

Twin-twin transfusion syndrome (TTTS) is a rare disorder that sometimes occurs when women are pregnant with identical (monozygotic) twins. It is a rare disease of the placenta, the organ that joins the mother to her offspring and provides nourishment to the developing fetuses. During the development of identical twins, there are always blood vessels in the fetuses' shared placenta that connect their blood circulations (placental anastomoses). In most cases, the blood flows properly through these vessels. However, in twin-twin transfusion syndrome, the blood begins to flow unevenly, with one fetal twin receiving too much blood (recipient) and one receiving too little (donor). The recipient twin may experience heart failure due to continual strain on its heart and blood vessels (cardiovascular system). The donor twin, on the other hand, may experience life-threatening anemia, insufficient nutrition and oxygen due to its inadequate supply of blood. Such an imbalance in blood flow (i.e., twin-twin transfusion) can occur at any time during the pregnancy, including during delivery. TTTS is a rare disorder that sometimes occurs when a mother is pregnant with identical (monozygotic) twins. There have been a few reported cases in which TTTS also affected identical triplets. Twin-twin transfusion syndrome affects approximately 5 to 15 percent of identical twin pregnancies, meaning that approximately 6,000 babies may be affected each year. However, it is difficult to determine the true frequency of TTTS in the general population since many cases are never diagnosed and many go unrecorded.