

Causes of Fetal Death

There are a number of known causes of fetal death. Sometimes more than one of these causes may contribute to the baby's death. Common causes include:

Birth defects: About 15 to 20 percent of fetal deaths have one or more birth defects. At least, 20 percent of these have chromosomal disorders, such as Down syndrome. Others have other birth defects resulting from genetic, environmental or unknown causes.

Placental problems: Placental problems cause about 25 percent of fetal deaths. One of the most common placental problems is placental abruption. In this condition, the placenta peels away, partly to almost completely, from the uterine wall before delivery. It results in heavy bleeding that can threaten the life of mother and baby. Sometimes it can cause the fetus to die from lack of oxygen. Women who smoke cigarettes or use cocaine during pregnancy are at increased risk of placental abruption.

Poor fetal growth: Fetuses who are growing too slowly are at increased risk of death. About 40 percent of fetal deaths have poor growth. Women who smoke cigarettes or have high blood pressure are at increased risk of having a baby that grows too slowly. An ultrasound examination during pregnancy can show that the fetus is growing poorly, allowing health care providers to carefully monitor the pregnancy.

Infections: Infections involving the mother, fetus or placenta appear to cause about 10 to 25 percent of fetal deaths. Infections are an important cause of fetal deaths before 28 weeks of pregnancy. Some infections may cause no symptoms in the pregnant woman. These include genital and urinary tract infections and certain viruses, such as fifth disease (parvovirus infection). These infections may go undiagnosed until they cause serious complications, such as fetal death or preterm birth (before 37 completed weeks of pregnancy).

Chronic health conditions in the pregnant woman: About 10 percent of fetal deaths are related to chronic health conditions in the mother, such as high blood pressure, diabetes, kidney disease and thrombophilias (blood clotting disorders). These conditions may contribute to poor fetal growth or placental abruption.

Umbilical cord accidents: Accidents involving the umbilical cord may contribute to about 2 to 4 percent of fetal deaths. These include a knot in the cord or abnormal placement of the cord into the placenta. These can deprive the fetus of oxygen.

Other causes of fetal death: Trauma (such as car accidents), postdate pregnancy (a pregnancy that lasts longer than 42 weeks), Rh disease (an incompatibility between the blood of mother and baby), and lack of oxygen (asphyxia) during a difficult delivery. These causes are uncommon.

Risk Factors for Fetal Death

- Maternal age over 35
- Maternal obesity
- Maternal Diabetes
- Maternal Drug/Alcohol/Tobacco Use during pregnancy
- Multiple gestation (twins or more)
- African-American ancestry
 - A recent study found that African-American women had a two-fold increased risk of stillbirth compared to white women. It is not known why African-American women are at higher risk. The risk for Hispanic women was similar to that of non-Hispanic white women. *Willinger, M., Ko, C.-W., & Reddy, U.M. (2009). Racial Disparities in Stillbirth Risk Across Gestation in the United States. American Journal of Obstetrics and Gynecology, 201. Retrieved September 28, 2009 from www.ajog.org*; Also, according to the Maryland Plan for Reducing Infant Mortality, a college-educated Black women have worse pregnancy outcomes than women of other races/ethnicities (White, Hispanic, Asian) with less than an 8th grade education.)

Prematurity

A premature or preterm baby is a baby born before 37 completed weeks of pregnancy (an average pregnancy is 40 weeks).

Half of all nervous system disabilities in children are related to premature birth.

Why do some women deliver too soon?

The reasons are similar to why some women have a higher risk for fetal death:

Race and ethnicity: A Black baby is 1 ½ times more likely to be premature than a white baby, both in the U.S. and in Maryland. The premature birth rate in Maryland is highest for Black infants (17.1%), followed by Hispanic infants (12.5%), and then white infants (11.3%). The national premature birth rates for both Black (18.1%) and white (11.5%) infants are higher than those in Maryland.

Mother's age: The chance of having a premature baby is greatest for the youngest and the oldest mothers. In Maryland, premature birth rate is highest for women 40 and older, followed by teens under age 20.

Multiple births: When a woman is carrying two or more babies, the chance of delivering prematurely is increased. About 10% of single babies are born prematurely, compared to 60% of twins and over 90% of triplets. The number of multiple births has increased dramatically in the past 2 decades with the increased use of medical treatments for infertility.

Treatable or avoidable risks of premature births and fetal death:

Infections: including urinary tract infections, vaginal and sexually transmitted infections, infections of the membranes around the baby, and even tooth or gum disease.

Other medical problems: such as high blood pressure, diabetes, or clotting problems; also being underweight or obese.

Smoking, drinking alcohol and using illegal drugs or certain prescription drugs

Stress: such as social, financial or health problems; domestic violence, including physical, sexual or emotional abuse.

What can you do to reduce the chance of having a premature baby?

- Take a multivitamin every day that contains 400 mcg of folic acid (try to start before you get pregnant and continue through at least your 1st trimester of pregnancy)
- Plan your pregnancies and allow time between pregnancies
- Try to reduce stress
- When you become pregnant, start your prenatal care early and keep all your appointments.

http://fha.maryland.gov/pdf/mch/Prematurity_awareness.pdf

-The leading causes of infant mortality are preterm/low birthweight births, congenital anomalies, and Sudden Infant Death Syndrome (SIDS). Preterm/low birthweight babies are associated with 2/3 of all infant deaths.

-Risk factors for infant mortality are multiple and include behavioral and environmental risks, health care risks, and socio-demographic risks. Behavioral risks such as unintended pregnancy increase neonatal mortality more than two-fold. Healthcare risks such as late prenatal care increases infant mortality more than 40%. Socio-demographic risks involving age, education and income are also associated with increased infant mortality.

-The State of Maryland has put into effect 3 strategies to help reduce the amount of infant mortality. The strategies concentrate on before pregnancy (Comprehensive Women's Health Centers), during pregnancy (Earlier entry into prenatal care), and after delivery (More comprehensive follow up care).

Maryland Department of Health & Mental Hygiene, Plan for Reducing Infant Mortality in Maryland.