

## COMPARING HEPATITIS B, HEPATITIS C AND HIV FOR THE WORKFORCE

	<b>Hepatitis B (HBV, hep B)</b>	<b>Hepatitis C (HCV, hep C)</b>	<b>HIV (Human Immunodeficiency Virus)</b>
<b>What is it?</b>	<ul style="list-style-type: none"> <li>• A virus that causes inflammation of the liver</li> <li>• Can progress to cirrhosis and liver cancer</li> <li>• Chronic in approximately 5% of adults and 90-95% of newborns – where there is no intervention at birth</li> </ul>	<ul style="list-style-type: none"> <li>• A virus that causes inflammation of the liver</li> <li>• Can progress to cirrhosis and liver cancer</li> <li>• Chronic for around 75% of people</li> </ul>	<ul style="list-style-type: none"> <li>• A virus that attacks the immune system</li> <li>• Can be managed with effectively with treatment</li> <li>• A person on treatment can have an ‘undetectable’ viral load, meaning they cannot transmit HIV</li> </ul>
<b>Incubation period</b>	<ul style="list-style-type: none"> <li>• 30 to 180 days</li> </ul>	<ul style="list-style-type: none"> <li>• 2 weeks to 6 months</li> </ul>	<ul style="list-style-type: none"> <li>• 1 to 4 weeks</li> </ul>
<b>Window period</b>	<ul style="list-style-type: none"> <li>• 3 to 6 months</li> </ul>	<ul style="list-style-type: none"> <li>• 3 to 6 months</li> </ul>	<ul style="list-style-type: none"> <li>• 6 to 12 weeks</li> </ul>
<b>Transmission</b>	<ul style="list-style-type: none"> <li>• Blood-to-blood contact</li> <li>• Sexual contact</li> <li>• Vertical transmission</li> </ul>	<ul style="list-style-type: none"> <li>• Blood-to-blood contact</li> </ul>	<ul style="list-style-type: none"> <li>• Blood-to-blood contact</li> <li>• Sexual contact with a HIV-positive person who has a detectable viral load</li> </ul>

	<b>Hepatitis B</b>	<b>Hepatitis C</b>	<b>HIV</b>
<b>Risk behaviours</b>	<ul style="list-style-type: none"> <li>• Sexual contact</li> <li>• Use of unsterile injecting equipment</li> <li>• Use of unsterile tattooing &amp; body piercing equipment</li> <li>• Receiving blood products (prior to 1990 in Australia)</li> </ul>	<ul style="list-style-type: none"> <li>• Use of unsterile injecting equipment</li> <li>• Use of unsterile tattooing or body piercing equipment</li> <li>• Receiving blood products (prior to 1990 in Australia)</li> </ul>	<ul style="list-style-type: none"> <li>• Sexual contact</li> <li>• Use of unsterile injecting equipment</li> <li>• Use of unsterile tattooing &amp; body piercing equipment</li> <li>• Receiving blood products (prior to 1990 in Australia)</li> </ul>
<b>Symptoms</b>	<p>Many people may have no symptoms – but can include:</p> <ul style="list-style-type: none"> <li>• flu-like symptoms</li> <li>• loss of appetite</li> <li>• nausea and vomiting</li> <li>• fatigue</li> <li>• abdominal pain</li> <li>• muscle and joint pain</li> <li>• dark urine and light stools</li> <li>• jaundice</li> </ul>	<p>Many people may have no symptoms – but can include:</p> <ul style="list-style-type: none"> <li>• flu-like symptoms</li> <li>• fatigue</li> <li>• nausea and vomiting</li> <li>• muscle aches and pains</li> <li>• abdominal discomfort</li> <li>• mood swings, anxiety, depression</li> <li>• skin rashes</li> </ul>	<p>Many people may have no symptoms – but can include:</p> <ul style="list-style-type: none"> <li>• flu-like symptoms</li> <li>• fever or chills</li> <li>• swollen lymph nodes</li> <li>• rash (similar to boils)</li> <li>• nausea, vomiting and diarrhoea</li> <li>• muscle aches</li> <li>• sore throat or cough</li> </ul>
<b>Treatment</b>	<ul style="list-style-type: none"> <li>• Goal of treatment is to reduce viral load to undetectable</li> <li>• Pegylated interferon – 1 injection per week for 48 weeks</li> <li>• Antiviral tablets – lifelong treatment</li> </ul>	<ul style="list-style-type: none"> <li>• Treatment can cure HCV</li> <li>• Direct acting antiviral (DAA) tablets</li> <li>• 95% cure rate</li> <li>• One pill per day for 12 weeks</li> </ul>	<ul style="list-style-type: none"> <li>• Goal of treatment is to reduce viral load to undetectable</li> <li>• Treatment is tablets taken for life. The latest medications have few side effects and are safe for long-term use.</li> </ul>
<b>Vaccination</b>	<ul style="list-style-type: none"> <li>• Yes - 3 injections over 6 months for adults (4 injections for children –part of childhood immunisation schedule)</li> </ul>	<ul style="list-style-type: none"> <li>• No vaccine available</li> </ul>	<ul style="list-style-type: none"> <li>• No vaccine available</li> </ul>

<p><b>Prevention</b></p>	<ul style="list-style-type: none"> <li>• Vaccination</li> <li>• HBV Immunoglobulin (HBIG) – commenced within 72 hours of possible exposure</li> <li>• Avoid blood-to-blood contact</li> <li>• Do not re-use or share any injecting equipment</li> <li>• Do not share any tattooing or body piercing equipment</li> <li>• Practice safe sex – using condoms and lube</li> <li>• Avoid sharing personal items (e.g. razor and toothbrush)</li> </ul>	<ul style="list-style-type: none"> <li>• Avoid blood-to-blood contact</li> <li>• Do not re-use or share any injecting equipment</li> <li>• Do not share any tattooing or body piercing equipment</li> <li>• Avoid sharing personal grooming items (e.g. razor and toothbrush)</li> </ul>	<ul style="list-style-type: none"> <li>• Practice safe sex – using pre-exposure prophylaxis (PrEP), condoms and lube, or have sexual contact with someone who has an undetectable viral load</li> <li>• Avoid blood-to-blood contact</li> <li>• Do not re-use or share any injecting equipment</li> <li>• Do not share any tattooing or body piercing equipment</li> <li>• Avoid sharing personal grooming items (e.g. razor)</li> <li>• Treatment as Prevention (TasP) – When managing HIV, maintain an undetectable viral load to prevent HIV transmission</li> <li>• PrEP – HIV treatments to prevent possible infection when engaging in unsafe practices with HIV positive person with a detectable viral load</li> <li>• Post exposure prophylaxis (PEP) – 4 week course of HIV treatment that may prevent transmission if a possible exposure has occurred – commenced within 72 hours of exposure</li> </ul>
--------------------------	--	--	--

#### Occupational prevention measures for hepatitis B, hepatitis C and HIV

- Follow standard infection control precautions for first aid
- When given resuscitation – use safe practices e.g. using face shield
- Cover any open sores, cuts or abrasions with water proof dressing
- Treat all blood as potential infectious
- Follow good hygiene practices – e.g. wash hand in between people
- Use personal protective equipment (PPE) – e.g. glasses, mask, disposal gloves
- Correctly disposing of sharps and other infectious material
- Use disposal material to clean up a blood or other bodily fluid spill – e.g. paper towel
- Seek medical advice for accidental exposure
- If you experience an accidental exposure and you are not vaccinated for hepatitis B, HBIG may be available, and PEP may be available if you have been exposed to HIV

#### What do you do if you get a needle stick injury

1. Stay calm!
2. Wash injury site and surrounding skin with soap and water
  - If you don't have soap use alcohol based hand sanitisers
  - Use a band aid, if necessary and apply pressure if wound is still bleeding
  - Do not squeeze or rub the injury site
3. Present to your doctor for testing and potential vaccination, HBIG and/or PEP – only if required
4. Report incident appropriately according to organisational policy and procedures