## **Direct Bilirubin**



#### Does this test have other names?

Conjugated bilirubin

#### What is this test?

This test looks for bilirubin in your blood or urine.

Bilirubin is a substance made when your body breaks down red blood cells. This is a normal process. Bilirubin is also part of bile, which your liver makes to help digest the food you eat.

A small amount of bilirubin in your blood is normal. Healthy adults make 250 to 350 milligrams (mg) of bilirubin each day.

Some bilirubin is bound to a certain protein (albumin) in the blood. This type of bilirubin is called unconjugated, or indirect, bilirubin. In the liver, bilirubin is changed into a form that your body can get rid of. This is called conjugated bilirubin or direct bilirubin. This bilirubin travels from the liver into the small intestine. A very small amount passes into your kidneys and is excreted in your urine. This bilirubin also gives urine its distinctive yellow color.

This test is often done to look for liver problems, such as hepatitis, or blockages, such as gallstones.

## Why do I need this test?

You may need this test if your liver doesn't seem to be working the way it should. Symptoms include:

- Yellowing of your skin and whites of your eyes (jaundice)
- Dark yellow urine
- Light gray or clay-colored stools
- Nausea
- Vomiting
- Severe tiredness (fatigue)
- Belly pain or swelling

You may also have this test to check for possible liver damage if you drink a lot of alcohol on a regular basis. Drinking too much alcohol can damage the liver over time.

You may also need this test if your healthcare provider thinks that you may have:

- Hepatitis. Your liver can become inflamed for different reasons, such as infection with hepatitis virus, and excessive drug or alcohol use. When liver cells are damaged from hepatitis, the liver may release both indirect and direct bilirubin into the bloodstream. This causes higher levels.
- **Gallstones**. The bile duct is a tube that carries bile to the small intestine. Bilirubin or cholesterol can form stones that block the duct. This causes bilirubin—mostly direct bilirubin—to rise in your bloodstream.
- Inflammation of the bile duct. Higher levels of direct bilirubin in your blood may stem from inflammation in the tube that carries bile to the small intestine.

# What other tests might I have along with this test?

You will likely have this test as part of a liver panel, or group of related liver tests. A total bilirubin level may also be done. When your liver is damaged, liver enzymes may leak into your blood. You may need other blood tests, such as:

- · Alkaline phosphatase, or ALP
- Aspartate transaminase, or AST
- Alanine transaminase, or ALT
- Gamma-glutamyl transferase, or GGT

You may also need a test to check the levels of liver proteins like albumin.

## What do my test results mean?

Test results may vary depending on your age, gender, health history, and other things. Your test results may be different depending on the lab used. They may not mean you have a problem. Ask your healthcare provider what your test results mean for you.

Results are given in milligrams per deciliter (mg/dL). Normal results of the blood test range from 0 to 0.3 mg/dL in adults.

If your results on the blood test are higher, bilirubin may also show up in your urine. Bilirubin is not present in the urine of normal, healthy people.

Results that are higher may mean that you have a liver problem, hepatitis, or gallstones.

Higher levels may also mean that you have:

- A blood infection (called blood poisoning or septicemia)
- Sickle cell anemia
- · Certain cancers or tumors
- · Certain rare inherited diseases
- Bile duct scarring

Low levels of bilirubin are often not a concern.

#### How is this test done?

The test is done with a blood sample. A needle is used to draw blood from a vein in your arm or hand. Or it's done with a urine sample collected at any time and checked with a test strip.

#### Does this test pose any risks?

Having a blood test with a needle carries some risks. These include bleeding, infection, bruising, and feeling lightheaded. When the needle pricks your arm or hand, you may feel a slight sting or pain. Afterward, the site may be sore.

#### What might affect my test results?

Strenuous exercise and pregnancy can affect your results. Vitamin C, androgen hormones, and certain medicines, such as phenazopyridine and rifampin, can affect your results.

Anorexia or fasting for a long time can also affect your results.

# How do I get ready for this test?

You don't need to prepare for this test. Tell your healthcare provider about all medicines, herbs, vitamins, and supplements you are taking. This includes medicines that don't need a prescription and any illegal drugs you may use.

© 2000-2027 The StayWell Company, LLC. All rights reserved. This information is not intended as a substitute for professional medical care. Always follow your healthcare professional's instructions

This information is not intended as a substitute for professional medical care. Always follow your Healthcare professional's instructions. Copyright Krames LLC.