Almost 300 million people are living with hepatitis B, and they can live long lives if their hepatitis B is managed. This guide can help you understand important management steps.

**An Overview of the Guidelines**

- If hepatitis B is not managed, it can lead to liver damage such as fibrosis, cirrhosis (liver scarring), or even liver cancer.
- Hepatitis B can affect how you feel each day and might decrease your energy and cause inflammation in your body.
- Things you can do for your health are to maintain a healthy weight, exercise, eat a well-balanced diet, avoid alcohol, and not smoke.
- Talk to your doctor about getting tested for co-infections including hepatitis C, hepatitis Delta and HIV (human immunodeficiency virus).
- If you are HBsAg positive, it is also important to encourage family members and close family contacts to get tested for hepatitis B, too. If any family members are not infected with hepatitis B (HBsAg positive), they should protect themselves by getting vaccinated.

**Are you HBsAg positive?**

HBsAg is the marker of current hepatitis B infection. Infection is considered chronic, or lifelong, if you have HBsAg longer than 6 months. For someone with chronic hepatitis B, ongoing monitoring is important to understand your liver health and see if you are eligible for treatment.

Hepatitis B monitoring includes:

- **AFP (alpha-fetoprotein) and Imaging of the Liver (every 6 months)**
  - **AFP**: This blood test is used to determine your risk for developing primary liver cancer in those living with chronic hepatitis B and should be tested at every visit for this. If an individual does have elevated AFP levels, then more tests and imaging studies should be ordered.
  - **Imaging**: Your doctor may order an abdominal ultrasound or transient elastography (also known as FibroScan, Hepatus, Siemens, GE, Philips, Velacur) to evaluate or monitor liver damage (e.g. inflammation, fibrosis, cirrhosis) and to screen for primary liver cancer. Be sure to talk to your doctor about liver cancer screening. Generally, imaging of the liver and blood tests at least every 6-12 months is recommended.

- **ALT (alanine aminotransferase) and HBV DNA testing (every 12 months)**
  - **ALT**: This enzyme is monitored closely with a hepatitis B infection and is found almost exclusively in the liver. This test is useful in deciding whether a person
would benefit from treatment or for evaluating how well a person is responding to treatment. Consistently high ALT levels might indicate liver damage.

- **Platelets**: The ideal platelet range is 150,000 to 400,000 per microliter (µL) of blood. A low platelet count can be an indicator of liver damage.

- **HBV-DNA**: This test also known as hepatitis B viral load, measures the amount of hepatitis B virus DNA in the blood, which tells how actively the virus is replicating.

**The AST to Platelet Ratio Index (APRI score) (a calculated number using platelets and AST)**

- The APRI is calculated to help measure liver health. It considers the platelet count and AST levels. If your score is less than or equal to 0.5, your liver is either completely free of fibrosis or has a tiny bit of scarring. If you have an APRI score of 1.5 or greater, your liver likely has some damage.

- Want to calculate your own APRI score, visit this resource: [https://www.mdcalc.com/calc/3094/ast-platelet-ratio-index-apri](https://www.mdcalc.com/calc/3094/ast-platelet-ratio-index-apri)

<table>
<thead>
<tr>
<th>Test</th>
<th>Normal Range</th>
<th>Abnormal Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspartate aminotransferase (AST)</td>
<td>30 IU/L men&lt;br&gt;19 IU/L women</td>
<td>40 to &gt; 200 IU/L</td>
</tr>
<tr>
<td>Alanine aminotransferase (ALT)</td>
<td>35 IU/L men&lt;br&gt;25 IU/L women</td>
<td>40 - 200 IU/L</td>
</tr>
<tr>
<td>Platelets</td>
<td>&gt;150,000</td>
<td>less than 150,000</td>
</tr>
</tbody>
</table>

*ranges for AST and ALT are those used by WHO and may differ by region

**Are you recommended for treatment?**

**Are you an adult with hepatitis B or an adolescent aged greater than 12 years? AND**
### Do you have any of the following?

<table>
<thead>
<tr>
<th>Condition</th>
<th>Description</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>APRI score greater than 0.5</td>
<td>Use the link <a href="#">here</a> or ask your doctor to help calculate your APRI score</td>
<td>![ ]</td>
</tr>
<tr>
<td>HBV DNA &gt;2000 IU/mL</td>
<td>If HBV DNA is not available, ALT levels can be used instead</td>
<td>![ ]</td>
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<tr>
<td>If you have any of the following:</td>
<td></td>
<td>![ ]</td>
</tr>
<tr>
<td>- coinfection (HIV, HCV, HDV)</td>
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<td>![ ]</td>
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<tr>
<td>- family history of liver cancer or cirrhosis</td>
<td></td>
<td>![ ]</td>
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<tr>
<td>- immune suppression</td>
<td></td>
<td>![ ]</td>
</tr>
<tr>
<td>- comorbidities (diabetes, fatty liver disease (NASH/NAFLD))</td>
<td></td>
<td>![ ]</td>
</tr>
<tr>
<td>Persistently abnormal ALT levels</td>
<td></td>
<td>![ ]</td>
</tr>
</tbody>
</table>

If you checked **yes** to any of the boxes in the table above you probably **need treatment**. Ask your doctor about hepatitis B antiviral medication.

Eligibility based on WHO Guidelines for the prevention, diagnosis, care, and treatment for people with chronic hepatitis B infection, March 2024, [https://www.who.int/publications/i/item/9789240090903](https://www.who.int/publications/i/item/9789240090903)

### Antiviral Treatment Options

- **TDF** (Tenofovir disoproxil fumarate) or **ETV** (Entecavir)
- **TDF** (Tenofovir disoproxil fumarate) + **3TC** (Lamivudine) or **TDF + FTC** (Emtricitabine).
  - *If no access to monotherapy (TDF or ETV)*
- **ETV** or **TAF**: In persons with osteoporosis or impaired kidney function or in children and adolescents

### If you did not check “yes” to any of the boxes in the table above on treatment eligibility then:

- You might not be recommended for treatment at this time, but you should talk to your healthcare provider about your specific situation and your preferences.
- Continue monitoring your hepatitis B and liver health regularly (every 6 to 12 months).
- Maintain a healthy lifestyle.

There may also be individual circumstances where treatment should be considered based upon an individual's specific concerns even if they may not meet any of the options for treatment eligibility above. These concerns may include infectivity, transmission, associated stigma, the risk of oncogenicity and progressive liver fibrosis and a strong individual motivation to consider treatment. **It is important to discuss your treatment options with your doctor if you have any of these concerns.**

For more information:

Visit: www.hepb.org

View the complete WHO [Updated Hepatitis B Guidelines here](#).

Need help understanding anything in this document including liver tests like AFP, ALT, and ultrasounds? Visit the Hepatitis B Information Guide which can be found at the QR code below: