



Hepatitis B Fact Sheet

Cause	<p>Hepatitis B Virus (HBV) DNA virus from the Hepadnaviridae family of viruses. Some features in common with retroviruses. Hepatitis B surface antigen (HbsAg) discovered in 1965 HbsAg also called Australian Antigen Four serotypes and seven genotypes of human hepatitis B (Hep B)</p>																				
Clinical Characteristics	<p>Incubation Period..... From 2 to 6 months Infectivity..... About 100 times more infective than HIV Acute Illness..... About 90% of adults clear the virus from their system after serious infection. Chronic Infection..... About 350 million people worldwide have long-term infection (≥5%). 15 to 40% advance to liver damage and liver disease. Death from Chronic Liver Disease, Disease from liver damage, and Cancer 15-25% risk, >1million people per year worldwide of the Liver Changes in the genetic structure of Hepatitis B virus (mutations) may be responsible for greater liver damage.</p>																				
Signs and Symptoms	<ul style="list-style-type: none"> » Jaundice (yellowing of the skin and eyes), other general symptoms such as tiredness, loss of appetite, joint pain, pain in the stomach area, and feelings of sickness. » Symptoms may not appear in all cases, and at least 30% of seriously infected people may not show symptoms 																				
Modes of Transmission	<ul style="list-style-type: none"> » Most infections can happen when body fluids including blood, blood products of an infected person enters the body of a person who is not protected against the virus. HBV has also been found in semen. » Infection routes include sexual contact with an infected person and exposure to needlesticks and other ‘sharps’ which have been contaminated with HBV (this includes people who inject drugs). » Can also be passed from mother to newborn infant at the time of birth (vertical transmission). 																				
Persons at Risk	<table border="0"> <thead> <tr> <th style="text-align: left;"><u>Persons</u></th> <th style="text-align: left;"><u>Level of Risk</u></th> </tr> </thead> <tbody> <tr> <td>Drug users who share needles or other injecting equipment (works)</td> <td>High</td> </tr> <tr> <td>Those who “snort” drugs</td> <td>High</td> </tr> <tr> <td>Those who have unprotected sex with multiple partners</td> <td>High</td> </tr> <tr> <td>Homosexual men</td> <td>Medium</td> </tr> <tr> <td>People from countries where the virus is regularly found (Africa, Southeast Asia, the Middle East, Southern and Western Pacific Islands, the Amazon Basin, Haiti and the Dominican Republic).</td> <td>Medium</td> </tr> <tr> <td>Those who spend time in prison</td> <td>Medium</td> </tr> <tr> <td>Hemophiliacs</td> <td>Low</td> </tr> <tr> <td>Individuals who undergo hemodialysis</td> <td>Low</td> </tr> <tr> <td>Health Care Workers (HCWs), Emergency Services Workers</td> <td>Low</td> </tr> </tbody> </table>	<u>Persons</u>	<u>Level of Risk</u>	Drug users who share needles or other injecting equipment (works)	High	Those who “snort” drugs	High	Those who have unprotected sex with multiple partners	High	Homosexual men	Medium	People from countries where the virus is regularly found (Africa, Southeast Asia, the Middle East, Southern and Western Pacific Islands, the Amazon Basin, Haiti and the Dominican Republic).	Medium	Those who spend time in prison	Medium	Hemophiliacs	Low	Individuals who undergo hemodialysis	Low	Health Care Workers (HCWs), Emergency Services Workers	Low
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Prevention	<ul style="list-style-type: none"> » Vaccines are available for the prevention of Hep B, and this is the best way to protect yourself. » Try to eliminate risky behaviours, such as unprotected sex and injecting drugs. » Pregnant women should be tested for Hep B. If they are positive, there are simple measures which can protect their newborn infants from infection. » Avoid sharing personal items likely to become infected with blood. These include toothbrushes and razors. » Tattooing and body piercing are also possible transmission pathways, so careful thought of the person performing these procedures is recommended. Unless the equipment is cleaned and sterilized effectively, the blood of an infected person may still be present. » HCWs and other people likely to be exposed to blood, blood products, or other bodily fluids are advised to be vaccinated against HBV. 																				
Vaccine Information	<ul style="list-style-type: none"> » Vaccine options are available to protect against HBV. » Recommended that all people who are in ‘at risk’ groups ask their health care provider about vaccination. » Most provinces in Canada have school-based immunization programs, and it is recommended that all children aged 0-15 ask about vaccination against HBV 																				
Treatment	<p>Two standard treatments for Hep B: interferon and lamivudine. Interferon is used for short periods of time. If this treatment is effective, the body will then suppress the virus on its own. Lamivudine may be used in a similar manner, or may be used to achieve long-term viral suppression. Newer treatments such as adefovir are effective in lamivudine-resistant infections.</p>																				
Canadian Data on the trends of HBV	<ul style="list-style-type: none"> » The incidence of Hep B was approximately 4.2 cases for every 100,000 persons in 1999 (Health Canada, Notifiable Diseases Online) » The prevalence is estimated to be 0.7-0.9%, and the distribution of cases varies by ethnic origin, job and risk group. 																				

