



Care of the Newborn with Late Prematurity or Intrauterine Growth Restriction (IUGR)

Newborns come in all sizes. We know that newborns who are born just 3–6 weeks early, may look like a full term newborn, but they are premature and require special monitoring for challenges that can arise after birth. Similarly, we know that newborns who are born smaller than they should be compared to the number of weeks of pregnancy, (sometimes referred to as small for dates or growth restricted), also require special monitoring for difficulties that can occur after birth.

At Children's Minnesota, we recommend that all newborns born preterm before 36 weeks of pregnancy as well as those born weighing less than 2000 grams, be cared for in one of our specialized nurseries after birth to monitor and help with any challenges they may encounter. Although each newborn will have their own unique transition after birth and all will be monitored closely, the most common challenges we see in these newborns are reviewed on the back.

Breathing

Sometimes the newborn's lungs are not fully developed and this can cause the newborn to have more difficulty breathing. Brain immaturity can also lead to breathing pauses or 'forgetting' to breathe consistently. Your newborn will be on continuous heart and lung monitoring to evaluate for these potential problems which they can outgrow in time.

Feedings

Successful feeding is complicated by the fact that a premature newborn is often times sleepy and sometimes doesn't wake up to eat even though they should be hungry. A weak suck and low energy stores may make it hard for the newborn to take in enough nourishment. It is common for newborns like this to tire with feeding and need some of their milk to be given through a small feeding tube to ensure they have plenty of nourishment to continue to grow, gain stamina, and thrive. Blood sugar levels will be checked closely after birth since preterm birth and growth restriction can also put a newborn at risk for episodes of low blood sugar. Sometimes a newborn will need IV fluids that contain sugar (dextrose) to help them achieve normal blood sugar levels while they are working on learning to feed successfully.

Temperature

Pre-term and growth-restricted newborns have smaller amounts of fat on their body. After birth, this can cause them to get cold and use too many calories to stay warm instead of using the calories to grow and get stronger. The newborn's temperature will be checked frequently, and when needed, a warmer or incubator will be used to keep them warm until they can do it on their own.

Jaundice

Preterm newborns can more easily develop jaundice, which is when the skin and eyes become yellow from a buildup of bilirubin in the body. Low milk intake along with an immature digestive tract, makes it common for these newborns to develop significant jaundice which may need to be treated with light therapy. We will monitor the newborn's bilirubin level closely to see if it needs any treatment to bring it down to an acceptable level until the newborn's body is able to handle it on their own.

Please reach out to your care team to discuss any concerns or questions, or visit [childrensmn.org/IUGR](https://www.childrensmn.org/IUGR) to learn more.