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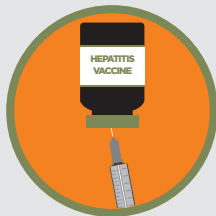
# HEPATITIS B

WHAT YOU NEED TO KNOW

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ARE YOU SURE YOU USE THE RIGHT MEASURES TO  
PROTECT YOURSELF AGAINST HEPATITIS B?

**GET INFORMED! GET VACCINATED! GET PROTECTED!**





# REMEMBER THE FOLLOWING FACTS ABOUT HEPATITIS

## Hepatitis B

causes acute liver infection and may lead to fulminant liver failure and liver necrosis.

• is the most common  
• infection acquired in a  
• hospital, either  
• through needle sticks  
• or contaminated  
• instruments.

• may lead to lifelong  
• infection, which, if  
• left untreated, may  
• lead to liver cancer.



AROUND THE WORLD

**2** Billion people  
are affected by  
hepatitis B

• • • • • • • • • • • • • • • • • •  
which leads to an estimated  
780,000 deaths annually  
(WHO, 2014)

# THE DISEASE IN SHORT

Hepatitis B is still very common in the European Union countries, reported at a rate of 3.45/100.000 population (ECDC-2013) with the majority of cases referring to the age group 25-34 year olds (33.2%). Surveillance at the European level is undergoing revision in order to record acute, as well as chronic infections.

# SYMPTOMS

Incubation period:

*30-180 days (usually around 75 -90 days)*

During the acute phase, manifestations range from subclinical or anicteric hepatitis to icteric hepatitis or fulminant hepatitis. The symptoms and clinical signs can last a few weeks up to six months and they include jaundice, dark urine, malaise, fatigue, anorexia, nausea, vomiting and abdominal pain, arthralgias.

# TREATMENT

Currently no specific treatment exists to cure acute hepatitis B infection. Usually supportive therapy is needed. Liver transplant is the only available treatment in the cases of liver necrosis. New antiviral agents are used for chronic hepatitis B infections.

# WHO NEEDS THE HEPATITIS B VACCINE?

**Healthcare workers** as hepatitis B is an occupational hazard due to clinical work and contact with patients.

**Family members and household contacts** of chronic carriers of hepatitis B.

**Other high risk groups** include Men who have Sex with Men (MSM), IV drug users (IVDUs), patients in dialysis, persons employed in prisons, psychiatric or long-term care facilities for persons with special needs

**Travelers** to countries endemic for hepatitis B (e.g. South-East Asia, Sub-Saharan Africa, the Amazon Basin, parts of the Middle East, the central Asian Republics and some parts of Eastern Europe).

**Any adult** who has no immunity, is recommended to receive hepatitis B vaccination.

## CONTRAINDICATIONS

Persons with hypersensitivity to yeast or any vaccine component.

Persons who experienced severe allergic reaction (e.g. anaphylaxis) with first dose.

**Not contraindicated** in pregnant women, persons with multiple sclerosis, other neurodegenerative disease, or autoimmune disorders.

# WHEN AND HOW DO I NEED TO GET A HEPATITIS B VACCINE?

## HEPATITIS VACCINATION

The hepatitis B vaccine is a recombinant DNA vaccine and should be administered intramuscularly, in a 3-dose schedule (0, 1, 6 months).

One to two months after the 3 doses, it is recommended for HCWs to test for protective antibodies:

- Anti-HBs >10mIU/mL: full immunity
- Anti-HBs <10mIU/mL: need to repeat full 3-dose series and test again for antibody response

One to two months after second vaccination schedule is completed:

- 2nd Anti-HBs >10mIU/mL: full immunity
- 2nd Anti-HBs <10mIU/mL: non responder.

Antibody protection lasts >20 years, probably more, therefore no booster doses are required.

### **After an occupational exposure, such as a needle stick:**

- HCWs who are vaccinated should test for protective antibody titers. If anti-HBs >10mIU/mL, no action is required.
- HCWs who are not vaccinated, or have low titers should receive HepB Immune Globulin and the first (or a booster dose) of Hepatitis B vaccine as soon as possible (within 24 hours).

**Attention:** HepB Immune Globulin should not be administered in the same site nor with the same syringe as the HepB vaccine.







# EFFECTIVENESS OF HEPATITIS B VACCINE



is 50% effective  
in preventing  
hepatitis B



are 75-80%  
effective in  
preventing  
hepatitis B



are 95% effective  
in preventing  
hepatitis B



## COMPLICATIONS FROM HEPATITIS B

- Chronic hepatitis B (between 1/10 and 1/20 adult patients)
  - Cirrhosis (between 1/3 and 1/6 patients with chronic hepatitis B)
  - Hepatocellular carcinoma (up to 1/4 (25%) patients with chronic hepatitis B, if left untreated)
- Fulminant hepatitis with acute hepatic necrosis (1-6/1,000 patients with acute hepatitis B)
  - Death (up to 2/3 (75%) of patients with fulminant hepatitis)

## HEPATITIS B VACCINE BENEFITS & POSSIBLE SIDE EFFECTS

The 3-dose vaccine schedule protects up to 95% from Hepatitis B.

Possible side effects include:

**Mild** (between 1/10-1/1,000 doses, represent the vast majority of reported side effects)

- Redness, swelling or pain at the site of the injection (usually 1/ 30 doses, but maybe up to 1/3 doses)
- Low grade fever (1-6/100 doses)
- Headache

**Moderate** (rare, between 1/1,000-1/10,000 doses)

- Fatigue

**Severe** (very rare, between 1/10,000-1/1,000,000 vaccinated)

- Anaphylaxis (1/600,000 doses)

# WHERE CAN I FIND MORE INFORMATION?

1. BZgA, Germany: [www.impfen-info.de](http://www.impfen-info.de)
2. ECDC- Communication Toolkit on Immunisation: [ecdc.europa.eu/en/healthtopics/immunisation/Pages/Communication-toolkit.aspx](http://ecdc.europa.eu/en/healthtopics/immunisation/Pages/Communication-toolkit.aspx)
3. WHO Europe: Vaccines and immunization, [www.euro.who.int/en/health-topics/disease-prevention/vaccines-and-immunization](http://www.euro.who.int/en/health-topics/disease-prevention/vaccines-and-immunization)
4. NIH, USA: [www.vaccines.gov](http://www.vaccines.gov)
5. Immunization Action Coalition, USA: [www.immunize.org](http://www.immunize.org)
6. National Centre for Immunisation Research & Surveillance, Australia: [www.ncirs.edu.au](http://www.ncirs.edu.au)



**HProImmune**  
Promotion of Immunization for Health Professionals in Europe  
[www.hproimmune.eu](http://www.hproimmune.eu)

Disclaimer: The consortium partners declare no relevant conflict of interest with direct bearing on the subject matter of the HproImmune project. This pertains to relationships with pharmaceutical companies, biomedical device manufacturers and other companies with relation to vaccines.



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Co-funded by  
the Health Programme  
of the European Union