

## Dear parents,

Congratulations on your new baby! The purpose of this brochure is to give you a brief explanation about jaundice in newborn infants.

“Jaundice” means that the skin becomes visibly yellow. This happens because the yellow bile compound *bilirubin* accumulates in the skin. To be able to see jaundice, you need to look at the skin in bright light (daylight or fluorescent lamps).

Jaundice is a normal transition phenomenon in newborn babies. It occurs because after birth the liver of the infant needs a start-up period in order to be able to take care of the processes that the mother’s liver handled for the baby during pregnancy. All newborn babies have elevated levels of bilirubin in their blood, but in some babies it does not get high enough that we are able to see it in the skin. It will usually take a few days before the processes that clear bilirubin from the body work well enough for the jaundice to start disappearing.

In some babies jaundice can increase above levels that we consider normal. Common causes for this can be blood group incompatibilities between mother and infant, such as Rhesus or AB0-incompatibility. Some hereditary factors can also increase jaundice in the newborn. If you have experienced jaundice in an older sibling of your new baby, and particularly if that sibling needed to be treated for jaundice, then the risk for jaundice in your new baby is considerable.

If jaundice becomes very pronounced, you may notice that the baby becomes drowsy and may not be as interested in feeding. This shows that severe jaundice can affect the workings of brain cells. Although this will typically disappear when jaundice becomes less pronounced, your doctor may choose to treat your baby in order to reduce the level of jaundice.

Jaundice in babies first becomes visible on the forehead, typically when the baby is 2-3 days old. The yellow color may reach its maximum when the baby is 4-5 days old. As the baby becomes gradually more yellow, the color will become visible further down on the body and along the arms and legs. If the yellow color can be seen clearly on the feet, the bilirubin level may be quite high, and it is advisable to perform a test. This can be done in two ways, either by a small machine that sends a flash of light into the skin, or by taking a blood test. The flash-of-light method relies on measuring the yellowness of the light that is reflected from the skin, and is not quite as precise as the blood test. Therefore, if the number from that machine seems high, a blood test will sometimes be necessary to verify the more precise number.

Jaundice can be treated in several ways, and the choice of method will to some extent depend on the cause of jaundice. The most common

method is phototherapy. Light in the blue part of the spectrum changes the bilirubin molecule so that it can be excreted from the body even if the liver function is not yet normalized. The infant needs to be naked in a bed, bassinet, or incubator, and will have her/his eyes covered for protection. The light can come from above, or below, or both. This treatment can last anywhere from a few hours to several days.

If the jaundice is caused by blood group incompatibility, an exchange transfusion can occasionally become necessary. With this procedure the infant’s blood is exchanged with blood from a donor. Exchange transfusion has become rare nowadays, because it was discovered some years ago that giving immune proteins intravenously can achieve the same effect in most of these babies.

## What can or should parents do about jaundice in their baby?

Please inform the maternity staff if you have a family history for conditions which can cause the baby to become more jaundiced. Such history may include one or more of the following: you as parents or the baby’s older siblings needed treatment for jaundice as babies; you are aware that you or other people in the family may have Gilbert syndrome; you know that there are cases of hemolytic jaundice in your family/kin.

If you leave the maternity ward before the infant is 2-3 days old, it may be sensible to check a bilirubin level before you go home, or when you come back to have the baby tested for metabolic disease. Based on this result the health staff may be able to assess whether close follow-up is recommended.

If the baby becomes visibly more jaundiced after you come home, you should take the baby back to the maternity hospital (or to your doctor) to measure the bilirubin. This is particularly urgent if the baby should become noticeably more tired, does not eat properly, or becomes irritable. If one or both parents are of African heritage, the infant’s bilirubin should be checked at 2-3 days of age, or earlier if the baby shows symptoms, and when the baby is discharged from the maternity ward. A new test should be done if the baby becomes more jaundiced at home.

If the baby remains jaundiced beyond 2-3 weeks of age you should ask your Well Baby Clinic or your doctor for advice. This is most often a normal phenomenon, but if the baby’s stools become grey/white, the baby will need further examinations. Premature infants may remain jaundiced for weeks after birth, but this should disappear gradually.

# Jaundice in newborn infants - AN ORIENTATION FOR PARENTS



This brochure has been prepared by the  
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