Oklahoma State University College of Osteopathic Medicine. He completed his residency in OB/GYN at the University of Colorado Health Sciences Center. He and his wife, Lisette, have three children. His special interests include minimally invasive gynecologic surgery, and high-risk obstetrics.

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# OUR CLINICIANS

***Kathryn K. Randall, MD*** grew up in New Mexico. She attended Western New Mexico University and the University of New Mexico School of Medicine. She completed her internship and residency at Penn State-Hershey Medical Center in Hershey, PA. Dr. Randall is married and has two children. Her special interests include pediatric and adolescent gynecology, high-risk obstetrics, and minimally invasive gynecologic surgery.

***Lisa A. Vigue, MD*** joined Cheyenne OB/GYN in August 2009. She completed her bachelor's degree and medical school at Creighton University. She has completed her residency through Penn State University at the Hershey Medical Center in Hershey, Pennsylvania. She is married and has two children. Her special interests include high-risk OB and minimally invasive GYN surgery.

***P. L. Bert Wagner, MD*** ** grew up in Casper. After receiving a degree in Civil Engineering from the University of Wyoming, he worked briefly as an engineer. He returned to graduate from Creighton University School of Medicine and did his internship and residency in OB/GYN at the University of Iowa in Iowa City, Iowa. Dr. Wagner and his wife Lisa have four children. His special interests include infertility, minimally invasive gynecologic surgery, and female incontinence surgery.

***Practice now limited to gynecology only.*

***Kristine Van Kirk, MD*** grew up in Cheyenne Wyoming. She graduated from the University of Wyoming and the University of Washington School of Medicine.

Dr Van Kirk completed her Ob/Gyn Residency from the University of Iowa Hospital and Clinics and was selected to be their Chief Resident. She has also earned The Arnold P. Gold Foundation Humanism and Excellence in Teaching Award.

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# **OUR CLINICIANS** (cont.)

***Phyllis A. Tarr, CNM*** grew up in New Hampshire and Massachusetts. She received her Bachelors degree from Ball State University in Indiana, and completed her midwifery training and Masters degree at Shenandoah University in Virginia. Phyllis has five children and five (so far) grandchildren. Her special interests include women's health and childbirth.

# IN MEMORIAM

***Robert L. McGuire, MD*** *grew up in Pennsylvania. He attended Muhlenberg College and graduated from Temple University School of Medicine. He did his internship and residency in OB/GYN in Allentown, Pennsylvania.*

*Dr. McGuire founded Cheyenne OB/GYN in 1979. Dr. McGuire practiced obstetrics and gynecology for many years but eventually limited his practice to gynecology only. His special interests included general gynecology, gynecologic surgery and the treatment of female urinary incontinence.*

*Dr. McGuire and his wife, Linda, have two children and two grandchildren.*

*After almost 32 years at Cheyenne OB/GYN, Dr. McGuire retired in February 2011.*