**What is Hepatitis B?**

Hepatitis B is a viral infection of the liver. It can be either acute or chronic. During an acute illness, a person may develop symptoms such as tiredness, weakness, nausea, vomiting, loss of appetite, abdominal pain and jaundice (yellowish skin and eyes). A very few (1%) of these people may develop a severe illness that leads to death. A small number of adults (6–10%) infected with hepatitis B will become infected with the virus for life (chronic carrier). Infants and children who get infected have a much higher chance of becoming a chronic carrier (up to 90%). The chronic infection may lead to cirrhosis (scarring of the liver) or liver cancer.

Hepatitis B is passed on by contact with infected body fluids especially blood, semen, and vaginal secretions and possibly saliva. Some people infected with hepatitis B look healthy and have no symptoms. They can still pass the virus on to others if they are carriers.

**Who should get this vaccine?**

- infants born to carrier mothers
- household and sexual contacts of carriers
- health care and emergency service workers
- persons having unprotected sex with multiple partners
- men who have sex with men
- injection drug users
- children less than 7 years old whose families have immigrated from countries of high numbers of hepatitis B
- persons on dialysis
- those with diseases requiring frequent blood products
- persons with chronic liver disease including hepatitis C

- travellers to developing countries should consider this vaccine, particularly if they may be at risk of sexual or blood contact with local people. Travellers who are staying for longer periods of time or who travel frequently to developing countries have a higher risk of needing medical care and may be treated with unclean needles and equipment or require blood transfusions in the event of an emergency

**What is Hepatitis B vaccine?**

There are a variety of dosing schedules. The standard schedule includes three doses as follows:

1. **1st dose**
2. **2nd dose — 1 month (or later)**
3. **3rd dose — 6 months after first dose (or later)**

- 70–84% are protected within one month after the second dose (third dose needed for long term protection)
- the vaccine can be administered at any age from birth onwards
- if time is limited, the series can be given in a shorter period before travel to risk areas
- still effective if any of the doses are given late, there is no need to restart the series
- after the series is completed, hepatitis B vaccine is more than 95% effective. Booster doses are not recommended in normally healthy individuals
School program in Ontario

- children aged 11–15 years (in grade 7) are offered a 2 dose series that provides the same protection as the three dose series (since the year 2000)
- school program in Ontario started as a 3 dose series in 1994
- at least 95% effective, no further boosters are generally needed

Who should NOT get this vaccine?

Persons who are sensitive to any component of the vaccine including thimerosal (preservative also used in contact lens solution), aluminium or yeast. (The vaccine used for infants and young children does not contain thimerosal). This vaccine is considered safe for pregnant women.

Side effects:

Hepatitis B vaccine is well tolerated.

- **Local** — Soreness, redness, swelling and warmth at site of injection lasting 1–2 days
- **General** — Fever, headache, nausea, dizziness, rash, allergic reaction, occasional tiredness and flu-like symptoms have been reported, but are rare.

When should I seek medical attention?

If you develop hives, swelling of the face or mouth, trouble breathing, serious drowsiness or other serious problems.

Your record of protection

After any immunization, ensure your personal immunization record (yellow card) is updated. *Keep it in a safe place!*

Region of Waterloo Public Health
Vaccine Preventable Disease Program
519-575-4400