



EMILIA'S WINGS

UNDERSTANDING
PREGNANCY
AND
INFANT LOSS

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What is Pregnancy & Infant Loss?

Pregnancy and Infant Loss refers to the death of a baby during pregnancy, at birth, or in the first year of life. Pregnancy and Infant loss can be classified into four categories: Miscarriage, Stillbirth, Neonatal Death, and Infant Loss. All four categories of loss combined affect approximately 1 out of 4 families.

What is a Miscarriage?

Miscarriage is the death of a baby in utero before 20 weeks gestation. Statistically, it is estimated that 10-15% of all known pregnancies end in miscarriage in the United States. This does not account for miscarriages that happen before the mother is aware of the pregnancy. Early miscarriages can easily be mistaken for a heavy period, leaving the pregnancy unknown. Most miscarriages happen before the 12th week of gestation, within the first trimester of pregnancy. 1-5% of pregnancies during 13-19 weeks of gestation end in miscarriage.

While it is unknown what causes all miscarriages, some miscarriages can be attributed to chromosomal abnormalities, maternal medical conditions, bacterial infections, problems with the cervix or uterus, and self-destructive lifestyle habits.

A **Chromosomal Abnormality** occurs when a baby receives the wrong number of chromosomes during fertilization. This type of genetic problem is random and there is no medical condition passed from the parents to the baby that causes the miscarriage. However, advanced maternal age is widely recognized for increasing the risk for chromosomal abnormalities.

Maternal Medical Conditions, such as uncontrolled Diabetes, Kidney Disease, Polycystic Ovary Syndrome, Thyroid Disease, and Autoimmune Diseases have all been linked with miscarriage. If you are pregnant or trying to conceive, consult with your healthcare provider on ways to manage and control your medical conditions to encourage a healthy pregnancy.

Bacterial Infections are caused by Microorganisms that can increase the risk of miscarriage. Bacteria from Sexual Transmitted Diseases (such as Gonorrhea or Chlamydia), foodborne illnesses (such as Listeria or Salmonella), and Toxoplasmosis (which is carried by cats and can be found in their stool) have all been known to contribute to miscarriages.

A **Cervix or Uterus Problem** can be caused by a weakened cervix (the opening to the uterus) or incompetent cervix can result in a miscarriage when the cervix begins to dilate, causing a premature birth. An abnormally shaped uterus can also contribute to miscarriage, as the baby may be unable to implant. If the baby does implant, it may not receive the nourishment it needs to survive.

Unhealthy Lifestyle Habits like smoking, drinking, drug abuse, and exposure to toxins in certain work environments are all risk factors that may contribute to a miscarriage.

Repeat miscarriages or a recurrent pregnancy loss, is two or more miscarriages in a row. A small number of women (1%) will have repeat miscarriages. However, most women who have a miscarriage or multiple losses will go on to have healthy subsequent pregnancies and births.

Types of Miscarriages or Early Pregnancy Losses

A **Threatened Miscarriage** is when your body shows signs that you might miscarry. You may notice abdominal cramping or vaginal bleeding, however, your cervix remains closed. This does not necessarily mean that you will have a miscarriage. Some women notice that the pain and bleeding eventually subsides and they continue to have a healthy pregnancy, while others notice that symptoms continue or worsen and they begin to miscarry their baby.

An **Inevitable Miscarriage** is strong abdominal cramping and heavy vaginal bleeding where the cervix opens and the baby is born premature, therefore not able to survive.

An **Incomplete Miscarriage** occurs when the uterus was unable to birth and expel all of the baby and placenta. You may notice continued bleeding and cramping and may require hospitalization. Generally, a procedure called a D&C (dilation and curettage) is performed to help birth the baby.

A **Missed Miscarriage** is when you have very little to no signs at all of a miscarriage. You often discover that your baby has died during a routine doctor's appointment. You may be sent home to naturally miscarry or you may require a D&C.

A **Complete or Natural Miscarriage** generally occurs before 12 weeks gestation and is when you require no medical assistance to birth your baby. Your body is able to naturally expel and birth your baby. This may happen with no complications within the comfort of your own home.

A **Blighted Ovum** is when the gestational sac is formed, but there is no baby inside. This means that the placenta developed and produced pregnancy hormones, but within the first six weeks, the baby did not develop. If you are unable to naturally miscarry, you may require a D&C.

An **Ectopic or Tubal Pregnancy** is when the baby implants outside of the uterus, often in one of the two fallopian tubes. The first sign of an Ectopic Pregnancy is severe abdominal cramping, that may or may not include vaginal bleeding.

A **Molar Pregnancy** is the result of a genetic error during fertilization that causes the baby to grow abnormally in the uterus. Although the baby never develops into an embryo, the growth still triggers symptoms of pregnancy.

A **Chemical Pregnancy** occurs shortly after implantation. A Chemical Pregnancy happens before an ultrasound can even detect a baby, but often times hCG (a pregnancy hormone created by the placenta after implantation) levels rise, indicating that conception has occurred. The hCH levels then decline, meaning the pregnancy was not viable. This may all happen before a woman's menstrual period is even missed.

What is Stillbirth?

Stillbirth refers to the death of a baby in utero at 20 weeks gestation or later. Statistically, it is estimated that 1 out of 160 pregnancies (or 26,000 babies a year) end in stillbirth in the United States alone. Most stillbirths happen before labor occurs, but a small percentage happen during labor and delivery due to complications.

In many cases, despite thorough autopsies, the cause of death is left unknown. However, some of the common known causes of stillbirth include chromosomal abnormalities, placental problems, poor fetal growth, bacterial infections, umbilical cord accidents, maternal medical conditions, and abdominal trauma.

Chromosomal Abnormalities or birth defects are the most common causes of stillbirth, contributing to roughly 14% of all deaths. While certain conditions are present at conception, some birth defects can be caused by environmental influences.

Placental Problems such as blood clots, problems with blood vessels, infections, inflammation, insufficient blood flow to the placenta, and Placental Abruption (where the placenta detaches from the wall of the uterus during pregnancy) can all contribute to stillbirth.

Poor Fetal Growth or babies who are significantly smaller or not growing at an appropriate rate for their gestational size are at a higher risk of dying in utero.

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Umbilical Cord Accidents contribute to a small number of stillbirths. Problems with the umbilical cord may include knots or infarctions (a kink) in the cord or when the cord is not attached to the placenta properly. All of these cases cause an insufficient amount of blood flow and oxygen to be supplied to the baby.

Maternal Medical Conditions affecting her health, such as Diabetes, clotting disorders, and certain autoimmune disorders can all attribute to stillbirth. If you are pregnant, consult with your healthcare provider on ways

to manage and control your medical conditions to encourage a healthy pregnancy.

Abdominal Traumas such as falling down the stairs, car wrecks, or blunt forces to the abdomen can cause serious stress to a baby in pregnancy.

Stillbirth cannot be predicted, nor does it discriminate. For most women, the chances of having a subsequent stillbirth is extremely low and most go on to have healthy pregnancies and births.

What is Neonatal Death?

Neonatal Death is the death of a baby who was born alive and then dies within 28 days of birth. Statistically, it is estimated that 4 out of 1,000 babies die each year within the neonatal period in the United States. These babies may have lived for days, hours, minutes, or for only a few moments after birth. However, roughly three-quarters of all newborn deaths occur within the first week of life.

Life-threatening conditions such as premature birth, birth defects, low birthweight, and bacterial infections are the leading causes of Neonatal Death.

Premature Birth is when a baby is born more than three weeks before the baby's estimated due date or before the start of the 37th week of pregnancy. Babies born too early may have more health problems than that of a baby born full term. Often times, babies born prematurely have a low birthweight, which contributes to an increased risk of developing more health conditions. An estimated 15 million babies (1 out of 10 babies) are born prematurely each year in the United States. Health complications from preterm birth and low birthweights are the leading cause of death among newborns.

Birth Defects is a health condition where problems with certain body parts or organs are present before and after a baby is born. Some birth defects make the life of a baby incompatible.

Neonatal Infections may be developed while in utero, during delivery, or after birth. Some infections are noticed soon after delivery, while others may develop days or weeks after birth. There is a higher risk of neonatal infections in babies born premature or with a low birth-weight.

A baby's fatal condition may or may not have been known while still in utero. During pregnancy, many parents are aware that their child may be facing a fatal condition shortly after birth. However, no amount of preparation can prepare loved ones for having to say goodbye.

What is Infant Loss?

Infant Loss refers to the death of a baby within the first year of their life. Statistically, it is estimated that over 23,000 babies die each year in the United States before their first birthday.

The leading causes of death among infants are contributed to SIDS, injuries, premature birth, birth defects, and complications during pregnancy and birth.

SIDS stands for Sudden Infant Death Syndrome. SIDS is the unexplained death of an infant younger than one-year. It is unknown what causes SIDS and it can happen without any warning to seemingly healthy babies. Removing stuffed animals or soft-fluffy surfaces from the crib, laying your baby on their back when they sleep, and avoiding bed-sharing are all different ways to reduce the risk of SIDS.

Injuries are a common factor in deaths among infants. Most childhood injuries can be easily prevented. Some examples of fatal injuries are if a child suffocates, drowns, exposure to toxins, accidental poisoning, severe injuries sustained in a car wreck, etc.

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Birth Defects are a health condition where problems with certain body parts or organs are present before and after a baby is born. Some birth defects make the life of a baby incompatible.

Complications during Pregnancy and Birth can contribute to a child's death within the first year of life. Any health problems raise the risk of infant mortality. A baby's health condition may or may not have been known while still in utero. During pregnancy, many parents may be aware that their child could be facing a fatal condition in infancy. However, no amount of preparation can prepare loved ones for having to say goodbye.

Statistics and facts were gathered from the following resources: Centers for Disease Control and Prevention, American Pregnancy Association, Mayo Clinic, March of Dimes, Share Pregnancy and Infant Loss, and National Institutes of Health.