Overview

There has been much concern over the possible risks of various fertility treatments. Recent data, however, suggests that couples with infertility are at increased risk for various complications of pregnancy even if they conceive without fertility treatment. This consent is intended to inform couples as to some of the possibilities for adverse outcomes after having a history of infertility. This consent is not intended to be all-inclusive.

Birth weight

Birth weight is related to the fetal age at delivery. A low birth weight (LBW) baby is commonly defined as a baby with a birth weight less than 2500 gram (5 pounds 8 ounces). A very low birth weight (VLBW) baby has a birth weight less than 1500 grams (3 pounds 5 ounces).

- **Cause**
  The primary risk factor is that development of the placenta is insufficient to meet the demands of the fetus, resulting in malnutrition of the developing fetus. There are two main categories of LBW babies: those that are born prematurely and those which were not premature but are nonetheless small. There are numerous contributing factors, of both environmental and genetic origin.

- **Infertility as a risk factor**
  A study published in 1999 suggested that babies born to couples who expressed concern about the length of time it took to achieve pregnancy were 40% more likely to deliver a baby with VLBW compared to couples who did not express concern over their fertility.

- **Impact**
  Babies who are VLBW have a 25% chance of dying before age 1. LBW babies have about a 2% chance of dying before age one (1/4 of 1% higher than normal weight babies). Various studies have also suggested that babies born with LBW or VLBW may be at increased risk for various problems such as mental retardation, cerebral palsy, poor motor skills and lower intelligence. As an adult such problems as obesity, diabetes, and lower intelligence have been reported.

Perinatal mortality

Perinatal mortality is defined as the death of a fetus after the 20th week of pregnancy but before delivery (antenatal death) plus the death of a baby up to 28 days after birth (neonatal death).

- **Infertility as a risk factor for perinatal death**
  A 1999 study of over 60,000 births found that women with untreated infertility had 3.3 times greater risk of losing a baby to a perinatal death compared to women without infertility.

- **Infertility as a risk factor for neonatal death**
  A study from 2005 has found that the length of time it takes to conceive is related to the risk of neonatal death. Compared to couples who took less than three months to conceive, couples that took over a year to conceive but who conceived without any treatment, were 3.32 times more likely to lose a baby in the first month after birth.

Other adverse outcomes

In a not yet published study presented at the annual meeting of the American Society for Reproductive Medicine in 2006, researchers analyzed the pregnancy outcomes of 1296 mothers and their children who conceived after a period of infertility. Approximately, one-third of the women conceived without treatment. They were compared to 1153 fertile mothers and their children.

The investigators found that the children of infertile couples had a threefold higher incidence of “severe” outcomes such as cerebral palsy, mental retardation, autism, seizure disorder or cancer by 6 years of age.

These children also had a 40% increase in “moderate” adverse outcomes such as attention deficit hyperactivity disorder, attention deficit disorder, learning disabilities, behavior disorders, developmental delay, serious vision disorders and serious hearing disorders.
Complications of pregnancy were also more common. Infertile couples had a higher rate of preterm labor, preeclampsia (a high blood pressure problem in pregnancy), chorioamnionitis (infection of the placenta) and cesarean section. Children were 30% more likely to be admitted to a neonatal intensive care unit.

**Genetic abnormalities**

Various types of infertility may be related to genetic abnormalities present in either the male or female partner. The most commonly cited examples are in men who have abnormal semen analyses. Studies of these men have found a higher rate of chromosome abnormalities and genetic mutations. If conception occurs, the abnormalities may be passed on to children and cause similar or possibly different health issues for the child.

We acknowledge that we have read the above consent in its entirety and have had any questions answered completely and to our satisfaction.