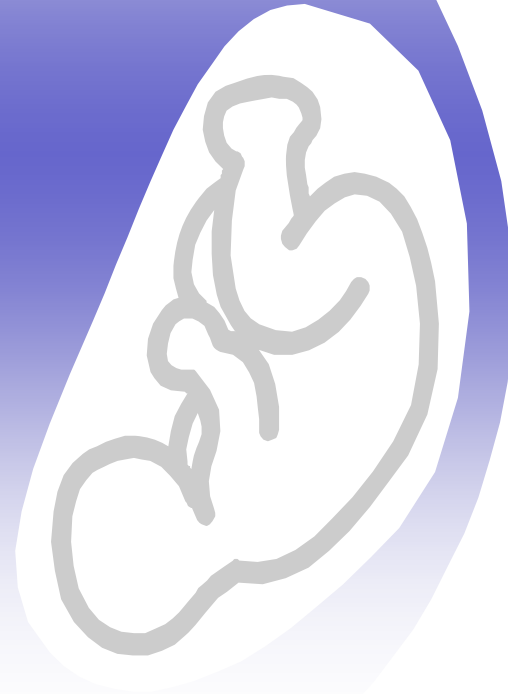


INFORMATION ON

*Fetal
Development,
Abortion
And Adoption*



WEST VIRGINIA
DEPARTMENT OF HEALTH AND HUMAN RESOURCES



This publication was produced in compliance with West Virginia Code 16-21-1, et. Seq., known as the Women's Right to Know Act, which requires the medical practitioner performing abortions to inform the female of physical and emotional risks of abortion procedures and risks of carrying a pregnancy to term.

This booklet and service directory is available free of charge upon request by calling the Office of Maternal, Child and Family Health at 1-800-642-8522 or online at www.wvdhhr.org.

Introduction

The information contained in this booklet describes and illustrates, at two week intervals, how a developing embryo or fetus grows during stages of a woman's pregnancy. Also provided is information about abortion methods and medical risks, as well as the medical risks of childbirth.

Government programs may pay for or help pay medical bills for pregnancy care and are available as a service directory in paper copy and on the West Virginia Department of Health and Human Resources (DHHR) internet website. This includes geographically indexed materials designed to inform women of public and private agencies and services available to assist her through pregnancy, upon childbirth and while the child is dependent, including adoption agencies. Also included is a comprehensive list of the agencies available including a description of the services they offer and their telephone numbers.


All women should be advised:

- The decision to terminate a pregnancy or to carry a pregnancy to term is hers. It is unlawful for any individual to coerce someone to undergo an abortion.
- The father of a child is legally responsible to assist in the support of that child, even in instances where he has offered to pay for an abortion.
- The law permits adoptive parents to pay costs of prenatal care, childbirth and neonatal care.

Fetal Development

A female's egg is fertilized by a male's sperm in the fallopian tube. After fertilization, the egg divides and multiplies to form the embryo. During the next few days, the embryo moves through the fallopian tube to the lining of the uterus. There it implants and starts to grow.

During pregnancy, the lining of the female's uterus thickens and its blood vessels enlarge to nourish the fetus. As pregnancy progresses, the uterus expands to make room for the growing embryo/fetus. The following pictures and drawings illustrate fetal development from 8 to 40 weeks.



8 WEEKS


1 1/2 inches — 1/2 ounce

The beginnings of all key body parts are present, although they are not completely positioned in their final locations.

Structures that will form eyes, ears, arms and legs are identifiable.

Muscles and skeleton are developing and the nervous system becomes more responsive.

The heart has four chambers and began pumping blood four weeks ago.





10 WEEKS

2 1/2 inches — 1.5 ounces

Fingers and toes are distinct and have nails.

The fetus begins small, random movements, too slight to be felt.

The fetal heartbeat can be detected with a heart monitor.

All major external body features have appeared.

Muscles continue to develop.



12 WEEKS

3.5 inches — 2 ounces

The fetus begins to swallow, the kidneys make urine, and blood begins to form in the bone marrow.

Joints and muscles allow full body movement.

There are eyelids and the nose is developing a bridge.

External genitals have been developing so that the sex can be identified.





14 WEEKS

5 inches — 4 ounces

The head is erect and the arms and legs are developed.

The skin appears transparent.

A fine layer of hair has begun to grow on the head.

Limb movements become more coordinated.

16 WEEKS

5.5 inches — 8 ounces

The skin is pink and transparent and the ears are clearly visible.

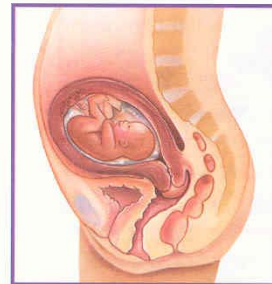
All the body and facial features are now recognizable.



The fetus can now blink, grasp, move its mouth.

Hair and nails begin to grow.

The fetus has begun to kick, although movement may not be felt by the woman.





18 WEEKS

6 1/4 inches — 12 ounces

All organs and structures have been formed, and a period of simple growth begins.

The skin is covered with vernix - a greasy material that protects the skin.

Respiratory movements occur, but the lungs have not developed enough to permit survival outside the uterus.

20 WEEKS

7.5 inches — 1 pound

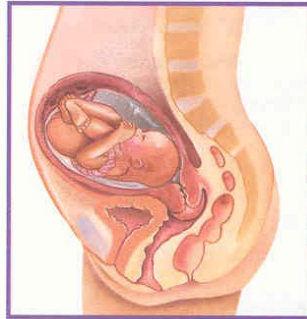
Time of extremely rapid brain growth.

Fetal heartbeat can be heard with a stethoscope.

The kidneys are starting to work.

Fetus may suck thumb and is more active.





22 WEEKS

8 1/4 inches — 1 1/4 pound

Bones of the ears harden making sound conduction possible.

Hears mother's sounds such as breathing, heartbeat and voice.

The first layers of fat are beginning to form. This is the beginning of substantial weight gain for the fetus.

21% chance of survival with appropriate high risk newborn care.

24 WEEKS

9 inches — 2 pounds

The fetus can respond to sound from both inside and outside the uterus.

Reflex movements improve and body movements are stronger.

Lungs continue to develop.

The fetus now wakes and sleeps.

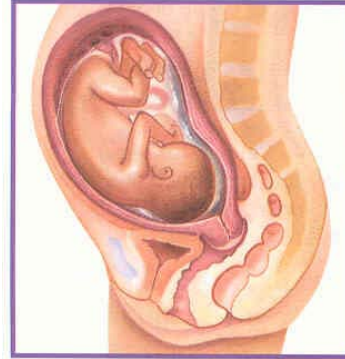
The skin has turned red and wrinkled and is covered with fine hair.



35% chance of survival outside of the womb with appropriate high risk newborn care.

26 WEEKS

10 inches — 2.5 pounds

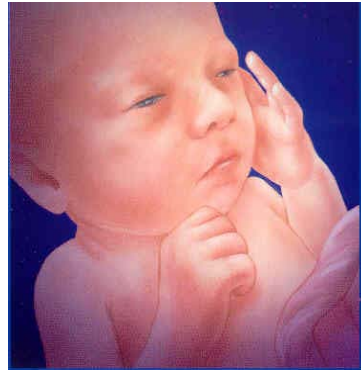


Mouth and lips show more sensitivity.

The eyes are partially open and can perceive light.

Brain wave patterns resemble those of a full term baby at birth.

50% chance of survival with appropriate high risk newborn care.



28 WEEKS

10.5 inches — under 3 pounds

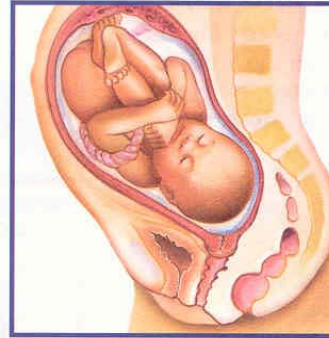
The fetus has lungs that are capable of breathing air, although medical help may be needed.

The fetus can open and close its eyes, suck its thumb, cry and respond to sound.

88% chance of survival with appropriate high risk newborn care.

30 WEEKS

11 inches — over 3 pounds



Skin is thicker and more pink.

There is an increase in the connections between the nerve cells in the brain.

From this stage on, fetal development centers mostly around growth.

95% chance of survival with appropriate high risk newborn care.

32 WEEKS

12 inches — 4.5 pounds

Eyes open during alert times and close during sleep.

The skin is now pink and smooth.

Almost all babies born now will survive (some will need intensive care services).

95% chance of survival with appropriate high risk newborn care.

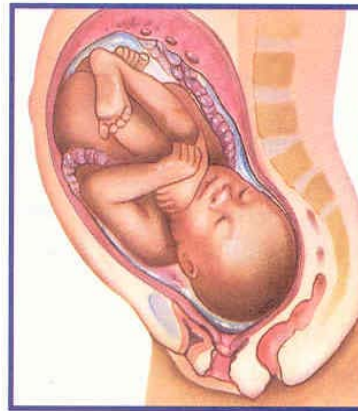
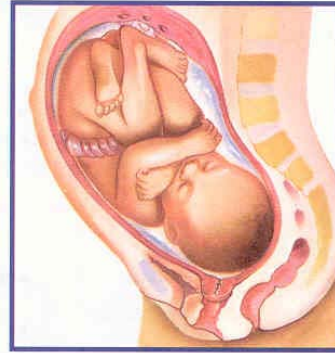
34 WEEKS

12 1/2 inches — 5.5 pounds

Scalp hair is silky and lays against the head.

Muscle tone has now developed and the fetus can turn and lift its head.

95% chance of survival with appropriate high risk newborn care.



36 to 40 WEEKS

13.5 inches and may reach over 20 inches overall, may weigh 6.5 to 10 pounds

Lungs are usually mature.

The fetus can grasp firmly.

Fetus turns toward light sources.

99% chance of survival with appropriate high risk newborn care.

Abortion Methods & Medical Risks

If a woman chooses to have an abortion, she and her doctor must first determine how far her pregnancy has progressed. The stage of a woman's pregnancy will directly affect the appropriateness or method of abortion. The doctor will use a different method for women at different stages of pregnancy. In order to determine the gestational age of the embryo or fetus, the doctor will perform a pelvic exam and/or an ultrasound.

Abortion Risks

At or prior to eight weeks after the first day of the last normal menstrual period is considered the safest time to have an abortion. The complication rate doubles with each two-week delay after that time. The risk of complications for the woman increases with advancing gestational age.

According to data from the Centers for Disease Control and Prevention (CDC), the risk of dying as a direct result of a legally induced abortion is less than one per 100,000. This risk increases with the length of pregnancy. For example:

- Less than 1 death per 100,000 abortions at 8 or fewer weeks
- Less than 6 deaths per 100,000 at 16-20 weeks
- Less than 17 deaths per 100,000 at 21 or more weeks

Complications associated with an abortion may make it difficult to become pregnant in the future or carry a pregnancy to term.

Definitions for Medical Risks of Abortion

The risk of complications for the woman increases with advancing gestational age.

Pelvic Infections (Sepsis): Bacteria (germs) from the vagina may enter the cervix and uterus and cause an infection. Antibiotics are used to treat an infection. In rare cases, a repeat suction, hospitalization or surgery may be needed. Infection rates are less than 1% for dilation and suction curettage/vacuum aspiration abortion, 1.5% for dilation and evacuation (D & E), and 5% for labor induction.

Incomplete Abortion: Fetal parts or other products of pregnancy may not be completely emptied from the uterus, requiring further medical procedures. Incomplete abortion may result in infection and bleeding. The reported rate of such complications is less than 1% after a dilation and evacuation (D & E).

Blood Clots in the Uterus: Blood clots that cause severe cramping occur in about 1% of all abortions. The clots usually are removed by a repeat dilation and suction curettage.

Heavy Bleeding (Hemorrhage): Some amount of bleeding is common following an abortion. Heavy bleeding (hemorrhage) is not common and may be treated by repeat suction, medication, or, rarely, surgery. Ask the doctor to explain what to do if it occurs.

Cut or Torn Cervix: The opening of the uterus (cervix) may be torn while it is being stretched open to allow medical instruments to pass through and into the uterus. This happens in less than 1% of first trimester abortions.

Perforation of the Uterus Wall: A medical instrument may go through the wall of the uterus. The reported rate is 1% out of every 1000 with early abortions and 3 out of every 1000 with dilation and evacuation (D & E). Depending on the severity, perforation can lead to infection, heavy bleeding or both. Surgery may be required to repair the uterine tissue, and in the most severe cases, hysterectomy may be required.

Anesthesia-Related Complications: As with other surgical procedures, anesthesia increases the risk of complications associated with abortion. The reported risk of anesthesia-related complications is around 1 per 5,000 abortions. Most are allergic reactions producing fever, rash and discomfort.

Breast Cancer: Studies show that women who have children before age 30 have a lower risk of breast cancer than those who have children later in life or no children at all.

Early Non-Surgical Abortion

A drug is given that stops the hormones needed for the fetus to grow. In addition, it causes the placenta to separate from the uterus, ending the pregnancy.

A second drug is given by mouth or placed in the vagina causing the uterus to contract and expel the fetus and placenta. A return visit to the doctor is required for follow-up to make sure the abortion is completed.

Possible Complications

- incomplete abortion
- allergic reaction to medications
- nausea and/or vomiting
- fever
- painful cramping
- heavy bleeding
- diarrhea
- infection

Vacuum Aspiration Abortion

A local anesthetic is applied or injected into or near the cervix to prevent discomfort or pain. The opening of the cervix is gradually stretched with a series of dilators. The thickest dilator used is about the width of a fountain pen. A tube is inserted into the uterus and is attached to a suction system that will remove the fetus, placenta and membranes from the woman's uterus. A follow up appointment should be made with the doctor.

Possible Complications

- incomplete abortion
- heavy bleeding
- perforated uterus
- pelvis infection
- torn cervix
- blood clots in uterus

Dilation and Curettage Abortion

A local anesthetic is applied or injected into or near the cervix to prevent discomfort or pain. The opening of the cervix is gradually stretched with a series of dilators. The thickest dilator used is about the width of a fountain pen. A spoon-like instrument (curette) is used to scrape the walls of the uterus to remove the fetus, placenta, and membranes. A follow up appointment should be made with the doctor.

Possible Complications

- pelvic infection
 - heavy bleeding
 - incomplete abortion
 - blood clots in uterus
 - perforated uterus
 - torn cervix
- requiring vacuum aspiration

Dilatation and Evacuation (D&E)

Sponge-like tapered pieces of absorbent material are placed into the cervix. This material becomes moist and slowly opens the cervix. It will remain in place for several hours or overnight. A second or third application of the material may be necessary. Following dilation of the cervix, intravenous medications may be given to ease discomfort or pain and prevent infection. After a local or general anesthesia has been administered, the fetus and placenta are removed from the uterus with medical instruments such as forceps and suction curettage. Occasionally for removal, it may be necessary to dismember the fetus.

Possible Complications

- blood clots in the uterus
- cut or torn cervix
- incomplete abortion
- perforation of the wall of the uterus
- heavy bleeding
- pelvic infection
- anesthesia-related complications

Labor Induction (Includes Intra-Uterine Instillation)

Labor induction may require a hospital stay. Medicine is placed in the cervix to soften and dilate it. There are three ways to start labor early: (1) medication is given directly into the bloodstream of the pregnant woman starting uterine contractions. (2) medication inserted into the vagina to start uterine contractions, and (3) medication injected directly into the amniotic sac by inserting a needle through the mother's abdomen and into the amniotic sac. This stops the pregnancy and starts uterine contractions. Labor and delivery of the fetus during this period are similar to the experiences of childbirth. The duration of labor depends on the size of the baby and the contractibility of the uterus. There is a small chance that a baby could live for a short period of time depending on the baby's gestational age and health at the time of delivery.

Possible Complications

If the placenta is not completely removed during labor induction, the doctor must open the cervix and use suction curettage (removal of uterine contents by low-pressure suction).

Labor induction abortion carries the highest risk for problems, such as infection and heavy bleeding. When medicines are used to start labor, there is a risk of rupture of the uterus. Possible complications of labor induction include infection, heavy bleeding, stroke and high blood pressure. Other medical risks may include blood clots in the uterus, heavy bleeding, cut or torn cervix, perforation of the wall of the uterus, pelvic infection, incomplete abortion, anesthesia-related complications.

Hysterotomy (similar to a Caesarean Section)

This method requires that the woman be admitted into a hospital. A hysterotomy may be performed if labor cannot be started by induction, or if the woman or her fetus is too sick to undergo labor. A hysterotomy is the removal of the fetus by surgically cutting open the abdomen and uterus. Anesthetic medication, given into the woman's vein or back, or inhaled into the lungs, is administered so the woman will not feel the surgery.

Possible Complications

- severe infection (sepsis)
 - blood clots to the heart and brain (emboli)
 - stomach contents breathed into lungs (aspiration pneumonia)
 - severe bleeding (hemorrhage)
 - blood clots in the uterus
 - pelvic infection
 - anesthesia-related complications
 - injury to the urinary tract
 - heavy bleeding
 - retention of pieces of the placenta
-

Dilation and Extraction

This method may be performed between 20 and 32 weeks gestation. Sponge-like tapered pieces of absorbent material are placed into the cervix. This material becomes moist and slowly opens in the cervix. It will remain in place for one to two days. A second or third application of the material may be necessary. After a local or general anesthesia has been administered, the fetus and placenta are removed from the uterus with medical instruments such as forceps, suction and curette (a spoon-like instrument). It may be necessary to dismember the fetus.

Possible Complications

- uterine infection
 - blood clot, stroke or anesthesia-related death
 - high blood pressure
 - heavy bleeding
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Possible Detrimental Psychological Effects of Abortion

Many women suffer from Post-Traumatic Stress Disorder Syndrome following abortion. PTSD is a psychological dysfunction resulting from a traumatic experience. Symptoms of PTSD include:

- guilt
 - depression
 - nightmares
 - fear and anxiety
 - alcohol and drug abuse
 - flashbacks
 - grief
 - suicidal thoughts or acts
 - sexual dysfunction
 - eating disorders
 - low self-esteem
 - chronic relationship problems
-

Medical Risks of Childbirth

Continuing a pregnancy and bringing it to a full-term delivery is usually a safe, healthy process. However, medical risks and death can occur. The most common complications of pregnancy include ectopic pregnancy, high blood pressure, complicated delivery, premature labor, depression, infection, diabetes and hemorrhage (heavy bleeding). According to the Centers for Disease Control, the risk of dying as a direct result of pregnancy and childbirth is less than 10 in every 100,000 births. The risk is higher for African-American women (22 in every 100,000). Medical risks and death can occur while a woman is pregnant, during labor and after the delivery.

Together, these causes account for less than one death per 100,000 relating to a woman's pregnancy. Unknown or uncommon causes account for the remaining 20% of deaths relating to pregnancy. Women who have chronic severe diseases are at greater risk of death than healthy women.

For women who smoke: Smoking has been associated with a number of pregnancy complications. One is an increased risk of ectopic pregnancy wherein the embryo becomes implanted in a fallopian tube or other abnormal site instead of the uterus. Cigarette smoking also appears to double a woman's risk of developing placental complications. These include placenta previa, a condition in which the placenta is attached too low in the uterus and covers part or all of the cervix and placental abruption, in which the placenta separates from the uterine wall before delivery. Smoking during pregnancy also increases the risk of stillbirth, miscarriage and severe vaginal bleeding.

Medical risks can also rise while a pregnant woman is in labor and after the baby's birth. Labor occurs when a pregnant woman's uterus contracts and pushes or delivers the baby from her body. The baby may be delivered through the woman's vagina or by caesarean section. A caesarean section is a surgical procedure.

Possible medical risks of vaginal delivery may include injury to the bladder or rectum, a hole (fistula) between the bladder and vagina or rectum and vagina, hemorrhage (heavy bleeding), difficulties with future pregnancies, emergency treatment for any of the above problems and, rarely, death.

Possible medical risks of caesarean delivery include injury to the bowel or bladder, difficulty with future pregnancies, hemorrhage (heavy bleeding), possible hysterectomy due to complications or injury from the procedure, emergency treatment for any of the above problems and, rarely, death.

Of the approximately 4 million births occurring annually in the United States, 40% are complicated by some form of a postpartum mood disorder.

Financial Assistance for Prenatal Care, Childbirth and Infant Care

Financial help for prenatal care and childbirth depends on income. Applications for financial help are available at local Department of Health and Human Resources offices. Programs such as Right From The Start will pay or help pay the costs of doctor, clinic, hospital or other related expenses to help with prenatal care, childbirth delivery services and infant care. These services are paid for by Medicaid and Title V/Public Health. Right From The Start program brochures are available

by calling toll-free 1-800-642-8522.

Adoption

Women who continue the pregnancy to term but cannot take care of a baby may consider adoption. There are agencies that can assist with exploring this decision and agencies to help with the adoption process. Agencies are listed in the service directory.

Service Directory

The decision to have an abortion, have a baby or place a baby for adoption should be carefully considered.

A directory of county and social service agencies and organizations is available from doctors, nurses and counselors and can also be requested by calling the Office of Maternal Child and Family Health at 1-800-642-8522, or online at www.wvdhhr.org.



*Written Materials in Compliance
with West Virginia Law
[Section 16-2I-1, et. seq.]
as enacted by
Senate Bill No. 170
of the year 2003*

*Joe Manchin III, Governor
Patsy A. Hardy, Cabinet Secretary*