

**EDUCATION GRAM™**  
**HEPATITIS B**

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Hepatitis B is caused by Hepatitis B virus (HBV). Hepatitis B virus can cause lifelong infection, **cirrhosis** of the liver, liver cancer, liver failure, and death. **Severity ranges** from mild lasting a few weeks to a serious lifelong illness. It is commonly **transmitted** by blood, semen, other body fluids from person infected with Hepatitis B virus, and sharing drug needles and syringes.

**Types of Hepatitis B**

Acute Hepatitis B	<ul style="list-style-type: none"> <li>Short term illness that occurs within first 6 months after someone is exposed</li> <li>Does not always lead to chronic infection</li> <li>Symptoms: Loss of appetite, fatigue, joint pain, jaundice, diarrhea and vomiting</li> </ul>
Chronic Hepatitis B	<ul style="list-style-type: none"> <li>Long-term illness that occurs when Hepatitis B virus remains in a person's body and eventually leading to death</li> </ul>

**Prevention of Hepatitis B:**

Vaccine	Trade Name	Age (years)	Dose	Route	Schedule	Booster
Hep. B Recombinant	Engerix-B or Recombivax	0- 19 Age>19	0.5 mL 1.0 mL	IM	3 doses: At birth, 1-2 mo., 6-18 mo.	None
Combined Hep. A&B	Twinrix	> 18	1.0 mL	IM	3 doses: At birth, 1-2 mo., 6-18 mo.	None

**Treatment of Hepatitis B:**

Indication	Drug Name	Class	Dose	AWP Cost
<ul style="list-style-type: none"> <li>1<sup>st</sup> Line for Chronic HBV</li> <li>Resistant to Lamivudine</li> </ul>	Entecavir (Baraclude)	Oral Nucleoside Analogs	<ul style="list-style-type: none"> <li>Nucleoside naive: 0.5 mg Daily</li> <li>Lamivudine-refractory or Resistance: 1 mg Daily</li> <li>Decompensated Liver disease: 1 mg Daily</li> </ul>	B: \$1332.97 G: \$1481.17
<ul style="list-style-type: none"> <li>Chronic HBV</li> </ul>	Epivir-HBV (Lamivudine)	Oral Nucleoside Analogs	<ul style="list-style-type: none"> <li>100 mg Daily</li> </ul>	B: \$498.89 G: \$429.66
<ul style="list-style-type: none"> <li>Resistant to Lamivudine</li> </ul>	Hepsera (Adefovir)	Oral Nucleotide Analogs	<ul style="list-style-type: none"> <li>10 mg Daily</li> </ul>	B: \$ 1389.98 G: \$1136.84
<ul style="list-style-type: none"> <li>Resistant to Lamivudine HBV</li> <li>Non-responsive to Adefovir</li> </ul>	Viread (Tenofovir)	Oral Nucleotide Analogs	<ul style="list-style-type: none"> <li>300 mg Daily</li> </ul>	B: \$971.03 (no generic)
<ul style="list-style-type: none"> <li>Chronic HBV</li> <li>Avoid if Resistant to Lamivudine</li> </ul>	Tyzeka (Telbivudine)	Oral Nucleoside Analogs	<ul style="list-style-type: none"> <li>600 mg Daily</li> </ul>	B: \$1285.26 (no generic)
<ul style="list-style-type: none"> <li>Chronic HBV</li> <li>Responders: High ALT levels, low viral load</li> </ul>	Pegasys (Pegylated interferon alfa-2a)	Interferon-Alfa	<ul style="list-style-type: none"> <li>180 mcg <b>SC</b> once every 48 weeks</li> </ul>	B: \$1039.83 (no generic)

References:

- American Liver Foundation. Hepatitis B. The American Liver Foundation. Accessed April 27, 2015 <http://www.liverfoundation.org>
- Center of Disease Control and Prevention, Hepatitis B Information. CDC, Accessed April 29, 2015. <http://www.cdc.gov/hepatitis/B/index.htm>