What Do Antigens & Antibodies Mean?

To find out if you have hepatitis B – or the stage of your infection – a simple blood sample is taken that will look for certain proteins called *antigens*, which make up the hepatitis B virus (HBV).

Doctors will also look for *antibodies* your immune system makes to fight the HBV antigens. When your body has created enough of these antibodies to kill off the antigens it means that you cleared or got rid of the infection.

The *hepatitis B surface antigen* (HBsAg) is the first antigen to appear after you are infected. If you have this antigen, it means you could infect others unless they are immunized against hepatitis B. If you test positive for the surface antigen for longer than six months, it means you have a chronic, or long-term, infection.

The *hepatitis B surface antibody* is the last antibody to appear in a hepatitis B infection. It means your immune system has cleared your body of the infection.

The *hepatitis B “e” antigen* (HBeAg) is the second antigen to appear; it is made by the virus as it multiplies in your liver. When it is present, it means HBV are actively infecting liver cells and making many copies of themselves. Its presence also means your blood and body fluids are very infectious.

When the *hepatitis B “e” antibody* appears, it means there are very few viruses reproducing in the liver. Today, the goal of treatment is to decrease the number of viruses in your body so the immune system can produce the “e” antibody.

The *hepatitis B core antigen* (HBcAg) is only found in the liver, so it never shows up in a blood test.

The *hepatitis B core antibody* (HBcAb) is present in your blood. Only people who have been infected with HBV have core antibodies in their blood.

People who are immunized against hepatitis B will not have core antibodies; they will only have surface antibodies because the hepatitis B vaccine contains only the surface antigen.