

Jaundice in Newborns

What Is Jaundice?

Babies with jaundice have a yellow coloring of the skin and eyes. This happens when there is too much bilirubin in the baby's blood.

Bilirubin (bill-uh-ROO-bin) is a yellow substance that comes from the normal breakdown of red blood cells. The liver removes bilirubin from the blood and passes it into the bowels so it can leave the body.

A newborn baby's liver does not remove bilirubin as well as an adult's does. Jaundice (JON-diss) happens when bilirubin builds up faster than the liver can break it down and pass it from the body.

Most types of jaundice go away on their own. Others need treatment to lower bilirubin levels.

What Are the Signs & Symptoms of Jaundice?

A baby with jaundice has skin that looks yellow. It starts on the face, then the chest and stomach, and then the legs. The whites of a baby's eyes also look yellow. Babies with very high bilirubin levels may be sleepy, fussy, floppy, or have trouble feeding.

Jaundice may be hard to see, especially in babies with dark skin. If you're unsure, gently press the skin on your baby's nose or forehead. If it's jaundice, the skin will appear yellow when you lift your finger.

Call the doctor if your baby:

- starts to look or act sick
- is not feeding well
- is sleepier than usual
- has jaundice that gets worse

What Causes Jaundice in Newborns?

Many healthy newborns have physiological ("normal") jaundice. This happens because newborns have more blood cells than adults do. These blood cells don't live as long, so more bilirubin is made when they break down. This kind of jaundice appears 2–4 days after the baby is born and goes away by the time a baby is 2 weeks old.

Babies can get jaundice if they:

- **are born early.** Premature babies are even less ready to remove bilirubin. They also can have problems at lower bilirubin levels than babies born later. Doctors treat them sooner.
- don't get enough breast milk. This often happens in the first few weeks of life, because a mother's milk isn't in yet or the baby has trouble breastfeeding. If a baby has this type of jaundice (called

breastfeeding jaundice), it's best to feed more often as it can lower the risk of jaundice. A breastfeeding (lactation) consultant can help.

- are breastfed. In some babies, breast milk prevents the liver from quickly removing bilirubin. This is called breast milk jaundice and happens after the first week of life. Bilirubin levels slowly improve over 3–12 weeks. Experts don't know why this happens in some babies, but it could be due to a protein that doesn't let bilirubin be cleared from the body or might be linked to genetics. Either way, it is only temporary.
- has a different blood type from the mother. If mother and baby have different blood types, the mother's body makes antibodies that attack the baby's red blood cells. This can happen if:
 - the mother's blood type is O and the baby's blood type is A or B (called ABO incompatibility)
 - the mother's Rh factor (a protein found on red blood cells) is negative and the baby is Rh positive
- has a genetic problem that makes red blood cells more fragile. Red blood cells break down more easily in health problems like hereditary spherocytosis and G6PD deficiency.
- is born with high red blood cell numbers (polycythemia) or a large bruise on the head (cephalohematoma)

How Is Jaundice Diagnosed?

Doctors can tell if a baby has jaundice based on a yellowing of the skin and whites of the eyes. All newborns are checked for jaundice before leaving the hospital or birth center.

Babies with jaundice will get a blood test to check bilirubin levels. Sometimes, a light machine that measures bilirubin in the skin is used. But if the level is high, a blood test must confirm the result.

High bilirubin levels can lead to serious problems. So doctors carefully watch babies with jaundice.

How Is Jaundice Treated?

Treatment depends on the cause of the jaundice, the bilirubin levels, and a baby's age.

Mild jaundice goes away after 1 or 2 weeks as a baby's body gets rid of the extra bilirubin on its own. For newborns with breastfeeding jaundice, mothers should breastfeed the baby more often. If the baby is not getting enough breast milk, the doctor may suggest supplementing with formula.

For more serious cases of jaundice, treatment should start as soon as possible. Babies may get:

- fluids. A loss of fluids (dehydration) will cause bilirubin levels to rise.
- **phototherapy.** Babies lie under lights with little clothing so their skin is exposed. The light changes the bilirubin to a form that can easily pass out of the body. Light-therapy blankets may also be used.
- **exchange blood transfusion.** This emergency procedure is done if very high bilirubin levels do not come down with phototherapy. The baby's blood is replaced with blood from a donor to quickly lower bilirubin levels.
- intravenous immunoglobulin (IVIg). Babies with blood type incompatibilities get this through an IV (into a vein). IVIg blocks antibodies that attack red blood cells and reduces the need for an exchange transfusion.

What Else Should I Know?

Call the doctor if your baby has jaundice that isn't going away. Babies with jaundice for longer than 2 weeks need more testing to check for other things that cause jaundice. These include infections, and problems with the liver or bile system, metabolism, or genes.

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