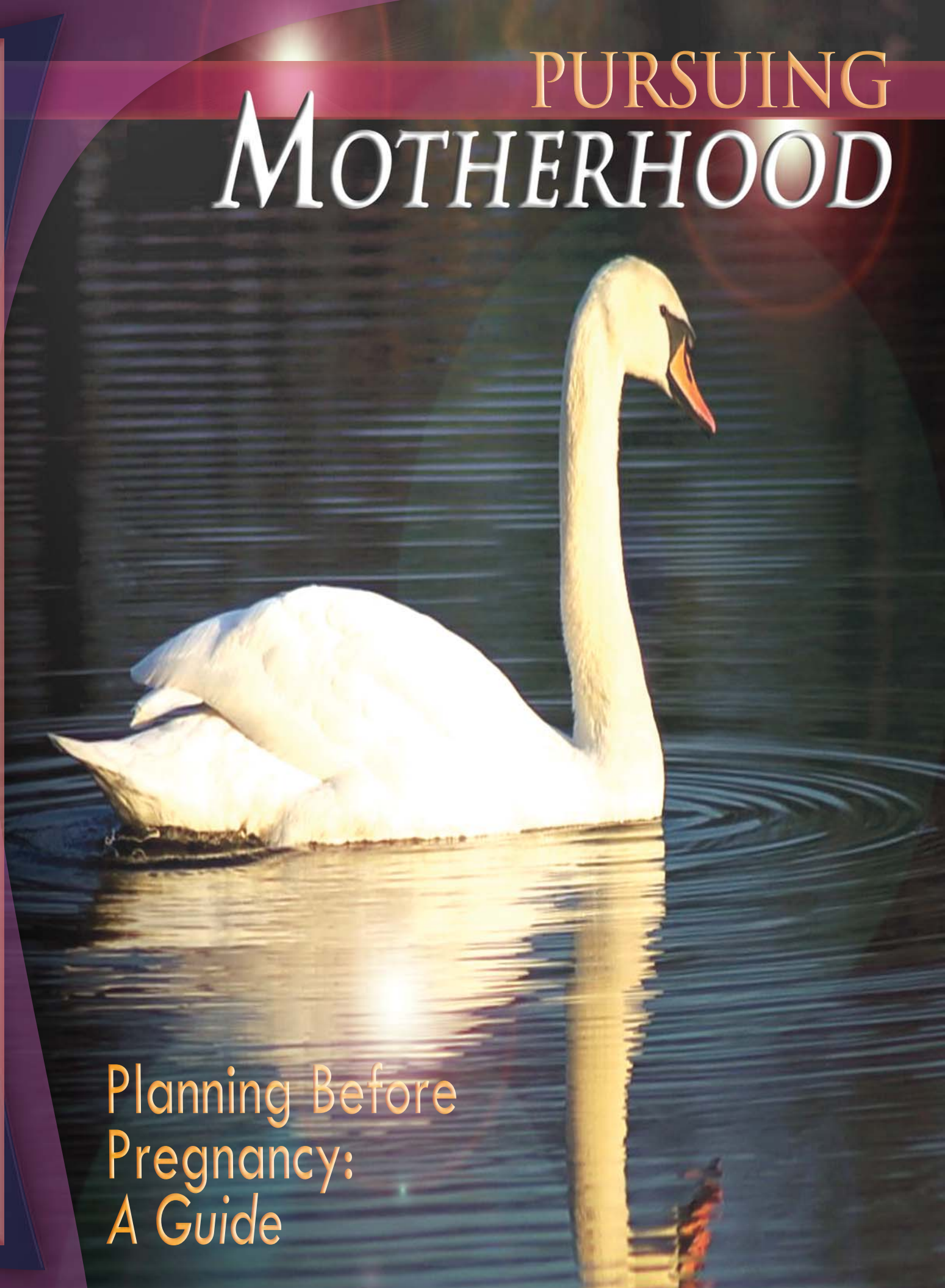
PURSUING MOTHERHOOD



Planning Before Pregnancy: A Guide

To the Reader

In planning for pregnancy, women are charting their course for the journey of a lifetime. In doing so, you may be attempting to fulfill a major life goal. It's a time full of excitement and anxiety, gain and loss.

If a women is not planning a pregnancy at this time, good health and active steps to prevent pregnancy are important. About one half of all pregnancies are unplanned.

To reach the destination of motherhood, a woman faces a variety of transitions. The first transition is before pregnancy - or preconception. This guidebook focuses on helping women get off to the best possible start by achieving maximum health before attempting to become pregnant. This will help the mother face the incredible physical and emotional demands of pregnancy and childbirth.

Delaware has the fifth worst infant mortality rate in the nation (about 9.3 deaths per 1000 live births). The percentage of low birth weight babies born in Delaware is above the national average (9 percent compared with 8 percent). This book is divided into sections that address improving Delaware's birth outcomes and contributing factors. All of those involved in its creation hope that this information will give women a stronger sense of risks and benefits, enable them to make the best possible health choices and find services and resources for help.

As an additional reference, see the next page. for recommendations issued by the Centers for Disease Control and Prevention.

Centers for Disease Control and Prevention (CDC)

RECOMMENDATIONS FOR PRECONCEPTION CARE

- Recommendation 1: Each woman and man should be encouraged to have a reproductive life plan. These tools can help women self-assess risks, make plans and take actions that will improve their health and that of their children.
- Recommendation 2: Increase public awareness of the importance of preconception health behaviors and preconception care.
- Recommendation 3: As a part of primary care visits, provide risk assessment and health counseling to all women of childbearing age to reduce reproductive risks and improve pregnancy outcomes.
- Recommendation 4: Increase the proportion of women who receive interventions as follow-up to preconception risk screening to address long-term health conditions and other risks.
- Recommendation 5: Provide additional intensive interventions to women who had a previous pregnancy that ended in an infant death, fetal loss, birth defects, low birth weight, or preterm birth.
- Recommendation 6: As part of maternity care, offer one pre-pregnancy visit for women planning pregnancy.
- Recommendation 7: Increase public and private health insurance coverage for women with low incomes to improve access to preventive women's health and pre-pregnancy care.
- Recommendation 8: Integrate components of preconception health into existing local public health and related programs, including emphasis on interventions for women with previous adverse outcomes.
- Recommendation 9: Increase the collection and use of evidence to improve preconception health.
- Recommendation 10: Maximize public health surveillance and related research mechanisms to monitor preconception health.

Survey

Please give us your thoughts on your binder materials. Please return the completed survey to the registration table. THANKS.

YOUR AGE

☐ 14-17 ☐ 18-25 ☐ 26-29 ☐ 30-34 ☐ 35-40

☐ over 40

YOUR EDUCATION

☐ High School Grad ☐ Some College

☐ Bachelor's Degree ☐ Graduate Studies ☐ Health Professional

Select your two favorite ways of getting information:

☐ Radio ☐ Newspaper ☐ Internet

☐ Television ☐ Books ☐ Magazines

What sources do you use for written health information:

☐ Magazines ☐ Internet

☐ Newspapers ☐ Doctor's handouts

☐ Books ☐ Health fair leaflets, brochures

☐ Newsletters

Does the binder content include information that you find useful?

☐ Yes ☐ No

What new topics should be included in the next binder? _____

_____

What do you think about the binder's appearance?

☐ Like a lot ☐ Like

☐ No opinion ☐ Dislike

How would you change the appearance of the next binder?

☐ Add photos of people ☐ Add photos of babies

☐ Sketches of baby items, themes ☐ Lighter colors ☐ No changes

How would you change the information in the next binder?

☐ Shorter information ☐ Info that is easier to understand

☐ No Changes

If you are interested in receiving a health newsletter, please provide your name and mailing address with zip code.

Name: _____

Street: _____

City:_____State: _____Zip Code: _____

Healthy Lifestyle Choices

Nutrition

Good eating habits can prevent and treat a wide variety of health issues in women and babies, from diabetes and high blood pressure to birth defects. Poor eating habits can leave unborn babies without building blocks for growth and development. Between 1989 and 2004, 44 percent of Delaware women who experienced a poor pregnancy outcome (delivering too early, delivering an underweight baby, experiencing an infant death) did not gain enough weight during pregnancy, and 24 percent gained too much weight. Adjusting eating habits properly can be more difficult for pregnant women who experience nausea and vomiting.

BALANCING THE DIET

Use these guidelines to eat the right variety of foods each day.

FOOD GROUP	AMOUNT	A SERVING IS...
Grains	6 servings or more	1 tortilla or bread slice, 1/2 bagel , ½ cup cooked rice, noodles
Vegetables	5 servings or more	½ cup chopped or cooked vegetables
Fruits	4 servings or more	1 apple, orange, peach or ½ cup chopped or cooked fruit
Milk	3 servings or more	1 cup milk or yogurt, 1-2 slices of cheese
Meat & Beans	6 ounces or more	1 ounce meat/poultry/fish, 1 egg, ½ cup cooked beans, 2 tablespoons peanut butter or nuts

PRENATAL VITAMINS

Check with your health care provider before taking vitamins. Large doses of vitamins A, C, D, E and K can be dangerous. However, mothers-to-be need much more iron, folic acid (vitamin B), calcium and phosphorus during pregnancy, especially if they are growing teens. Studies suggest that women who do not consume enough of the B vitamin folic acid before and during the early weeks of pregnancy are at increased risk of having a baby with a heart defect.

SPECIAL CONSIDERATIONS

The medication used to treat some disorders may affect the way foods are absorbed by the body. Women with phenylketonuria (PKU) can pass on heart defects unless they follow a special diet before pregnancy.

WIC provides free nutritious foods to eligible breast-feeding moms and their children. To find out if you qualify, call WIC at 302-739-3671 or go to www.dhss.delaware.gov/dhss/dph/chca/dphwichominf01.html

Best Weight

Most pregnant women are concerned about weight gain: what is too much and what is too little. Between 1989 and 2004, 44 percent of Delaware women who experienced a poor pregnancy outcome (delivering too early, delivering an underweight baby, experiencing an infant death) did not gain enough weight during pregnancy, and 24 percent gained too much weight. Too much weight gain can increase a pregnant woman's chances of gestational diabetes and preeclampsia. (See pg. 30) Not putting on enough weight can prevent the baby from growing at the right rate.

THE NUMBERS

Ideal weight gain recommended by most physicians is between 25 - 35 pounds after nine months. The best way for a woman to figure out her ideal weight gain is to see how close she was to ideal weight before conception. Body mass index (BMI) finds a person's proper weight for their height. Your BMI is the number across the top of the chart below.

BMI (kg/m2)	19	20	21	22	23	24	25	26	27	28	29	30	35	40
Height (in.)	Weight (lb.)													
58	91	96	100	105	110	115	119	124	129	134	138	143	167	191
59	94	99	104	109	114	119	124	128	133	138	143	148	173	198
60	97	102	107	112	118	123	128	133	138	143	148	153	179	204
61	100	106	111	116	122	127	132	137	143	148	153	158	185	211
62	104	109	115	120	126	131	136	142	147	153	158	164	191	218
63	107	113	118	124	130	135	141	146	152	158	163	169	197	225
64	110	116	122	128	134	140	145	151	157	163	169	174	204	232
65	114	120	126	132	138	144	150	156	162	168	174	180	210	240
66	118	124	130	136	142	148	155	161	167	173	179	186	216	247
67	121	127	134	140	146	153	159	166	172	178	185	191	223	255
68	125	131	138	144	151	158	164	171	177	184	190	197	230	262
69	128	135	142	149	155	162	169	176	182	189	196	203	236	270
70	132	139	146	153	160	167	174	181	188	195	202	207	243	278
71	136	143	150	157	165	172	179	186	193	200	208	215	250	286
72	140	147	154	162	169	177	184	191	199	206	213	221	258	294
73	144	151	159	166	174	182	189	197	204	212	219	227	265	302
74	148	155	163	171	179	186	194	202	210	218	225	233	272	311
75	152	160	168	176	184	192	200	208	216	224	232	240	279	319
76	156	164	172	180	189	197	205	213	221	230	238	246	287	328

WHAT BMI MEANS

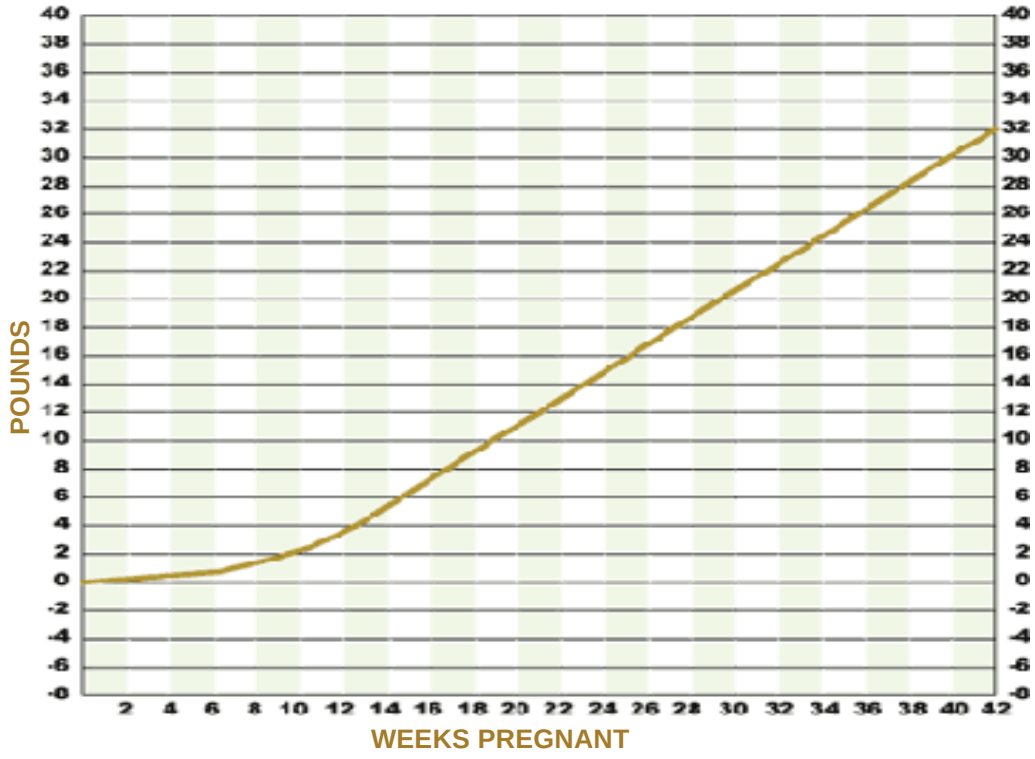
For a woman who is not pregnant, here's how to interpret the BMI score.

Underweight = less than 18.5
Normal = 18.5-24
Overweight = 25-29
Obese = 30 and over

If you are underweight or overweight, talk to a health care provider about how to reach the proper range.

RATE AND DISTRIBUTION

A good pattern for weight gain throughout pregnancy is about three pounds in the first trimester, 11 in the second, and 11 in the third. However, no obstetrician can say for sure what is the best pattern. The following chart shows the range of weight gain that is best at each week of pregnancy



If a woman's ideal weight gain during pregnancy is 30 pounds, it is typically distributed as follows:

Baby	7 ½ pounds
Required stores of fat, protein and other nutrients	7 pounds
Increased fluids	4 pounds
Increased blood volume	4 pounds
Enlarged breasts	2 pounds
Enlarged uterus	2 pounds
Amniotic fluid	2 pounds
Placenta	1 ½ pounds

Vaccination

Vaccines are an important tool to assure the health of families. Each person that is vaccinated helps keep others safe from disease. There are two kinds of vaccines, live and killed. Live vaccine puts weakened germs into the body so that natural disease fighters respond. Once active, these disease fighters, called antibodies, can protect the body for years. Killed vaccine uses dead germs to get the same disease fighting response.

Most people vaccinated in Delaware can find out their history by calling the Division of Public Health's Immunization Program at 1-800-282-8672.

BEFORE PREGNANCY

Women should make sure they are up-to-date on routine adult vaccinations before becoming pregnant. Because a mother's immunity is passed along to her newborn for the first few months of life, pre-pregnancy vaccination has twice the benefits. Live vaccines should be given a month or more before pregnancy. Killed vaccines can be given before or during pregnancy, if needed.

DURING PREGNANCY

A pregnant woman who gets the flu is at risk for serious complications and hospitalization. Killed flu vaccine is safe and very important for a pregnant woman.

Many vaccine-preventable diseases that are rarely seen in the United States are still common in other parts of the world. A pregnant woman planning international travel should talk to her health professional about vaccines. Information about travel vaccines can be found by calling DPH's Immunization Program at
1-800-282-8672.

AFTER DELIVERY

It is safe for a woman to receive vaccines right after giving birth, even while she is breast-feeding. A woman who has not received the latest vaccine for prevention of tetanus, diphtheria and pertussis (TDAP) should be vaccinated right after delivery. Women who are not immune to measles, mumps and rubella and/or chicken pox should also be vaccinated before leaving the hospital.

VACCINES FOR CHILDREN

Pregnancy is a good time to learn about childhood vaccines. A mother's immunity is passed along to her baby during pregnancy. This protects the baby from some diseases during the first few months of life until the baby can get vaccinated. Free vaccines are available through the federal Vaccines for Children program. The program covers children through age 18 who are uninsured, under insured, eligible for Medicaid or are American Indian or Alaskan Native. Call DPH's Immunization Program at 1-800-282-8672.

Dental Health

A healthy mouth is necessary for a healthy body, but is especially important before and during pregnancy. Good oral health means that the teeth do not have cavities, and the gums are not swollen, red or bleeding. When these conditions happen, they are caused by germs (bacteria) in the mouth. Dental problems are easily prevented with a good diet, brushing, flossing, and regular dental care.

DURING PREGNANCY

Pregnancy increases the risk for having oral health problems. Nearly half of all pregnant women develop red and swollen gums that may bleed, a condition called pregnancy gingivitis. This can usually be corrected with a cleaning by the dentist.

Increased snacking during pregnancy can cause more cavities for the mother-to-be, which could also affect the baby after birth. In some cases, untreated cavities can lead to serious infections in the mouth. The bacteria that cause a mother's tooth decay can be spread to the baby. Reducing the bacteria in the mouth may also help the baby have healthy teeth when they come in during his or her first year.

WHAT YOU CAN DO

- Eat healthy foods that provide calcium, protein, phosphorus and Vitamins A, C, D and B.
- Limit foods with sugar to mealtimes only.
- Drink plenty of water that contains fluoride.
- Brush teeth twice each day with a fluoride toothpaste.
- Use floss to clean between teeth each time you brush.
- Chew gum that contains xylitol to fight germs in your mouth.

THE DENTIST

Dental care is safe during your pregnancy. Plan to see your dentist before or early in your pregnancy for an exam and cleaning. Treatment can be done anytime during pregnancy, but is best scheduled between the 14th and 20th weeks. Emergencies should not be delayed. Optional care can wait until after delivery.

For more information, contact the Division of Public Health's Oral Health Program at 302-741-2960.

Healthy Lifestyle Choices

The choices a woman makes about smoking, using alcohol, street drugs and prescription medication affect her health. Between 1989 and 2004, among Delaware women who experienced a poor pregnancy outcome (delivering the baby too early, delivering the baby too small, or experiencing an infant death), 20 percent smoked during pregnancy. Among Delaware women with more than one poor pregnancy outcome, 19 percent smoked during pregnancy.

SMOKING

When a pregnant woman smokes, there is nothing health care providers can do to protect her baby. When expectant mothers smoke, harmful chemicals get into her bloodstream - the baby's only source of oxygen and nutrients. The most serious pregnancy complications -- stillbirth, premature delivery and low birth weight -- occur because nicotine and carbon monoxide work together to reduce a baby's oxygen supply.

The Delaware Smoking Quitline is a powerful tool to help adult smokers ready to kick the habit. The Quitline offers tobacco education materials and personal support sessions. The program also offers in-person assistance from specially trained Delaware pharmacists, and a voucher program to help qualifying low-income participants get nicotine replacement products. The Delaware Quitnet web site offers online counselors, tips, supportive group discussions and resources to develop your own quitting plan. Go to de.quitnet.com/

ALCOHOL

No amount of alcohol use during pregnancy is safe. Each year, more than 40,000 babies in the U.S. are born with alcohol-related defects. Drinking alcohol during pregnancy increases the risk of miscarriage, stillbirth and low birth weight. Many women do not know that even light drinking can harm their baby. Pregnant women should not drink beer, wine, wine coolers or hard liquor. Because women may not know they are pregnant for months, women who are trying to become pregnant should also avoid alcohol.

When a pregnant woman drinks, alcohol passes through the placenta to her baby. Birth defects are more likely caused by drinking during the first trimester. Growth problems are more likely caused by drinking in the third trimester. Each year, 1,300 - 8,000 babies in the U.S. are born with fetal alcohol syndrome (FAS), a combination of physical and mental birth defects caused by excessive drinking during pregnancy. FAS babies are abnormally small at birth and usually do not catch up on growth. They may have small eyes, a short or upturned nose and small, flat cheeks. They may be mentally retarded, have an abnormally formed brain, poor coordination and a short attention span. Their organs, especially the heart, may not form properly.

People affected by alcohol and drug abuse can get referrals for help by calling The National Council on Alcoholism at 1-800-NCA-CALL (1-800-622-2255).

DRUGS

A pregnant woman should check with a health care provider before taking any drugs or medicines. Drugs taken by a pregnant woman can affect her baby by:

- Acting directly, causing damage, leading to birth defects, or death.
- Tightening blood vessels in the placenta and reducing the baby's oxygen and nutrients. This can result in an underweight, underdeveloped baby.
- Causing contractions that reduce the baby's blood supply and trigger preterm labor and delivery.

Nearly 3 percent of pregnant women use illicit drugs such as marijuana, cocaine, ecstasy and other amphetamines, and heroin, according to a 2003 study by the Centers for Disease Control and Prevention. The March of Dimes advises women who use illicit drugs to stop before they become pregnant or to delay pregnancy until they can avoid the drug throughout pregnancy. The March of Dimes also encourages pregnant women who use illicit drugs (with the exception of heroin) to stop using the drug immediately, because of the harm continued drug use may cause. (See pgs. 24-26.)

COCAINE

During the early months of pregnancy, cocaine may increase the risk of miscarriage. It can later trigger preterm labor (before the 37th week) or cause the baby to grow poorly. Cocaine-exposed babies are more likely than unexposed babies to be born with low birth weight (less than 5½ pounds). Low-birth weight babies are 20 times more likely to die in their first month of life than normal-weight babies, and face an increased risk of lifelong disabilities such as mental retardation and cerebral palsy. Cocaine-exposed babies also tend to have smaller heads, which generally reflect smaller brains.

Some studies suggest that cocaine-exposed babies are at increased risk of birth defects, including urinary tract defects and, possibly, heart defects. Cocaine also may cause an unborn baby to have a stroke, which can result in irreversible brain damage or a heart attack, and sometimes death. Cocaine use also may cause the placenta to pull away from the wall of the uterus before labor begins. This can lead to extensive bleeding and can be fatal for both mother and baby. (Prompt cesarean delivery can prevent most of these deaths.)

MARIJUANA

Some studies suggest that use of marijuana during pregnancy may slow fetal growth and slightly decrease the length of pregnancy (possibly increasing the risk of premature delivery). Both of these factors can increase a woman's chance of having a low-birth weight baby. After delivery, some babies who were regularly exposed to marijuana in the womb appear to undergo withdrawal-like symptoms including excessive crying and trembling. Couples who are planning pregnancy also

should keep in mind that marijuana can reduce fertility in both men and women, making it more difficult to conceive.

ECSTASY AND METHAMPHETAMINE

There have been few studies on how these drugs may affect pregnancy. One small study did find a possible increase in heart defects and, in females only, clubfoot. Another commonly abused amphetamine is methamphetamine, also known as speed, ice, crank and crystal meth. Some studies suggest that this drug may cause an increased risk of birth defects, including cleft palate and heart and limb defects. It also appears to contribute to pregnancy complications including high blood pressure, which can slow fetal growth, premature delivery, and excessive bleeding in the mother following delivery. The long-term outlook for these children is not known.

HEROIN

Common pregnancy complications associated with heroin use include miscarriage, placental separation, poor fetal growth, water breaking too soon, premature delivery and stillbirth. As many as half of all babies of heroin users are born with low birth weight. These newborns often have breathing problems and brain bleeds, sometimes leading to lifelong disabilities.

Most babies of heroin users suffer from withdrawal symptoms after birth, including fever, sneezing, trembling, irritability, diarrhea, vomiting, constant crying and occasionally, seizures. Babies exposed to heroin before birth also face a ten-fold increased risk of sudden infant death syndrome (SIDS).

Pregnant women who share needles are at risk of contracting HIV (the virus that causes AIDS) and passing it on to their babies. A pregnant woman who uses heroin should not suddenly stop taking the drug. This can put her baby at increased risk of miscarriage or premature birth. She should ask her health care provider about methadone treatment.

For more information, go to www.marchofdimes.com. To learn more about stopping drug use, ask a health care provider or contact National Drug and Alcohol Treatment Referral Service at 1-(800)- 663-HELP (800-662-4357).

Sexually Transmitted Diseases

Sexually transmitted diseases (STD) are illnesses which can cause serious damage to women and their unborn children if not treated. These diseases include syphilis, hepatitis, gonorrhea, chlamydia and HIV. A baby can get an STD from his or her mother during pregnancy, at birth or while breast-feeding. However, STDs can be treated or controlled with medication.

SOURCES OF DISEASE

- Having vaginal, oral or anal sex with someone who is infected with an STD.
- Touching the sexual organs of someone who is infected.
- Sharing a needle to inject drugs.
- STDs cannot be spread by toilet seats, door knobs, swimming pools, hot tubs, bath tubs, shared clothing or eating utensils.

TYPES (Listed alphabetically)

Chlamydia is called a "silent" disease because three quarters of infected women and half of infected men have no symptoms. Serious damage, including infertility, can occur before a woman knows it. Chlamydia can be passed from an infected mother to her child during vaginal birth. In pregnant women, chlamydia infections may lead to premature delivery. Babies born to infected mothers can get chlamydial infections in their eyes and respiratory tracts. Chlamydia is a leading cause of early infant pneumonia and conjunctivitis (pinkeye) in newborns. To prevent chlamydia, use condoms correctly every time you have sex, including oral sex.

If symptoms occur, they usually appear 1-3 weeks after exposure. The few women with symptoms have abnormal vaginal discharge or feel burning when urinating. When the infection spreads from the cervix to the Fallopian tubes, some women have lower abdominal pain, low back pain, nausea, fever, pain during intercourse, and bleeding between menstrual periods. Whenever the infection spreads past the cervix into the upper reproductive system, permanent damage can occur. Men with symptoms might have a discharge from the penis and a burning sensation when urinating. Men might also have burning and itching around the opening of the penis or pain and swelling in the testicles, or both. There are two kinds of laboratory tests to diagnose chlamydia. Chlamydia can be cured with antibiotics. All sex partners must also be treated.

In the United States, nearly 75 percent of reported gonorrhea is found in people 15-29 years old, especially among African Americans. Gonorrhea is spread through penis-to-vagina, penis-to-mouth, penis-to-anus, mouth-to-vagina, and mouth-to-anus contact. Ejaculation of semen does not have to occur for gonorrhea to

be transmitted. Gonorrhea can also be spread from mother to child during birth. Gonorrhea infection can spread to other unlikely parts of the body. A person can get an eye infection after touching infected genitals and then the eyes. Gonorrhea be prevented by using latex condoms. If you are infected, notify all sex partners.

In women, the early symptoms of gonorrhea are often mild, and many women have no symptoms. Or symptoms can be vague and mistaken for a bladder or vaginal infection. The initial symptoms include pain or burning when urinating and a vaginal discharge that is yellow or occasionally bloody. Untreated gonorrhea in women can develop into pelvic inflammatory disease (see below). Symptoms of rectal infection include discharge, anal itching, soreness, bleeding, and sometimes painful bowel movements. Infections in the throat cause few symptoms.

In men, symptoms include a burning sensation when urinating and a yellowish white discharge from the penis. Sometimes men with gonorrhea get painful or swollen testicles. In males, symptoms usually appear 2 to 5 days after infection, but can last 30 days. Several laboratory tests diagnose gonorrhea. Antibiotics can cure gonorrhea. Although medication will stop the infection, it will not repair any permanent damage. Untreated gonorrhea can cause serious and permanent problems in both women and men. In women, gonorrhea is a common cause of pelvic inflammatory disease (PID). PID can cause infertility or damage that increases the risk of ectopic pregnancy. Ectopic pregnancy is a life-threatening condition in which a fertilized egg grows outside the uterus, usually in a Fallopian tube.

If a pregnant woman has gonorrhea, she may give the infection to her infant as the baby passes through the birth canal during delivery. This can cause blindness, joint infection, or a life-threatening blood infection in the baby. Treatment of gonorrhea as soon as it is detected in pregnant women will lessen the risk of these complications. Pregnant women should consult a health care provider for appropriate medications. Any genital signs or symptoms such as discharge or burning during urination or an unusual sore or rash should be a signal to stop having sex and to consult a health care provider immediately.

Herpes takes two forms, called herpes simplex 1 and herpes simplex 2. Herpes simplex 1 causes fever blisters. A person can get this form of herpes by contacting the saliva of an infected person. Herpes simplex 1 infection of the genitals usually occurs in people who received oral sex from a person with oral HSV-1 infection. Both herpes viruses can be released from the sores, but they also are released between episodes from skin that does not appear to be broken or to have a sore. The consistent and correct use of latex condoms can help protect against infection. However, condoms do not provide complete protection because the condom may not cover the herpes sores, and viral shedding may still occur. It is best to abstain from sex when symptoms or signs are present, and to use latex condoms between outbreaks.

Herpes simplex 2 is an infection of the sex organs, and often occurs without any signs. When signs do occur, they typically appear as one or more blisters on or around the genitals or rectum. The blisters break, leaving tender sores that may take two to four weeks to heal the first time they occur. Typically, another outbreak can appear weeks or months later, but is usually shorter and less severe. Although the infection can stay in the body indefinitely, the number of outbreaks tends to go down over a period of years. A person almost always gets this disease during sexual contact with someone who has a genital herpes simplex 2 infection.

Herpes simplex 2 can cause fatal infections in infants if the mother is shedding the virus at the time of delivery. It is important that women avoid contracting herpes during pregnancy because a first episode during pregnancy causes a greater risk of transmission to the newborn. If a woman has active genital herpes at delivery, a cesarean delivery is usually performed. There is no treatment that can cure herpes, but antiviral medications can shorten and prevent outbreaks.

HIV See pg.33

Human papilloma virus and genital warts are single or multiple growths, can be raised or flat, that appear in the genital area and sometimes form a cauliflower shape. Warts can appear within several weeks after sexual contact with an infected person, or can take months to appear. Genital warts are caused by the human papilloma virus (HPV). From 50 to 75 percent of sexually active men and women get genital HPV infection at some point. Not all HPV infections appear as warts. There are more than 100 different strains or types of HPV. More than 30 strains are sexually transmitted, infecting the skin of the penis, vulva, labia, anus, or the tissues covering the vagina and cervix. Some types may cause abnormal Pap smears and cancer of the cervix, anus and penis. Others are low-risk, and may cause mild Pap smear abnormalities and genital warts.

HPV that infects the genital area are spread through sexual contact. Condoms can reduce, but do not eliminate, the risk for transmission. Most HPV infections have no signs or symptoms, so most infected people are unaware and can transmit the virus to a sex partner. Rarely, pregnant women pass HPV to their baby during vaginal delivery. A newborn that is exposed to HPV during delivery can develop warts in the voice box (larynx).

Genital warts are diagnosed by examination. Visible genital warts can be removed, but no single treatment is ideal for all cases. Most women are diagnosed with HPV from abnormal Pap smears. There is no cure for HPV, although the infection usually goes away on its own. Cervical HPV infection becomes undetectable for 90 percent of women within two years. Persistent infection with certain types of HPV is the key risk factor for cervical cancer. Sexually active women should have a regular Pap smear to screen for cervical cancer or other precancerous conditions.

Pelvic inflammatory disease (PID) is an infection of the tubes that carry eggs from the ovary to the womb. A woman's other internal reproductive organs can also be infected. PID occurs when other sexually transmitted diseases are left untreated, but most cases are linked with gonorrhea and chlamydia. Sexually active women under age 25 are most likely to develop PID. Women who douche or have an intrauterine device (IUD) are also at higher risk. Untreated, PID can lead to infertility, ectopic pregnancy, infections and long-term pelvic pain. Sexually active women in their childbearing years are most at risk.

Symptoms of PID vary from none to severe. When PID is caused by chlamydial infection, there may be minimal symptoms, even while it is seriously damaging the reproductive organs. Because of the vague symptoms, PID goes untreated two thirds of the time. If symptoms occur, they include lower abdominal pain, fever, foul-smelling vaginal discharge, painful intercourse, painful urination and irregular menstrual bleeding. Without treatment, PID can cause permanent damage to the female internal reproductive organs such as scarring. Scar tissue blocks the movement of eggs into the uterus. Blocked Fallopian tubes from scarring can cause infertility. Women with repeated PID are more likely than women with a single episode to suffer infertility, ectopic pregnancy or chronic pelvic pain. PID can be diagnosed using tests to identify the infection-causing organism, by pelvic exam, pelvic ultrasound or laparoscopy, a procedure that allows the doctor to see internal organs. PID can be cured with antibiotics. The longer women delay treatment for PID, the more likely they are to have an ectopic pregnancy or infertility. Women's sex partners should be treated to decrease the risk of re-infection.

Syphilis is passed from person to person through direct, often sexual, contact with a syphilis sore. Sores occur mainly on the external genitals, vagina, anus, or in the rectum. Sores also can occur on the lips and in the mouth. Pregnant women with the disease can pass it to the babies they are carrying. Syphilis cannot be spread by toilet seats, door knobs, swimming pools, hot tubs, bath tubs, shared clothing, or eating utensils. Untreated, long-term syphilis can cause death. Using a latex condom can prevent syphilis.

The time between infection with syphilis and the start of the first symptom can range from 10-90 days (average 21 days). Typically a single sore (called a chancre) appears, but there may be more. The chancre is usually firm, round, small, and painless. The chancre lasts 3-6 weeks and heals on its own. If untreated, the infection progresses to a secondary stage, when one or more areas of the skin break into a rash that usually does not itch. Rashes can appear as the chancre is fading or can be delayed for weeks. The rash often appears as rough, red or reddish brown spots both on the palms of the hands and on the bottoms of the feet. The rash also may also appear on other parts of the body with different characteristics, some of which resemble other diseases. Sometimes the rashes are so faint that they are not noticed.

Even without treatment, rashes clear up on their own. In addition to rashes, second-stage symptoms can include fever, swollen lymph glands, sore throat, patchy hair loss, headaches, weight loss, muscle aches, and tiredness. A person can easily pass the disease to sex partners when the first or secondary stage signs or symptoms are present. The latent (hidden) stage of syphilis begins when the secondary symptoms disappear. Without treatment, the infected person still has syphilis, although there are no signs or symptoms. As syphilis remains in the body, it can begin to damage the brain, nerves, eyes, heart, blood vessels, liver, bones and joints. Infected people may experience uncoordinated muscle movements, paralysis, numbness, gradual blindness, dementia and death.

Depending on how long a pregnant woman has been infected, she has a high risk of having a stillbirth or a baby who dies shortly after birth. If not treated immediately, an infected baby may be born without symptoms but could develop them within a few weeks. Untreated babies may become developmentally delayed, have seizures, or die. A health care provider can diagnose syphilis by blood test or by examining material from infectious sores under a microscope. Every pregnant woman should have a blood test for syphilis. Antibiotics cure syphilis. People receiving syphilis treatment must abstain from sexual contact with new partners until the syphilis sores are completely healed, and notify their sex partners.

Trichomoniasis (trich) is the most common curable STD in young, sexually active women. It is spread through penis-to-vagina intercourse or vulva-to-vulva contact with an infected partner. Symptoms usually appear within 5 to 28 days of exposure in women. The vagina is the most common site of infection in women, and the urethra is the most common site of infection in men. Women can acquire the disease from infected men or women. Men usually get it only from infected women. Trichomoniasis in pregnant women may cause premature rupture of the membranes and preterm delivery. Using condoms during vaginal intercourse can prevent spread.

Many women have signs or symptoms of infection. In these women, trichomoniasis causes a frothy, yellow-green vaginal discharge with a strong odor. The infection may cause discomfort during intercourse and urination. Irritation and itching of the female genital area and lower abdominal pain can also occur. Most men with trichomoniasis do not have signs or symptoms. Men with symptoms may have an irritation inside the penis, mild discharge, or slight burning after urination or ejaculation. The disease is diagnosed by tests performed on a sample of vaginal fluid or urethral fluid. Trichomoniasis can usually be cured with a prescription drug. An infected man, even a man who has never had symptoms or whose symptoms have stopped, can continue to infect a female partner until he has been treated. Both partners should be treated at the same time.

For more information, contact DPH's STD program at (302)-744-1050.

Domestic Violence

Domestic violence is a severe threat to women's health at any time of life. It includes physical, sexual or mental abuse. Examples include marital rape, denial of access to birth control and/or threats of physical or sexual violence. Violence against a partner or a child is a crime in all states. Each year, at least 2 million women are abused in the U.S. A household survey found that pregnant women are 60 percent more likely to be beaten than women who are not pregnant. Women are four times more likely to suffer increased abuse if the pregnancy is unplanned or unwanted.

People who are hurt by their partners or parents do not cause the abuse. The most common reason for violence during pregnancy is that the male partner feels more stress over the upcoming birth. The stress is shown as frustration, which is directed back at what the man sees as the source: the mother and her unborn child. Pregnant women ages 13-17 have a particularly high risk of violence from their partners.

Although typical domestic violence targets the woman's head, attacks of pregnant women are often focused on the breasts, abdomen or genitals. The physical effects include:

- Insufficient weight gain
- Vaginal bleeding
- Hemorrhage
- Complications during labor
- Miscarriage
- Broken membranes
- Fetal bruising, fractures and swellings filled with blood
- Separation of placenta
- Abdominal injury
- Chronic illnesses become worse
- Delayed prenatal care
- Low birth weight
- Death
- Vaginal, cervical, uterus and kidney infections

Pregnant women who are abused by their partners are more likely to experience stress, depression and addiction to tobacco, alcohol and drugs. The long-term emotional affects of violence during pregnancy can damage a child's psychological development. The man who abuses his partner is also likely to abuse his children.

WHAT TO DO

Go to a safe place, such as the home of a friend or a relative or an emergency shelter. Take your children with you. Call the police if you think you need protection or if you want to bring charges against your abuser. If possible, take house keys, money and important papers. Do not use drugs or alcohol at this time because you need to be alert in a crisis. The staff at emergency shelters can help with filing for a court order of protection. Talk to your doctor, who can treat any medical problem, provide support and make referrals. For free help and information on Delaware services, contact the National Domestic Violence Hotline 24 hours a day, everyday at 800-799-7233 or go to http://www.ndvh.org

Preconception Care Program

The Preconception Care Program in the Division of Public Health provides enhanced reproductive health care for women. Services are targeted to women who:

- Had a preterm birth, low birth weight baby, an infant death, stillbirth or fetal death.
- Live in certain zip codes.
- Are African-American.
- Are Medicaid eligible, medically underinsured, or uninsured.
- Have chronic diseases including hypertension, diabetes and depression.
- Struggle with domestic abuse, unsafe community or poverty.
- Need increased social supports.

SERVICES

- Access to preconception care for women which includes:
  - reproductive health services.
  - support for stress, violence and depression.
  - nutrition counseling.
  - contraceptive education and counseling.
  - pregnancy diagnosis and counseling.
  - access to a broad range of contraceptive methods.
  - testing and treatment for sexually transmitted diseases (STDs) including gonorrhea, Chlamydia, syphilis.
  - testing and treatment referral for HIV and AIDS.
  - Level 1 infertility counseling.
  - genetics information, education and referral.
- Screening for alcohol, drug, and tobacco use and referral to smoking cessation and drug treatment programs.
- Trained community support services personnel to provide street level outreach, reinforce patient education and assist with social service needs.
- Social work services to address family social and emotional needs.
- Basic nutrition counseling, breast-feeding education and support, folic acid education and specialized counseling for patients with chronic diseases or pregnancy-induced complications which may result in poor birth outcomes.
- Oral health education and referral.

For more information see following page.

Delaware Planned Parenthood, Dover	678-5200
Delaware Planned Parenthood, Claymont	798-8000
Delaware Planned Parenthood, Newark	731-7801
Delaware Planned Parenthood, Rehoboth	645-2737
Delaware Planned Parenthood, Wilmington	655-7293
Delmarva Rural Ministries, Inc., Dover	678-2000 or 678-3652
La Red Health Center, Georgetown	855-1233
Women's Health Center, Wilmington	428-4414
Women's Health Group, Newark	733-6510
Westside Health, Brookside	455-0900
Westside Health, Northeast	575-1414
Westside Health, Wilmington	655-5822
Wilmington Hospital Health Center, Wilmington	428-4410

Family Practice Team Model

The Family Practice Team Model program in the Division of Public Health provides enhanced reproductive health care for women. Services are targeted to women who:

- Had a preterm birth, low birth weight baby, an infant death, stillbirth or fetal death.
- Live in certain zip codes.
- Are African-American.
- Are Medicaid eligible, medically underinsured, or uninsured.
- Have chronic diseases including hypertension, diabetes and depression.
- Struggle with domestic abuse, unsafe community or poverty.
- Need increased social supports.

SERVICES

- Access to preconception care for women which includes:
  - reproductive health services.
  - support for stress, violence and depression.
  - nutrition counseling.
  - contraceptive education and counseling.
  - pregnancy diagnosis and counseling.
  - access to a broad range of contraceptive methods.
  - testing and treatment for sexually transmitted diseases (STDs). including gonorrhea, Chlamydia, syphilis.
  - testing and treatment referral for HIV and AIDS.
  - Level 1 infertility counseling.
  - genetics information, education and referral.
- Screening for alcohol, drug, and tobacco use and referral to smoking cessation and drug treatment programs.
- Trained community support services personnel to provide street level outreach, reinforce patient education and assist with social service needs.
- Social work services to address family social and emotional needs.
- Basic nutrition counseling, breast-feeding education and support, folic acid education and specialized counseling for patients with chronic diseases or pregnancy-induced complications which may result in poor birth outcomes.
- Oral health education and referral.

For more information contact:

Wilmington Hospital Health Center, Wilmington	428-4410
Women's Health Group, Newark	733-6510
Delmarva Rural Ministeries, Inc., Dover	678-2000
	678-3652
La Red Health Center, Georgetown	855-1233
Westside Health, Wilmington	655-5822
Westside Health, Northeast	575-1414
Westside Health, Brookside	455-0900

DPH Team

Prematurity

Delaware's infant mortality rate has been attributed to the delivery of low birth weight infants. Low birth weight is defined as less than 5½ pounds at birth and is often linked to prematurity. Why these infants were born prematurely is not fully understood.

In 2004, Delaware's Gov. Ruth Ann Minner established the Infant Mortality Task Force to identify risk factors and implement practices to prevent future deaths. The task force produced 20 recommendations which may be found at www.dhss.delaware.gov/dhss/dph/index.html .

RISK FACTORS

Infants that are born at 37-42 weeks of pregnancy are usually healthier than those born early. So it's frightening when a pregnant woman starts having regular contractions that cause her cervix to start to open or thin out (known as dilation and effacement) before reaching 37 weeks. This is preterm, or premature, labor. If the woman delivers her baby before 37 weeks, it's called preterm birth and the baby is considered premature. A mother may experience a spontaneous preterm birth if her water breaks early (premature rupture of membranes), or her cervix dilates early without contractions.

In 2004 in Delaware, 13 percent of all births were premature. Some are planned because there is a medical condition or more than one baby. These include induced labor and scheduled cesarean sections. However, spontaneous or unexpected prematurity is one of the leading causes of infant mortality in Delaware.

Babies born premature at 34-37 weeks often do very well. If a woman starts labor before 34 weeks, her medical provider may be able to slow down the labor for a few days so the baby can be given medicine to help his or her lungs and other organs get ready.

CAUSES

- Injury or surgery in the abdomen, such as having the appendix removed.
- Infection such as strep B can cause premature labor.
- It's believed that high stress causes the release of hormones that trigger preterm labor. A study showed that working moms-to-be who stand for more than 40 hours a week or had extremely tiring jobs were more likely to deliver prematurely. Some researchers are studying family links to preterm birth because it seems to happen across generations.

RISK FACTORS

- Previous preterm delivery The risk is higher the earlier a baby is born and the more preterm births a woman has had.
- Pregnancy with more than one baby.
- Mother younger than 17 or older than 35.
- Mother is African-American. (17.4 percent of African-American babies are premature).
- Not enough weight was gained during pregnancy (See pgs. 5-6).
- Too thin before pregnancy.
- Mother with short stature.
- Vaginal bleeding in more than one trimester
- Smoking, alcohol abuse and drug use - especially cocaine - during pregnancy. (See Healthy Lifestyles section on pgs.9-11).
- Gave birth in the last 18 months (particularly birth within the last six months).

PREDICTING AND PREVENTING PREMATURITY

Two prematurity tests are available. One measures the length of a woman's cervix and may be part of the first prenatal visit. If the cervix becomes shorter in the second trimester, a woman is at higher risk for preterm delivery. Symptoms that the cervix is changing include pelvic pressure, backache or increased mucus discharge. Health care providers may recommend an ultrasound to check.

If a woman is less than 24 weeks pregnant, with a changing cervix but no contractions, her health care provider may put stitches in the cervix to help keep it closed. This is called a cerclage. However, there's considerable controversy about whether cerclage is effective enough in this situation to be worthwhile. Women who've had three or more pregnancies often benefit from cerclage. Women who have lost second-trimester pregnancies may have a cerclage at 13 to 16 weeks.

The second test for prematurity is fetal fibronectin screening which looks for protein in cervical and vaginal mucous. If more than a small amount is found during the second trimester, the woman is at risk for premature birth. In response to a positive test, a practitioner may give the mother drugs to stop labor for a short time, and steroids to help the baby's lungs mature faster. A negative test result means the woman is highly unlikely to have a preterm delivery in the next two weeks. A negative result can put a woman's mind at ease and help her avoid hospitalization or bed rest and medications.

Preventing Premature Labor

Signs of Premature Labor

The earlier a woman discovers preterm labor, the more likely it is that her baby can receive treatment. Let your health practitioner know right away if any of these signs occur in the second or third trimester:

- An increase in vaginal discharge or a change in the type of discharge, such as if it becomes watery, mucus-like, or bloody (even if it's pink or just tinged with blood).
- Any vaginal bleeding or spotting.
- Abdominal pain, menstrual-like cramping, or more than four contractions in one hour - even if they don't hurt.
- An increase in pressure in the pelvic area, such as a feeling that your baby is pushing down.
- Low back pain, especially if you didn't have it before.

These symptoms can be confusing because some, such as pelvic pressure or low back pain, occur during normal pregnancies, too. Occasional early contractions may just be Braxton Hicks contractions. A woman with signs of preterm labor or possibly leaking amniotic fluid should call a health practitioner. She will probably need her contractions monitored at a hospital along with the baby's heart rate. A physician or midwife will check if the mother's membranes have broken and check her urine for infection.

If water hasn't broken, the practitioner will perform a vaginal exam to see how much the cervix has dilated and effaced. Often a practitioner will also do an abdominal ultrasound to check the amniotic fluid and confirm the baby's growth, gestational age and position. If membranes haven't ruptured, and the cervix remains closed and uneffaced after a few hours, the woman will probably go home.

When a woman is less than 34 weeks pregnant and found to be in preterm labor with membranes intact with no signs of a uterine infection or other problems (such as severe preeclampsia or signs of a placental abruption), health care providers will usually try to delay delivery. The woman will get antibiotics to prevent group B strep infection in the baby and medication to delay delivery for several days. She will also receive steroids to help the baby's lungs, intestines and brain mature quickly..

When a woman's water breaks before 37 weeks but there are no contractions, the medical team may decide to wait for the onset of labor, to induce labor, delay labor or transfer to a hospital with a level 3 nursery. In most cases, women in premature labor after 34 weeks will deliver the baby then. Babies born at this time usually do as well as full-term babies.

A woman's health care provider may ask for input from a perinatologist, a specialist in high-risk pregnancies. A specialist may consider treating a woman with hormones called 17 P if they lost babies in the second trimester or had a spontaneous preterm birth. For help, see Smart Start pg. 47.

Birth Defects and Genetic Counseling

A birth defect is an abnormality of structure, function or body chemistry present at birth. Some are mild; others can cause serious physical or mental disabilities (the most common are below). Birth defects have been the leading cause of infant mortality in the U.S. for 20 years, causing one in five infant deaths. In Delaware, birth defects are the second leading cause of infant death after premature birth and low birth weight. The Delaware Birth Defects Surveillance Registry Program of the Division of Public Health (DPH) keeps confidential data on nearly 100 birth defects diagnosed during pregnancy and following birth to age 5. The information is kept confidential. The program helps identify environmental and hereditary factors and preventive strategies.

PREVENTION

Women can take the following steps to eliminate causes of birth defects in their children:

- Take a multivitamin containing 400 micrograms of folic acid.
- Avoid alcohol and unprescribed drugs.
- Get tested for immunity to rubella before pregnancy and get vaccinated if needed.
- See a health provider about ways to improve your health.
- See a genetic counselor before pregnancy to find out the chances of passing on a birth defect. DPH's genetics program refers individuals to genetics counselors.

HEART DEFECTS

The most common birth defects, heart defects occur in one of every 125-150 U.S. infants each year. Women who get rubella (German measles) during their first trimester have a high risk of having a baby with a heart defect. Heart defects can prevent the heart from pumping enough blood to parts of the body and can cause heart failure. The baby may have a rapid heartbeat and breathing difficulties, especially when feeding. The baby's skin may look pale gray or blue.

According to the March of Dimes, medications linked to heart defects include the acne medication Accutane, lithium and possibly anti-seizure drugs. Drinking alcohol and using cocaine while pregnant increases the risk of heart defects. Women with diabetes are at increased risk, but risk can be reduced if the diabetes is controlled before pregnancy. Women with phenylketonuria (PKU) can pass on heart defects unless they follow a special diet before pregnancy. Women who do not consume enough vitamin B (folic acid) before and during pregnancy are at increased risk of having a baby with a heart defect.

Research continues to find links of certain genes with certain defects. More than one-third of children with Down syndrome, and nearly a quarter of girls with Turner syndrome, have heart defects. Other disorders linked with heart defects include Noonan, Alagille, Marfan and Williams syndromes.

Most heart defects can be improved by surgery, medicine, artificial valves and pacemakers. Thankfully, death rates from heart defects are dropping.

CLEFT LIP AND PALATE

Gaps in the lip and palate (roof of mouth) are called oral clefts and occur separately or together. A cleft lip can be a small notch in the upper lip or a complete opening that extends into the bottom of the nose and upper gum. Cleft palate can involve only the soft tissue in the back of the mouth or continue toward the front of the mouth. These birth defects occur about 5-7 weeks after conception. According to the March of Dimes, nearly 6,800 U.S. babies are born with clefts each year. Clefts are most common among Asians and Native Americans, and least common among African Americans. Heredity, some anti-seizure drugs, infections, lack of folic acid, smoking and alcohol use may be causes. Methamphetamine, also called speed and crystal meth, may cause an increased risk of cleft palate.

Babies with oral clefts may have feeding difficulties, frequent ear infections, hearing loss, speech difficulties and dental problems. Babies with cleft palate alone or also with a cleft lip have the most feeding difficulty. Some babies may gag, choke or have milk come out of their nose. Most babies with cleft palate can't breast-feed. Special nipples and bottles are available and health providers may recommend a special plastic plate that fits into the roof of the mouth to block the opening during feeding.

Surgery can correct cleft lip and cleft palate. The timing and type of surgery depend on the baby's health, the type of cleft and the surgeon's assessment. Most can be repaired by about 3 months of age. Cleft palate usually is repaired at 6-18 months old. Many children need follow up surgeries.

DOWN SYNDROME

Down syndrome is a disorder that includes mental retardation, specific facial features, heart defects, increased infections, problems with vision and hearing, and other health problems. The severity of these problems varies. Down syndrome affects nearly one in 800-1,000 babies. The risk of Down syndrome increases with the mother's age, from one in 1,250 for a woman age 25, to one in 1,000 at age 30, one in 400 at age 35, and one in 100 at age 40. Nearly 80 percent of babies with Down syndrome are born to women under age 35, who tend to have the most babies. Studies suggest that with proper intervention, fewer than 10 percent of Down babies will have severe mental retardation. Prenatal testing can diagnose or rule out Down syndrome.

Down syndrome occurs during conception, when an egg or sperm cell has an extra chromosome number 21. There is no way to prevent the chromosomal accident that causes Down syndrome and there is no cure. It seems that some women who have a Down syndrome baby have a problem processing folic acid.

Nearly half of newborns with Down syndrome have heart defects and all babies with Down syndrome should be examined by a pediatric cardiologist in their first two months. Nearly 10 percent of infants with Down syndrome have intestinal malformations that require surgery. More than 50 percent have some visual or hearing impairment. These children also get many colds, ear infections, bronchitis and pneumonia. They also are at increased risk of thyroid problems and leukemia.

For more information, go to www.dhss.delaware.gov/dhss/dph

Neonatal Care Unit (NICU)

A neonatal intensive care unit, usually shortened to NICU, is a section of a hospital that specializes in the care of sick or premature newborn infants. Nearly all children's hospitals have NICUs, but they can be found in large general hospitals as well. Public access to a NICU is limited, and staff and visitors must wear gowns, gloves, and masks to reduce spread of infection. For many babies, time in the NICU includes steps forward and backward. This is understandably emotional for parents. See pgs. 35-36 for coping methods.

WHAT YOU'LL SEE

NICUs were created to provide infants with better protection from infection, offer specialized feeding, specialized equipment and temperature. It's meant to be an area of warmth, quiet and calm. Some of the things mothers will see include:

- Warmers: Infants are cared for in incubators, called Isolettes or open warmers.
- Soft lighting: The eyes of premature babies may not be fully grown. In some cases, babies will wear tiny goggles or have blankets over their incubators to protect their sensitive eyes until they mature.
- Therapy lights: Many newborns have a yellow skin coloring for the first few days, called jaundice. The lights are part of a belt that lays over the baby's middle.
- Oxygen equipment: Breathing is the biggest problem among premature babies because their lungs are not fully grown. A clear plastic head hood or a nasal cannula is used to deliver warm, moist oxygen. Some infants need mechanical ventilation that uses a tube going from the mouth to the windpipe.
  Other babies need a mask that provides extra pressure to keep their lungs inflated.
- IV/intravenous lines: These tubes give newborns their feedings and medications. Babies who get tube feedings are given breast milk or formula.
- Monitors: Some track the heartbeat of each baby, while other monitors show how well babies are breathing. A temperature probe is a wire on the skin that measures the baby's temperature.

HOW TO HELP:

- Talk in a soft and gentle voice, or sing or hum. This is how baby learns to recognize you.
- Place your hand gently on baby. Ask when the baby is ready to be held.
- Change diapers and ask about washing the baby.
- Protect baby from bright light and noise. Bring a special blanket to drape over the incubator.
- Bring breast milk. Breast- or bottle-feed when possible.
- Donate blood.

Pregnancy Risk Assessment Monitoring System

PRAMS is a survey mailed to new mothers that asks questions about their health and habits before, during, and shortly after their pregnancy. PRAMS provides information that is not available from other sources. The goal of the survey is to improve the health of mothers and infants. All information provided to PRAMS is kept confidential.

PRAMS was created because the number of infant deaths and low birth weight babies across the U.S. was staying the same despite improvements in health care. PRAMS information showed that women's behaviors during pregnancy may affect infant birth weight and mortality rates.

PRAMS is used to identify women's health conditions and habits during pregnancy that can put them and their babies at risk. The data is used by Delaware's Division of Public Health to create and assess programs that help improve the health of women and their babies. It also helps health personnel understand changes in unintended pregnancy, prenatal care, breast-feeding, smoking, drinking, and infant health.

FINDINGS

- In 2002, PRAMS found that the percentage of unintended pregnancy among women who gave birth to a live infant ranged from 33-54 percent.
- During 2000 – 2002, the percentage of alcohol use in the three months before pregnancy ranged from 21-65 percent.
- In 2002, the percentage of women smoking in the three months before pregnancy ranged from 14- 37 percent. The percentage of women smoking the last three months of pregnancy ranged from 7-25 percent.

PRAMS is a project of Delaware's Division of Public Health. For research on infant mortality, see the following page on Fetal and Infant Mortality Review (FIMR).

Fetal & Infant Mortality

The death of a child is a tragedy for the family and community. Never is this more true than when the child is still in infancy. The Division of Public Health (DPH) has made reducing infant mortality a top priority. A Fetal and Infant Mortality Review (FIMR) is a process that DPH and health care professionals use to find causes of death in children before, and up to one year after, birth. The goal of this process is to find ways to prevent future deaths. Information provided to FIMR is kept confidential.

Infant mortality is defined as the number of infant deaths under one year of age per 1,000 live births. From 1999 - 2003, Delaware's infant mortality rate was 9.1 per 1,000 live births, ranking sixth highest in the U.S. That rate increased to 9.3 per 1,000 live births in Delaware from 2000 – 2004. The infant mortality rate among Delaware's African Americans was 16.1 per 1000, compared to 7.3 per 1000 for whites and not available for Hispanics. Kent County had the highest county rate at 10.2 per 1,000 live births. Wilmington had the highest rate of all, at 12.4 per 1,000 live births.

THE FIRST FINDINGS

FIMR searches for medical and social factors that affect fetal and infant deaths. Births that ended in an infant death at Christiana Care Health System during 2003 were selected for the first study. Researchers looked for the most frequent factors shared by cases and noted what community resources could have helped. Eighty-five percent of the infants in the study died of complications of prematurity.

FIVE RECOMMENDED ACTIONS INCLUDED:

- Help women recognize preterm labor. See pg. 23 for specific signs.
- Help women with risk factors for poor pregnancy outcome promptly find public assistance or public health services. Develop and promote easy-to-use access phone numbers.
- Help women with infant losses obtain grief support and provide mental health home-visiting services. See pgs. 36 and 55.
- Help women with long-term medical conditions, history of a poor pregnancy outcome or poor lifestyle choices improve their health. This includes a focus on all women's health before and between pregnancies.
- Help women with multiple gestation, obesity and inadequate weight gain during pregnancy maintain a healthy weight. See pgs. 5, 6, 55. Offer nutrition counseling.

MOVING FORWARD

These recommendations are a starting point. Among the deaths from 2003, only 38 percent of mothers agreed to interviews. Changes will be made to encourage more mothers to participate. For more information, contact the Fetal Infant Mortality Review program at (302) 255-1760.

High Blood Pressure

High blood pressure can lead to stroke, heart attack, heart failure or kidney failure. Nearly 65 million U.S. adults have high blood pressure, with half of them women. Many of these people are not receiving the right care. According to the American Heart Association, blood pressure is the force in the arteries when the heart beats (systolic pressure) and when the heart is at rest (diastolic pressure). Health care providers consider 120 over 80 a normal blood pressure. Hypertension, or high blood pressure, occurs at 140 mm Hg or higher systolic pressure, at 90 mm Hg diastolic pressure or higher. High blood pressure puts adults at risk for coronary heart disease, which leads to heart attack and stroke. People of any age can have high blood pressure, but it's most often seen in those over age 35 and among African Americans. Obesity, frequent alcohol use, diabetes mellitus, gout and kidney disease also put people at risk.

WOMEN & THE PILL

Birth control pills (combined hormone contraception) are connected with high blood pressure. Risk increases if a woman smokes, is overweight, has a family history of high blood pressure, kidney problems or had high blood pressure during pregnancy.

PREGNANCY

A woman with untreated high blood pressure during pregnancy is at higher risk of having a premature or low birth weight baby, or having her placenta separate from the uterus, causing stillbirth. An increase of 30 or more systolic, or 15 in the diastolic reading, can be a sign of high blood pressure in pregnancy. Symptoms of high blood pressure during pregnancy include severe and constant headaches, swelling, especially in the face, dizziness, blurred or spotty vision and sudden weight gain of more than a pound a day.

High blood pressure that first occurs in the second half of pregnancy, along with protein in the urine and fluid retention is called preeclampsia (pre-e-clamp-sia). This usually occurs in first pregnancies and not again. During preeclampsia, blood flow that nourishes the fetus is reduced. The blood supply can be improved by bed rest. In severe cases early delivery may be needed, resulting in a premature baby. If convulsions occur the disease is called eclampsia, and is treated by delivery.

PREVENTION & CONTROL

High blood pressure can be controlled but not cured. A woman's control plan may include eating less fat and salt, losing weight, drinking less alcohol, quitting smoking and adding regular physical activity. Medication can also lower blood pressure. See your health care provider for blood pressure checks and to discuss the best way for you to maintain a healthy blood pressure before and during pregnancy.

Diabetes

Diabetes is a group of diseases caused by lack of insulin. Insulin is a hormone the body needs to convert sugar, starches, and other food into energy. There are several types of diabetes, each explained below. Among American adults age 20 or older, 20.6 million or 9.6 percent have diabetes. This includes 9.7 million women. African Americans, Mexican Americans, Puerto Ricans and American Indians are nearly twice as likely to have diabetes as Caucasians. The risk for death among diabetics is nearly twice that of people without diabetes of a similar age.

Many people control their diabetes by following a healthy meal plan and exercise program, losing extra weight, taking medication, testing blood daily and receiving recommended tests. Diabetes can lead to serious health problems if not controlled. Among adult diabetics, 16 percent take insulin only, 12 percent take both insulin and oral medication, 57 percent take oral medication only, and 15 percent do not take either. Many people with diabetes also need to take medications to control cholesterol and blood pressure.

TYPE 1 DIABETES

Type 1 diabetes develops when the body's immune system destroys the only cells in the body that make insulin. This form of diabetes usually occurs in children and young adults. Symptoms include increased thirst and urination, constant hunger, weight loss, blurred vision and extreme tiredness. Without treatment with insulin, a person with type 1 diabetes can lapse into a life-threatening diabetic coma. Type 1 diabetes makes up less than 10 percent of all diagnosed cases of diabetes. There is no known way to prevent type 1 diabetes.

TYPE 2 DIABETES

Type 2 diabetes makes up 90-95 percent of all diagnosed cases of diabetes. Type 2 diabetes is linked with older age, obesity, family history of diabetes or gestational diabetes, physical inactivity and race/ethnicity. About 80 percent of people with type 2 diabetes are overweight. The symptoms of type 2 diabetes develop gradually and include fatigue, frequent urination, increased thirst and hunger, weight loss, blurred vision, and slow healing of wounds or sores. Some people have no symptoms.

SERIOUS HEALTH PROBLEMS

People with diabetes are prone to many other problems, such as blindness, kidney damage, heart disease and amputations. Diabetics are more likely to die from pneumonia or influenza than people without diabetes. Blood pressure control reduces the risk of heart disease or stroke among diabetics by 33-50 percent, and the risk of eye, kidney, and nerve diseases by nearly 33 percent. Detecting and treating eye disease with laser therapy can reduce severe vision loss in half. Comprehensive foot care can reduce amputation rates by 45-85 percent.

For more information, contact the Division of Public Health's Diabetes Prevention and Control Program at 302-744-1020.

Gestational Diabetes

Gestational diabetes is diabetes that occurs when women are pregnant. Gestational diabetes occurs in 7 percent, or nearly 200,000 U.S. pregnancies each year, more frequently among African Americans, Hispanic Americans, and Native Americans. It is also more common among obese women and those with a family history of diabetes. It usually develops during the second half of pregnancy. Unlike other forms of diabetes, gestational diabetes usually goes away when the baby is born. During pregnancy, gestational diabetes requires treatment to avoid health problems in the baby. An oral glucose tolerance test between the 24th and 28th weeks of pregnancy.

After pregnancy, 5-10 percent of women with gestational diabetes have type 2 diabetes. (See pg. 31) Women who have had gestational diabetes have a 20-50 percent chance of developing diabetes in the next 5-10 years. The children of women who have had gestational diabetes have an increased risk for obesity and diabetes. Talk to your health care provider about your risk for diabetes.

OTHER RISK FACTORS

- Age: risk increases with age, especially 45 years and older.
- Overweight: Body Mass Index (BMI) 25 or higher (23 or higher if Asian American, 26 or higher if Pacific Islander) See pg. 5
- Family history of diabetes: having a parent, brother, or sister with diabetes.
- History of gestational diabetes and giving birth to a baby weighing more than 9 pounds.
- Blood pressure: 140/90 or higher.
- Cholesterol: HDL cholesterol less than 50 for women, triglyceride level 250 or higher
- Inactive lifestyle: exercise less than three times a week.

SYMPTOMS

- Increased thirst.
- Increased urination.
- Weight loss but increased appetite.
- Fatigue.
- Nausea and vomiting.
- Frequent infections including those of the bladder, vagina, and skin.
- Blurred vision.
- Usually there are no symptoms.

CONTROLLING GESTATIONAL DIABETES

Most women with gestational diabetes can control their blood sugar levels with diet, while 10-15 percent need insulin injections or oral medication. A pregnant woman with diabetes should follow a special diet designed for her. How many calories a pregnant woman with diabetes should eat, and the amount of foods from various groups, depend on factors including height, weight, stage of pregnancy, and the baby's growth rate. For more information, contact the Division of Public Health's Diabetes Control Program at 302-744-1020.

HIV

Between 120,000 to 160,000 women in the U.S. are infected with HIV, the virus that causes AIDS. Nearly one out of four of these women don't know they have HIV. Women can pass HIV to their babies during pregnancy, while the baby is being delivered, or through breast-feeding. Mother-to-child transmission is the most common way children become infected with HIV.

With treatment, these women and their babies are living longer, healthier lives. If moms get treatment before and during delivery, and the babies get treatment immediately after birth, less than 2 percent of the babies get infected with HIV. Routine HIV testing and treatment of pregnant women has dramatically reduced the number of children in the U.S. born with HIV from 855 in 1992 to only 57 in 2005.

RISK FACTORS

Twenty years ago, more women were exposed to HIV through sharing needles to inject drugs. Now, more women get HIV from having unprotected sexual contact with men that were infected with HIV through sharing needles. Almost all children now living with HIV/AIDS in the U.S. got HIV from their mothers.

This is why all women and their partners should get an HIV test, especially if pregnant or considering pregnancy. Every child with HIV in Delaware in the last 5 years has a mother who did not get tested, did not know she had HIV, and did not get treatment.

PREVENTION

HIV testing is the key. Of more than 100,000 HIV-infected women in the U.S., 80 percent are of childbearing age. To prevent spreading HIV during pregnancy, women must know if they are infected. If they have HIV, and don't receive treatment, nearly 25 percent of mothers will transmit HIV to their babies. Because more women are getting tested, the number of children with AIDS who got HIV from their mother declined from 122 in 2000 to 47 in 2004.

TESTING IN DELAWARE

The Division of Public Health offers confidential, rapid HIV testing and counseling across Delaware, providing results in only 20 minutes. Only a drop of blood is needed from the finger, or a sample can be obtained by a swab between the gum and cheek.

WHY GET TESTED?

- You want to have, could be having or are having a baby.
- You did not use condoms every time you had sex.
- You shared a needle with someone else to shoot drugs.
- You had sex without a condom with someone that shared needles to shoot drugs.
- You and/or your partner have new physical problems; rapid weight loss, fevers, skin blemishes, white coating on tongue, repeated coughing.

Benefits of Birth Spacing

Birth Spacing

Allowing ample time between pregnancies is called birth spacing. Ample time between live births is at least 24 months or two years. Among women who had a poor pregnancy outcome (delivering the baby too early, delivering a small baby, or experiencing an infant death), 38 percent waited less than two years before getting pregnant again. (Statistic 1989-2003). Among women who had more than one poor pregnancy outcome, 32 percent waited less than two years before getting pregnant again. By allowing time between pregnancies, a woman's body can recover from giving birth. Letting her body rest or recover for at least two years after delivery prepares her for another healthy pregnancy.

RISKS FOR TEENS

Young women, especially under age 15, are more likely to have premature labor, spontaneous abortion and stillbirths than women age 20 and older. Women under age 16 have not reached physical maturity. Young women may suffer prolonged labor or obstructed delivery if their pelvis is small. This can result in heavy bleeding, infection and death of mother or infant. First births are usually more risky than those that follow. Women having their first birth are more likely to develop hypertensive disorders, including preeclampsia and eclampsia, conditions with protein in the urine, high blood pressure and edema. Infant death rates are generally higher for teen mothers than for older women.

HOW TO SPACE

Keep a record of menstrual cycles to avoid pregnancy too soon. Health providers can offer many options for planning and timing the next pregnancy. In addition to natural methods, contraception methods include condoms, foams, diaphragms, rings, intrauterine devices (IUD), pills, injections, implants and patches. Birth control pills, patches and rings are not recommended for breast-feeding mothers.

Douching or washing following sex does not prevent pregnancy.

BEWARE

Women can get pregnant while breast-feeding. However, breast-feeding can be a family planning method in the first few months after birth, if mothers can answer yes to three questions. When a mother can not answer all questions with "yes," she will need to find another family planning method.

- Is your infant less than six months old?
- Are your menstrual periods absent?
- Is your baby breast-feeding around the clock without receiving other foods, beverages or pacifiers?

Postpartum Depression

Many women have mood swings right after childbirth. They can be happy one minute and sad the next. Even when their baby is asleep, they may have difficulty sleeping or eating and feel a little depressed. If these symptoms begin a few days after delivery and go away after 7-10 days without treatment, they are in all likelihood the "baby blues," a short-lasting condition that 50-80 percent of women feel. This usually doesn't require medical intervention.

Postpartum depression affects 10-15 percent of women from a month to a year after childbirth. A woman may need to delay her next pregnancy while she recovers from this condition. Postpartum depression includes feeling restless, anxious, sad or depressed. Mothers may have feelings of guilt, decreased energy and motivation, and a sense of worthlessness. They may also have difficulties sleeping and undergo unexplained weight loss or gain. Some mothers may worry about hurting themselves or their baby. Bottle feeding and not living with one's partner are factors that have been linked with postpartum depression.

Very rarely, women develop postpartum psychosis within the first few weeks after delivery. Symptoms may include refusing to eat, frantic energy, sleep disturbance, paranoia and irrational thoughts. Women with postpartum psychosis usually need to be hospitalized.

CAUSES

The causes of postpartum depression are not clear. Some researchers think that large shifts in hormone levels during and after pregnancy may cause changes in the brain. The birth of a child is also a major life change that can create ongoing stress that contributes to depression. A mother who is overwhelmed by her responsibilities for the baby, the household and her job may be at risk for postpartum depression.

HELP

Postpartum depression is an illness that can be successfully treated. Women treated with medication and counseling usually show marked improvement. A mother's ability to continue breast-feeding may depend on the type of medication she is receiving.

If you believe that someone you know is experiencing postpartum depression, it's important to show understanding and support to help the mother avoid the shame and isolation often associated with this condition.

A depression self quiz is available at depression-screening.org . The Delaware Mental Health Association offers free support groups for a variety of emotional issues. For more information, go to www.mhainde.org/support.htm

Coping With Loss

The loss of a pregnancy, child or other loved one can cause a major emotional crisis. Mourning can seriously test a person's natural defense systems. A woman may feel a wide range of emotions. Existing illnesses may worsen or new conditions may develop. Recovering physically and emotionally may mean delaying a pregnancy.

Common and normal emotions include denial, disbelief, confusion, shock, sadness, yearning, anger, humiliation, despair and guilt. It takes time to fully adjust to a loss — months or years. A child's death can cause an overwhelming sense of injustice — for lost potential, unfulfilled dreams and senseless suffering. Stomach pain, loss of appetite, intestinal upsets, sleep disturbances and loss of energy are common physical symptoms of grief. Intense reactions may include anxiety attacks, chronic fatigue, depression and thoughts of suicide.

REACTIONS

People may not seem to consider the miscarriage or stillbirth as a "real" death. Parents may fear that they will never have other children. When an infant survives, it can be difficult to handle the conflicting emotions - the joy of the birth and sorrow of the death. The loss of one baby from a multiple birth set can present complicated emotional questions. Why this baby and not the other? Did I resent or fear the responsibility of more than one child, and cause this to happen? Did my preference for one sex cause this baby to die? Talk to a grief counselor, your partner, friend, health care provider or religious leader.

People may pay more attention to the living baby rather than the deceased. Let them know if you appreciate having your dead child mentioned by name. Other parents prefer not to be reminded of the death. When infants die after illness, many parents focus on their living children and delay grief. Parents often hear inappropriate comments that are meant to comfort but do the opposite. People often call two surviving triplets or quadruplets "twins". Communication is important, and a counselor may help grieving parents avoid losing relationships with loved ones by deciding how they want people to refer to their children and their experience. Hearing "at least one survived," or "it was for the best," is understandably painful.

TAKING CARE

There are many ways to cope with grief. Find relatives and friends who can understand your feelings. Join support groups. Ask for help with baby-sitting, cooking and running errands. Maintain regular contact with your family physician. Beware of developing a dependence on medication or alcohol to deal with your grief. Avoid making major life decisions, such as moving, remarrying, changing jobs or having another child. If your grief seems unbearable, seek professional assistance.

To find local support groups for grieving parents, contact your hospital or go to First Candle at www.sidsalliance.org/whenababy/when_gr_ns.html The Division of Public Health's Child Development Watch program provides support to Delaware mothers who experienced stillbirth and miscarriage. Call 800-671-0050 or see pg. 55.

Prenatal Care Schedule

The American College of Obstetrics and Gynecology recommends 13 to 14 visits per pregnancy for a healthy, normal woman. This typically includes a monthly visit for the first 28 weeks. Visits then increase to every two weeks from the 28th to 36th week, then weekly until delivery. This can vary depending on the health of the woman and baby. The health care provider will keep record of growth and changes during the pregnancy and signs of health issues that need special attention. All information is kept confidential. Prenatal visits help women have the healthiest pregnancies and babies possible and reduce the likelihood of premature delivery and birth complications.

PRECONCEPTION CARE

Women and their partners are encouraged to meet with a health care provider as soon as they decide to start a family. This appointment can address health matters that could cause serious problems during pregnancy, such as smoking, drug and alcohol use, weight, risks of birth defects and prematurity, and illnesses the woman may have. Women may be referred to other health services that can help them achieve a healthy pregnancy. This is a good time to schedule a dental visit to take care of cavities, fillings, infections and more.

MOM'S ROLE

- Call to schedule the first prenatal care appointment as soon as you believe you are pregnant, attend all prenatal care appointments, even if everything seems the same.
- Tell the health care provider about any changes in your pregnancy.
- Ask questions to be sure you understand everything that is happening.

WHAT HAPPENS

During prenatal visits, the health care provider asks questions and conducts examinations and tests to be sure everything is normal. This includes:

- Pregnancy test at first visit.
- Questions about the mother's health, her partner's health and the health of close family members.
- Questions about the mother's eating habits, medications and discuss taking vitamins.
- A physical exam: weight measurement, blood pressure, listen to heart and lungs, check hands, feet and face for swelling.
- An internal pelvic exam: health of reproductive organs, Pap smear and tests for infections.
- Urine test for infection, sugar, and protein.
- Blood tests: infections, HIV (optional), anemia, genetic diseases.
- Check mother's belly for size of uterus, baby's position, movement and growth.
- Check baby's heartbeat.
- Give mother an ultrasound to assess baby.
- Discuss signs of labor and when to go to hospital.
- Discuss a birth plan: family members present, pain relief, breast-feeding and more.
- Schedule childbirth classes.

Cesarean Birth

A cesarean delivery (C-section) is sometimes safer for mother or baby than vaginal delivery. A health care provider may recommend a C-section if:

- Labor isn't progressing.
- The baby's heartbeat suggests reduced oxygen supply.
- The baby is in an abnormal position.
- The mother is carrying twins, triplets or other multiples.
- There's a problem with your placenta or umbilical cord.
- The baby is very large.
- The mother or baby have a health problem.
- The mother had a previous C-section.

A cesarean birth is major surgery. Recovery takes longer than a vaginal delivery. Mother and baby stay in the recovery area for about four hours and then are transferred to a postpartum unit. The hospital stay is 72-96 hours after delivery. Mothers should check what their health care plan covers.

During the surgery, pain is controlled by a spinal or epidural for the first few hours after surgery. Mothers are given pain medication as needed. New mothers will have a cut (incision) in the lower part of the belly, which is covered with a bandage. After the bandage is removed, follow the health care provider's instructions for washing the area, watching for infection, increased pain or tenderness around the area. Pain medications prescribed will not interfere with breast-feeding. As with any major surgery, rest is important. Restrictions on using stairs, driving, exercise and sex will be discussed by your health care provider before you go home.

EPISIOTOMY CARE

An episiotomy is not a routine part of childbirth. Sometimes the doctor makes an incision in the area between the mother's vagina and rectum during delivery. This is called an episiotomy, and it makes the area bigger for the baby's head to pass through. If a mother needs an episiotomy, she will receive an injection to numb the area, if she hasn't had other anesthesia. The process will be painless. A nurse will put a large ice pack on this area after delivery. This will help with any swelling or bruising. Ice packs are used for about 24 hours. Other steps include:

- Keeping the wound clean.
- Sitting down carefully.
- Doing Kegal exercises.
- Taking pain medication as needed.
- Taking a warm sitz bath.
- Using medicated spray or Tucks medicated pads.
- Watching for signs of infection.

If pain intensifies or the wound becomes hot, swollen and painful or produces a pus-like discharge, contact your health care provider.

Birth Certificates

After a baby's birth, a hospital staff person asks the new mother some questions for the birth certificate. Some of these questions help researchers learn how to improve the health of mothers and babies. Be sure to say yes when hospital staff ask if you want the child's social security number. The mother will need the following information:

- mother's birth place
- father's birth place
- date of the first prenatal care visit
- date of the last prenatal care visit
- mother's pre-pregnancy weight
- number of cigarettes smoked -
  - three months before pregnancy
  - the first three months of pregnancy
  - the second three months of pregnancy
  - last three months of pregnancy

PATERNITY

This is also a good time to officially declare the father of the child, known as paternity. Delaware law provides two ways for unmarried mothers to have the father of their child recognized; court order and voluntary acknowledgement of paternity. An acknowledgement of paternity form can be filled out by both parents in front of a notary at the hospital. The mother can not have been married within 300 days before the baby's birth. The birth certificate will not show that the father agreed to paternity after the baby was born. The baby's name is not changed. If the father and mother agree about paternity after the mother and child come home from the hospital, the form can be filled out at a vital statistics office. During this process, the mother or father can bring the baby's first birth certificate and trade it in for the new version for free.

VITAL STATISTICS OFFICES

Birth certificates can be picked up from a vital statistics office 10 days after the child's birth. Copies are $10 each. Keepsake birth certificates with fancy lettering are $25. Fifty percent of the funds raised from the sale of these attractive certificates go to the Children's Trust Fund to prevent child abuse.

- New Castle County (302) 995-8586 Office hours 8 a.m. - 4:15 p.m. Mon-Fri
  Limestone Building, 2055 Limestone Rd., Wilmington
- Kent County (302) 744-4549 Office hours 8 a.m. - 4:15 p.m. Mon-Fri
  Jesse Cooper Building, 417 Federal St., Dover
- Sussex County (302) 856-5495 Office hours 8 a.m. - 4:15 p.m. Mon-Fri
  Georgetown State Service Center, 546 S. Bedford St., Georgetown

SAFE KEEPING

Be sure to store all birth certificates in a safe place. Stolen birth certificates can be used for fraud or identity theft.

Newborn Screening

The Division of Public Health's Newborn Screening Program identifies newborn babies with rare disorders. These disorders include problems with the blood and problems breaking down food. Every baby born in Delaware is tested unless parents refuse. Disorders that are not found early can cause delays in learning and physical skills, mental retardation, serious medical problems and death. Unfortunately, some of these disorders have no treatment.

TESTING

All newborn screening tests in Delaware performed by the Delaware Public Health Laboratory. Each baby is tested at while still in the hospital. When the baby is seven to 28 days old, parents need to go to the hospital's outpatient lab for a second test. A small amount of blood is taken from the baby's heel. The blood is used to test for more than 25 health problems, including the following:

- Hypothyroidism
- Phenylketonuria (PKU)
- Galactosemia
- Congenital adrenal hyperplasia
- Sickle cell anemia
- Maple syrup urine disease (MSUD)
- Homocystinuria
- Glutaric aciduria 1
- Other organic acidurias
- Other aminoacidopathies
- Other fatty acid oxidation disorders
- Medium chain AcyL-CoA dehydrogenase deficiency (MCAD)

When test results are normal, a report is mailed to the baby's doctor. If the baby needs more tests, the parents are notified promptly by phone. If you do not have a telephone, give the hospital staff the phone number of a friend, relative or neighbor.

HEARING SCREENING

All Delaware birthing sites provide hearing screening before discharging newborns. Babies can be tested safely within the first day of life. Among Delaware's 10,500 annual births, nearly 300 children may be diagnosed with a hearing impairment each year. A trained person will screen your baby's hearing using special equipment. The test is not painful and can be given while the infant is asleep. It will show whether the baby's hearing is normal, or if more testing is needed. Parents receive the results of the hearing screening before leaving the hospital.

Nearly one of every 10 newborns will need re-screening. This does not mean the baby is deaf or hard of hearing. Sometimes the baby is too fussy during screening or there is something in the ears. If the test results show your infant should be re-screened, have it done within the first month. The hospital will schedule an appointment for re-screening. Early identification is vital to preventing problems in learning to speak. Hard of hearing and deaf infants who receive help before six months of age can learn at the same speed as other preschoolers.

For more information about newborn screening in Delaware, call 800-262-3030.

Sudden Infant Death

Sudden infant death syndrome (SIDS) is the name given for the unexplained sudden death of an infant under one year of age. SIDS is the leading cause of death in infants between one month and one year of age. Most SIDS deaths occur when a baby is between one and four months old. The cause of SIDS is not known.

RISK FACTORS

Several factors increase an infant's risk for SIDS.

- Babies who sleep on their stomachs or sides.
- Babies who sleep with soft toys or on soft bedding, such as bean bag cushions, foam pads, large pillows, waterbeds or couches.
- Babies who get too warm.
- Babies born premature or low birth weight.

Research shows that infants who are immunized are at decreased risk of SIDS. The rate of SIDS in African-American babies is 2.2 - 2.4 times that of Caucasian babies. The rate of SIDS in American Indian and Alaskan Native babies is nearly three times that of Caucasian babies. Boys are at greater risk for SIDS than girls and babies are at higher risk during the cold winter months than the hot summer months.

The mother's behavior and health affect the infant's risk for SIDS. These include:

- Less than age 20 at first pregnancy.
- A short time period between pregnancies.
- Late or no prenatal care.
- Smoking during and/or after pregnancy.
- Placental abnormalities.
- Low weight gain during pregnancy.
- Anemia.
- Alcohol and drug abuse.
- History of sexually transmitted disease or urinary tract infection.

PREVENTION

- Always place baby on his or her back to sleep.
- Place baby on a firm sleep surface, such as a safety-approved crib mattress, covered by a fitted sheet.
- Keep soft objects and loose bedding out of baby's sleep area.
- Do not allow smoking around the baby.
- Keep the baby's sleep area close to, but separate from, where others sleep. When baby breastfeeds in mother's bed, return him or her to a bassinet, crib, cradle, or infant bed that attaches to an adult bed.
- Try a dry pacifier when putting baby to sleep. Don't force baby to take it.
- Do not let the baby overheat during sleep. Dress baby in light sleep clothing.
- Avoid products claiming to reduce risk of SIDS. Most have not been safety tested.
- Before using home monitors, talk to your health care provider.
- Change the direction the baby lies in the crib each week to prevent flat spots on the head.

Breast-feeding

Breast-feeding is very beneficial to mother and baby. A mother's milk has the nutrients and germ fighting antibodies perfect for baby. It's all babies need for the first six months and it's easier for them to digest. If a mother uses street drugs or is HIV-positive, she should not breast-feed. See HIV pg. 33.

BABY'S BENEFITS

- Fewer allergies
- Fewer earaches
- Less tooth decay
- Fewer illnesses
- Fewer instances of diarrhea and constipation

MOTHER'S BENEFITS

- It's always ready and at the right temperature.
- It helps moms get back in shape.
- It reduces risk of some cancers.
- See pg. 34 for birth spacing benefits.

HELP FROM WIC

The Women, Infants and Children program (WIC) at Delaware's Division of Public Health has breast-feeding counselors available to show mothers how to position the baby, provide pumps, supplies and answers to questions. Peer counselors are women who have breast-fed at least one infant for a minimum of four months and have received training in breast-feeding support. Breast-feeding classes are offered to eligible women.

BIRTH CONTROL

Any birth control method containing estrogen will reduce the mother's milk supply. See your health care provider about other options.

HERE ARE SOME ANSWERS TO FREQUENTLY ASKED QUESTIONS:

Will breast-feeding hurt? Breasts may swell for the first few days. Ice packs can provide relief. Positioning the baby properly avoids discomfort. Some women find they may need the support of a bra at night. Later, mothers find breast-feeding to be a loving and relaxing activity.

Will I make enough milk? A mother can make all the milk her baby needs. The amount depends on how often the baby nurses, not on breast size. The more the baby nurses, the more milk the mother makes. C-section surgery and pain medicine do not affect the amount of milk.

How often should I feed my baby? Nurse the baby as often as he or she shows signs of hunger.

Will my breasts sag? Breasts change due to pregnancy, not breast-feeding. Wearing a supportive bra during pregnancy and breast-feeding may help.

Can I eat and drink whatever I want? Breast-feeding moms should eat nutritious foods and avoid drinking alcohol. Drinking a steady amount of water, milk and juice is also important. Let your hunger and thirst be your guide. Avoid large amounts of caffeine, which is passed in breast milk and can make some babies fussy.

Can I smoke again? Nicotine passes into mother's milk. It is best if you quit smoking.

If I need medicine, can I still nurse? Many over-the-counter and prescription medicines will be safe. Tell the baby's doctor about any medicines you are taking, including birth control.

WIC also provides free nutritious foods to eligible breast-feeding moms and their children. To find out if you qualify, call WIC at 302-739-3671 or go to www.dhss.delaware.gov/dhss/dph/

Skin Care for Baby

ACNE

It's common for newborns to develop acne pimples in their first weeks. It usually passes in two months. Do not break the pimples or use adult acne products. Keep baby's skin clean and the acne will go away. If the pimples seem infected, call your health care provider.

CIRCUMCISION

Boys will have a visible incision or a plastibell, which is a small plastic ring. Clean the area with warm water 3-4 times a day. Avoid getting the umbilical stump wet. At each diaper change, apply a small amount of unscented petroleum jelly.

Problems after circumcision are very rare. However, call a pediatrician if baby doesn't urinate normally in 4-6 hours after the circumcision. A little yellow discharge or coating around the tip of the penis is normal, but this should not last longer than a week.

CRADLE CAP

Cradle cap looks like flaky skin on the scalp and is common in newborns. Rub some mineral oil onto baby's scalp. Then use baby shampoo to wash the scalp daily.

HEAT RASH

Heat rash is more common when baby is overdressed. No treatments are needed other than usual bathing and keeping baby dressed according to the weather. The rash often appears on the neck, chest, back and scalp. It looks like raised red bumps on a red area.

SUNBURN

Sun protection is important for babies because sunburn is painful and increases the risk of skin cancer as your child grows up. Infants under 6 months of age should not be exposed to direct sunlight. Hats and loose clothing will protect baby. Use sunscreens after 6 months of age. Call your health care provider if baby has a sunburn.

UMBILICAL CORD CARE

Cleaning the umbilical area each day is important. Use a damp cloth to gently clean around and under the cord. The umbilical cord usually falls off easily when the baby is 1-3 weeks old. It is normal for a spot of blood to remain after the cord is gone. Call your health care provider if there is a foul smell from the area or the cord is bleeding.

DIAPER RASH

Diaper rash is caused by wet or soiled diapers. It occurs when urine in the diaper stays on the baby's skin for too long or by snug-fitting, air-tight plastic pants or plastic-covered diapers. Diarrhea is often more acidic and may burn baby's skin. Once a rash occurs, baby's skin must be kept clean and protected. Change diapers after every bowel movement and wash baby's skin with mild soap, rinse and dry thoroughly. Spread cream or petroleum jelly on the skin.

Safe Arms for Babies Law

Delaware's Safe Arms for Babies law allows a parent to leave their baby, 14 days old or younger, at any Delaware hospital's emergency department. Under this law, a parent will not be charged with a crime so long as the baby is alive, unharmed and brought to a staff person or volunteer inside a hospital emergency department.

WHAT HAPPENS TO THE FAMILY?
The person who leaves the baby will not be asked for identification, will not be asked who they are and will not be contacted.

The employee or volunteer at the hospital will offer the following to the person giving up the baby:

- An identification number for the baby. Parents must keep this.
- A mail-back medical questionnaire.
- A list of phone numbers for public and private agencies that provide counseling and adoption services.

WHAT HAPPENS TO THE BABY?
The hospital will give the baby a numbered bracelet to link it to the medical questionnaire, if that information was sent.

The baby will receive a physical examination and any necessary medical care.

The hospital takes temporary custody of the baby and informs the state Division of Family Services and the State Police that a baby has been given up under the law. The Division of Family Services will request ex parte custody of the baby from Family Court and the State Police will submit an inquiry to the Delaware Missing Children Information Clearinghouse.

Parents who change their mind must call within 30 days to the Division of Family Services hotline at 1-800-292-9582. Parents need to give the baby's identification number, which was offered by the hospital at the time the baby was left.

Once left at the hospital, the baby will not be returned until the Division of Family Services and Family Court decides that the baby will be safe.

If the parents do not ask for their baby back in 30 days, the child will be placed with a family willing to adopt. Parental rights will be terminated.

To speak with someone directly 24-hours a day about Safe Arms for Babies, call 1-800-262-9800.

Lead Poisoning

Childhood lead poisoning can cause serious health problems. Homes built before 1978 may contain lead-based paint indoors and out. The federal Lead-Based Paint Disclosure Rule requires that sellers, landlords and their agents must inform buyers and renters if housing has lead paint.

RISK FOR CHILDREN

Children are most at risk because they often put objects and their hands in their mouths. Young children absorb 50 percent of the lead they swallow, while adults absorb only 10 percent. Pencils are not a source of lead. Lead in children can cause:

- Nervous system and kidney damage
- Learning disabilities
- Decreased intelligence
- Hearing loss
- Attention Deficit Disorder

TESTING CHILDREN

All children in Delaware must receive a blood test for lead when they are a year old. Proof of this test is needed to be accepted in child care, pre-school programs and kindergartens.
Find a testing site at www.dhss.delaware.gov/dhss/dph/ofclocations.html

SOURCES

- Lead-based paint on any surfaces in older homes
- Lead pipes and solder: more common in older homes
- Glazing from ceramic pottery can leech lead into foods
- Foreign medicines: Azarcon, Rueda, Coral, Alarcon, Liga, Maria Luisa, Yogran Guggulu
- Candy bar wrappers, especially from imported candies
- Inexpensive trinkets and jewelry
- Home smelting of lead shot and bullets

WHAT TO DO

If renting, tell the landlord if paint is peeling. Call DPH's lead program if peeling paint is not repaired at 1-800-464-HELP (4357).

- Make sure family members wash their hands before meals and bedtime.
- Feed children low-fat foods high in calcium, iron and vitamin C.
- Wash toys, bottles and pacifiers regularly. Mop floors regularly.
- If windowsills contain lead paint, wipe with a damp cloth.
- Remove old vinyl mini-blinds.
- Let tap water run until it becomes cold.
- Cover dirt with mulch or plants if outdoor paint is flaking.
- Do not store food in imported glazed pottery.

Anyone doing lead-based paint work in Delaware must be certified by the Division of Public Health after passing an exam. A list of those certified to do lead-based paint work is available at www.dhss.delaware.gov/dhss/dph/

Smart Start

Smart Start is a Division of Public Health program for pregnant women and mothers. The goal of Smart Start is to assist women in having healthier babies.

Public health nurses, social workers and nutritionists make home visits to:

- Teach danger signs during pregnancy.
- Help women choose the right foods to eat during pregnancy.
- Teach women about childbirth.
- Show mothers-to-be how to breast or bottle feeding, diaper and care for the baby.
- Demonstrate safety measures.
- Help mothers find assistance with housing, utilities, transportation and child care.

For an appointment or information, (302) 995-8590 or (302) 424-7300.

Car Seats

Child safety seats decrease the risk of a baby's death during a crash by 71 percent. A rear-facing seat protects a baby's head, neck and spine. Use a rear-facing car seat in the back seat of your car until the baby is one year old and weighs 20 pounds. If the baby was born prematurely or is small, a car bed may be needed.

TYPES

Car beds allow babies to lie down while traveling. Medical staff determine if a baby needs a car bed by checking if the baby has difficulty breathing or heart rate problems when restrained in a traditional rear-facing seat. Read your instruction manual for how to install the car bed. If baby needs a breathing monitor or other equipment, secure it so it won't move in a crash.

A rear-facing convertible seat can be used from birth up to 30-35 pounds. Once the child reaches one year and 20 pounds, the seat may face forward. Check the owner's manual or seat label for weight and height limits. Children should face the rear until reaching the maximum weight for the safety seat, as long as the top of the head is below the top of the seat. Smaller children need to face the rear until they weigh at least 20 pounds, even if they are one year old. A rear-facing convertible seat that is made for heavier and/or taller babies is another option. Check your seat's instruction manual or label for weight and height limits. It's not a safety problem if the child's legs bend at the knees or touch the back seat of the car.

CHOOSING A SEAT

Before you buy, try the seat in your vehicle to make sure it fits. The label should say: "This child-restraint system conforms to all applicable U.S. federal motor vehicle safety standards." Put your child in the seat to see how it fits. Before using the seat, talk to a Certified Child Passenger Safety (CPS) Technician or visit a car seat checkpoint. Find out if there is a Certified CPS Technician on your hospital's staff or at a retail store. For more information on choosing a car seat, go to the American Academy of Pediatrics website at www.aap.org/

TIPS

Infant-only seats are portable and can be used as an infant carrier. Convertible seats can be used longer because they can hold bigger and heavier infants. They also can be converted to forward-facing seats when a child reaches at least one year and at least 20 pounds. Seats with tray, t-shield and overhead shields may not fully protect newborns because the harnesses are stiff, at a fixed height and cannot usually be adjusted to fit. Send in the manufacturer's registration card to receive notices if the seat has safety problems. If you moved since you sent in the card, call National Highway Traffic Safety Administration auto safety hotline at 1-888-327-4236 for a form.

Special Needs Alert Program

The Division of Public Health's Special Needs Alert Program (SNAP) allows parents to alert ambulance teams to their child's special medical needs. Premature and low birth weight babies, and children with tracheotomies, IV fluids, feeding tubes, oxygen tanks and wheelchairs may need ambulance staff to take special steps.

Parents who choose to enroll their child in SNAP provide their son or daughter's health information to local emergency agencies before an ambulance is needed. After receiving this information, paramedics can meet the family at their home and create the child's emergency plan together. Ambulance staff uses these plans to save time if the child has an emergency.

Participation in SNAP is voluntary and any information provided is kept confidential. To enroll in SNAP, call Delaware's Office of Emergency Medical Services at 302-744-5415.

The Poison Control Center

1-800-222-1222 TTY/TDD: (215) 590-8789

Many poisonings can be treated faster at home than the hospital. If a family member could be harmed by a product, medicine, plant or sting, a poison control center can tell you what to do over the phone. Never make someone vomit or throw up unless told to by the poison control center.

The Poison Control Center at Children's Hospital of Philadelphia serves Delaware callers for free, 24 hours every day. They handle poisonings in adults as well as children. A poisoning expert answers the phone, asks a few questions about the type of poison and age and size of the victim. They will provide directions on how you can help the person, or tell you if you need an ambulance.

Poisoning can occur in the following ways:

Swallowed: This can include medicines, cleaners, auto products and objects.

On skin: Plants, cleaners, and products used for cars and insect control can injure skin.

In eyes: Almost any product can hurt eyes.

Breathed in: Household products, insect sprays, carbon monoxide.

Bites & stings: From snakes, spiders, bees and other creatures.

For child proofing information, phone stickers and other information, go to www.chop.edu/consumer/jsp/division/generic.jsp?id=84723

Illness in Children

Fever is a sign that the body is fighting infection. Fever may accompany respiratory illnesses, ear infections, flu, severe colds, and sore throats.

BODY TEMPERATURE

A normal temperature is about 98.6 degrees F when taken by mouth (orally). A fever is often considered an oral temperature above 99.4 degrees F, or a rectal temperature above 100.4 degrees F. Take a rectal temperature if the child is younger than 4 years old. In an older child, take it orally. Don't wrap up the child tightly in a blanket before taking his or her temperature and never leave them alone while the thermometer is in use. Ear thermometers are not reliable when used in a child under 12 months of age because of the small size of their ear tubes. If the child has diarrhea or blood in the stool, do not take a rectal temperature.

TREATING FEVERS

Children often have high temperatures with infections. Not all fevers mean that a child has a serious illness or needs an antibiotic. Usually, a high temperature can be treated with acetaminophen. Never give aspirin to a child under 18 years. Use a child's weight to decide how much medicine to use. Check with the pharmacist, physician or medicine's package for the right dose. Call the doctor if your infant is under 3 months of age and has a rectal temperature of 100.4 F. (38 C.) or more; between 3 and 6 months and has a fever of 102 F. (38.9 C.) or more; or older than 6 months and has a fever of 103 F. (39.5 C.) or more. A child with a temperature of 102 F. (38.9 C.) or more should be given acetaminophen no more than every four hours.

GIVING ACETAMINOPHEN

AGE	WEIGHT	DOSE EVERY 4 HOURS
0-3 months	6-11 pounds	Ask your health care provider
4-11 months	12-17 pounds	80 mg
1-2 years	18-23 pounds	120 mg
2-3 years	24-35 pounds	160 mg
4-5 years	36-47 pounds	240 mg

- Don't give more than five doses in one day.
- Don't give medicine to a baby younger than 4 months old unless told to by your health care provider.
- When using drops, fill the dropper to the line.
- For liquids, use a liquid measure (from drug store) for the right dose.

FEELING BETTER

- Encourage the child to drink frequently to prevent dehydration and cool the body.
- Keep the child still and quiet.
- Keep the room at 70 – 74 degrees F.
- If chilled, place a blanket over the child. Take it off when the chills stop.
- Don't use an alcohol or cold water bath.

CALLING THE DOCTOR

Call for advice right away if the following occur:

- Fever with seizures.
- Fever with a rash.
- High fevers of 104 degrees F (40 C) or 105 degrees F (40.5 C).
- Fever with unexplained pain.
- Above normal temperature for more than 72 hours.
- Under 1 month old - call right away if the baby's temperature is over 100.5 degrees F rectally, even if he or she doesn't seem sick.
- One to 3 months old - call if the baby has a temperature of 100.5 degrees F (even if your baby doesn't seem sick) or a temperature of 99.5 degrees F for more than 24 hours.
- Three months and older. If the child has a fever of 101.4 degrees F, watch how he or she acts. Call the doctor if the fever rises or lasts for more than three days.
- In children 3 months to 2 years of age, if the temperature is 102 degrees F, call your doctor even if the child seems to feel fine.
- Call if the child has symptoms such as vomiting, diarrhea or a severe cough.
- Do not give acetaminophen to infants under 3 months old unless told to by a physician.

Dressing Baby

FALLS

More than half of fall-related injuries occur among children ages 5 and under. Babies can easily roll off changing tables, beds or furniture. They may also tumble from high chairs, strollers and car seats. Falls from a height greater than three feet, such as from furniture, can result in injury, especially if the child hits a hard floor.

PREVENTION

- Choose baby furniture with safety rails.
- Always keep a hand on your baby during diapering, bathing and changing clothes.
- Prevent your child from standing during a bath.
- Place child safety gates at doors and at the top and bottom of stairs. Add rails or barriers to low windows.
- Make sure your furniture can't be pulled onto a child. Secure bookcases and cupboards to the wall.
- Put away ladders and step stools.
- Pick up toys and wipe up spills that can cause adults to slip while carrying the baby.

CLOTHING

Unless the temperature is over 75 degrees F, your newborn will need several layers of clothing to keep her warm. These could include an undershirt and diapers, covered by pajamas and then a blanket. Premature babies may need another layer until they reach the weight of a full-term baby. When it is over 75 degrees F babies can wear a single layer, but make sure you add layers if the temperature changes. Mothers can keep in mind that generally the baby needs one more layer than she does.

Babies need a blanket when they sleep. Instead of wrapping the child, keep the blanket loosely placed on top. When the baby begins to kick off blankets, use warmer pajamas with feet. Be sure to position the crib away from drafts and vents.

Avoid clothing with large buttons, ribbons and strings that could cause choking. Helpful features for dressing baby include:

- Front snaps or zipper.
- Leg snaps or zippers.
- Loose-fitting sleeves.
- Stretchy fabric.

SLEEPWEAR

The U.S. Consumer Product Safety Commission urges parents to make sure their children's sleepwear is either flame-resistant or snug-fitting. Loose garments can catch fire easily and burn rapidly, especially if they are made of cotton. Flame-resistant garments do not continue to burn when removed from a small flame. In addition, snug-fitting sleepwear does not burn as easily or rapidly as loose clothing because less air is underneath the garment to feed a fire.

Baby Teeth

An infant's teeth form between the third and sixth months of pregnancy. A newborn has 20 primary or "baby" teeth, which can not be seen. A few days after birth, begin wiping the baby's gums with a damp washcloth or gauze pad after every feeding. When the first teeth can be seen, parents should brush them twice a day with a soft, child-sized toothbrush and water. Toothpaste is not needed before age two.

TEETHING

Teething begins between ages 4 months and 2½ years, making the gums sore and swollen. Teething is painful for infants, but a cool teething ring or pacifier can help. Ask your physician or dentist if Baby Orajel (7.5% benzocaine) can be applied to the gums. Teething does not cause a fever. If your child has a high temperature, call your physician. Also see pgs. 50-51.

DECAY

As soon as teeth appear, decay can occur. This can affect the permanent teeth and cause pain. Babies' first four teeth usually appear at six months to one year. Baby bottle tooth decay is a condition that occurs when an infant is allowed to nurse continuously from a bottle of milk, formula, sugar water or fruit juice during naps or at night.

PREVENTION

- Never allow infants to fall asleep with a bottle containing liquids other than water.
- Do not use the bottle as a pacifier.
- Never dip a pacifier into sugar or honey.
- Avoid saliva sharing: sharing food-tasting spoon with baby, cleaning dropped pacifier by mouth.
- Offer juices from a cup.
- Wean babies from the bottle at 12-14 months old.

THUMB SUCKING

The need to suck is present in all infants. Some sonograms show babies sucking their thumbs before birth. If a child is still sucking his or her thumb at age 6, it can cause crooked teeth, bite problems and changes in the roof of the mouth. Most children stop by 4 years old with no harm done. If your child does not stop by then, your dentist or pediatrician can offer a thumb guard or other device.

Shaken Baby Syndrome

Shaken baby syndrome is a serious injury that can occur when an infant or toddler is violently shaken. These children, especially babies, have very weak neck muscles and can not support their heavy heads. When they are shaken, their brains move back and forth in their skulls. This can cause:

- Blindness or eye damage.
- Delay in normal development.
- Seizures.
- Damage to the spinal cord (paralysis).
- Brain damage.
- Death.

Shaken baby syndrome usually occurs when a parent or other caregiver shakes a baby because of anger or frustration. This is often because the baby would not stop crying. Shaken baby syndrome is a serious form of child abuse.

GETTING HELP

If someone has shaken a baby because of anger or frustration, get medical care right away. Take the child to the pediatrician or emergency room. If the baby's brain is damaged or bleeding inside from severe shaking, it will only get worse without treatment. Getting medical care right away may save the child's life and prevent serious health problems. Be sure to tell the doctor that the child was shaken, or the doctor may think the baby is vomiting or having trouble breathing because of an illness. Mild symptoms of shaken baby syndrome are much like those of infant colic, feeding problems and fussiness.

PREVENTION

Taking care of an infant can be challenging, especially when the crying never seems to end. If you have tried to calm the crying child but nothing seems to work, it's important to stay in control of your temper. Remember, it's never okay to shake, throw or hit a child. If you feel you could lose control:

- Take a deep breath and count to 10.
- Take time out and let your baby cry alone.
- Call someone close to you for emotional support.
- Call your pediatrician. There may be a medical reason why your child is crying.

Child Development Watch

Some children may be growing and changing, yet may have difficulty hearing, seeing, talking, moving, or learning the way other children do. This is called a developmental delay, which is sometimes associated with premature birth. The Division of Public Health's Child Development Watch program helps Delaware infants and toddlers with disabilities or developmental delays reach their potential. The program also helps families nurture disabled children so they can grow. More than 1,000 children have received early intervention services through Child Development Watch.
The following list includes skills and abilities children typically have at various ages:

6 to 9 months	12 months	18 months
• follow an object with her eyes. • turn to hear a noise. • hold up head. • reach for toys and put them in mouth. • make sounds and squeal.	• able to sit up by himself. • turn when name is called. • say "mama," "dada," or other sounds over and over.	• say the names of a few objects. • stand alone. • drink from a cup by self.

2 years	3 years	4 years
• walk by self. • copy and do something that someone else does. • point to mouth, nose, eyes, and other body parts. • use at least six words.	• walk down steps. • run and jump. • talk in short sentences. • help take clothes off.	• use a normal tone of voice. • copy a picture of a circle. • name people he knows.

If you think your child does not have some of the skills and abilities that come with his or her age, see your child's health care provider. If a delay is found, Child Development Watch can provide the following services:

- Equipment and technology used to assist the child's development.
- Audiology/hearing services.
- Family training and counseling.
- Special health services provided in cooperation with your child's health care provider.
- Nutrition plans.
- Nursing services.
- Occupational therapy to teach self-help, play and eating skills.
- Physical therapy to develop motor skills and movement.
- Psychological counseling on behavior management, learning, and mental health.
- Family and child counseling and help with coordinating services.
- Speech-language therapy for the child's language development.
- Transportation assistance for appointments.
- Services to improve the child's vision.

For more information, call 1-800-671-0050.

Credits

Pursuing Motherhood, Planning Before Pregnancy: A Guide was created to address recommendations established by the Delaware Infant Mortality Task Force. The binder was produced through the cooperation of the following organizations and individuals:

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