

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?	 A virus that causes inflammation of the liver Can progress to cirrhosis and liver cancer Chronic in approximately 5% of adults and 90-95% of newborns – where there is no intervention at birth 	 A virus that causes inflammation of the liver Can progress to cirrhosis and liver cancer Chronic for around 75% of people 	 A virus that attacks the immune system Can be managed with effectively with treatment A person on treatment can have an 'undetectable' viral load, meaning they cannot transmit HIV
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	 Blood-to-blood contact Sexual contact Vertical transmission 	Blood-to-blood contact	 Blood-to-blood contact Sexual contact with a HIV- positive person who has a detectable viral load



	Hepatitis B	Hepatitis C	HIV
Risk behaviours	 Sexual contact Use of unsterile injecting equipment Use of unsterile tattooing & body piercing equipment Receiving blood products (prior to 1990 in Australia) 	 Use of unsterile injecting equipment Use of unsterile tattooing or body piercing equipment Receiving blood products (prior to 1990 in Australia) 	 Sexual contact Use of unsterile injecting equipment Use of unsterile tattooing & body piercing equipment Receiving blood products (prior to 1990 in Australia)
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	 Goal of treatment is to reduce viral load to undetectable Pegylated interferon – 1 injection per week for 48 weeks Antiviral tablets – lifelong treatment 	 Treatment can cure HCV Direct acting antiviral (DAA) tablets, no injections 95% of people cured Tablets taken daily for 8-12 weeks Little to no side effects 	 Goal of treatment is to reduce viral load to undetectable Treatment is tablets taken for life. The latest medications have few side effects and are safe for long-term use.
Vaccination	 Yes - 3 injections over 6 months for adults (4 injections for children –part of childhood immunisation schedule) 	No vaccine available	No vaccine available



Prevention	 Vaccination HBV Immunoglobulin (HBIG) – commenced within 72 hours of possible exposure Avoid blood-to-blood contact Do not re-use or share any injecting equipment Do not share any tattooing or body piercing equipment Practice safe sex – using condoms and lube Avoid sharing personal it ems (e.g. razor and toothbrush) 	 Avoid blood-to-blood contact Do not re-use or share any injecting equipment Do not share any tattooing or body piercing equipment Avoid sharing personal grooming items (e.g. razor and toothbrush) 	 Practice safe sex – using pre- exposure prophylaxis (PrEP), condoms and lube, or have sexual contact with someone who has an undetectable viral load Avoid blood-to-blood contact Do not re-use or share any injecting equipment Do not share any tattooing or body piercing equipment Avoid sharing personal grooming items (e.g. razor) Treatment as Prevention (TasP) – When managing HIV, maintain
			 an undetectable viral load to prevent HIV transmission PrEP – HIV treatments to prevent possible infection when engaging in unsafe practices with HIV positive person with a detectable viral load 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



 Occupational prevention measures for hepatitis B, hepatitis C and HIV Follow standard infection control precautions for first aid When giving resuscitation – use safe practices e.g. using face shield Cover any open sores, cuts or abrasions with waterproof 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 it you get a needle stick injury Stay calm! 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 Present to your doctor for testing and potential vaccination, HBIG and/or PEP – only if required Report incident appropriately according to organisational policy and procedures