

Hepatitis B

Definition

Hepatitis B is the world's most common serious liver infection. It is caused by a virus that attacks liver cells and can lead to liver failure, cirrhosis or cancer of the liver. Hepatitis B can be transmitted by exposure to blood and bodily fluids.

How can Hepatitis B be prevented in the work place?

1. Universal Precautions
 - Use universal barrier precautions when in contact with blood and bodily fluids
 - Wash hands before and after all contact with blood and bodily fluids
2. Education
 - Understand which procedures and protective equipment to use to prevent or minimize contact with blood and bodily fluids
 - Follow the appropriate protocols if exposed to blood and bodily fluids
 - Initial Hepatitis B education is provided during new recruit training
3. If exposed to blood and bodily fluids follow protocols as outlined in section 2 of policy 27.
4. Hepatitis B vaccine
 - a) The protocol for adults over 19 years of age includes 3 doses of vaccine administered at 0, 1, and 6 months.
 - b) Upon completion of the protocol, Firefighters should have blood tests performed at their family doctor 1 to 6 months after the 3rd dose to confirm the vaccine's effectiveness.
 - c) If blood test confirms antibody levels ≥ 10 , no further action is required, and you are considered immune to Hepatitis B. You may provide a copy of your results to Employee Health Services so they can keep a copy in your personal confidential health file at the City.
 - d) If you have previously demonstrated protective antibody levels, i.e. have confirmed lab test results with an antibody level ≥ 10 , you will not contract the disease when exposed to the

Hepatitis B virus, whether or not, any future lab test results indicate a decrease in antibody level ≥ 10 . You DO NOT require a booster dose.

- e) If antibody levels, after the initial 3 doses, are < 10 , one vaccine booster should be given and re-testing for antibody response should occur 1 month later. If after retesting antibody levels are ≥ 10 , you are considered immune. If after retesting antibody levels are ≤ 10 , complete the next 2 doses of vaccine. Once the second series is complete follow-up with another blood test within 1 to 6 months after the 3rd dose (2nd round). If antibody response is ≤ 10 , then you are considered a "non-responder".
- f) Non-responders with suspected exposure to Hepatitis B should be provided with immediate first aid in an emergency room setting, which will include blood work testing for antibody and antigen levels, Hepatitis B Immunoglobulin (HBIG) and possibly Hepatitis B vaccine. This will likely involve consultation with the Emergency physician and Infectious Disease Specialist. If you are a "non-responder" contact your Captain, immediately, to initiate the appropriate response should you come in contact with Hepatitis B.
- g) Anyone uncertain of antibody status, after the initial series, should obtain a blood test to determine antibody status, prior to a booster being given. **Employee Health Services is available to administer a Hepatitis B booster but only once they are provided with written confirmation of your antibody status. Please contact Employee Health Services should there be any questions or comments.**
- h) For more detailed information on Hepatitis B immunizations, the Seventh Edition of the Canadian Immunization Guide can be reviewed at <http://www.phac-aspc.gc.ca/publicat/cig-gci/p04-hepb-eng.php>.

