

This resource has been developed as part of the Implementing Pathways for Cancer Early Diagnosis (I-PACED) project supported by the Victorian Government. It aims to increase GP awareness about critical primary care points as outlined in the hepatocellular carcinoma Optimal Care Pathway – a nationally endorsed resource.

Summary statistics

- Liver cancer (hepatocellular carcinoma) is rarely detected early and is the fastest increasing cancer in Australia, with a nearly 4-fold age-standardised increase from 1.8 to 8.6 per 100,000 persons between 1982 and 2019
- In Victoria 2018, there were 458 new cases of liver cancer in men and 132 new cases in women
- The five-year survival for people with liver cancer is poor (23%).

Risk factors

- Cirrhosis of the liver of any cause
- Chronic hepatitis C (HCV) infection
- Alcoholic liver disease
- Family history of liver cancer
- Hepatitis B (HBV) infection (particularly for those with an extended period of exposure, childhood-acquired and high viral load).

Other risk factors

- Chronic alcohol consumption
- Male
- Older age
- Viral co-infection (HIV)
- Obesity
- Non-alcoholic fatty liver disease
- Type 2 diabetes
- Iron overload (haemochromatosis)
- Tobacco smoking
- Aflatoxin exposure.

*For further information, view the Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine resources for primary care at www.ashm.org.au/HepB_PCP and www.ashm.org.au/HepC_PCP

Prevention

- HBV immunisation
- Avoid blood to blood contact
- **Opportunistic testing** to identify people with HBV and HCV. At-risk groups include*:

Hepatitis B (HBV)

- People who have migrated from intermediate and high prevalence regions:
 - ▶ Asia
 - ▶ Middle East
 - ▶ Pacific
 - ▶ Sub-Saharan Africa
 - ▶ Eastern Europe
- Men who have sex with men
- Aboriginal and Torres Strait Islander people
- People with evidence of liver disease (e.g. raised transaminases).

Hepatitis C (HCV)

- People who inject drugs or who have ever injected drugs
 - People in custodial settings
 - Men who have sex with men
 - People with evidence of liver disease (e.g. raised transaminases)
 - People who have migrated from high-prevalence regions should be tested at least once. Regions include:
 - ▶ Africa
 - ▶ Eastern Europe
 - ▶ Egypt
 - ▶ Mediterranean
 - ▶ Pakistan
 - ▶ Southern Asia
 - Aboriginal and Torres Strait Islander people.
 - People who received a blood transfusion before 1990.
- Monitor patients with HBV and HCV
 - ▶ Use direct acting antiviral drugs in individuals with HCV to reduce risk of infection developing into cancer
 - ▶ Use antiviral therapy in individuals with HBV who have active liver disease and or cirrhosis
 - Avoid or limit alcohol intake
 - Reduce obesity through regular exercise and maintaining a healthy body weight.



Screening recommendations

- There is no effective general population screening program for HCV, HBV or liver cancer
- Surveillance is recommended for liver cancer in patients with cirrhosis or specific groups with chronic hepatitis B. This includes six-monthly abdominal ultrasound tests which is often combined with alpha-fetoprotein (AFP) in patients in the following high-risk groups:

Chronic hepatitis B

- **All patients with cirrhosis**
- Patients with a family history of liver cancer
- Males from Asia \geq 40 years
- Females from Asia \geq 50 years
- Africans \geq 20 years

Chronic hepatitis C

- **All patients with cirrhosis** (including those who are cured by HCV therapy)

- Patients detected through surveillance have significantly improved outcomes.

Signs and symptoms

- Right upper quadrant abdominal pain or discomfort
- A hard lump on the right side of the abdomen
- Worsening liver failure (jaundice, ascites, portal hypertension)
- Constitutional symptoms including weight loss.

Initial investigations include

- Ultrasound (further imaging to be done in conjunction with specialist referral)
- Assessment of liver and renal function
- Assessment of tumor markers (AFP)
- Full blood examination
- HBV and HCV serology (HBsAG, anti-HCV antibody).

Tests should be conducted within two to three days of symptom discovery.

Referral pathway

- Prior to referral, discuss the cost implications to enable patients to make an informed decision regarding their choice of specialist and health service, including out of pocket costs: for example, radiological tests and specialist appointments.
- All patients with a suspected liver cancer should be referred for assessment within 2 weeks to a specialist (gastroenterologist, hepatologist, oncologist, or hepato-pancreato-biliary (HPB) surgeon) linked with a multidisciplinary team (MDT).
- Referral information should include:
 - ▶ Relevant psychosocial history, medical history and family history, current medications and allergies
 - ▶ Results of current clinical investigations (imaging and pathology results)
 - ▶ Results of all prior relevant investigations.

To gain access to your local HealthPathways visit

<https://vtphna.org.au/care-pathways-and-referral/> or equivalent care pathways site.

Patient resource checklist

- ✓ Factsheets and resources at www.cancervic.org.au/for-health-professionals/community-health-professionals/hepatitis-b-and-liver-cancer
- ✓ For additional practical and emotional support, encourage patients to call **Cancer Council 13 11 20** to speak with an experienced oncology nurse or visit cancervic.org.au for more information about liver cancer
- For translator assistance call TIS on 13 14 50
- ✓ Download the 'What to expect - Liver cancer' guide at www.cancerpathways.org.au
- ✓ **The Liver Foundation** – for free information packs, support and resources, visit liver.org.au or call **1300 454 837**

The Optimal Care Pathways were developed through consultation with a wide range of expert multidisciplinary teams, peak health organisations, consumers and carers. They are nationally endorsed by the National Cancer Expert Reference Group, Cancer Australia and Cancer Council Australia.

For more information on the Optimal Care Pathways please refer to www.cancervic.org.au/for-health-professionals/optimal-care-pathways

