

# Jaundice in newborns

Reviewed by SickKids Staff | Last updated: November 25th 2014

Jaundice is a condition that causes the skin and the whites of the eyes to turn yellow. Learn about causes and treatments of jaundice in newborns.

## Key points

- Jaundice occurs when there is a build-up of bilirubin in the blood. It is common in newborns.
- The signs and symptoms of jaundice include yellowish skin and eyes, drowsiness, difficulty feeding and dark or black stools for longer than normal after birth.
- Doctors can diagnose jaundice with a physical exam and a simple blood test. If your baby needs to have another test of their bilirubin level, follow instructions carefully.
- To prevent jaundice, feed your baby at least every three hours in the first couple of weeks of life.
- See your doctor for jaundice the same day if your newborn is not feeding well or appears more jaundiced or dehydrated. Go to your nearest emergency department if your baby is vomiting or has a fever or your doctor is not available.

## What is jaundice?

Jaundice is a condition that causes the skin to appear yellow. It occurs when bilirubin builds up in the blood.

Bilirubin is released when the liver breaks down red blood cells. Normally, the bilirubin passes out of the body as bile through the intestines. If the liver cannot break down the bilirubin quickly enough, a baby can develop jaundice.

Jaundice can be common in newborns and usually appears in the first week of life.



## Signs and symptoms of jaundice

The most common sign of jaundice is yellowish skin and eyes. Other symptoms include:

- drowsiness
- difficulty feeding
- dark or black stools for a longer time after birth compared with a newborn without jaundice

## Causes of jaundice in newborns

The most common cause of jaundice in newborns is "physiological jaundice". This can happen because newborn babies:

- produce more bilirubin than older children and adults since their red blood cells break down more quickly
- may have a build-up of bilirubin in the blood because their young livers cannot yet remove it quickly enough

Other causes of jaundice include:

- prematurity
- difficulty feeding or inadequate intake of milk
- an infection in the blood or urinary tract
- incompatible mother/child blood groups
- thyroid disease
- liver, intestinal or gut problems (rare)
- an inherited condition such as [G6PD deficiency](#) (rare).

## How jaundice is diagnosed

All babies in Canada have a blood test to check their bilirubin level around 24 hours after they are born, before leaving the hospital. At that time, you may be told that your baby needs treatment for jaundice or needs repeat blood testing to monitor for jaundice.

If your baby develops jaundice after leaving hospital, your doctor will examine them and confirm the diagnosis with a simple blood test that checks the level of bilirubin.

- If the level of bilirubin is high, your doctor will admit your baby to the hospital for treatment.

- If the test shows that the level is moderately high but not high enough to need treatment, your doctor will arrange a follow-up visit with a repeat blood test.
- If the doctor thinks that there may be a more complex reason for the jaundice, they may decide to do extra tests.

## How jaundice is treated

### Phototherapy

Phototherapy means “treatment with light”. The light changes the bilirubin to a form that can be passed out of the body more easily.

1. A doctor or nurse will undress your baby, protect their eyes and place them in an isolette (baby incubator). The isolette will make sure that your baby is kept warm while they are undressed.
2. A light will be placed over and sometimes beside the isolette.
3. Your baby’s skin and blood will absorb the light waves and convert the bilirubin to a form that dissolves in water so that the body can get rid of it.

Some hospitals also use a “biliblanket” – a blanket placed under the baby’s back – as a way to treat a baby’s jaundice with light.

Phototherapy is completely safe, but it does mean less time for skin-to-skin contact with your newborn. The doctor may also ask you to limit your feeds to 30 minutes to give your baby as much time under the light as possible.

### Feeding

An increase in your baby’s milk intake will also help to treat the jaundice. The doctor may recommend that you give your baby some formula in addition to normal breastfeeding. If the jaundice is severe, your baby may need an intravenous (IV) line to give fluids into their vein.

## How to prevent jaundice

Feed your baby at least every three hours for the first couple of weeks of life. You may feed your baby more often, for example every two hours, if they seem hungry. Do not let your baby go for more than three hours without a feed until your doctor says you can (usually once your baby has regained their birth weight at around two weeks).

## Complications of jaundice

Most babies with jaundice do not have any long-term complications. A very small number of babies with severe jaundice can develop a condition called kernicterus, but this is rare. Kernicterus can lead to lasting brain damage, hearing loss and problems with motor development. Health care staff are very careful about monitoring and treating babies for jaundice to avoid any possibility of kernicterus.

## When to see a doctor about jaundice

### See your baby's regular doctor if your baby:

- appears more jaundiced (yellow)
- is not feeding well
- is showing signs of [dehydration](#) such as dry lips

### Call 911 or go to the nearest emergency department if:

- your baby is lethargic, inactive or difficult to wake up for feeds
- your baby is [vomiting](#) (throwing up)
- your baby has a [fever](#)
- the jaundice is getting worse and your doctor is not available.

Please visit [AboutKidsHealth.ca](https://www.aboutkidshealth.ca) for more child health information.

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