

Extremely Preterm Birth

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When is a baby considered "preterm" or "extremely preterm?"

A normal pregnancy with one baby lasts about 40 weeks. Babies born before 37 completed weeks of pregnancy are called "*preterm*" or "premature." Babies born before 28 completed weeks of pregnancy are considered extremely preterm. The earlier a baby is born, the less likely he or she is to survive. Those who do survive often have serious, sometimes long-term health problems and disabilities.

What is gestational age?

Gestational age is the "age" of the pregnancy. It often is counted in weeks and days. For example, "24 and 2/7 weeks of pregnancy" refers to 24 completed weeks and the next 2 days of pregnancy.

What are the health outcomes for extremely preterm babies?

Medical advances have helped some preterm babies survive and overcome health challenges. However, the chances that a baby born extremely early will survive without disability are still small. With very rare exceptions, babies born before 23 weeks of pregnancy do not survive. Although survival rates increase for babies born between 23 weeks and 25 weeks of pregnancy, most survivors face serious, often lifelong disabilities. As gestational age increases, the outlook for preterm babies improves.

Is there specialized health care for women and babies at risk of extremely preterm birth?

Extremely preterm birth usually is managed by a team of specialized health care professionals. In addition to your obstetrician or other pregnancy care professional, the team may include a *maternal-fetal medicine subspecialist*, a *neonatologist*, and other pediatric subspecialists. You may be transferred to a hospital that offers specialized care for extremely preterm infants. If time allows, this transfer may take place before delivery. High-level *neonatal intensive care units (NICUs)* provide care for infants with serious health problems. High-level maternal care facilities manage women with high-risk pregnancies.

What will happen if my baby is expected to be born extremely preterm?

You and your health care team will work together to form a plan about the care you and your baby will receive. This involves weighing the risks and benefits of the available treatment options for both you and your baby. Your personal beliefs and values and what your wishes are for your baby also are important in forming the care plan.

It is important to remember that this care plan may change as circumstances change. For instance, care plans may be adjusted after the baby is born when more information is known about the baby's condition. Care decisions also may change depending on how the baby responds to treatment.

If my baby is born extremely preterm, will he or she need resuscitation?

Extremely preterm infants will not survive without *resuscitation*. Often this means helping the baby breathe by inserting a tube into his or her airway. Steps may be taken to start the baby's heart. Even with resuscitation efforts, some babies will not survive. Those who do may have severe disabilities. Babies born before 23 weeks of pregnancy typically do not survive even with resuscitation. In some cases, after discussion with the health care team, a family may decide that resuscitation is not the best option for their baby. In situations like this, medical care will focus on keeping the baby warm, comfortable and free from pain.

What medications can be given to improve an extremely preterm baby's chance of survival?

If resuscitation of the baby is planned or being considered, medications given to the pregnant woman may improve the baby's chances of survival and reduce the risk of disability. These medications include the following:

- 1. Corticosteroids to help the baby's lungs and other organs mature
- 2. *Magnesium sulfate* to decrease the risk of cerebral palsy
- 3. Tocolytic medications to help prolong pregnancy for a few hours or days to give time for the first two drugs to work
- 4. Antibiotics to prevent infection

Recommendations for giving these medications are made on a case-by-case basis. For example, corticosteroids are not recommended when delivery is expected at 22 weeks of pregnancy or earlier because they have not been found to be helpful. At 23 weeks of pregnancy, corticosteroids may be considered, but whether they will help is uncertain.

Will I need to have a cesarean delivery if my baby is born extremely preterm?

Not necessarily. Some babies at risk of extremely preterm birth may not be in a good position in the *uterus* to allow for a safe vaginal delivery. In these cases, a *cesarean delivery* may be recommended depending on gestational age. Cesarean delivery is rarely recommended before 23–24 weeks of pregnancy because it is unlikely to affect the outcome.

How can extremely preterm delivery affect my health?

A cesarean delivery can increase the risk of complications in future pregnancies. Prolonging pregnancy may worsen some medical conditions, such as *preeclampsia*, or put you at risk of infection. These health consequences also should be considered in care decisions.

Who can I turn to for support?

Your health care team is trained to give medical guidance and to include your and your family's wishes and preferences in the decision-making process. Because your culture, values, and religious beliefs are important to consider when making these decisions, you also may want to seek support from family, trusted friends, and clergy. The hospital may offer counseling services and other programs for you and your family.

What will happen if it is decided to withdraw or withhold life-saving care?

If you decide to withdraw or withhold life-saving care, measures will be taken to make sure the baby is kept warm and comfortable. You will be able to spend as much time as you want with your baby. Nurses and other staff can help you create keepsakes, such as taking pictures and making footprints. Your health care team will make sure that you get the help and support you need.

What is involved in caring for an extremely preterm baby after leaving the hospital?

Most extremely preterm babies spend months in the hospital. After they are discharged, many will need ongoing, specialized medical care. There are pediatricians who specialize in the care of preterm babies from birth through childhood. Some clinics focus on follow-up care for preterm babies. The doctor will closely watch how your baby grows and check to see if any other problems develop during childhood.

Many agencies provide help for parents caring for preterm babies. It is a good idea to become as informed as you can so you can give your baby the best care. As your child reaches school age, you may need to find a special school or teachers to help with any learning problems.

Glossary

Antibiotics: Drugs that treat certain types of infections.

Cesarean Delivery: Delivery of a baby through surgical incisions made in the mother's abdomen and uterus.

Corticosteroids: Medications given to help fetal lungs mature, for arthritis, or for other medical conditions.

Gestational Age: The age of a pregnancy, usually calculated from the number of weeks that have elapsed from the first day of the last normal menstrual period and often using findings from an ultrasound examination performed in the first or second trimester of pregnancy.

Magnesium Sulfate: A drug that may help prevent cerebral palsy when it is given to women in preterm labor who are at risk of delivery before 32 weeks of pregnancy.

Maternal–Fetal Medicine Subspecialist: An obstetrician–gynecologist with additional training in caring for women with high-risk pregnancies; also called a perinatologist.

Neonatal Intensive Care Units (NICUs): Specialized area of a hospital in which ill newborns receive complex medical care.

Neonatologist: A pediatrician who specializes in the diagnosis and treatment of disorders that affect newborn infants.

Preeclampsia: A disorder that can occur during pregnancy or after childbirth in which there is high blood pressure and other signs of organ injury, such as an abnormal amount of protein in the urine, a low number of platelets, abnormal kidney or liver function, pain over the upper abdomen, fluid in the lungs, or a severe headache or changes in vision.

Preterm: Born before 37 completed weeks of pregnancy.

Resuscitation: Medical procedures that restore life to someone who appears to be dead.

Tocolytic: A drug used to slow contractions of the uterus.

Uterus: A muscular organ located in the female pelvis that contains and nourishes the developing fetus during pregnancy.

If you have further questions, contact your obstetrician-gynecologist.

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