

# HEPATITIS-B

..... a deadly disease,

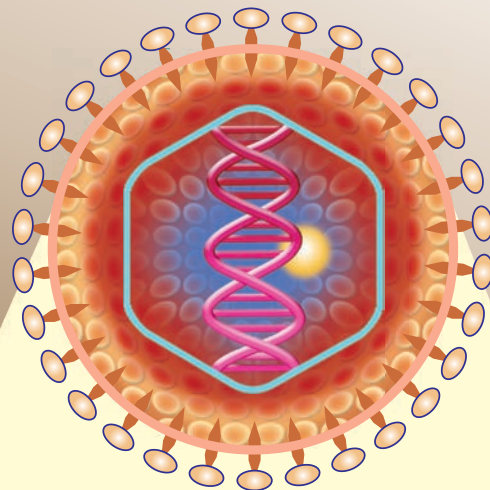
Control it with Reliable Diagnosis.....

## HEPACARD

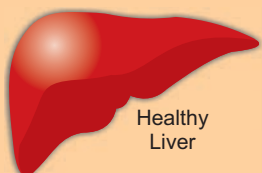
*(A Rapid & Qualitative Test for Detection of HBsAg)*

Hepatitis-B is a serious disease caused by Hepatitis-B virus. It is also called Australian Antigen. This virus attacks the liver and causes hepatitis which means inflammation of liver. The Liver helps the body to digest food, store energy and remove poison.

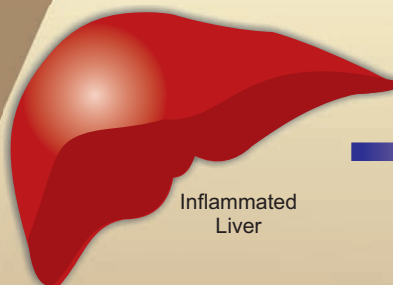
The hepatitis virus makes it mal-functioning. It can cause a life long infection that can lead to liver cirrhosis, liver cancer, liver failure and ultimately death!!!



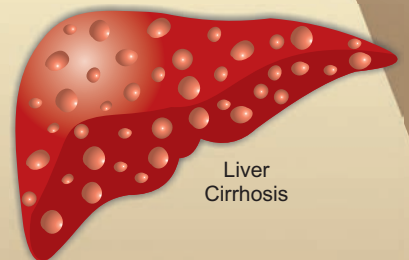
Hepatitis-B Virus



Healthy  
Liver



Inflamated  
Liver



Liver  
Cirrhosis

# HEPACARD

One Step Rapid Visual Test For the Qualitative Detection of HBsAg in Human Serum/Plasma

**Clinical significance:** HBsAg is a protein on the surface of HBV. It is the first detectable viral antigen which appear during HBV infection. It can be detected in high level in serum during acute or chronic HBV infection. The presence of HBsAg indicates that the person is infected. HBsAg has been the principle target for the laboratory testing to identify active infection by HBV. It determines the specific HBV serotype. The screening of blood donors for the presence of HBsAg has significantly reduced the incidence of Hepatitis B in blood transfusion recipients.

## Salient Features

- ◆ Principle : Based on Immunochromatography
- ◆ One step, rapid, visual and qualitative immunoassay
- ◆ Detect all the "11" subtypes of HBsAg
- ◆ No sample preparation required
- ◆ Excellent sensitivity & specificity : Antigen Sensitivity- 0.5ng/ml.
- ◆ Ready to use
- ◆ Shelf Life 30 months at 2-8°C
- ◆ Prompt service backup
- ◆ See-through device introduced for the first time in India
- ◆ 100% user safe as there is no direct contact of user with sample & strip. This limits the risk of infection



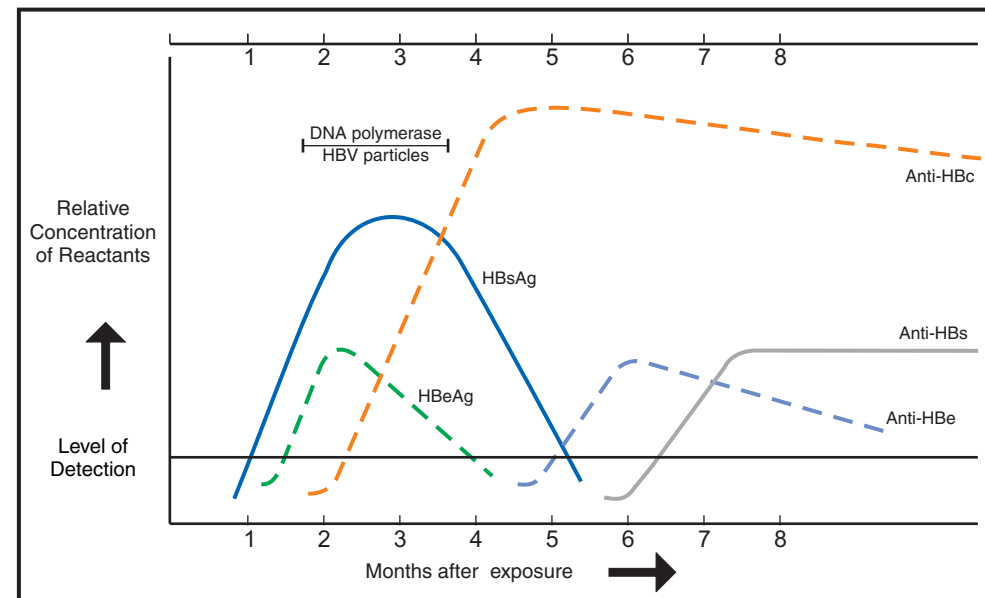
## Sensitivity & Specificity:

Sensitivity: **100%**

Specificity: **100%**

## Packsize:

- 20 Tests (Single Test Pack)
- 100 Tests (Single Test Pack)
- 200 Tests (5 Test Pack)

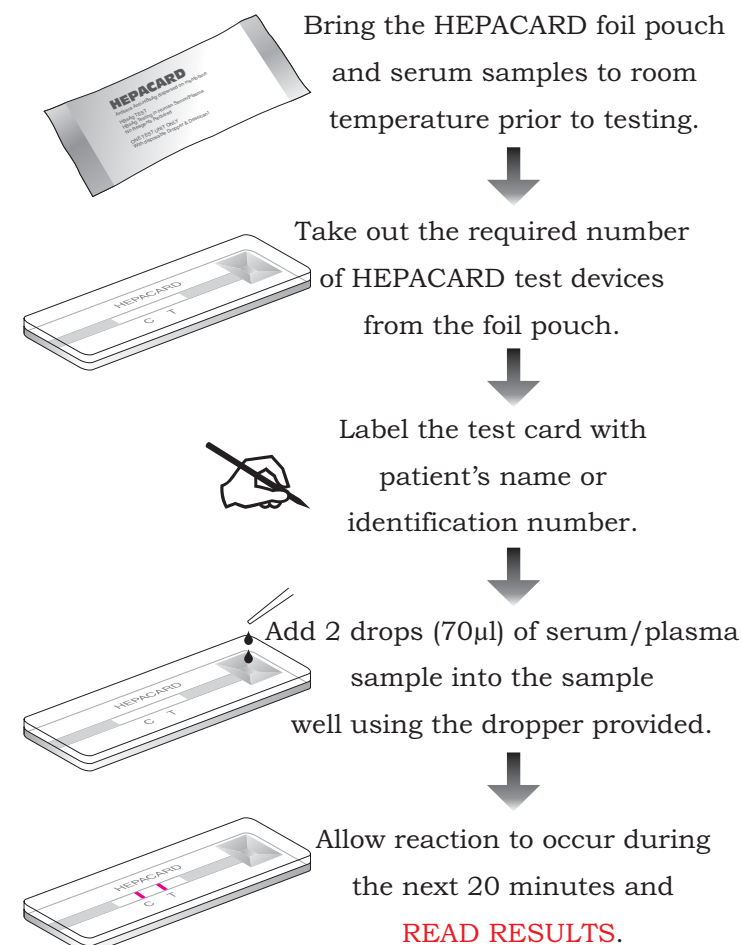


Serological & Clinical pattern during acute HBV infection

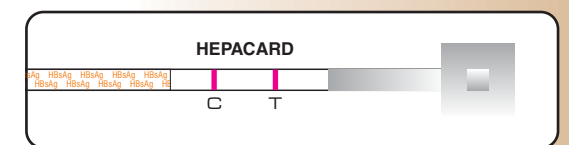
## Significance of HBsAg

- ◆ First Detected during HBV infection before appearance of symptoms.
- ◆ Appear within 2 weeks of infection
- ◆ Disappear within 3-4 month of exposure in acute infection.
- ◆ Most reliable & universal marker of HBV infection.
- ◆ In carrier & chronic state, persists for more than 6 months.
- ◆ Produced In large quantities.
- ◆ Carries a highly antigenic determinant.
- ◆ Used to make hepatitis B vaccine.

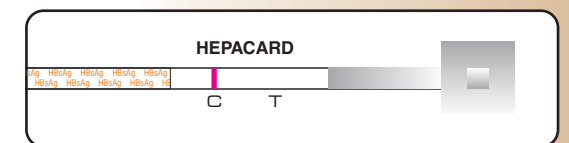
## Test Procedure



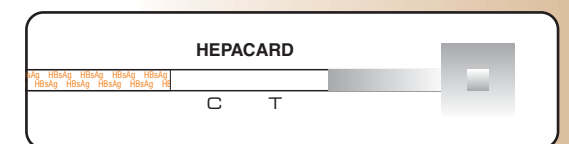
## Result Interpretation



Reactive for HBsAg



Non-Reactive for HBsAg



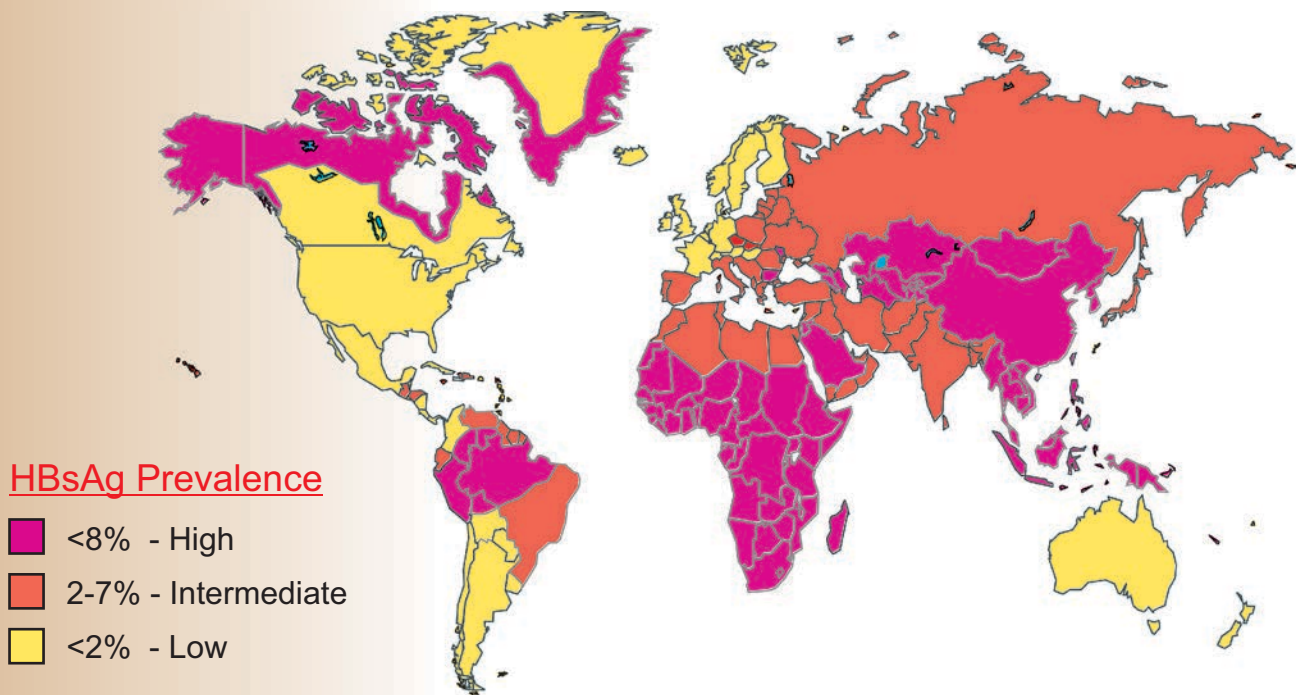
Invalid

## \*Facts : At a Glance

- ◆ HBV is a global public health problem.
- ◆ Nearly 2 billion people in the world have been acutely infected by HBV.
- ◆ About 350 million people chronically infected with HBV.
- ◆ 15-25% of chronically HBV infected people will die due to liver disease caused by HBV.
- ◆ Highest incidence of the disease in the age group 20-49.
- ◆ 90% of infants & 30% of children of age less than 5 years who acquire HBV infection, become chronically infected.

Source: [who.int/immunization\\_delivery/new\\_vaccine/hepb/en/index1.html](http://who.int/immunization_delivery/new_vaccine/hepb/en/index1.html).

## \*Geographic Distribution of Chronic HBV Infection



## \*Evaluation Report

- ◆ WHO, Geneva, USA.  
Sensitivity : **100%**      Specificity : **97.8%**
- ◆ M/s PATH (Program for Appropriate Technology in Health), Seattle, USA.  
Sensitivity : **100%**      Specificity : **100%**
- ◆ **Christian Medical College, Vellore, India (Reference centre for Govt. of India)**  
Sensitivity : **100%**      Specificity : **100%**

\* Note : This information is provided for the Scientific Community. It is not for commercial or promotional purpose.

for further information, please contact:

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