



Progesterone is a hormone that is produced in a woman's ovaries. After each ovulation, it thickens the uterine lining to prepare for a potential pregnancy. If a fertilized egg implants in the uterine wall, the ovaries will continue producing a high level of progesterone. This helps maintain the pregnancy by inhibiting uterine contractions, and keeps the uterine lining thick enough to provide cushioning for the growing baby. In some cases, doctors may prescribe a synthetic version of progesterone in order to [prevent premature birth](#) and associated complications such as [hypoxic-ischemic encephalopathy \(HIE\)](#). Progesterone is often given in conjunction with other methods of preventing preterm delivery, such as a [cervical cerclage](#).

When Should Expectant Mothers Be Given Progesterone?

If a pregnant woman's body does not produce a sufficient amount of progesterone, this can lead to premature birth. Signs that an expectant mother is not producing enough progesterone, or is otherwise in danger of delivering her baby prematurely and may benefit from progesterone therapy, include the following:

- [Cervical insufficiency](#): The cervix is a narrow passage forming the lower end of the uterus. In the beginning of pregnancy, the cervix is long and closed. It remains this way until labor and delivery. In some pregnancies, the cervix begins to soften, shorten, or open up prematurely. This is called *cervical insufficiency*. Instances of cervical insufficiency can allow the fetal membranes to go through the opening and break, which can trigger early onset of labor and premature birth or miscarriage. Progesterone, generally used in combination with a procedure called [cervical cerclage](#), can help to prevent preterm birth in women with cervical insufficiency.
- **Past Preterm Birth**: If a woman has previously had a premature delivery, she is considered at high risk for having another. In some cases, physicians may prescribe synthetic progesterone in order to prevent this from happening.
- **Past Preterm Premature Rupture of Membranes (PPROM)**: In some pregnancies, the fetal membranes rupture (colloquially known as the 'water breaking') before the baby is actually ready for birth. This is called premature rupture of membranes (PROM). If PROM occurs before 37 weeks of pregnancy, it is considered preterm premature rupture of



membranes, or PPROM. PPROM can trigger early delivery. Women who have had PPROM in a prior pregnancy may benefit from progesterone supplementation in order to prevent it from happening again.

A significant number of preterm births could be prevented with proper care, and progesterone supplementation is an important component of this. Physicians should ask their patients about their reproductive history in order to determine whether they may need progesterone therapy or other interventions to prevent preterm delivery. Examining a pregnant woman's cervix is also important in determining whether she is at risk of delivering prematurely and in need of progesterone supplementation.