

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

	Hepatitis B (HBV, hep B)	Hepatitis C (HCV, hep C)	HIV (Human Immunodeficiency Virus)
What is it?	<ul> <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> <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> <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>
Incubation period	• 30 to 180 days	2 weeks to 6 months	1 to 4 weeks
Window period	• 3 to 6 months	• 3 to 6 months	6 to 12 weeks
Transmission	<ul> <li>Blood-to-blood contact</li> <li>Sexual contact</li> <li>Vertical transmission</li> </ul>	Blood-to-blood contact	<ul> <li>Blood-to-blood contact</li> <li>Sexual contact with a HIV- positive person who has a detectable viral load</li> </ul>



	Hepatitis B	Hepatitis C	HIV
Risk behaviours	<ul> <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> <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> <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>
Symptoms	Many people may have no symptoms – but can include: flu-like symptoms loss of appetite nausea and vomiting fatigue abdominal pain muscle and joint pain dark urine and light stools jaundice	Many people may have no symptoms – but can include: • flu-like symptoms • fatigue • nausea and vomiting • muscle aches and pains • abdominal discomfort • mood swings, anxiety, depression • skin rashes	Many people may have no symptoms – but can include: • flu-like symptoms • fever or chills • swollen lymph nodes • rash (similar to boils) • nausea, vomiting and diarrhoea • muscle aches • sore throat or cough
Treatment	<ul> <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> <li>Treatment can cure HCV</li> <li>Direct acting antiviral (DAA) tablets, no injections</li> <li>95% of people cured</li> <li>Tablets taken daily for 8-12 weeks</li> <li>Little to no side effects</li> </ul>	<ul> <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>
Vaccination	<ul> <li>Yes - 3 injections over 6 months for adults (4 injections for children –part of childhood immunisation schedule)</li> </ul>	No vaccine available	No vaccine available



Prevention	<ul> <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 it ems (e.g. razor and toothbrush)</li> </ul>	<ul> <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> <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</li> </ul>
			<ul> <li>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>



<ul> <li>Occupational prevention measures for hepatitis B, hepatitis C and HIV</li> <li>Follow standard infection control precautions for first aid</li> <li>When giving resuscitation – use safe practices e.g. using face shield</li> <li>Cover any open sores, cuts or abrasions with waterproof dressing</li> <li>Treat all blood as potential infectious</li> <li>Follow good hygiene practices – e.g. wash hand in between people</li> <li>Use personal protective equipment (PPE) – e.g. glasses, mask, disposal gloves</li> <li>Correctly disposing of sharps and other infectious material</li> <li>Use disposal material to clean up a blood or other bodily fluid spill – e.g. paper towel</li> <li>Seek medical advice for accidental exposure</li> <li>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</li> </ul>
<ul> <li>What do you it you get a needle stick injury</li> <li>Stay calm!</li> <li>Wash injury site and surrounding skin with soap and water <ul> <li>If you don't have soap use alcohol based hand sanitisers</li> <li>Use a band aid, if necessary and apply pressure if wound is still bleeding</li> <li>Do not squeeze or rub the injury site</li> </ul> </li> <li>Present to your doctor for testing and potential vaccination, HBIG and/or PEP – only if required</li> <li>Report incident appropriately according to organisational policy and procedures</li> </ul>