Health Information You Need To Know

ANTANNO

California Department of Public Health | Genetic Disease Screening Program

own.

## What You Do Can Make a Difference

Congratulations on your new life together! Throughout your life you will have many opportunities to make choices and decisions about health-related matters.

This booklet contains information about healthy choices that can make a difference for you and your family. Making the right health decisions and living a healthy lifestyle is important at any age. Please review the sections that may be important for you and save this booklet for future reference.

Contents	Page
Living a Healthy Lifestyle	1
Domestic Violence	4
HIV/AIDS	9

#### Planning a Family

Family Planning	12
Planning for Pregnancy	14
Genetic Disorders	19
Genetic Counseling	23
List of Genetic Information Centers	25

#### **During and After Pregnancy**

Healthy Choices When You Are Pregnant	26
Infectious Diseases That Can Harm Your Baby	29
Important Tests During Pregnancy	37
An Important Test for Babies	41

## Living a Healthy Lifestyle

While maintaining good health habits will not guarantee a longer life, it will certainly improve the quality of life. The following are a few general recommendations that help decrease the risk of illness and enrich life:

#### **Annual Check-Ups**

An annual doctor's visit can help make the difference between good health and illness. Yearly visits provide the opportunity for discussion of preventive health measures and early detection of potential problems. Early detection of serious diseases such as breast cancer, prostate cancer, colon, or ovarian cancer is the key to successful treatment.

#### **Regular Exercise**

Exercise is a key factor in staying healthy. The question is not should you exercise, but what kind of exercise is appropriate for

you? Exercise strengthens bones, heart, and lungs, tones muscles, and increases physical reserve and vitality. It also helps you sleep better, relieves stress and depression, and prevents constipation. If you are just starting an exercise program and have any health concerns, talk to your doctor to help establish limits for your exercise program.

#### **Balanced Diet**

A well-balanced diet provides adequate amounts and appropriate types of nutrients necessary to maintain health. To achieve a balanced diet, the dietary guidelines recommend eating a variety of foods daily from each of the five major food groups: protein foods (2-3 servings); milk products (2-3 servings); vegetables (3-5 servings); fruits (2-4 servings); and breads, cereals, rice and pasta (6-11 servings). Limit intake of fats, oils, and sweets.

If you have food allergies or a health condition that requires dietary restrictions, discuss your diet with your doctor before making any changes.

#### **Folic Acid in Your Diet**

Folic acid is an important B vitamin that everybody needs at every age to be healthy. For women of childbearing age, it can reduce the risk of certain birth defects. For more information on this important benefit of folic acid, please see the section on "Planning for Pregnancy." Folic acid may reduce the risk of strokes and heart attacks. Also, certain adult cancers that may be associated with poor nutrition, such as colon cancer, may occur more often in adults with insufficient folic acid. Another serious condition that occurs more often in older individuals, pernicious anemia, can go undetected if there is too much folic acid in the diet. Vitamin B12 in the diet prevents this condition from occurring. Folic acid can be obtained in vitamin tablet form, in fortified grains and pastas, or through a diet rich in dark leafy greens. It is a good idea to check with your health care provider to determine whether or not you are getting the right amount of folic acid.

### **Domestic Violence**



No matter how well two people may get along, there are times when they disagree, get annoyed with the other person, or just have spats or fights because they're in a bad mood or tired or for some other reason. They also may use many different ways of trying to settle their differences. Domestic violence is more than just having a disagreement or a spat. Domestic violence is abuse.

#### What is Domestic Violence?

Domestic violence is a pattern of behavior that an abuser uses to control and gain power over his or her spouse or intimate partner. Domestic violence can occur in heterosexual as well as same-sex couples.

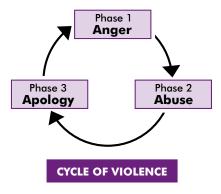
Domestic violence affects all kinds of people every day. Your race, religion, and age do not matter, nor does your education, income, country of birth, or sexual orientation. What does matter is that one out of four women and one out of fourteen men in this country suffer

some kind of violence at the hands of a spouse or intimate partner. Alarmingly, nearly 5.3 million U.S. women are victims of domestic violence each year, resulting in 2 million injuries and 1,300 deaths.

#### **Cycle of Violence**

Unfortunately, domestic violence almost always does not happen just once and stop. It occurs over and over again in 3 phases called the "Cycle of Violence." The 3 phases of the Cycle of Violence are:

- **Phase 1** Increased stress, anger, blaming, and arguing occurs between the couple.
- **Phase 2** The abuser may hit, kick, slap, beat up, rape, call names, threaten, stalk, withhold money, or destroy your property. An abuser may even hurt your animal.
- Phase 3 The abuser says he or she is sorry, makes excuses, gives gifts, and promises it will never happen again. Over time, this phase may fade, and the abuse happens more often and becomes more serious.



#### **The Effects of Domestic Violence**

Domestic violence affects more than just you and your spouse or intimate partner.

- Children that live in homes where domestic abuse occurs are twice as likely to be abused as other children.
- Male children who witness their parent's domestic violence are twice as likely to abuse their partners in adulthood than male children of nonviolent parents.
- Sometimes, domestic violence begins or becomes more severe when a woman is pregnant. The abuse will cause health complications for the pregnant woman and the unborn child.
- Domestic violence may cause you to lose your job, because of frequent absences or tardiness or frequent phone calls from the abuser.
- National studies have shown that domestic violence is one of the most common causes of homelessness for women and their children.

### CRISIS INTERVENTION SERVICE Counseling Services National Shelter for Violence National Shelter for Violence National Shelter for Violence National Domestic 1-800-799-SAFF Hortine Each Legal 000-000-0000

#### What You Should Do if You Believe You Are a Victim:

If you are in an abusive relationship or your relationship becomes abusive, take steps to become safe and stay safe.

- Trust your instincts and seek help. Talk with someone you trust, and call your local domestic violence agency listed under "Crisis Intervention" in the telephone book or the National Domestic Violence Hotline at 1-800-799-SAFE or 1-800-787-3224 (TTY).
- Understand that the abuse is not your fault.
- Know that you and your children do not deserve to be hurt or to live in fear.
- Recognize that you are not alone and help is available.
- When seeking help on the Internet, use a computer that your abuser can not access.

### **DOMESTIC VIOLENCE IS AGAINST THE LAW.**

If you need emergency help, call <u>911</u> or the police immediately.

### **Domestic Violence Resources:**

**National Domestic Violence Hotline** 

1-800-799-SAFE (7233) 1-800-787-3224 (TTY)

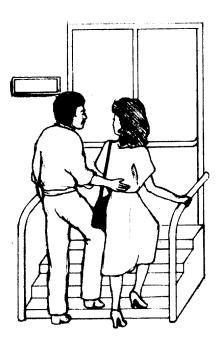
www.ndvh.org

**National Sexual Assault Hotline** 

1-800-656-HOPE (4673)

www.rainn.org

# **HIV/AIDS**



This information will help you decide if you need to take an HIV antibody test.

Infection with HIV, the human immunodeficiency virus, causes HIV disease and AIDS, the last stage of HIV disease. Everyone who is HIV-infected, including people with AIDS – has HIV disease. Today there is no cure for HIV infection, although there is hope for people infected with HIV. New medications are available which can prevent or delay the onset of AIDS, enabling someone to live a longer and healthier life.

#### How Do You Get HIV?

AIDS experts agree that HIV is passed through sex and blood-to-blood contact.

#### HIV may enter a person's body in these ways:

- Having unprotected sex with a person infected with HIV.
- Sharing syringes/needles with a person infected with HIV.
- A woman who has been infected with HIV may pass it on to her baby during pregnancy, delivery or through breastfeeding.

#### The Test

There is a test for HIV. The "HIV Antibody Test" measures the presence of antibodies to HIV in the blood. You should think about getting this test if:

- You or your sex partner have had unprotected sex with someone who may have had HIV.
- You or your sex partner have shared used syringes/needles with someone.
- You or your sex or needle sharing partner had a sexually transmitted disease.

• You are pregnant or thinking about getting pregnant.

California law requires all pregnant women to be offered the opportunity for testing for HIV.

#### **The Test Results**

If you get a positive test result, it means you have HIV antibodies and can infect others **even if you do not feel sick right now.** If you go to a publicly funded test site you can ask to take the test anonymously or confidentially, with an HIV test counselor. Publicly funded HIV tests are free.

#### Where Do You Get the Test?

You can get a test from your doctor, clinic, or county health department HIV Counseling and Testing Site. To find out where to get a free test from an HIV Counseling and Testing Site in your area call this number: 1 (800) 367-AIDS (2437)

# **Family Planning**

Planning your family means choosing when you want to get pregnant and when you don't want to get pregnant. Private doctors, clinics and health departments can help you plan for either of these choices. Family planning services include:

- Choosing a birth control method
- Emergency contraception
- Help with getting pregnant
- Pregnancy testing
- Exams to test for HIV/AIDS and other Sexually Transmitted Infections (STIs)
- Individual education and counseling



The State's Family PACT (Planning, Access, Care and Treatment) Program provides comprehensive family planning services at no cost to eligible, low-income women and men. Services include all FDA approved birth control methods, pregnancy testing with counseling, preconception counseling, male and female sterilization, limited infertility and cancer screening services, STI testing and treatment, HIV screening, and Hepatitis B vaccine. For more information on Family PACT, you can visit the website at www.Familypact.org or call 1-800-942-1054 to locate a Family PACT provider in your area. Family planning services are covered under the Medi-Cal Program and many insurance plans. Most phone books provide a listing of local family planning providers under "Family Planning Information Centers."

# **Planning for Pregnancy**



Choosing to become pregnant is a big decision. Your life will change before and after a baby is born. Before you get pregnant, take steps to improve your chance of having a healthy baby. Visiting a health care provider before pregnancy is a good idea for everyone.

#### **Take Care of Yourself**

Nine months of a healthy pregnancy is the best gift you can give your future baby. You can get your baby off to a good start by taking care of yourself before you get pregnant.

• Get up-to-date on your immunizations. Most routine vaccines are given before you are pregnant. Talk with your doctor about immunizations you may need for a healthy pregnancy, including MMR and chickenpox shots. Be sure to ask about Tdap, the new tetanus booster that also protects against whooping cough, hepatitis B for women at risk, and the new HPV vaccine currently recommended for women up to 26 years of age.

- Aim for a healthy weight.
- Eat healthy foods like fruits, vegetables, milk, fish, lean meat, and whole grain breads and cereals. Limit foods high in fat and sugar, such as potato chips, cookies, candy and soda.
- Start exercising now and set goals for what you want to achieve. Check with your doctor or nurse about what kinds of exercises are best for you.
- Take a multivitamin which contains folic acid every day. (See pages 17-18 for more information on folic acid.)
- Do not smoke cigarettes, drink alcohol, or take drugs. Any amount of use of these substances can hurt you and your unborn baby.
- Manage stress in your life. Seek help for depression. Talk to your partner, a close family member, doctor or close friend about how to get help.
- Have a physical exam that includes a pap smear, breast exam, blood

type, and immunity to measles and chicken pox. There are medical problems that you may not be aware of that can affect your pregnancy.

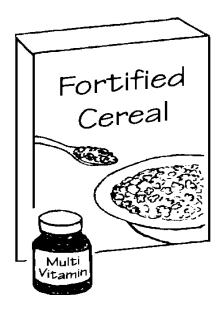
- Know your HIV status. About 25% of the women who are HIV positive transmit the virus to their baby. Taking anti-HIV medication can prevent much of this transmission. For this reason, it is important to know if you are HIV positive or not.
- Talk to your health care provider about any and all prescription drugs you are taking.
- Seek treatment if you have health problems (like diabetes, high blood pressure, anemia, thyroid problems, kidney disease, seizure disorders, PKU, etc.) These problems can hurt your baby or get worse during pregnancy. If you have a health problem like diabetes, it is even more important to see your doctor or clinic before you get pregnant. Your doctor or clinic staff will probably want you to make changes in your diet and take special care of yourself before you get pregnant. Sweet Success is a special program for women with diabetes before and during pregnancy.

To find out more, go to: www.llu.edu/llumc/sweetsuccess/.

Women with Phenylketonuria (PKU) will need to be on a special diet including medical foods prior to becoming pregnant and during pregnancy to prevent severe health problems in their babies. Even women with milder forms of PKU (like hyperphe or variant PKU) who have not previously been on a low phe diet may need it prior to and during pregnancy. If you have PKU and think that you might already be pregnant, contact a PKU clinic immediately. For more information on PKU and Maternal PKU and a list of clinics, visit our website at: cdph.ca.gov/nbs.

#### Folic Acid: Every Woman, Every Day

**Folic acid is essential for the health of your baby.** The U.S. Public Health Service recommends that all women who can become pregnant take 400 micrograms (mcg) of folic acid daily. Folic acid is a B-vitamin that is needed for proper cell growth. Studies have shown that, if taken before and during pregnancy, folic acid can dramatically reduce the number of birth defects of the brain and spine called neural tube defects.



New research also suggests that folic acid might reduce the risk of other birth defects, such as cleft lip and palate and some heart defects. To get enough folic acid, women should consume 400 mcg of folic acid daily from a vitamin supplement or breakfast cereal, in addition to eating a healthy diet.

There are two ways to get the 400 mcg of folic acid your body needs every day:

- Take a multivitamin pill with folic acid every day.
  OR -
- Eat one serving of a cereal that has 400 mcg of folic acid every day.

Many cereals do not have enough folic acid, so it is important to read the nutrition label on the box. It should say that the % Daily Value for folic acid is 100%. To get all the folic acid, drink the milk remaining in the cereal bowl.

### **Genetic Disorders**



Just as hair and eye color and general body build are passed down in the family from the parents to the child through genes, so are certain disorders. These disorders are called "genetic disorders." Genetic disorders are not contagious. That is, they cannot be "caught" like a cold. They can only be passed down to your children through genes. Genes are tiny bits of information contained in the father's sperm and the mother's egg that form a blueprint for the baby.

Some genetic disorders cause minor problems. For example, people with "color blindness" can't see certain colors. Other genetic disorders are more serious. They can lead to mental retardation or even death. That is why it is important to find out as much as you can about your risk of having a child with a genetic disorder. If there are any known genetic disorders in your family, ask your doctor or clinic for a referral to a genetic counselor.



#### Finding Out if You Can Pass on a Genetic Disorder

Tests are available for some genetic disorders. These tests can show if you carry one or more genes for a genetic disorder. For many genetic disorders you can have one gene for the condition but not have the disorder. A person who has one gene for a genetic disorder but does not have the disorder is called a "carrier." Carriers and people with a genetic disorder can pass on the gene for this disorder to their children.

# For example, you can be tested to see if you carry a gene for these disorders:

**Sickle Cell Disease**. This is found most often in African-Americans, and people whose families come from Mexico, Central America, India, the Middle East, and parts of Europe and Asia. People with this blood disease can have episodes of severe pain and other problems.

**Cooley's Anemia or Beta Thalassemia Major.** This is most often found in people who are of Southeast Asian (and other Asian) descent,

as well as in people of Greek and Italian descent. Frequent blood transfusions are the main treatment for this disease.

**Tay-Sachs**. This is found most often in Jewish people of Central and Eastern European descent. Babies with this incurable disease become blind, deaf and paralyzed. They die by the time that they are 4 or 5 years old.

**Familial Dysautonomia**. This rare condition is seen almost exclusively in people with Ashkenazi Jewish ancestry. The disorder affects the autonomic nervous system and is characterized by episodic vomiting, abnormal sweating, pain and temperature insensitivity, an inability to produce tears, scoliosis, and abnormal feeding and sucking difficulties. There currently is no cure for FD but some treatments are available which can improve the length and quality of life.

**Cystic Fibrosis.** This is among the most common genetic disorders. There are currently over 1400 different CF gene mutations found. This disorder affects different body organs including the lungs, sinuses, digestive system, pancreas, liver, and reproductive system. Treatments are available which can improve the length and quality of life.

# **Genetic Counseling**



A specially trained genetic counselor can help you understand your risk of passing on a genetic problem to your child. If you have any questions about diseases that run in the family, ask to talk with a genetic counselor before becoming pregnant. You should definitely talk with a genetic counselor if you answer "yes" to any of the following questions:

- Will you be 35 years of age or older when you become pregnant?
- Have you or your partner had a child with a birth defect or genetic disease?
- Is anyone in your family or your partner's family mentally retarded?
- Have you or your partner or a close family member had...
  - any health problem known to "run in the family?"
  - a genetic disease or birth defect?

- a baby who died during the first year of life?
- Do you or your partner carry a gene for a genetic disorder such as sickle cell anemia, cystic fibrosis, Tay-Sachs, or thalassemia?
- Have you had two or more miscarriages or stillbirths?
- Have you been diagnosed with diabetes or with seizures (epilepsy)?
- Are you related by blood to your partner (for example, cousins)?

#### **Help When You Need It**

You can find out more about genetic counseling and genetic disorders by calling one of the Referral Centers listed on page 25 of this booklet.

# List of Referral Centers for Genetic or Prenatal Testing Information

For referral information about genetic disorders, counseling and tests call any of these numbers:

- Northern California and Central Coast .......(800) 391-8669

- San Diego/Imperial/Riverside Counties .......(866) 366-4408

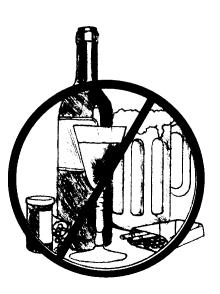
## Healthy Choices When You Are Pregnant



There are many things to think about and choices to be made when you are pregnant. Two of the most important things are your health and the health of your baby. Go to your doctor or clinic for prenatal care as soon as you think that you are pregnant.

During the first three months of pregnancy the baby's brain, heart and other organs form. Your doctor or clinic will do tests during this time to check on the health of your baby. You will also be given information on the best amount and type of foods, exercise and rest for you and your growing baby.

The California Department of Public Health recommends that babies be breastfed. Should you be or become pregnant, talk to your doctor about breastfeeding. For more information on breastfeeding, visit these websites: the Women, Infants, and Children (WIC) Supplemental Nutrition Program at:



http://www.cdph.ca.gov/programs/wicworks/pages/WIC-BFResource. aspx or California Maternal, Child and Adolescent Health web page at cdph.ca.gov/breastfeeding.

#### **Healthy Choices**

When you are pregnant, what you eat and drink helps your baby grow. Stay away from things that can harm your baby. Remember...

- Don't drink alcohol. Wine, including wine coolers, beer and hard liquor can cause your baby to be born with mental and physical health problems. There is no known safe amount of alcohol use at any time during pregnancy.
- Don't smoke. Smoking can cause you to have a small baby. Small babies have more health problems than babies born with normal birth weights.
- Don't use street drugs. Marijuana (pot), cocaine, PCP, heroin and speed can cause serious problems before and after your baby is born.

• Don't take any prescription or over-the-counter drugs, like aspirin or cold tablets, without first checking with your doctor, clinic staff or pharmacist. Make sure that they know you are pregnant when you ask them about the medicine.

## Infectious Diseases That Can Harm Your Baby

Certain infections while you're pregnant need special care. These infections can be very harmful to you and your baby.

**HIV/AIDS**. Medication to help prevent the transmission of the HIV virus from mother to baby is now available. If you are HIV positive, see your doctor as soon as possible after you become pregnant. If you don't know your HIV status, get tested for HIV **before** getting pregnant or during your pregnancy.

**Herpes**. If you or your partner have genital herpes, or if your partner has cold sores (oralabial herpes) but you don't, tell your doctor or clinic staff. If you have herpes, your doctor may ask you to take medicine at the end of your pregnancy. If you have a herpes outbreak close to the time of delivery you may need a C-section to reduce the risk that your baby gets infected.

**Syphilis.** If you have untreated syphilis during pregnancy, you can pass the infection to your baby. Untreated syphilis infection can cause serious problems during pregnancy, including a higher risk of stillbirth or birth to a baby who dies soon after birth. Some infected babies are born without symptoms but may develop serious problems within a few weeks of life. Since most syphilis infections do not cause symptoms, syphilis testing early in pregnancy and early treatment are the best ways to prevent your baby from becoming infected. If you have had syphilis in the past, tell your doctor or clinic staff.

**Chlamydia**. If you have untreated chlamydia infection during pregnancy, you may give the infection to your baby as it passes through the birth canal during delivery. Your baby could develop an eye infection or pneumonia that would need treatment with antibiotics. Since most chlamydia infections do not cause symptoms, you should have a chlamydia test during your pregnancy to prevent infection in your baby.

**Gonorrhea**. If you have untreated gonorrhea infection during pregnancy, you may give the infection to your baby as it passes through the birth canal during delivery. Most babies receive special eye ointment immediately after birth which can prevent your baby from getting the infection. Since most gonorrhea infections do not cause symptoms, you should talk with your doctor about whether you should be tested for gonorrhea during your pregnancy.

**Flu.** Even if you could handle the flu before, now that you are pregnant you are at higher risk for serious complications from the flu. These complications can be dangerous and could land you in the hospital. If you are pregnant during flu season you need a flu shot. A preservative-free version is available for pregnant women. The flu is also very dangerous for infants, but babies under 6 months of age cannot get a flu shot. To help prevent the flu from spreading to your new baby, flu shots are recommended for anyone who lives with or takes care of your baby.

**Rubella (German measles)**. Although rubella is less frequent than it used to be, it is still a great risk to developing babies. While you are pregnant, you will be tested to see if you have ever had rubella or if you need rubella immunization. If you need it, your doctor will make sure you are given a MMR shot (measles, mumps, rubella) before you leave the hospital after your baby is born. Immunization will protect your future babies from congenital rubella syndrome.

**Chickenpox (varicella).** While you are pregnant, you will be tested to see if you have ever had chickenpox or received the chickenpox vaccine. If you need chickenpox immunization, you may be given a chickenpox shot before you leave the hospital after your baby is born. This will protect you from catching the disease and spreading it to your new baby as well as protect your future babies from congenital rubella syndrome.

**Tetanus.** Your doctor will recommend you get a tetanus booster if you have not had one in the last 10 years. This will help prevent a

tetanus infection that could cause great harm to you and your baby while you are pregnant. Tdap, the new tetanus booster, also protects against whooping cough (pertussis), a serious disease to which new babies are particularly vulnerable. Ask your doctor about Tdap before, during, or after your pregnancy.

**Cytomegolovirus (CMV).** CMV causes a very common viral infection, usually does no harm, and by 40 years of age, 50-80% of people in the U.S. have been infected. CMV is part of the herpes virus group and is spread from person to person through saliva, urine, or other bodily fluids. It is also the virus most frequently passed on from mother to baby before birth. However, if you develop your **first CMV infection during pregnancy**, there is a small risk that after birth your baby may have complications such as hearing loss, vision loss, and a range of mental and coordination problems. First CMV infections occur in 1-3% of pregnant women in the U.S. With supportive treatment most babies with CMV disease usually survive. There is little risk of CMV-related complications from an infection in your

baby if you have been infected at least 6 months prior to conception. Although there is no treatment for CMV infection, the following recommendations apply:

- Throughout your pregnancy, practice good personal hygiene, especially handwashing with soap and water after every contact with diapers or oral secretions (particularly with a child who is in day care).
- If you develop a mononucleosis-like illness (fever, sore throat, fatigue) during pregnancy you should be evaluated for CMV infection and counseled about the possible risks to the unborn child.
- Laboratory testing for antibody to CMV can be done at the first prenatal visit to determine if you have already had a CMV infection.

**Listeriosis**. This infection can cause a miscarriage or early labor and may harm your baby. You can prevent this by following these recommendations when you're pregnant:

- Thoroughly cook raw food from animal sources (e.g., beef, pork, and poultry).
- Avoid consumption of raw (unpasteurized) milk or foods made from raw milk.
- Thoroughly wash raw vegetables before eating.
- Avoid soft cheeses (e.g., Mexican-style, Feta, Camembert, and blue-veined cheese). There is no need to avoid hard cheeses, cream cheese, cottage cheese, or yogurt.
- Do not eat hot dogs, luncheon meats, or deli meats unless they are reheated until steaming hot. Wash hands after handling these meats.
- Although the risk for listeriosis associated with foods from delicatessen counters is relatively low, pregnant women may choose to avoid these foods.

**Toxoplasmosis**. This disease is caused by a parasite. You can prevent this disease by taking these steps while you are pregnant:

- Don't eat raw or rare meat.
- Wash hands thoroughly after handling raw meat.
- Wear gloves while gardening.
- Thoroughly wash garden vegetables that are often eaten raw, like carrots and lettuce.
- Don't handle cat litter.
- Stay away from cats that are fed raw or rare meat or that go outside the house.

#### If you have a cat:

- Have someone else change the cat litter box daily.
- Don't feed raw or rare meat to your cat.

## Important Tests During Pregnancy



While you are pregnant your doctor or clinic staff will do many tests. These tests may show if you and your unborn baby have certain problems. Five important tests are the Rh Factor, Hepatitis B, HIV Antibody, Syphilis, and Expanded AFP tests.

**Rh Factor Test.** This test is to determine whether a person is Rh positive and has the Rh factor in her blood or is Rh negative and does not have the Rh factor. When a woman is Rh negative and has an Rh positive baby, problems occur such as severe anemia, heart failure and brain damage. A special shot given to Rh negative women can prevent these problems. California state law requires that all health care providers test pregnant women for their Rh blood type. Your doctor or clinic will tell you the results of the test and if any special treatment is needed.

**Hepatitis B Test**. This test is to determine if you are infected with the hepatitis B virus. Infected people often do not have any symptoms.

They may carry the virus in their blood and other body secretions for many years. The hepatitis B virus can be passed to your baby at birth and later cause your baby to have severe liver disease. Hepatitis B disease in your baby can be prevented if a blood test for the virus is done while you are pregnant so that your baby can receive special immunizations at birth. Your baby will need 2-3 more hepatitis B shots to be protected. California state law requires that all health care providers test pregnant women for hepatitis B virus.

**HIV Antibody Test.** This test is to determine if you are infected with HIV, the virus that causes AIDS. A woman with HIV may not know she is infected, but can pass HIV to her infant during pregnancy, delivery or through breastfeeding. A simple test performed along with other routine prenatal care tests can easily determine a woman's HIV status. If your HIV test result is positive, you can receive treatment during pregnancy and delivery, and your baby can receive treatment after delivery. This treatment can lower the baby's chances of being infected with HIV to less than 2%. California state law requires that



all pregnant women be offered an HIV test during prenatal care.

**Syphilis Test.** This test is done to determine if you are infected with syphilis. People with syphilis often do not have any signs or symptoms and carry the infection in their blood. For more information on this harmful infection in pregnancy see the previous section "Infectious Diseases That Can Harm Your Baby." California law requires that all health care providers test all pregnant women for syphilis at their first prenatal visit.

**Prenatal Screening Test**. This blood test can be done before the 5th month of pregnancy. The test shows whether the baby has an increased chance of certain birth defects such as spina bifida or Down syndrome. Your doctor or clinic will give you a booklet with more information, or call any phone number on page 25.

Your doctor or clinic staff will give you information about all these tests early in pregnancy.

#### If You Are 35 Or Older and Pregnant

Women over 35 years old have a greater chance of having a baby with Down syndrome. Tests for Down syndrome include the blood tests (page 39) or these diagnostic tests:

**Chorionic villus sampling**. At 10 to 12 weeks of pregnancy, a doctor with special training takes a tiny piece of tissue from the placenta. Lab tests are done on the tissue to see if the baby has normal cell development.

Amniocentesis. At 15 to 20 weeks of pregnancy, a doctor with special training takes a small sample of fluid that surrounds the unborn baby. Lab tests are done on the fluid to see if the baby has normal cell development or certain birth defects.

For more information you can call one of the Referral Centers listed on page 25 of this booklet.

## An Important Test For New Babies



California state law requires that babies be tested for the diseases listed below. Prenatal doctors and hospitals are required to provide information about these tests. Early treatment of these diseases can prevent serious problems. A simple blood test done before leaving the hospital can detect these diseases:

#### **Metabolic Diseases**

**PKU (Phenylketonuria).** Babies born with PKU have problems when they eat foods high in protein such as milk, including breast milk and formula, meat, eggs and cheese. Without treatment babies with PKU develop mental retardation. A special diet can prevent these problems.

Galactosemia. Babies with this disease cannot use some of the sugars in milk, formula, breast milk and other foods. Untreated

babies with galactosemia can become very sick and die. A special infant formula and diet can help prevent these problems.

**Biotinidase Deficiency**. Babies with this disease cannot use or recycle biotin (vitamin B) from their diet. Without treatment, babies with this disorder can have seizures, mental retardation, vision problems, hearing loss, and/or other health problems. Treatment includes daily biotin supplements.

Other Metabolic Diseases. Babies with these diseases have similar problems breaking down and using certain parts of food as energy. As a result, substances build up and can be harmful to the body and brain. If identified early, many of these diseases can be treated before they cause serious health problems. Treatment may include medication, dietary supplements, and/or special diets.

#### **Endocrine Diseases**

**Primary Congenital Hypothyroidism.** Babies born with this disease do not have enough thyroid hormone. Without this hormone they grow very slowly and develop mental retardation. These problems can be prevented by giving the baby special thyroid medicine every day.

**Congenital Adrenal Hyperplasia (CAH).** Babies with this disease do not make enough of the hormone that maintains energy supply and blood sugar level. Some of these babies also do not make enough salt-retaining hormone. This can result in dehydration, shock, and even death. Treatment with one or more oral medicines can help prevent these problems.

#### Hemoglobin Diseases

#### Sickle Cell Disease and other Hemoglobin Disorders.

These diseases affect the baby's red blood cells. Babies with sickle cell disease can get very sick and even die from common infections. Many of the infections can be prevented with daily antibiotics. Ongoing health care and close monitoring help children with hemoglobin diseases stay as healthy as possible.

#### **Other Genetic Diseases**

**Cystic Fibrosis.** This disease can affect many body organs, including the lungs and digestive system. In the first few months of life, a baby with CF can have poor absorption of milk or formula, slow growth, failure to thrive, recurrent lung infections, salty sweat, frequent runny stools, dehydration and life-threatening salt imbalance. Early treatment along with ongoing health care by a team at a specialty care center can alleviate many of these problems.



# For more information about the Newborn Screening Program, visit our website at cdph.ca.gov/nbs.

In addition to newborn screening, babies will need routine health care. This includes well baby visits and immunizations to protect against some serious childhood diseases.

For additional copies, call GeneHELP at (510) 412-1542. For more information about genetic diseases or services, or to make comments on this booklet, write to:



California Department of Public Health Genetic Disease Screening Program 850 Marina Bay Parkway, F175 Richmond, California 94804-6403 or visit our website by typing in **cdph.ca.gov/gdsp** 

### AMERICANS WITH DISABILITIES ACT

Notice and Information Access Statement Policy of Nondiscrimination on the Basis of Disability and Equal Employment Opportunity Statement

The Department of Public Health, State of California does not discriminate on the basis of disability in employment or in the admission and access to its programs or activities.

The Deputy Director, Office of Civil Rights, 1615 Capitol Avenue, Suite.73.720, Mail Stop 0009, Sacramento, CA 95814 has been designated to coordinate and carry out the agency's compliance with the nondiscrimination requirements of Title II of the Americans with Disabilities Act (ADA). Information concerning the provisions of the ADA, and the rights provided thereunder, are available from the ADA Coordinator.

Revised 2008 © Copyright Genetic Disease Screening Program. This booklet was previously titled "If There are Children in Your Future" and is required for distribution to: marriage license applicants per Civil Code Marriage, Article 2 Section 4201.5 and domestic partners per Family Code 358 (b)