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NORTH WESTERN MELBOURNE
An Australian Government Initiative

Hepatitis B screening - clinical and practical strategies for the general practice team

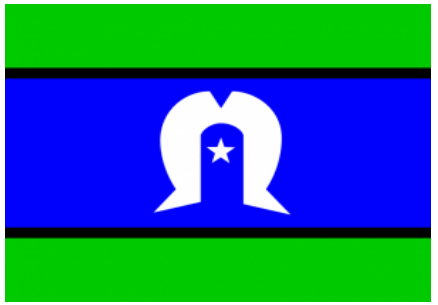
The content in this session is valid at date of presentation

Thursday 15th May 2025

Acknowledgement of Country

North Western Melbourne Primary Health Network would like to acknowledge the Traditional Custodians of the land on which our work takes place, The Wurundjeri Woi Wurrung People, The Boon Wurrung People and The Wathaurong People.

We pay respects to Elders past, present and emerging as well as pay respects to any Aboriginal and Torres Strait Islander people in the session with us today.



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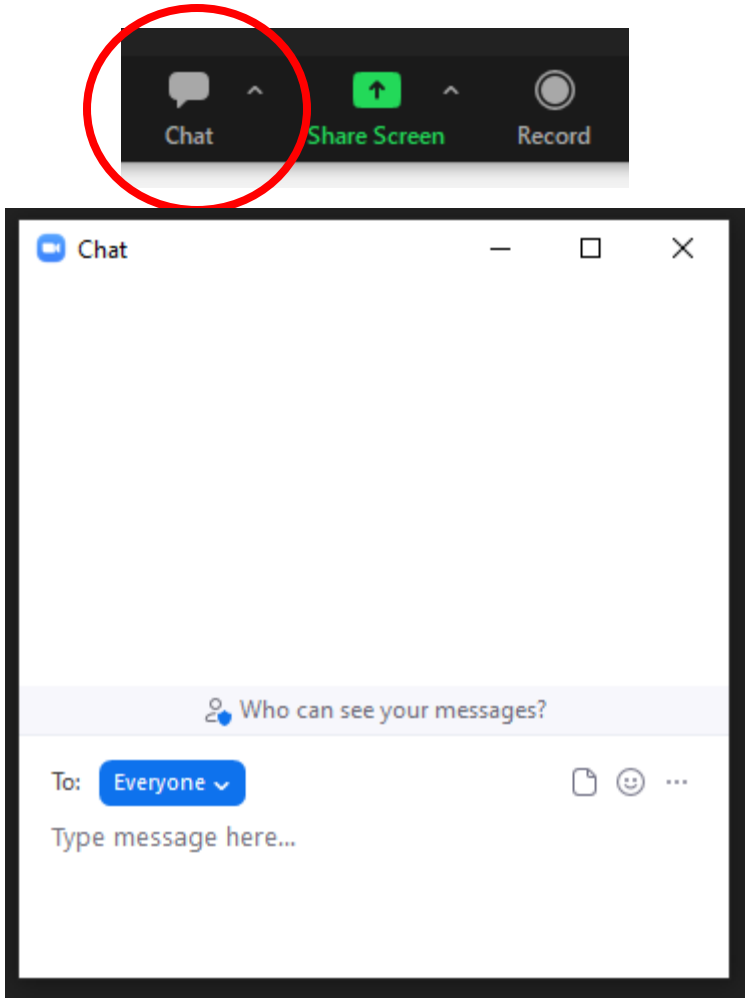

How to change your name in Zoom Meeting

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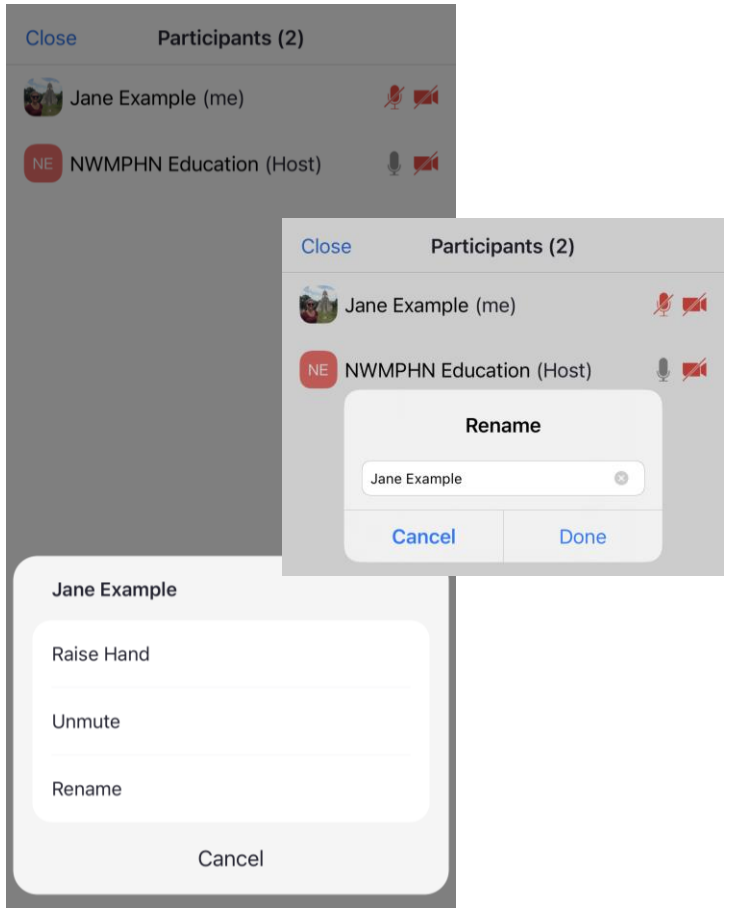
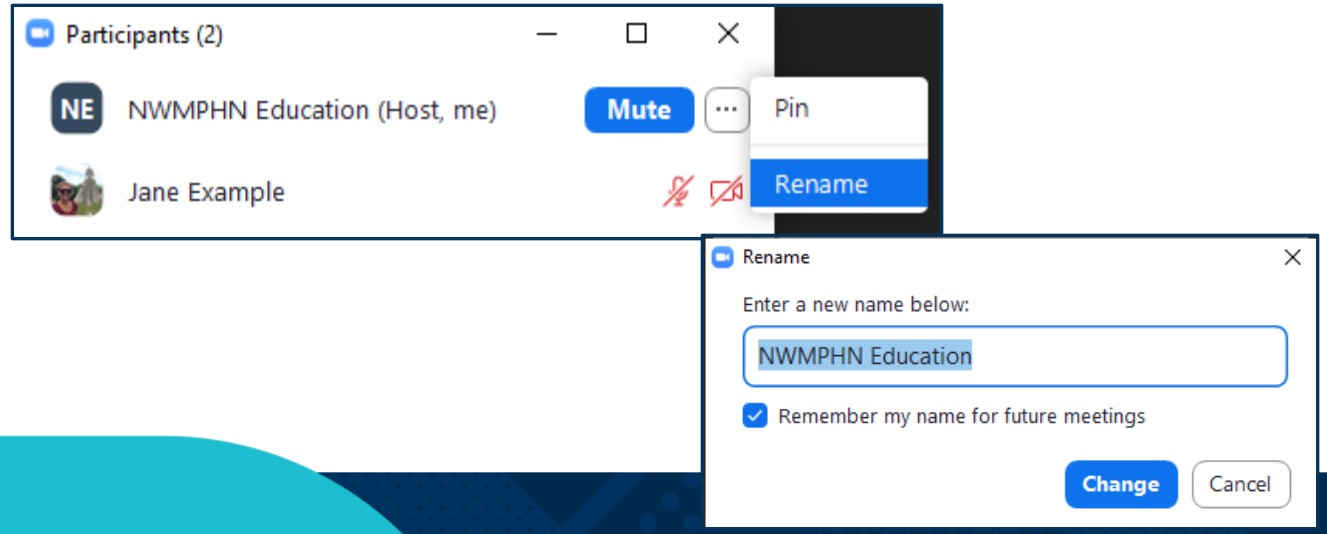




Speakers

Meiken Grant – Viral hepatitis educator

Victorian Department of health

Mieken Grant is a viral hepatitis educator, a statewide role funded by the Victorian Department of Health. She educates health professionals about hepatitis B and C, and supports them in delivering best practice viral hepatitis prevention, testing, treatment and care.

Mieken is a Registered Nurse with extensive experience in public health, concentrating mainly on sexual health and blood-borne viruses. She is passionate about improving the health of marginalised communities. She has worked in public hospitals and sexual health centres, as well as in community and remote settings, supporting clients with complex social and medical care needs. Mieken also has experience in policy review, research, education, partner notification and contact tracing.

Natalia Rode – General Practitioner

Dr Natalia Rode is a GP, researcher and medical educator. She is passionate about quality improvement in general practice. As a hepatitis B s100 prescriber, she is particularly interested in improving care for people living with this condition.

Tanya Hounslow – Practice Nurse

Northside clinic

Tanya Hounslow is a practice nurse at Northside Clinic, dedicated to making a real difference in patient care through quality improvement activities. With over 10 years' experience, she loves working collaboratively to help general practice thrive.

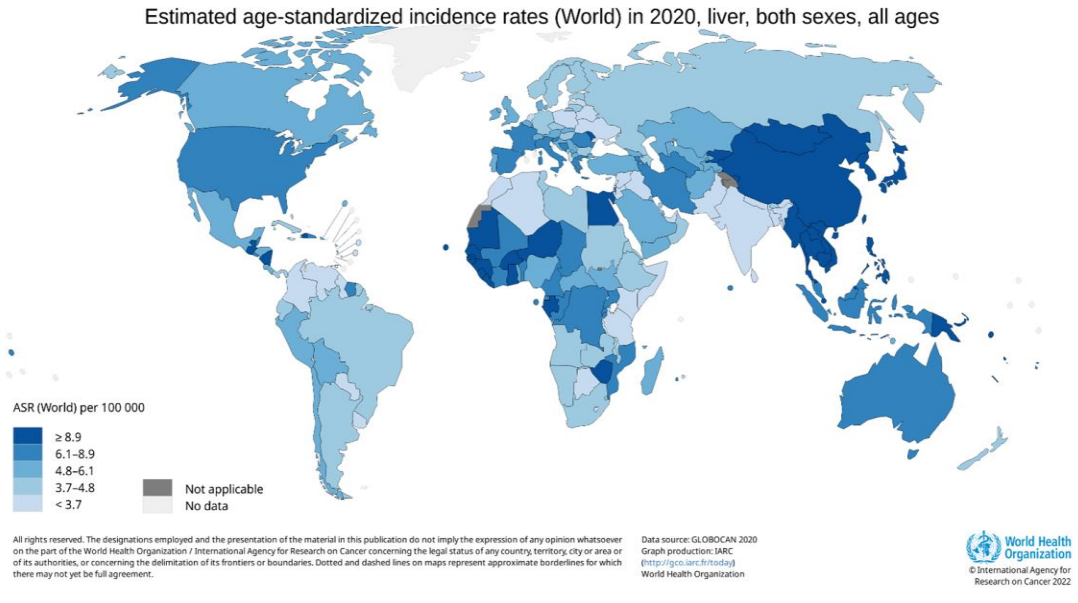
Hepatitis B Crash Course

Mieken Grant (RN, MPH)
Victorian Viral Hepatitis Educator
St Vincent's Hospital Melbourne

Mieken Grant, Victorian Viral Hepatitis Nurse Educator, St Vincents Hospital Melbourne

Why should we care?

HBV and HCC


Estimated age-standardized incidence rates (World) in 2020, liver, both sexes, all ages
ASR (World) per 100 000
≥ 8.9
6.1–8.9
4.8–6.1
3.7–4.8
< 3.7
Not applicable
No data
All rights reserved. The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization / International Agency for Research on Cancer concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate borderlines for which there may not yet be full agreement.
Data source: GLOBOCAN 2020
Graph production: IARC (http://gco.iarc.fr/today)
World Health Organization
World Health Organization
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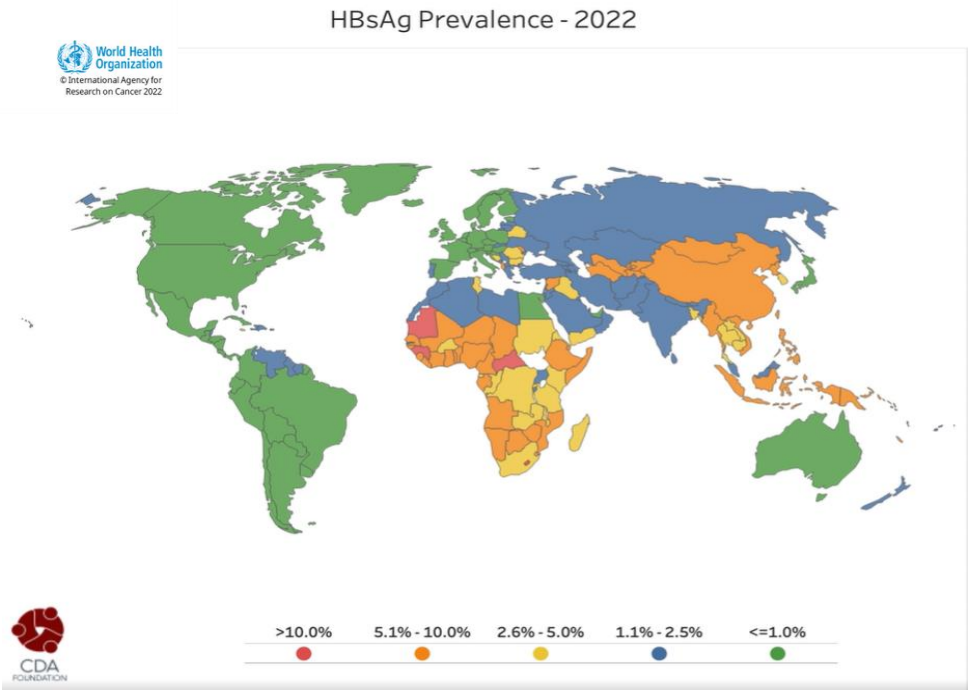
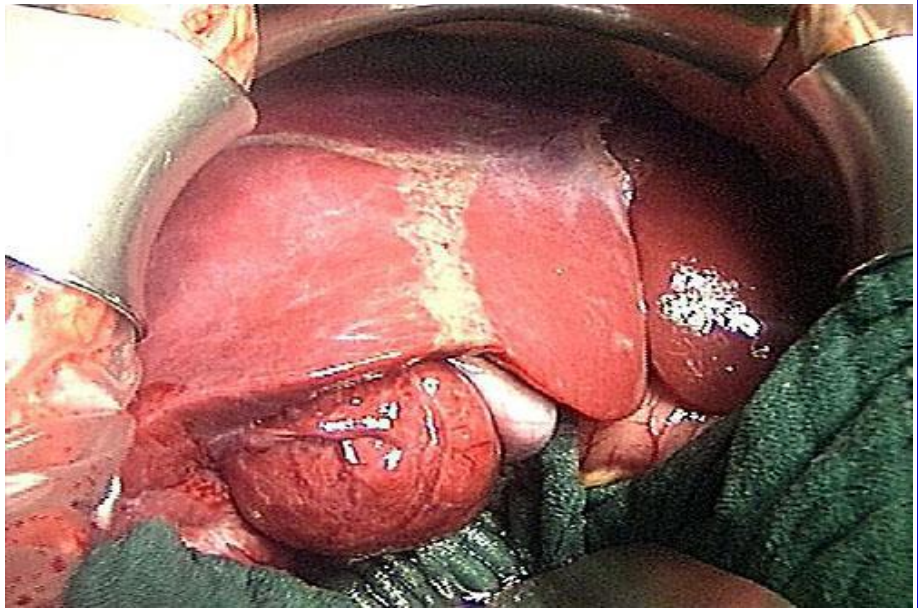

HBsAg Prevalence - 2022
>10.0%
5.1% - 10.0%
2.6% - 5.0%
1.1% - 2.5%
<=1.0%
CDA FOUNDATION

Progression of liver disease

Inflammation → Scarring → Fibrosis → Cirrhosis → ESLD/Cancer



Liver cancer in Australia

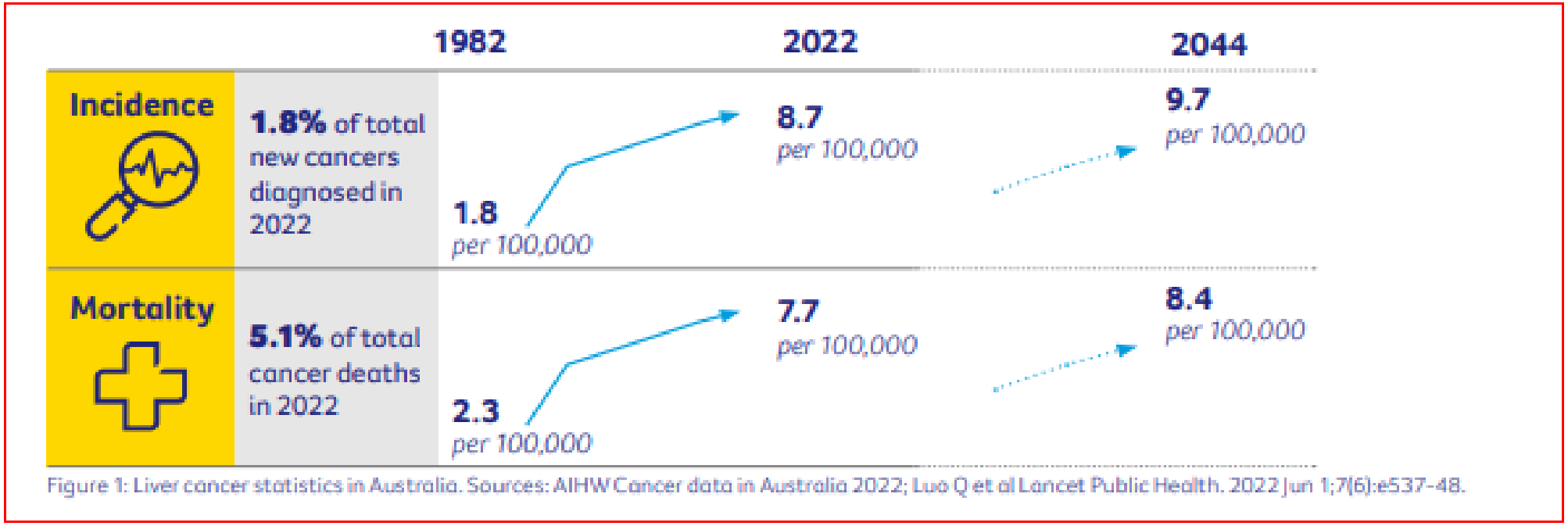
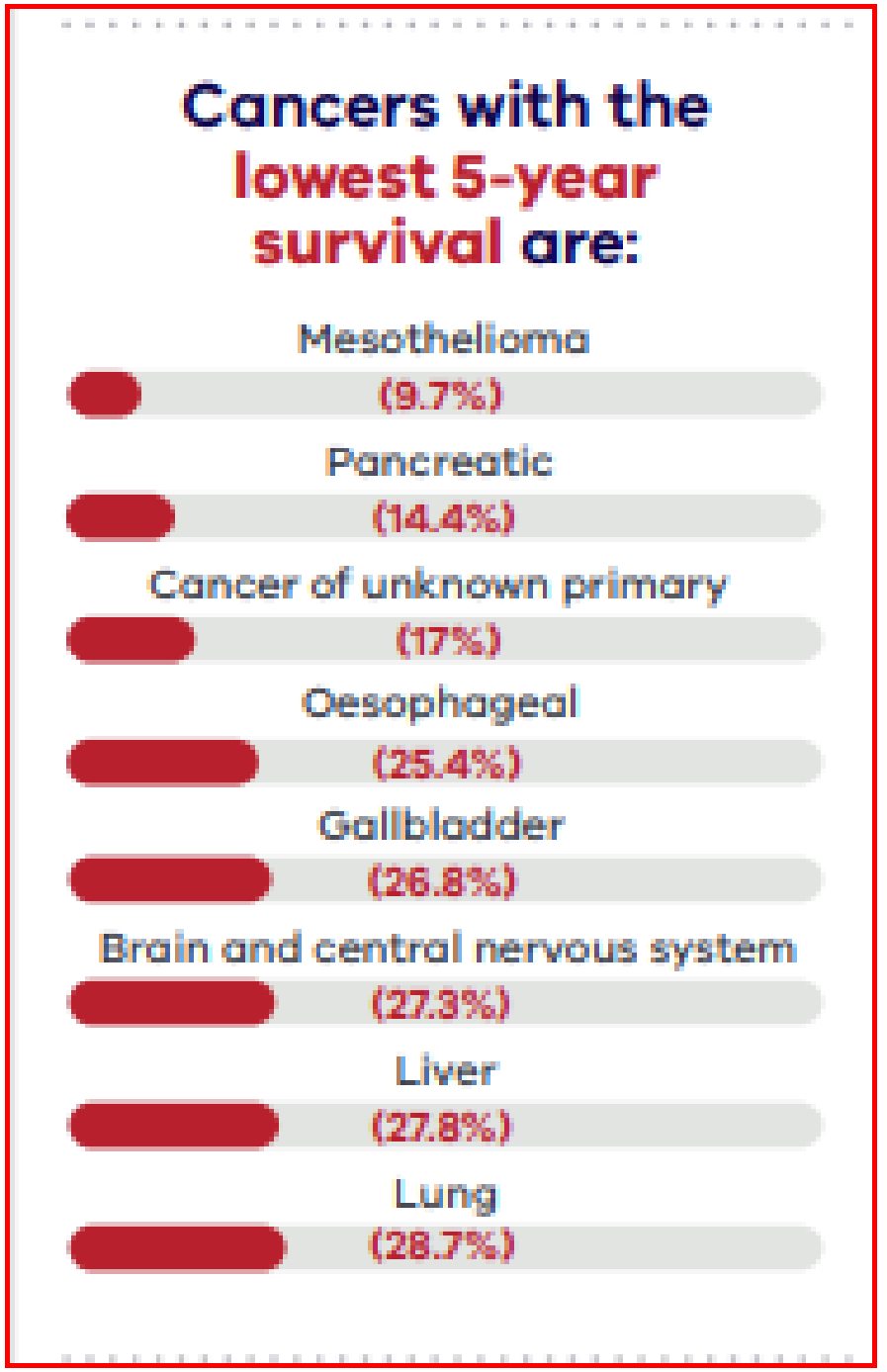


Figure 1: Liver cancer statistics in Australia. Sources: AIHW Cancer data in Australia 2022; Luo Q et al Lancet Public Health. 2022 Jun 1;7(6):e537-48.

Cancers in Victoria

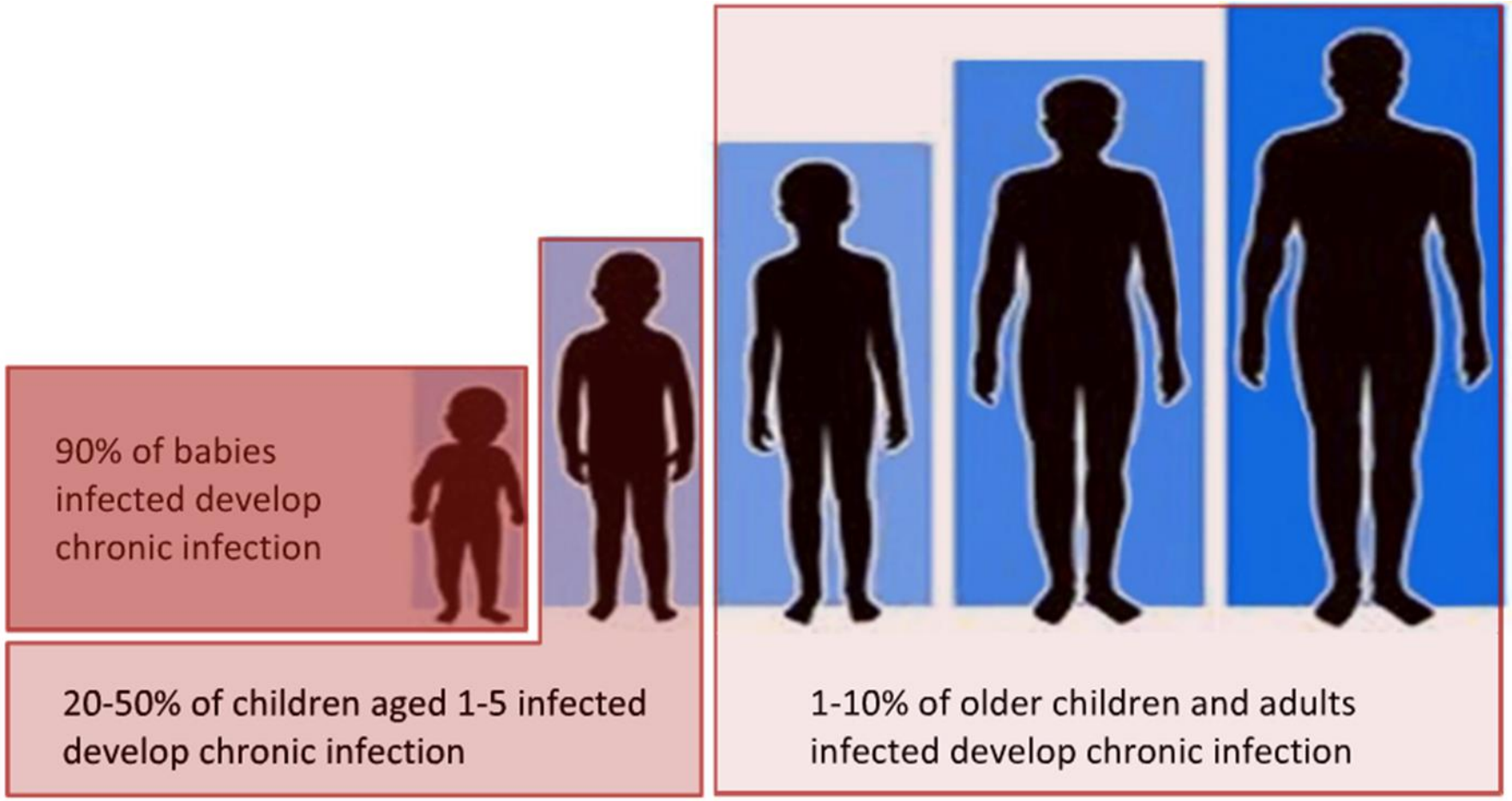


Challenges in HCC diagnosis

- Low rates of diagnosis of cirrhosis
- Competing priorities when working with patients with multimorbidity
- Delayed diagnosis HCC - Asx in early stages and clinical examination and investigations might not detect any abnormalities
- Low awareness of survival benefit of HCC surveillance
  - People with chronic hepatitis B without cirrhosis
  - People who have achieved Hep C cure with cirrhosis
- Low uptake of HCC surveillance
  - Hospital-based often
  - No national registry

Hepatitis B

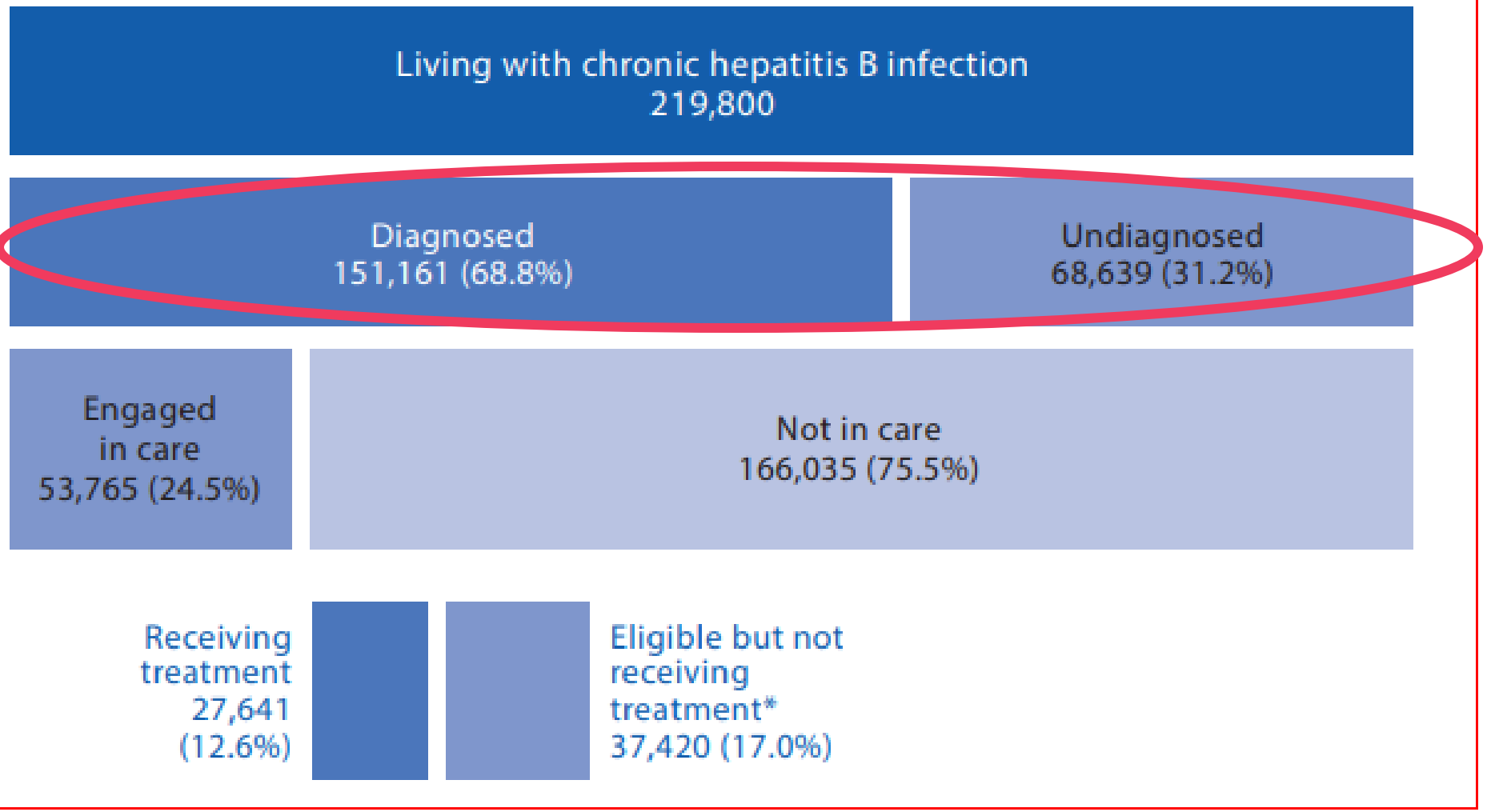
Acute or Chronic?



Mieken Grant, Victorian Viral Hepatitis Nurse Educator, St Vincents Hospital Melbourne

Chronic Hep B ‘cascade of care’

Figure A.1: CHB cascade of care, Australia, 2023



When to test

DECISION MAKING IN HEPATITIS B

HBV

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People who should be offered testing:

- People born in intermediate or high prevalence country (offer interpreter)
- Aboriginal and Torres Strait Islander peoples
- Patients undergoing chemotherapy or immunosuppressive therapy (risk of reactivation)
- Pregnant women
- Infants and children born to mothers who have HBV (>9 months)
- People with clinical presentation of liver disease and/or elevated ALT/AFP of unknown aetiology
- Health professionals who perform exposure prone procedures
- Partner/household/sexual contacts of people with acute or chronic HBV
- People who have ever injected drugs
- Men who have sex with men
- People with multiple sex partners
- People in custodial settings or who have ever been in custodial settings
- People with HIV or hepatitis C, or both
- Patients undergoing dialysis
- Sex workers
- People initiating HIV pre-exposure prophylaxis (PrEP)

Additionally, testing should be offered to anyone upon request.

When gaining informed consent before testing, discuss:

- Need for an interpreter
- Reason for testing
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2 Order tests

To determine hepatitis B status, order 3 tests.

Request:

- **HBsAg** (hepatitis B surface antigen)
- **anti-HBc** (hepatitis B core antibody)
- **anti-HBs** (hepatitis B surface antibody)

If acute HBV is suspected (through recent risk, presentation, or both), anti-HBc IgM can also be ordered.

By ordering all 3 tests you can determine **susceptibility, immunity** through vaccination or past infection, or **current infection**.

All 3 tests are Medicare rebatable simultaneously. Write '? chronic hepatitis B' or similar on the request slip.

3 Interpret serology

HBsAg **anti-HBc** **anti-HBs**	**positive** **positive** **negative**	**Chronic HBV Infection** Progress to step 4
HBsAg **anti-HBc** **anti-HBc IgM*** **anti-HBs**	**positive** **positive** **positive** **negative**	**Acute HBV Infection** * (high titre) Progress to step 4
HBsAg **anti-HBc** **anti-HBs**	**negative** **negative** **negative**	**Susceptible or non-immune** When there is no documented history of completed vaccination, then vaccination is recommended†
HBsAg **anti-HBc** **anti-HBs**	**negative** **positive** **positive**	**Immune due to resolved infection** Record result and consider family screening
HBsAg **anti-HBc** **anti-HBs**	**negative** **negative** **positive**	**Immune due to hepatitis B vaccination** No action required
HBsAg **anti-HBc** **anti-HBs**	**negative** **positive** **negative**	**Various possibilities, including: distant resolved infection, recovering from acute HBV, false positive, 'occult' HBV** Refer to hpositive.org.au for more details

4 Initial assessment if HBsAg positive

Baseline screening to assess phase of disease:

- HBeAg and anti-HBe
- HBV DNA (quantitative)
- Full blood count
- LFT, INR and alpha fetoprotein (AFP)
- Liver ultrasound

Refer to graph on next page to determine phase of disease:

In addition:

- Test for HAV, HCV, HDV and HIV to check for co-infection. Discuss vaccination if susceptible to HAV and discuss transmission and prevention of BBVs.
- Screen household contacts and sexual partners for HBsAg, anti-HBs and anti-HBc, then vaccinate if susceptible to infection.
- Vaccination is recommended for all high-risk groups and is provided free in many cases.
- Contact your local Health Department for details.

Assess liver fibrosis – cirrhotic status:

- Signs of cirrhosis
- Non-invasive assessment of fibrosis:
  - Serum biomarkers such as APRI (1.0 or less, cirrhosis unlikely)‡
  - FibroScan assessment if available (>12.5 kPa consistent with cirrhosis)

REFER TO OR DISCUSS WITH A SPECIALIST IF:

- Severe exacerbation (or acute HBV)
- Co-infection with HIV, HCV, or HDV
- Pregnant
- Immunosuppressed
- Hepatocellular carcinoma (HCC) present
- Has previously been treated with a different hepatitis B medication
- Cirrhosis is present or likely – APRI ≥1 and elastography score not available; elastography >12.5kPa

For more information testingportal.ashm.org.au/hbv

† Refer to immunisationhandbook.health.gov.au/vaccine-preventable-diseases/hepatitis-b for more detail

‡ Refer to hepatitisc.uw.edu/page/clinical-calculators/apri for an APRI calculator

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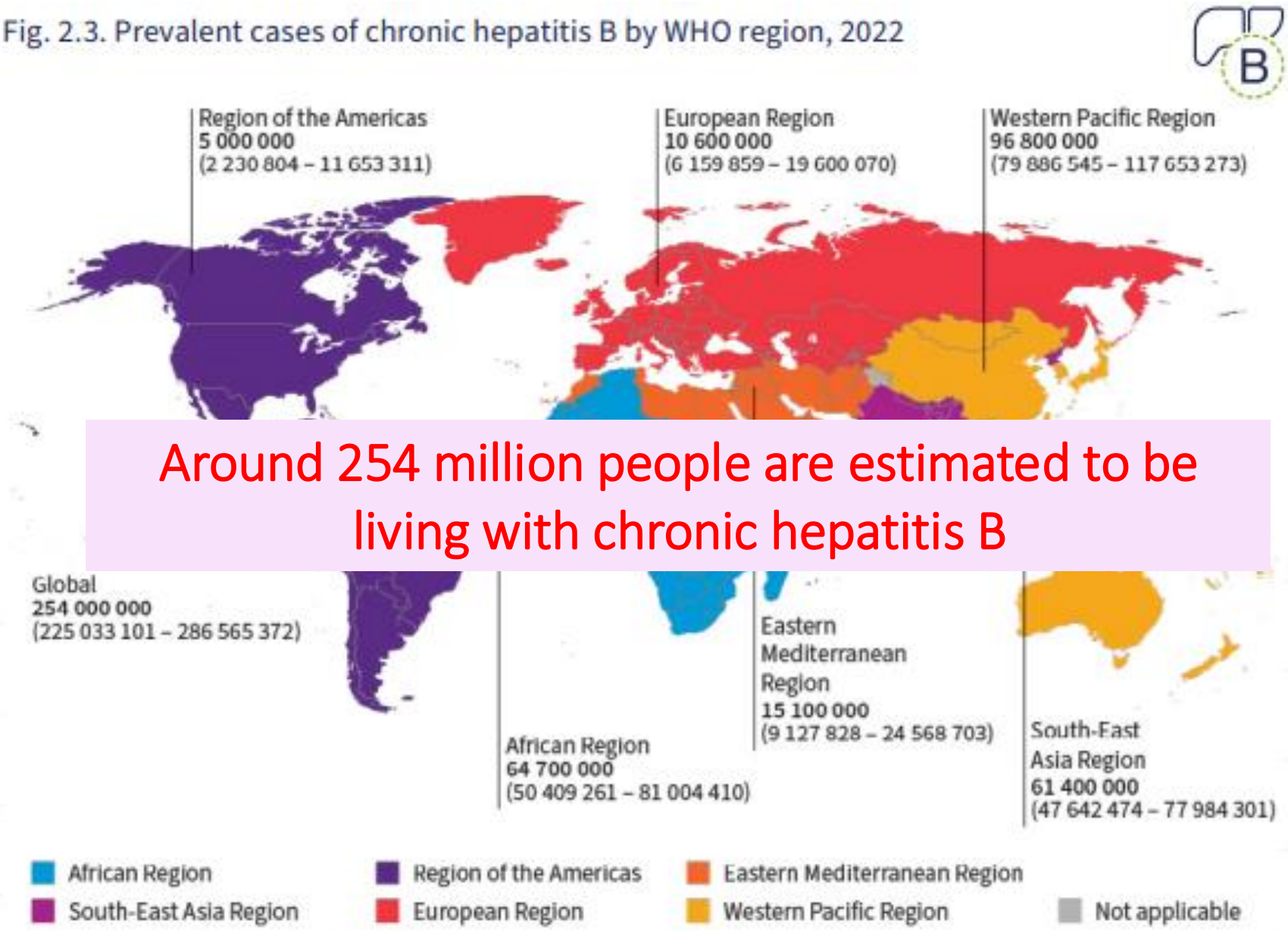
Fig. 2.3. Prevalent cases of chronic hepatitis B by WHO region, 2022



Around 254 million people are estimated to be living with chronic hepatitis B

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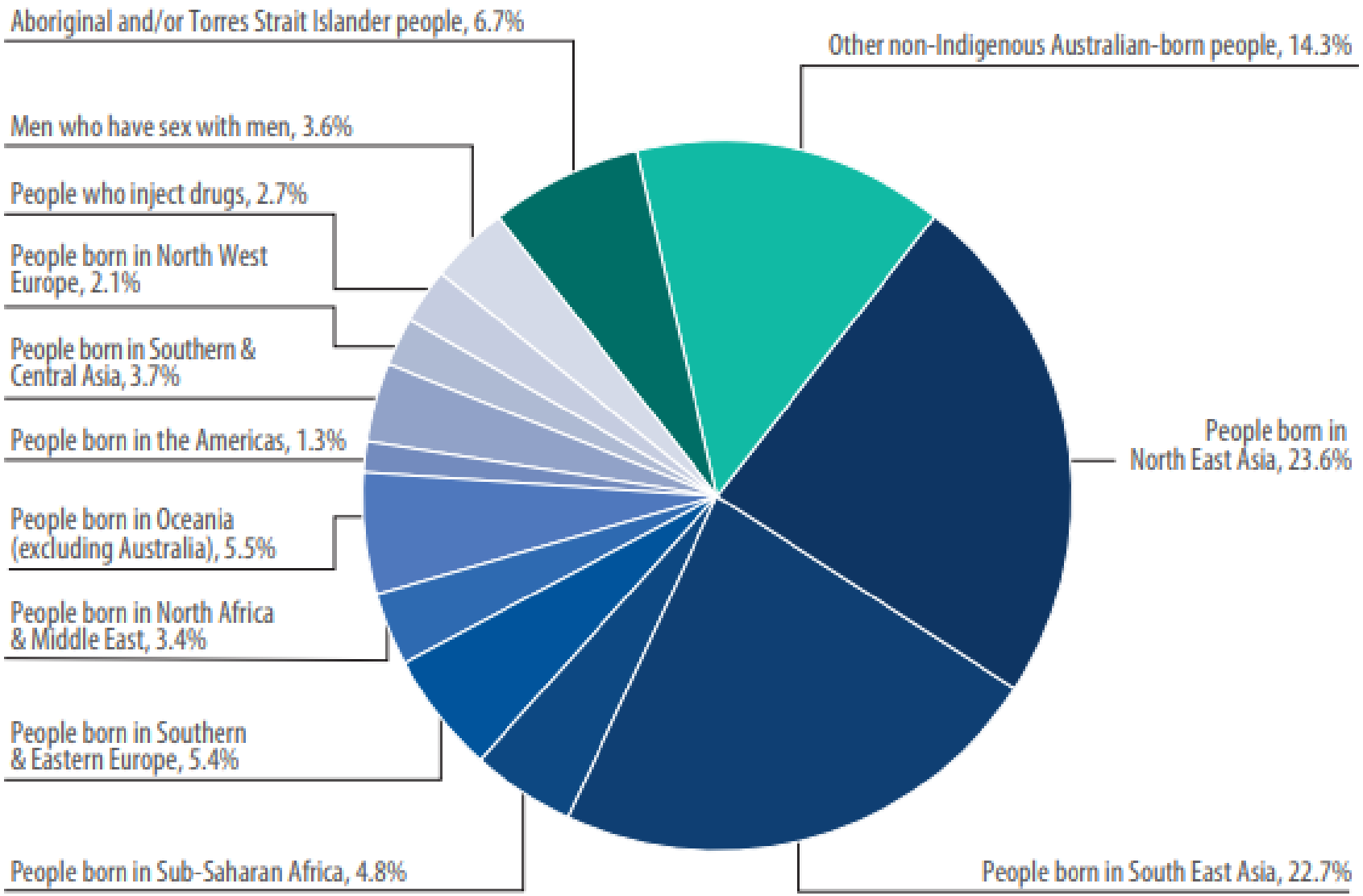
Table A.1: Heat map of CHB prevalence, care uptake and treatment uptake, by PHN, 2023

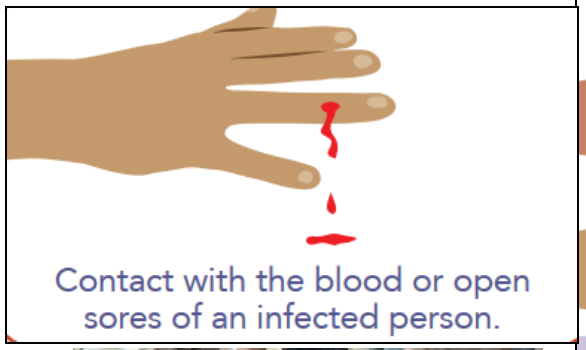
PHN	PREVALENCE Proportion of the population living with CHB (%)	TREATMENT Proportion of people with CHB who received treatment (%)	CARE Proportion of people with CHB who received care (treatment or monitoring) (%)
NATIONAL AVERAGE IN 2023	**0.82%**	**12.6%**	**24.5%**
NATIONAL STRATEGY TARGET	-	**20.0%**	**50.0%**
Northern Territory	1.79%	10.9%	21.3%
South Western Sydney	1.36%	20.2%	37.2%
Western Sydney	1.29%	17.4%	34.1%
Central and Eastern Sydney	1.28%	14.9%	28.7%
Northern Sydney	1.23%	15.5%	32.2%
Eastern Melbourne	1.17%	13.9%	28.9%
North Western Melbourne	1.09%	13.9%	27.3%
Brisbane South	0.96%	13.4%	27.1%
South Eastern Melbourne	0.94%	12.4%	25.5%
Country WA	0.82%	4.0%	*
Perth North	0.82%	9.4%	*
Perth South	0.79%	9.6%	*
Western Queensland	0.72%	#	#
Adelaide	0.70%	12.4%	*
Australian Capital Territory	0.67%	15.2%	26.2%
Northern Queensland	0.64%	6.8%	16.9%
Brisbane North	0.61%	8.5%	15.0%

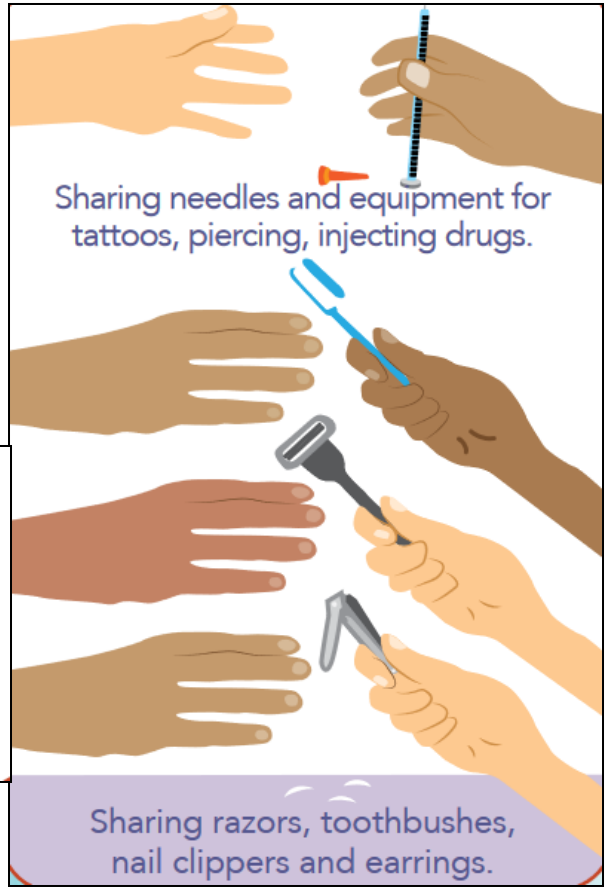
Viral Hepatitis Mapping Project: Hepatitis B : National Report 2023

Figure A.5: People living with CHB in Australia, by priority population,* 2023



Transmission

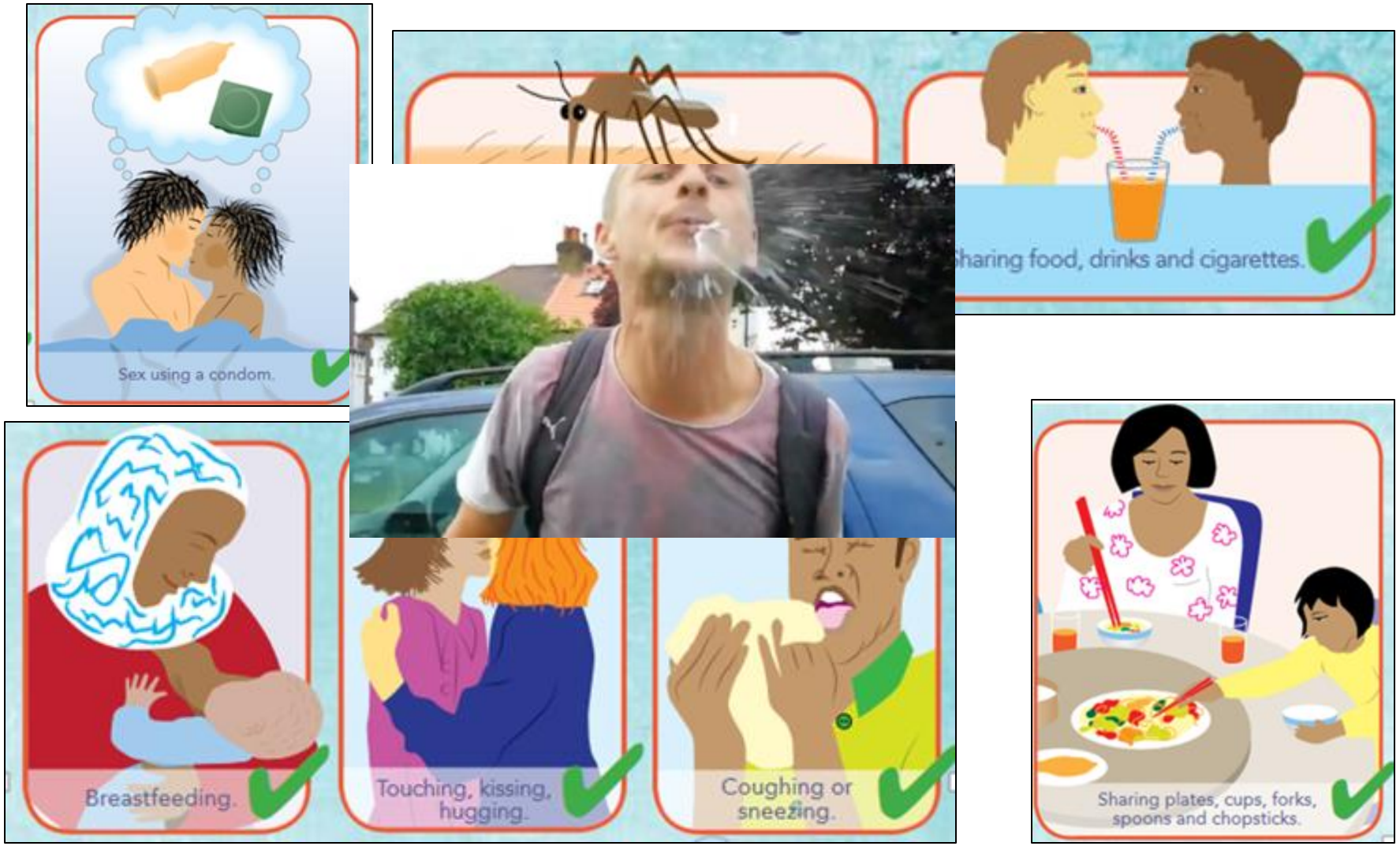




Images: The Hepatitis B Story, www.svhm.org.au

Mieken Grant, Victorian Viral Hepatitis Nurse Educator, St Vincents Hospital Melbourne

Hepatitis B is NOT spread by



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Pregnancy and Hep B

- Pregnancy is a common diagnostic setting for hepatitis B (universal screening)
- ~ 800 women with CHB give birth annually in VIC
- Evidence of local MTCT over the years
- Effective management crucial to reduce risks of transmission to infant
- Refer to perinatal specialist

DECISION MAKING IN HEPATITIS B

HBV

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3 tests

- Surface antigen (HBsAg)
- Surface antibody (anti-HBs)
- Core antibody (anti-HBc)

DECISION MAKING IN HEPATITIS B

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Testing – the basics

Test result	What does it mean?
Surface antigen (HBsAg)	*Do they have hep B virus?*
Surface antibody (anti-HBs)	*Are they protected? Do they have immunity?*
Core antibody (anti-HBc)	*Has there been infection in the past or present?*

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- **anti-HBc** (hepatitis B core antibody)
- **anti-HBs** (hepatitis B surface antibody)

If acute HBV is suspected (through recent risk, presentation, or both), anti-HBc IgM can also be ordered.

By ordering all 3 tests you can determine **susceptibility, immunity** through vaccination or past infection, or **current infection**.

All 3 tests are Medicare rebatable simultaneously. Write '? chronic hepatitis B' or similar on the request slip.

3 Interpret serology

HBsAg **anti-HBc** **anti-HBs**	**positive** **positive** **negative**	**Chronic HBV Infection** Progress to step 4
HBsAg **anti-HBc** **anti-HBc IgM*** **anti-HBs**	**positive** **positive** **positive** **negative**	**Acute HBV Infection** * (high titre) Progress to step 4
HBsAg **anti-HBc** **anti-HBs**	**negative** **negative** **negative**	**Susceptible or non-immune** When there is no documented history of completed vaccination, then vaccination is recommended[†]
HBsAg **anti-HBc** **anti-HBs**	**negative** **positive** **positive**	**Immune due to resolved infection** Record result and consider family screening
HBsAg **anti-HBc** **anti-HBs**	**negative** **negative** **positive**	**Immune due to hepatitis B vaccination** No action required
HBsAg **anti-HBc** **anti-HBs**	**negative** **positive** **negative**	**Various possibilities, including: distant resolved infection, recovering from acute HBV, false positive, 'occult' HBV** Refer to hpositive.org.au for more details

4 Initial assessment if HBsAg positive

Baseline screening to assess phase of disease:

- HBeAg and anti-HBe
- HBV DNA (quantitative)
- Full blood count
- LFT, INR and alpha fetoprotein (AFP)
- Liver ultrasound

Refer to graph on next page to determine phase of disease:

In addition:

- Test for HAV, HCV, HDV and HIV to check for co-infection. Discuss vaccination if susceptible to HAV and discuss transmission and prevention of BBVs.
- Screen household contacts and sexual partners for HBsAg, anti-HBs and anti-HBc, then vaccinate if susceptible to infection.
- Vaccination is recommended for all high-risk groups and is provided free in many cases.
- Contact your local Health Department for details.

Assess liver fibrosis – cirrhotic status:

- Signs of cirrhosis
- Non-invasive assessment of fibrosis:
  - Serum biomarkers such as APRI (1.0 or less, cirrhosis unlikely)[‡]
  - FibroScan assessment if available (>12.5 kPa consistent with cirrhosis)

REFER TO OR DISCUSS WITH A SPECIALIST IF:

- Severe exacerbation (or acute HBV)
- Co-infection with HIV, HCV, or HDV
- Pregnant
- Immunosuppressed
- Hepatocellular carcinoma (HCC) present
- Has previously been treated with a different hepatitis B medication
- Cirrhosis is present or likely – APRI ≥1 and elastography score not available; elastography >12.5kPa

For more information testingportal.ashm.org.au/hbv

[†] Refer to immunisationhandbook.health.gov.au/vaccine-preventable-diseases/hepatitis-b for more detail

[‡] Refer to hepatitisc.uw.edu/page/clinical-calculators/apri for an APRI calculator

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Follow up

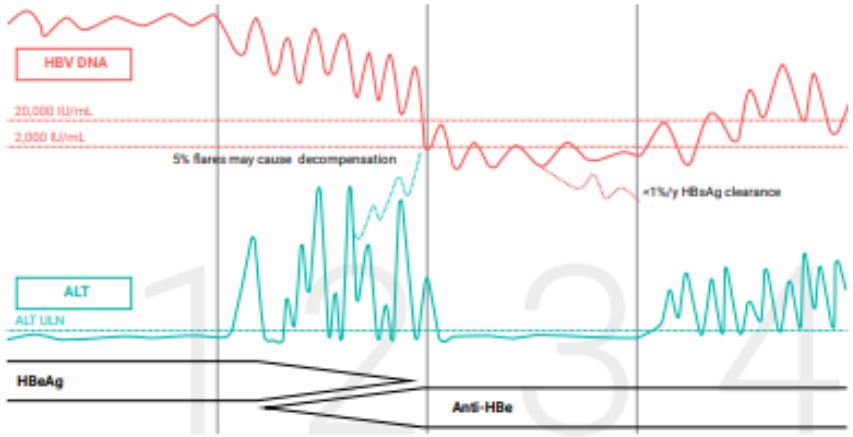
- Lots of GPs and nurses are now ‘co-managing’ people living with HBV
- Explanation of results and thorough education
- Translator and resources
- Contact tracing with family and sexual contacts
- Bloods for liver health, coinfections & determine phase of infection
- Ultrasound & Fibroscan

DECISION MAKING IN HEPATITIS B

HBV

5 Assess phase of infection

Patients with CHB must be **regularly re-evaluated** to determine which phase they are in and managed accordingly.



HBeAg-positive chronic infection (Immune tolerance)	HBeAg-positive chronic hepatitis (Immune clearance)	HBeAg-negative chronic infection (Immune control)	HBeAg-negative chronic hepatitis (Immune escape)
• **HBV DNA: high**† >10^7 IU/mL • **ALT: normal** • **HBeAg positive**	• **HBV DNA: high**† >20 000 IU/mL • **ALT: elevated** Elevated is >30 IU/L men; >19 IU/L women • **HBeAg positive**	• **HBV DNA: low**† <2000 IU/mL • **ALT: normal** • **HBeAg negative** • **anti-HBe positive**	• **HBV DNA high**† >2000 IU/mL • **ALT: elevated** Elevated is >30 IU/L men; >19 IU/L women • **HBeAg negative** • **anti-HBe positive**
Treatment not required	**Refer to s100 community prescriber or specialist for consideration of treatment** Risk of progression to cirrhosis and HCC	**Treatment not required**	**Refer to s100 community prescriber or specialist for consideration of treatment** Risk of progression to cirrhosis and HCC

† Medicare covers HBV DNA testing once per year for patients not on treatment and 4 times per year for patient on treatment.

ASHM thanks these organisations and clinical advisors for their review and endorsement

6 Provide ongoing monitoring

Regular monitoring is required to identify virological response, resistance and hepatitis flares, and to encourage adherence.

Indication	Monitoring specific to phase	PLUS, monitoring for all phases
HBeAg-positive chronic infection (Immune tolerance)	• Liver function tests (6-monthly) • HBV DNA (12-monthly)† • HBeAg and anti-HBe (6-12 monthly) • Assess for liver fibrosis (12-monthly)	• Periodic review of household contacts and sexual partners where appropriate • If indicated (see below): HCC surveillance
HBeAg-negative chronic infection (Immune control)	• Liver function tests (6-monthly) • HBV DNA (12-monthly)† • Assess for liver fibrosis (12-monthly)	
On treatment **HBeAg-negative chronic hepatitis (Immune escape)** **HBeAg-positive chronic hepatitis (Immune clearance)**	**3-monthly for the first year, then 6-monthly:** • Liver and renal function tests • HBV DNA† • Serum phosphate if on tenofovir disoproxil fumarate (TDF) **In addition:** • If HBeAg positive at baseline: HBeAg/anti-HBe (6-12 monthly) • If HBV DNA undetectable: HBsAg/anti-HBs (12-monthly) • If cirrhotic: FBE and INR (3-monthly for the first year, then 6-monthly)* Also assess adherence to treatment every review.	

* This is the minimum requirement

HEPATOCELLULAR CARCINOMA SURVEILLANCE *

6-monthly ultrasound with or without AFP is recommended for patients with CHB in these groups:

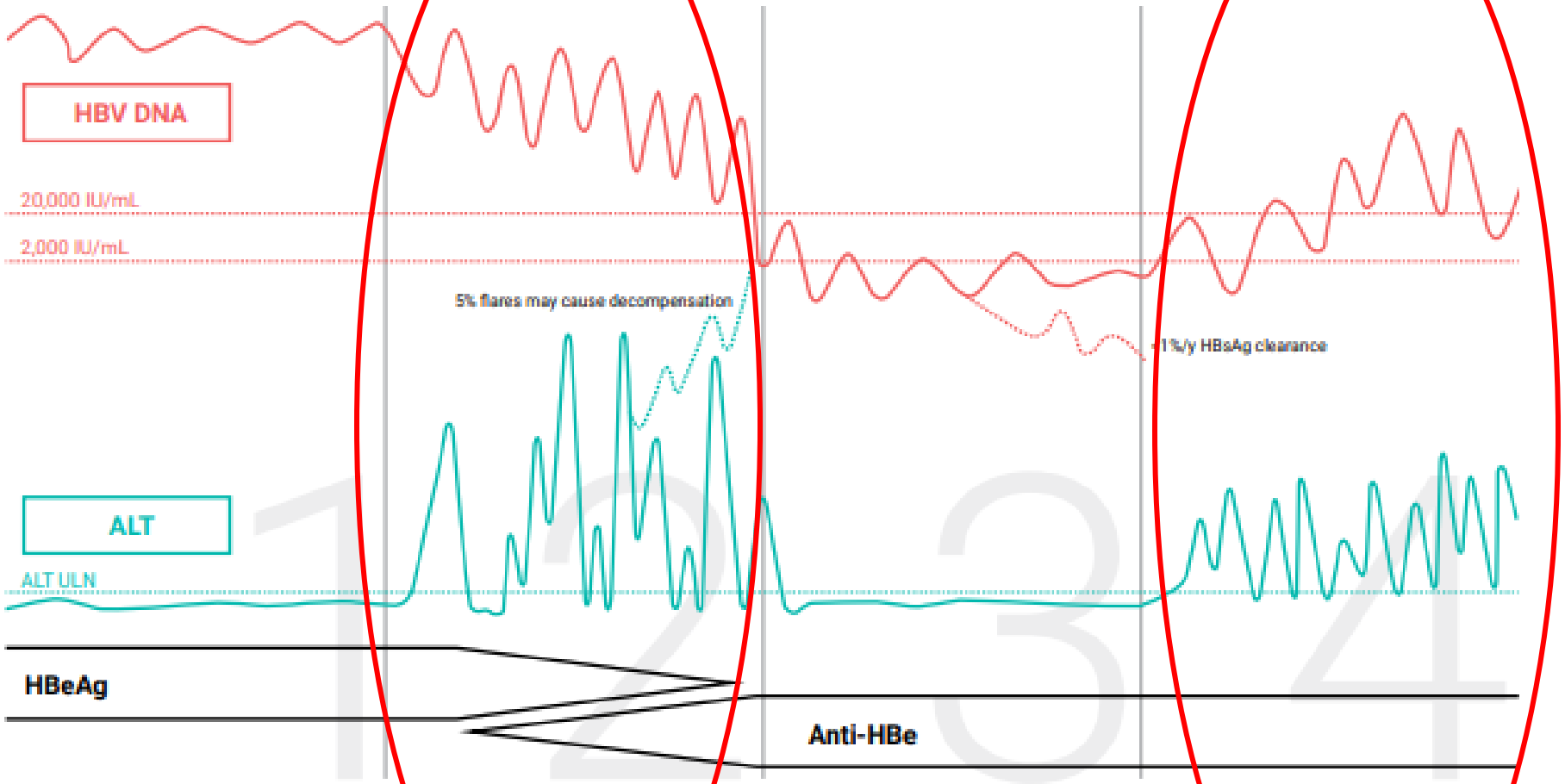
- People with cirrhosis
- Anyone aged ≥ 40 years with a family history of HCC (first-degree relative). *Consider offering surveillance 10 years prior to earliest case in a family*
- Sub-Saharan African people ≥ 20 years
- Aboriginal and Torres Strait Islander people ≥ 50 years
- Aboriginal and Torres Strait Islander people with high risk features ≥ 40 years ^
- Asian-Pacific males ≥ 40 years
- Asian-Pacific females ≥ 50 years

* These surveillance guidelines are based on the Clinical Practice Guidelines for HCC Surveillance for people at high risk in Australia (Cancer Council, April 2023). Alternative guidelines are offered in the Australian recommendations for the management of hepatocellular carcinoma: a consensus statement (GESA).

^Such as confirmed or likely high risk HBV genotype. Genotype testing is not routinely offered and not subsidised through the Medicare Benefits Schedule.

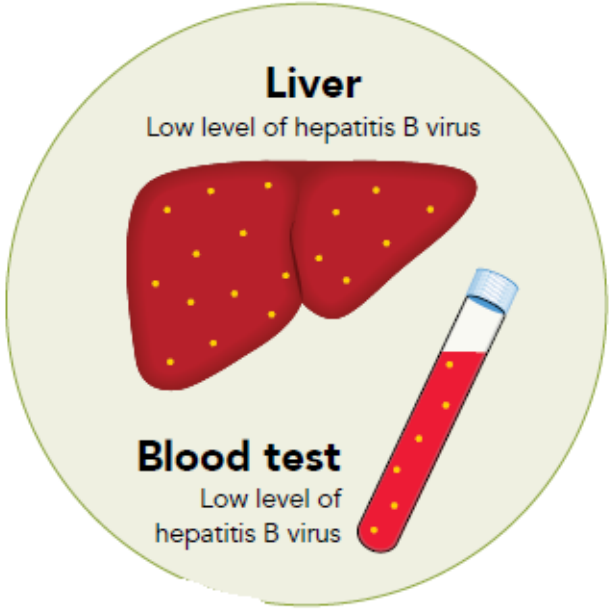
5 Assess phase of infection

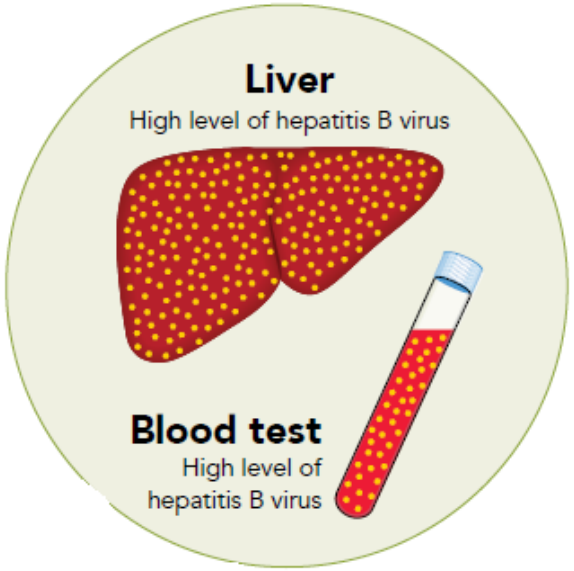
Patients with CHB must be **regularly re-evaluated** to determine which phase they are in and managed accordingly.



HBeAg-positive chronic infection (Immune tolerance)	HBeAg-positive chronic hepatitis (Immune clearance)	HBeAg-negative chronic infection (Immune control)	HBeAg-negative chronic hepatitis (Immune escape)

When to have medication?





Treatment

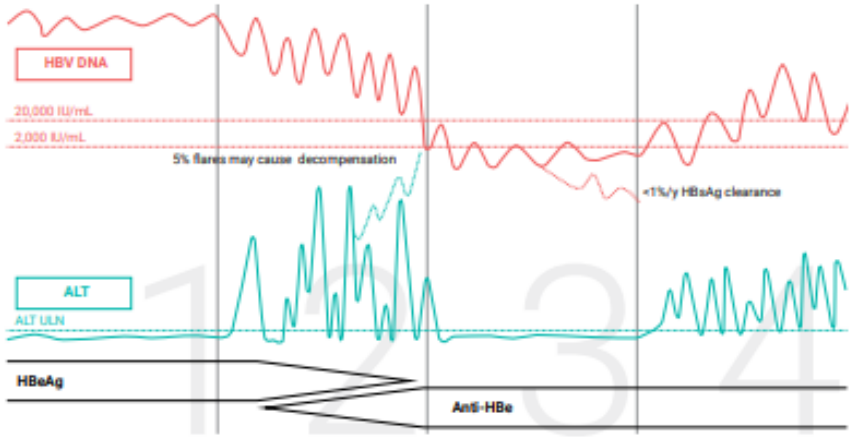
- Oral – minimal side effects
- ↓ risk of advanced liver disease & cancer
- Once started, most people stay on tablets for life
- Adherence support is crucial to control HBV and avoid hepatic flares
- Tenofovir (Viread®) or Entecavir (Baraclude®)

DECISION MAKING IN HEPATITIS B

HBV

5 Assess phase of infection

Patients with CHB must be **regularly re-evaluated** to determine which phase they are in and managed accordingly.



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[†] Medicare covers HBV DNA testing once per year for patients not on treatment and 4 times per year for patient on treatment.

ashm Cancer Council hepatitis australia GESA ASID AUSTRALASIAN HEPATOLOGY ASSOCIATION

ASHM thanks these organisations and clinical advisors for their review and endorsement

6 Provide ongoing monitoring

Regular monitoring is required to identify virological response, resistance and hepatitis flares, and to encourage adherence.

Indication	Monitoring specific to phase	PLUS, monitoring for all phases
HBeAg-positive chronic infection (Immune tolerance)	• Liver function tests (6-monthly) • HBV DNA (12-monthly)[#] • HBeAg and anti-HBe (6-12 monthly) • Assess for liver fibrosis (12-monthly)	• Periodic review of household contacts and sexual partners where appropriate • If indicated (see below): HCC surveillance
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HEPATOCELLULAR CARCINOMA SURVEILLANCE *

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*Such as confirmed or likely high risk HBV genotype. Genotype testing is not routinely offered and not subsidised through the Medicare Benefits Schedule.

Long term

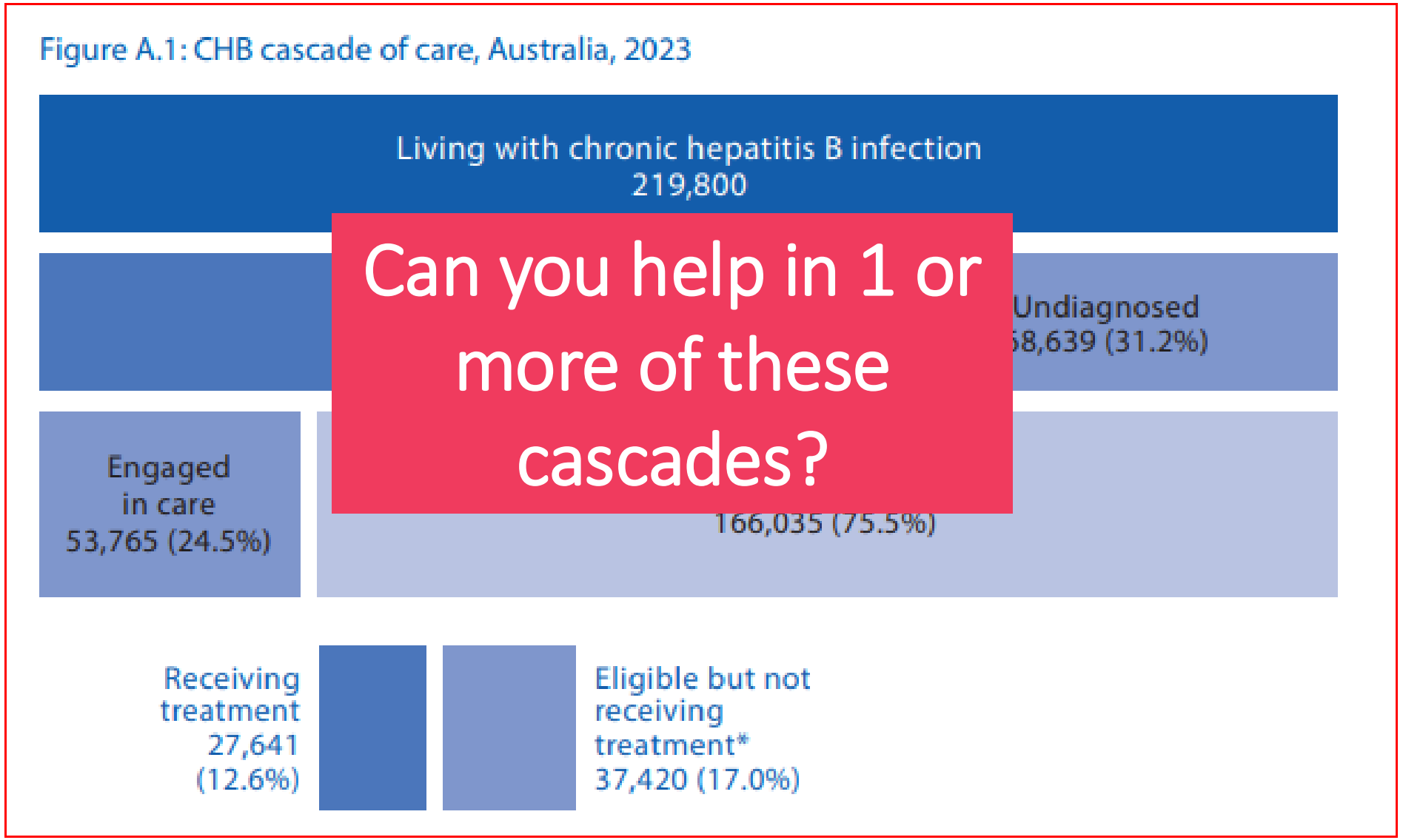
- CHB long term follow up: 6-12 monthly check ups
- Bloods and assessment of fibrosis/cirrhosis

HEPATOCELLULAR CARCINOMA SURVEILLANCE *

6-monthly ultrasound with or without AFP is recommended for patients with CHB in these groups:

- People with cirrhosis
- Anyone aged ≥ 40 years with a family history of HCC (first-degree relative). *Consider offering surveillance 10 years prior to earliest case in a family*
- Sub-Saharan African people ≥ 20 years
- Aboriginal and Torres Strait Islander people ≥ 50 years
- Aboriginal and Torres Strait Islander people with high risk features ≥ 40 years ^
- Asian-Pacific males ≥ 40 years
- Asian-Pacific females ≥ 50 years

Chronic Hep B ‘cascade of care’



Can you help in 1 or more of these cascades?

Resources

“The hepatitis B story”

12 languages, hardcopies and online. Also available in ‘talking books’

Hep B Story

- English
- Yolŋu
- Anindilyakwa
- Warlpiri
- Tiwi
- Arrernte
- Kunwinjku
- Pitjantjatjara
- Burarra
- Kriol

menzies school of health research

BACK

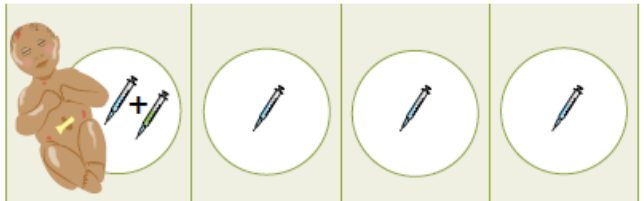
Women with hepatitis B can deliver their baby safely and can breastfeed.

Women with hepatitis B can deliver their baby by vaginal birth. Women with hepatitis B are encouraged to breastfeed their baby. Breastfeeding helps you and your baby to be strong and healthy.

Talk with your midwife or doctor about the delivery and feeding your baby.

Women with hepatitis B can deliver their baby safely and can breastfeed.

At home after the birth: Care for your BABY



Birth
Check that your baby gets 2 injections.

Age 2 months
Check that baby has 2nd hepatitis B vaccine.

Age 4 months
Check that baby has 3rd hepatitis B vaccine.

Age 6 months
Check that baby has 4th hepatitis B vaccine.

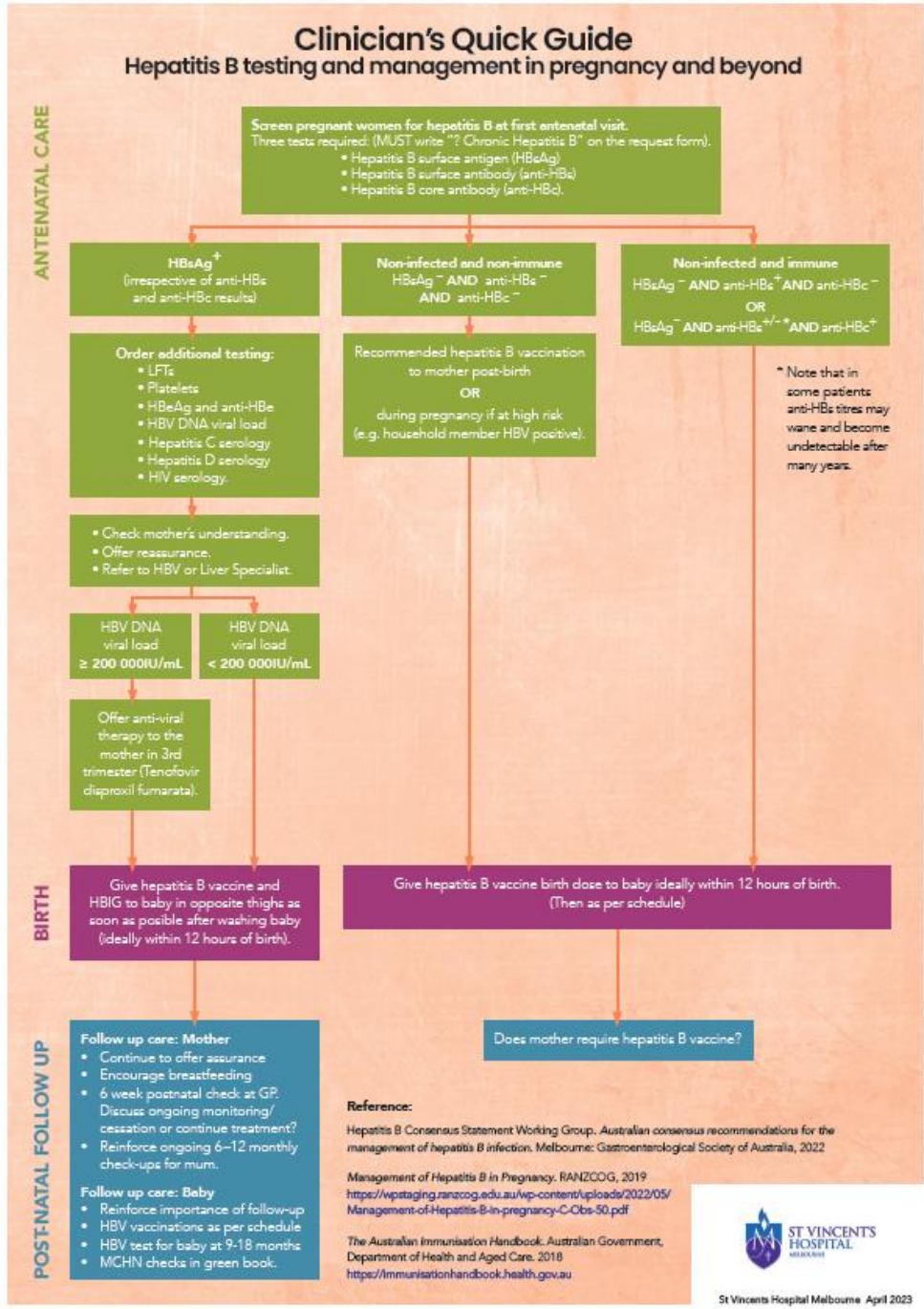
Tick off your baby's vaccinations in their Green Book. Take the Green Book to health appointments.

Age 9–18 months
Check that your baby gets a blood test to check for hepatitis B.

You don't need to worry. You have managed your baby's health care so well!

Clinician's Quick Guide

Hepatitis B testing and management in pregnancy and beyond



Reference:

Hepatitis B Consensus Statement Working Group. *Australian consensus recommendations for the management of hepatitis B infection*. Melbourne: Gastroenterological Society of Australia, 2022

Management of Hepatitis B in Pregnancy. RANZCOG, 2019
https://wpstaging.ranzcog.edu.au/wp-content/uploads/2022/05/Management-of-Hepatitis-B-in-pregnancy-C-Obs-50.pdf

The Australian Immunisation Handbook. Australian Government, Department of Health and Aged Care. 2018
https://immunisationhandbook.health.gov.au

ST VINCENTS HOSPITAL MELBOURNE

St Vincents Hospital Melbourne April 2023

DECISION MAKING IN HEPATITIS B

HBV

1 When to test

People who should be offered testing:

- People born in intermediate or high prevalence country (offer interpreter)
- Aboriginal and Torres Strait Islander peoples
- Patients undergoing chemotherapy or immunosuppressive therapy (risk of reactivation)
- Pregnant women
- Infants and children born to mothers who have HBV (>9 months)
- People with clinical presentation of liver disease and/or elevated ALT/AFP of unknown aetiology
- Health professionals who perform exposure prone procedures
- Partner/household/sexual contacts of people with acute or chronic HBV
- People who have ever injected drugs
- Men who have sex with men
- People with multiple sex partners
- People in custodial settings or who have ever been in custodial settings
- People with HIV or hepatitis C, or both
- Patients undergoing dialysis
- Sex workers
- People initiating HIV pre-exposure prophylaxis (PrEP)

Additionally, testing should be offered to anyone upon request.

When gaining informed consent before testing, discuss:

- Need for an interpreter
- Reason for testing
- Personal implications of a positive test result
- Availability of treatment

2 Order tests

To determine hepatitis B status, order 3 tests.

Request:

- **HBsAg** (hepatitis B surface antigen)
- **anti-HBc** (hepatitis B core antibody)
- **anti-HBs** (hepatitis B surface antibody)

If acute HBV is suspected (through recent risk, presentation, or both), anti-HBc IgM can also be ordered.

By ordering all 3 tests you can determine **susceptibility, immunity** through vaccination or past infection, or **current infection**.

All 3 tests are Medicare rebatable simultaneously. Write '? chronic hepatitis B' or similar on the request slip.

3 Interpret serology

HBsAg **anti-HBc** **anti-HBs**	**positive** **positive** **negative**	**Chronic HBV infection** Progress to step 4
HBsAg **anti-HBc** **anti-HBc IgM*** **anti-HBs**	**positive** **positive** **positive** **negative**	**Acute HBV infection** * (high titre) Progress to step 4
HBsAg **anti-HBc** **anti-HBs**	**negative** **negative** **negative**	**Susceptible or non-immune** When there is no documented history of completed vaccination, then vaccination is recommended[1]
HBsAg **anti-HBc** **anti-HBs**	**negative** **positive** **positive**	**Immune due to resolved infection** Record result and consider family screening
HBsAg **anti-HBc** **anti-HBs**	**negative** **negative** **positive**	**Immune due to hepatitis B vaccination** No action required
HBsAg **anti-HBc** **anti-HBs**	**negative** **positive** **negative**	**Various possibilities, including: distant resolved infection, recovering from acute HBV, false positive, 'occult' HBV** Refer to hpositive.org.au for more details

4 Initial assessment if HBsAg positive

Baseline screening to assess phase of disease:

- HBeAg and anti-HBe
- HBV DNA (quantitative)
- Full blood count
- LFT, INR and alpha fetoprotein (AFP)
- Liver ultrasound

Refer to graph on next page to determine phase of disease:

In addition:

- Test for HAV, HCV, HDV and HIV to check for co-infection. Discuss vaccination if susceptible to HAV and discuss transmission and prevention of BBVs.
- Screen household contacts and sexual partners for HBsAg, anti-HBs and anti-HBc, then vaccinate if susceptible to infection.
- Vaccination is recommended for all high-risk groups and is provided free in many cases.
- Contact your local Health Department for details.

Assess liver fibrosis – cirrhotic status:

- Signs of cirrhosis
- Non-invasive assessment of fibrosis:
  - Serum biomarkers such as APRI (1.0 or less, cirrhosis unlikely)[2]
  - FibroScan assessment if available (>12.5 kPa consistent with cirrhosis)

REFER TO OR DISCUSS WITH A SPECIALIST IF:

- Severe exacerbation (or acute HBV)
- Co-infection with HIV, HCV or HDV
- Pregnant
- Immunosuppressed
- Hepatocellular carcinoma (HCC) present
- Has previously been treated with a different hepatitis B medication
- Cirrhosis is present or likely – APRI ≥1 and elastography score not available, elastography >12.5kPa

For more information testingportal.ashm.org.au/hbv

[1] Refer to immunisationhandbook.health.gov.au/vaccine-preventable-diseases/hepatitis-b for more detail

[2] Refer to hepatitisc.uw.edu/page/clinical-calculators/apri for an APRI calculator

Liver webinar series 2024

https://www.svhm.org.au/health-professionals/specialist-clinics/g/gastroenterology/education-and-training

Viral Hepatitis Education Training 2024

Liver and Viral Hepatitis webinar series 2024 (free recorded sessions)

In early 2024 the Victorian Viral Hepatitis Educator facilitated weekly lunchtime webinar sessions about all things liver disease and viral hepatitis. Over 11 weeks the best in the business, including St Vincents own Gastroenterologists and nurses plus lots of big brains in the viral hepatitis, alcohol & other drugs, data surveillance, HIV and harm reduction arenas, walked us through a topic in depth around viral hepatitis. Below are the recordings of most sessions - watch all 9 sessions for a great overview of liver disease and viral hepatitis or pick and choose sessions that suit your area of work or interest.

- Week 1: Liver Cancer Screening - A/Prof Jessica Howell
- Week 2: Viral Hepatitis Serology Explained - Dr Jacqui Richmond
- Week 3: Hepatitis C Treatment - A/Prof Jacinta Holmes
- Week 4: Liver Cirrhosis 101 - Prof Alex Thompson
- Week 5: Hepatitis B Treatment - Dr David Iser
- Week 6: Viral Hepatitis Mapping Project - Jennifer MacLachlan (not recorded due to unpublished data being discussed, please contact Mieken.grant@svha.org.au or Jennifer.MacLachlan@vidrl.org.au for presentation slides
- Week 7: A Focus on Injecting practices that lead to poor health outcomes - Jane Dicka (not recorded. Please contact Mieken.grant@svha.org.au or janed@hrvic.org.au for information or to book into 'Bloody Serious Facts' education)
- Week 8: The Changing Landscape of Opioid Use Disorders - Dr Adam Pastor
- Week 9: Pregnancy & Viral Hepatitis - Dr Naomi Whyler
- Week 10: HIV and Viral Hepatitis Coinfection - Dr David Iser
- Week 11: Innovative approaches to Viral Hepatitis - Anne Craigie

Viral Hepatitis Education Training 2025
FREE lunchtime webinars on liver disease & viral hepatitis

Running weekly February - April 2025 at 12:30 to 1:15pm on Tuesdays (except Week 10 is on a Wednesday). Please see the flyer with more details and registration: Hepititis and liver

- Week 1: Tuesday 18th February. Basics of Viral Hepatitis
- Week 2: Tuesday 25th February. How do I start the conversation about testing for hepatitis C?
- Week 3: Tuesday 4th March. Innovative incentivisation for HCV testing and treatment
- Week 4: Tuesday 11th March. The intersection of mental health and viral hepatitis
- Week 5: Tuesday 18th March. Liver Cancer screening in General Practice
- Week 6: Tuesday 25th March. Viral hepatitis in pregnancy & care in the postnatal period
- Week 7: Tuesday 1st April. Management of stable hepatitis B in general practice
- Week 8: Tuesday 8th April. Cirrhosis assessment and management
- Week 9: Tuesday 15th April. Abnormal LFTs - what could it be?
- Week 10: Wednesday 23rd April:. Metabolic dysfunction-associated steatotic liver disease (MASLD)

Resources to help!

- www.gesa.org.au – referral forms, guidelines, FAQ
- Hepatitis B toolkit: https://ashm.org.au/hepatitis-b-toolkit/
- Clinical practice guidelines for hepatocellular carcinoma surveillance for people at high risk in Australia||Introduction (magicapp.org)
- Management of Hepatitis B in pregnancy (ranzcog.edu.au)
- Hepatitis B | The Australian Immunisation Handbook (health.gov.au)
- ASHM_Decision-Making-in-Hepatitis-B-Toolkit-Update_Nov.pdf
- HepBHelp
- Hepatitis B | ASHM Health
- Harm Reduction Victoria (HRVic)/Melbourne/Home
- www.aivl.org.au Australian Injecting and Illicit Drug Users League

Mieken Grant, Victorian Viral Hepatitis Nurse Educator, St Vincents Hospital Melbourne

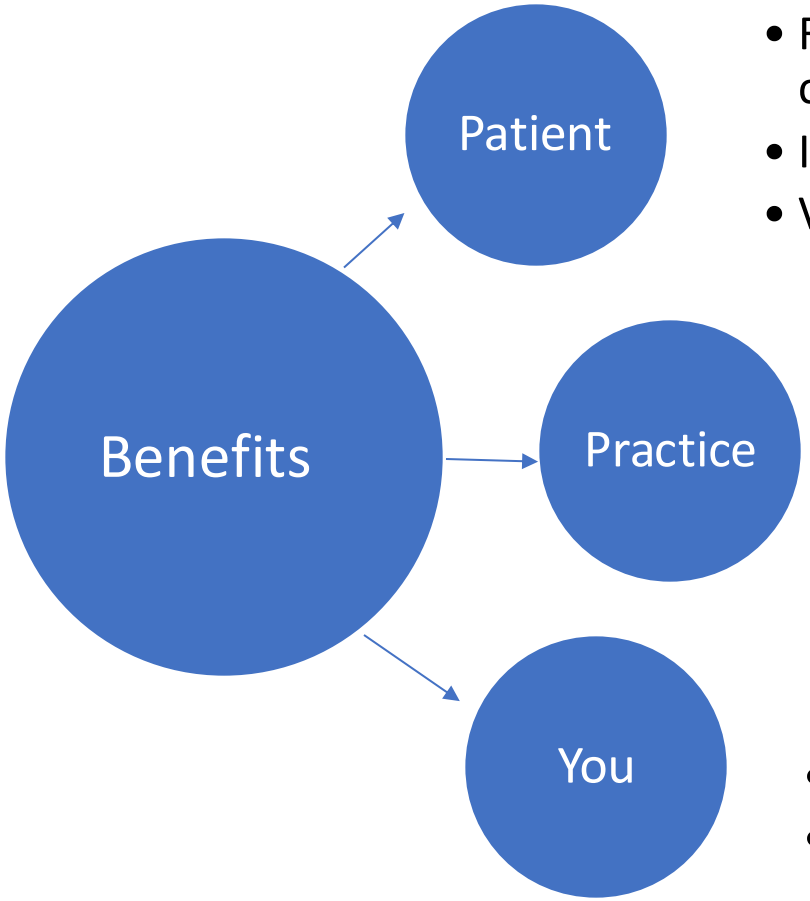
Contact

Mieken Grant
Victorian Viral Hepatitis Nurse Educator
St Vincent's Hospital
Ph: 0407 865 140
Mieken.Grant@svha.org.au

Hepatitis B Quality Improvement in practice

Working together to improve the care we provide people at risk of cirrhosis and liver cancer

Why should I do this?



- Reduce risk of liver failure and cancer
- Improve quality of life
- Vaccination

- QI Pip
- RACGP standards for General practice

- CPD hours!
- EA/ RP /MO

The community/ Public health

How to start?

Continuous Quality Improvement

WORKBOOK FOR GENERAL PRACTICE

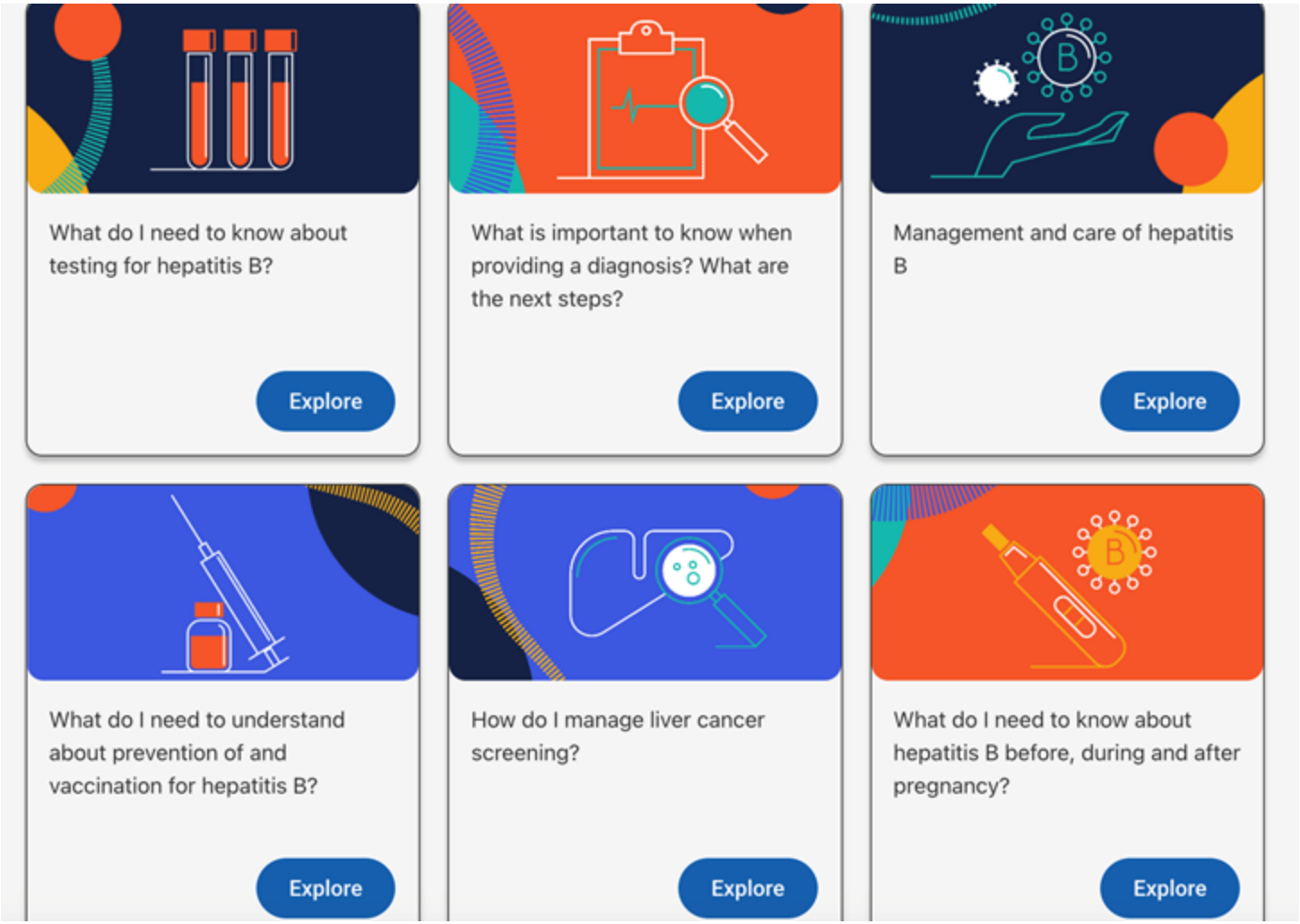
Improve hepatitis B screening

Step 1: Understand Hepatitis B

- This webinar!

Other resources:

- HealthPathways
- ASHM :
  - Hepatitis B toolkit
  - Decision making in Hep B
- B positive – guide for primary care
- Your local PHN quality improvement team



Step 2: Work as a team to collect data and develop goals

First:

- Choose QI team members
- Nominate team lead/s

2.1 Prepare your practice for your Hepatitis B activity

- Identify any potential gaps in knowledge and processes eg
  - Who is at risk of hep B
  - How to test for hep B
  - How to interpret results
- For clinicians you may consider a self-assessment eg

How do you feel:	Not confident	Apprehensive	Comfortable	Confident
Identifying a patient that is at an increased risk of having hepatitis B				
Identifying whether an at-risk patient has been screened for hepatitis B				
Engaging in a discussion about hepatitis B with patients who may be at risk				
Asking a patient about their ethnicity or country of birth				
Accessing up-to-date hepatitis B resources and information (including patient resources, referral pathways and GP resources)				

2.1 Prepare your practice for your Hepatitis B activity

- You may want to consider something similar for non-clinicians regarding gaps in confidence

How do you feel:	Not confident	Apprehensive	Comfortable	Confident	Not applicable
Recording patient ethnicity and other demographic data in your practice's clinical software					
Explaining to a patient why it is important for the GP to know their ethnicity or country of birth					
About your understanding of hepatitis B					
Accessing up-to-date hepatitis B resources and information					
Responding to patient inquiries about hepatitis B					

2.1 Preparing your practice

2.2 Collect baseline data

- To identify current performance & areas that need improvement
- To compare with after implementing strategies

Identify patients

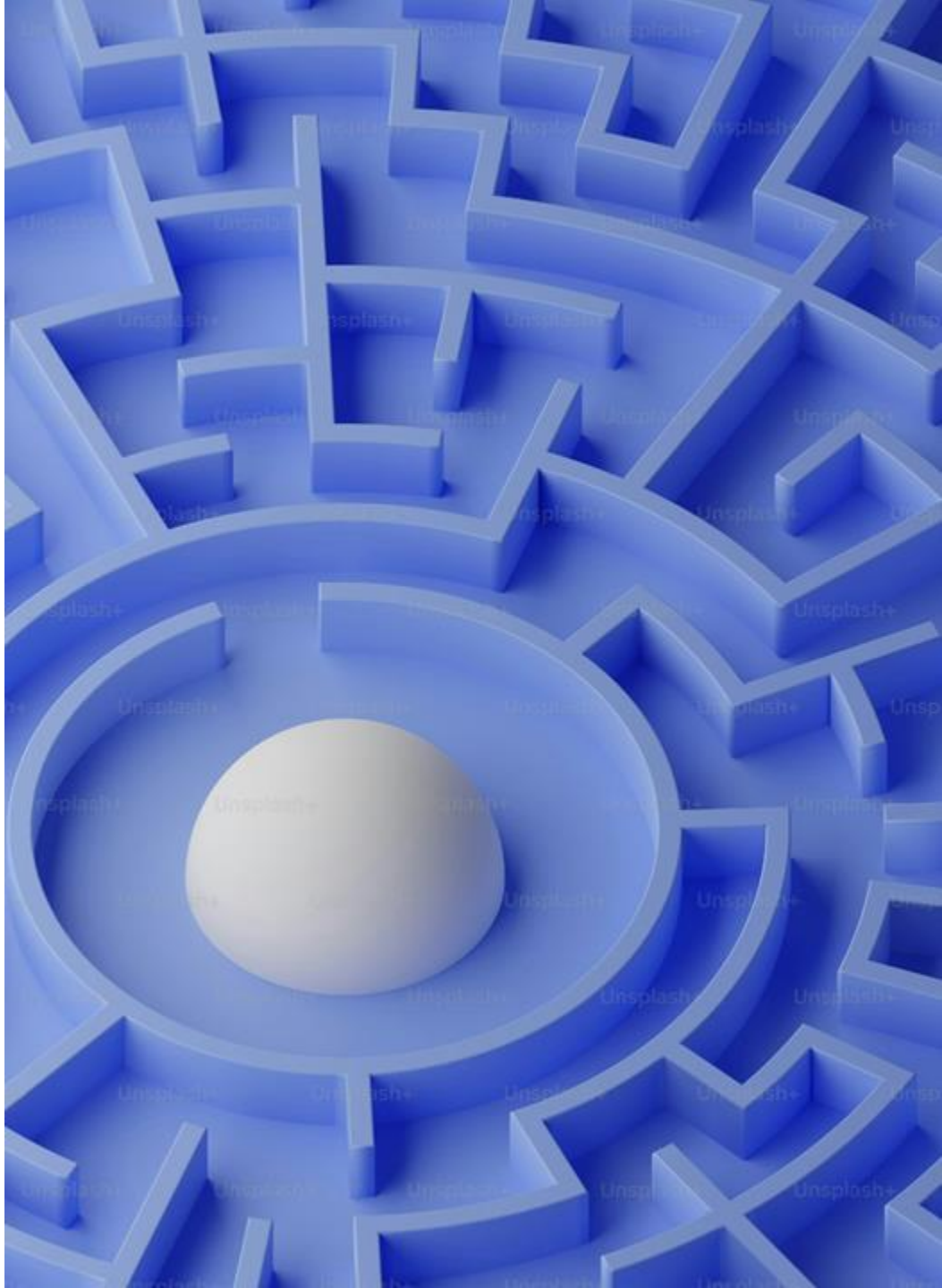
- Identify patients with an increased risk of hepatitis B who have not been screened

AND

- Have no current hepatitis B diagnosis recorded (and no recorded vaccination/immunity).

Populations at risk include:

- People with clinical presentation of liver disease and/or elevated ALT/AFP of unknown aetiology
- Pregnant people
- Patients undergoing chemotherapy or immunosuppressive therapy (who are at risk of reactivation)
- People born in regions with intermediate or high hepatitis B prevalence (Central, North-East and South-East Asia, the Pacific Islands, North and Sub-Saharan Africa, and Southern and Eastern Europe)
- Aboriginal and Torres Strait Islander people*
- Men who have sex with men
- Sex workers
- Partners and household/sexual contacts of people with acute or CHB
- Infants and children (> 9 months of age) born to mothers who have hepatitis B
- Patients undergoing dialysis
- People with multiple sex partners who have not been previously tested
- People who inject drugs or have done so in the past
- People who are in custodial settings or have been in the past
- People with HIV or hepatitis C or both
- People initiating HIV pre-exposure prophylaxis
- Health professionals who perform exposure prone procedures



PenCAT , POLAR, OR…

CAT4 POLAR

File Edit View Tools Data Submission Prompts Help Support

Collect | Report | View Population | CAT 4 | Cleansing CAT | Registrar CAT | Daily CAT | Programs | phn Clinical Audit for Viral Hepatitis B | Clear Filters | Recalculate

Show Extracts

Filter

General | Ethnicity | Conditions | Medications | Date Range (Results) | Visits | Patient Name | Patient Status | Providers | Risk Factors | MBS Attendance | Saved Filters | Custom Filters

Gender
- Male
- Female
- Other
- Not Stated

Card
- DVA < Any Color > No
- Pension/HCC No

Health Cover
- Medicare No. No
- Health Insurance No

Age
- Start Age
- End Age
- Yrs Mths
- No Age

Risk Stratification Score(%)

Last Visit / First Visit
- Any / None
- < 6 mths / < 15 mths
- < 24 mths / < 30 mths
- Date Range 01/01/2021 to 01/01/2021

Activity
- Any
- Active (3x in 2 yrs)
- Not Active

Visits in last 6 mths ≥ 0

Has Not Visited in last 0 mths

Postcode Include Exclude

City/Suburb Include Exclude
(lists: comma separated, * wildcard)

Please Select Your GP Application from the Preferences; Extract Date: 01/01/2021 3:12 AM; Filtering By: Active Patient

Viral Hepatitis

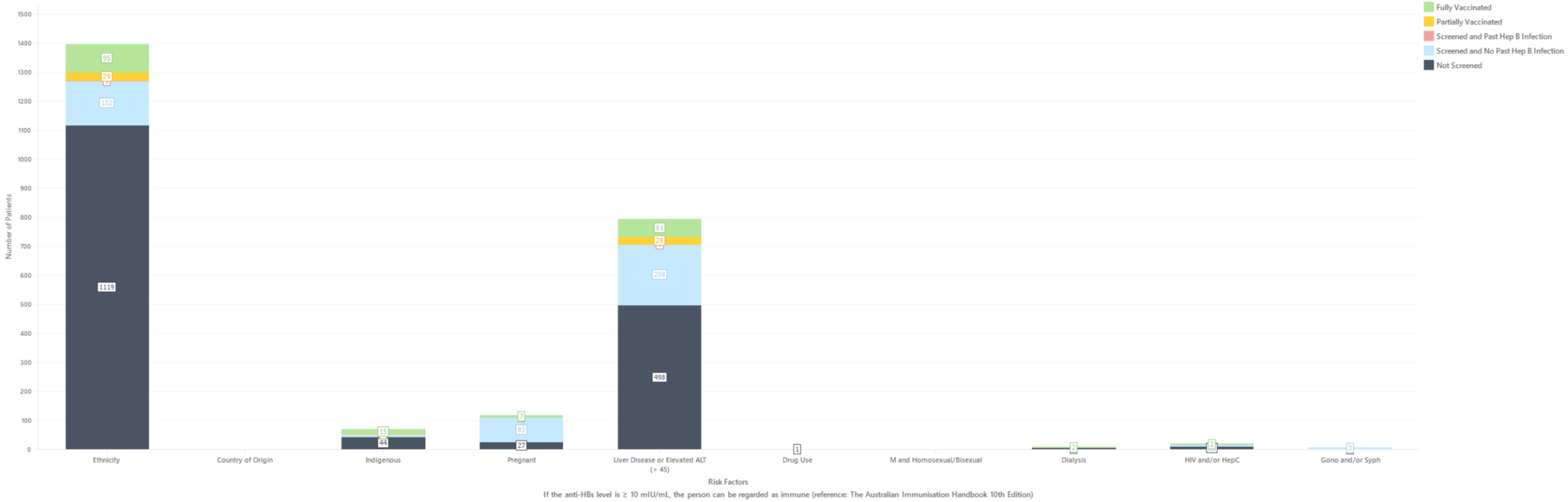
Hep B Screening and Management

Hep B At Risk Screening | Hep B Management

Select All | Worksheet | Print

Hep B Screening [Population = 2274]

Patients with no current Hep B diagnosis and one or more risk factors



If the anti-HBs level is ≥ 10 mIU/mL, the person can be regarded as immune (reference: The Australian Immunisation Handbook 10th Edition)

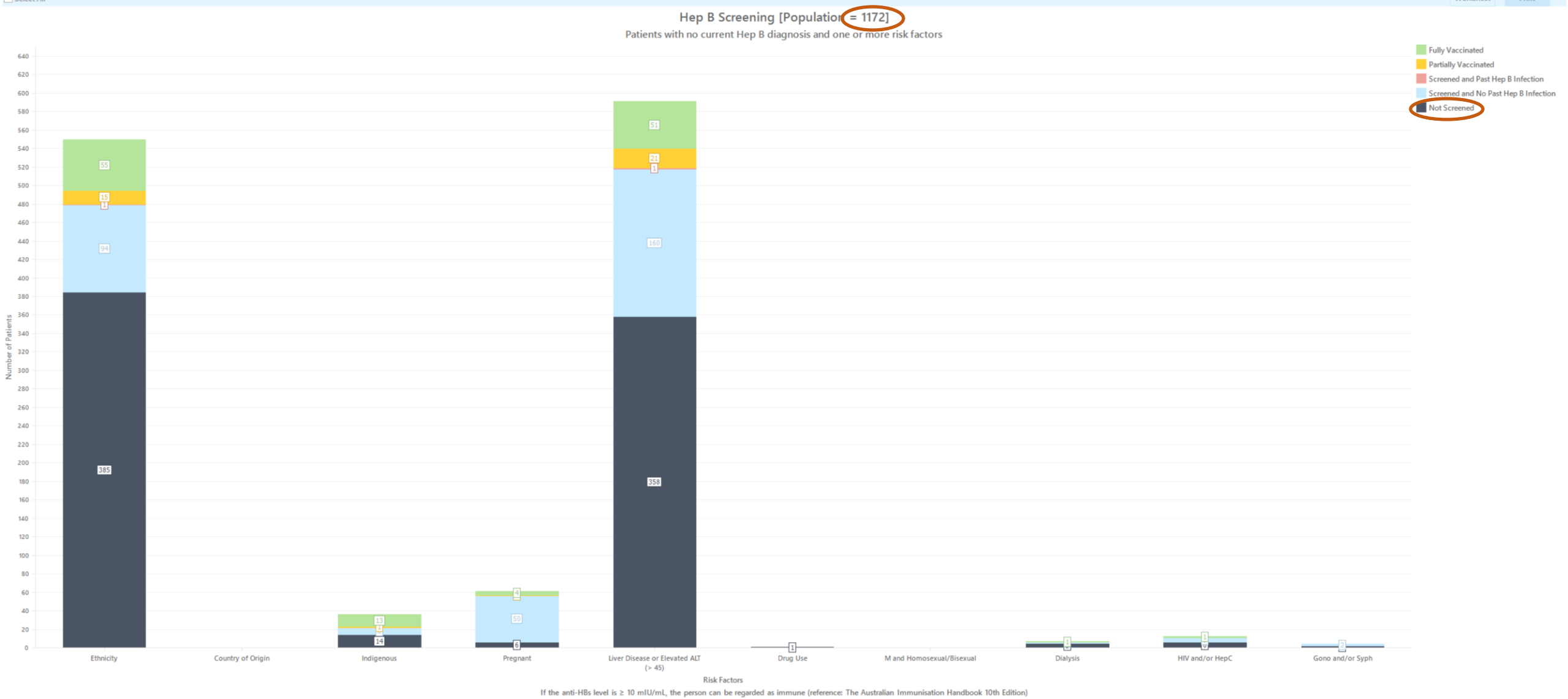
Please Select Your GP Application from the Preferences; Extract Date: 01/01/2021 3:12 AM; Filtering By: Active Patient

Viral Hepatitis

Hep B Screening and Management

Hep B At Risk Screening | Hep B Management

Select All | Worksheet | Print



If the anti-HBs level is ≥ 10 mIU/mL, the person can be regarded as immune (reference: The Australian Immunisation Handbook 10th Edition)

Please Select Your GP Application from the Preferences; Extract Date: 01/01/2021 3:12 AM; Filtering By: Active Patient, Selected: Hep B Screening (Liver Disease or Elevated ALT Not Screened, Dialysis Not Screened)

Viral Hepatitis•

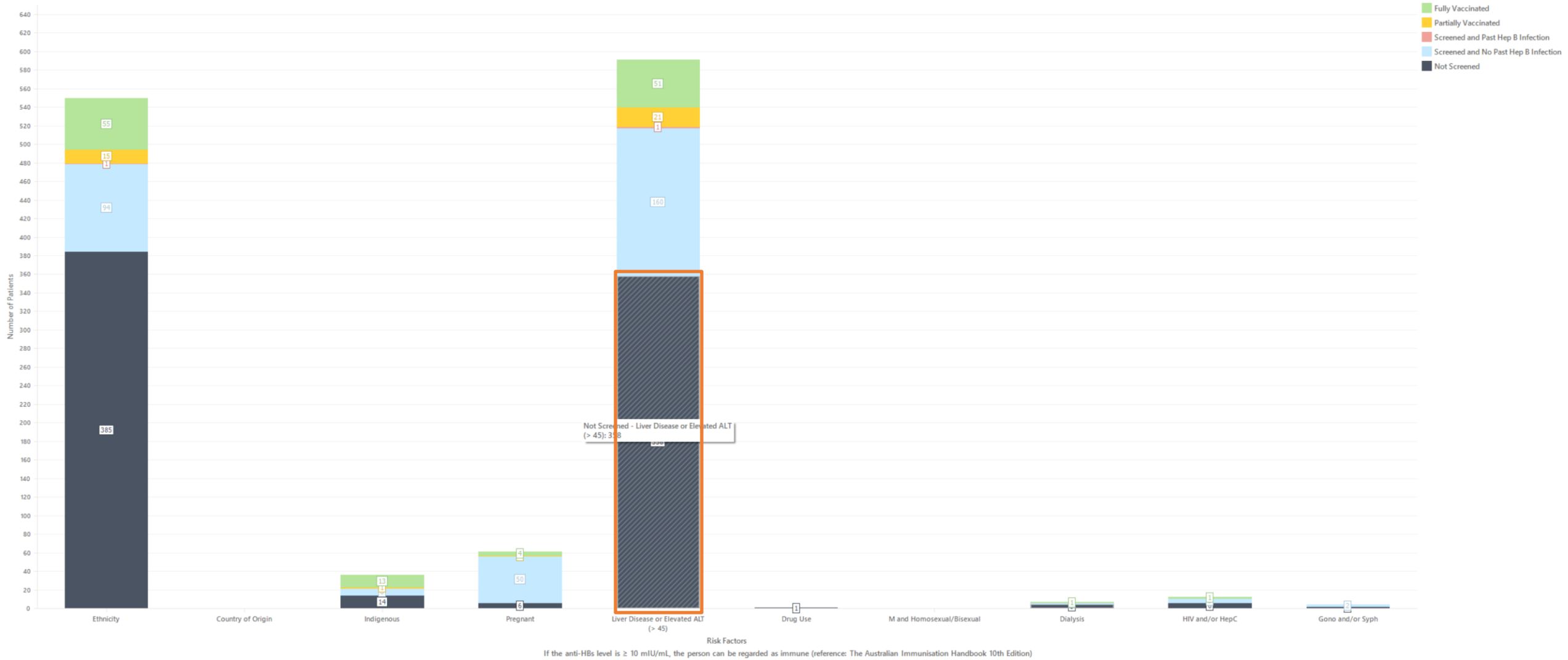
Hep B Screening and Management•

Hep B At Risk Screening• Hep B Management

Select All Worksheet Print

Hep B Screening [Population = 1172]

Patients with no current Hep B diagnosis and one or more risk factors



If the anti-HBs level is ≥ 10 mIU/mL, the person can be regarded as immune (reference: The Australian Immunisation Handbook 10th Edition)

POLAR HepLOGIC - Liver Cancer Risk Audit

Patient Count
80,531

- [ ] RACGP Active
- [ ] Adult Patients (>18)

Risk Categories

- [ ] Patients with cirrhosis
- [ ] Patients with APRI >= 1
- [ ] Patients with NAFLD
- [ ] Patients with elevated ALT
- [ ] Patients indicated for hep B or C mgt
- [ ] Patients indicated for hep B or C testing

View		Patient ID	Full Name	Sex	Age	Dx Cirrhosis	APRI	ALT	Dx NAFLD	Indicated for HBV testing	Indicated for HBV mgt	Indicated for HCV testing	Indicated for HCV mgt	Most seen clinician
	☑	1	Alex James	Male	29	No	-	-	No	No	No	No	No	-
	☑	2	Marcus Hendrix	Male	26	No	0.220	18	No	No	No	No	No	Dr Doogie Howser
	☑	3	Jayce Patton	Male	64	No	-	28	No	No	No	No	No	Dr Dolittle
	☑	4	Donna Ferguson	Female	50	No	-	-	No	No	No	No	No	Dr Strange
	☑	5	Presley Lang	Female	14	No	0.180	10	No	No	No	No	No	Morgan Freeman
	☑	6	Bo Patrick	Male	25	No	-	-	No	No	No	No	No	-
	☑	7	Jordyn Davenport	Female	63	No	0.220	16	No	No	No	No	No	Dr Strange
	☑	8	Brent Holmes	Male	51	No	0.260	38	No	No	No	No	No	Dr Doogie Howser
	☑	9	Brent Schmidt	Male	69	No	0.220	9	No	No	No	No	No	Indiana Jones
	☑	10	Anabel Green	Female	27	No	-	-	No	No	No	No	No	-
	☑	11	Jordin Rollins	Female	33	No	-	-	No	No	No	No	No	-
	☑	12	Litzy Hodges	Female	21	No	-	-	No	No	No	No	No	-
	☑	13	Daphne xxx	Female	31	No	0.160	12	No	Yes	No	No	No	Dr Seuss
	☑	14	Nadia Harrell	Female	50	No	-	-	No	No	No	No	No	-
	☑	15	Eliana Mora	Female	85	No	0.190	10	No	No	No	No	No	Dr Doogie Howser
	☑	16	Ace Douglas	Male	74	No	-	-	No	No	No	No	No	Dr Strange
	☑	17	Melody Mann	Female	38	No	0.270	26	No	No	No	No	No	Dr Doogie Howser
	☑	18	Carley Hensley	Female	33	No	-	-	No	Yes	No	No	No	-
	☑	19	Oswaldo Saunders	Male	16	No	-	-	No	No	No	No	No	-
	☑	20	Devyn Garner	Male	12	No	-	-	No	No	No	No	No	Valentino Rossi

Items per page: 100 | 1 – 100 of 80531 | Export Data

POLAR HepLOGIC - Liver Cancer Risk Audit

Patient Count
11,781

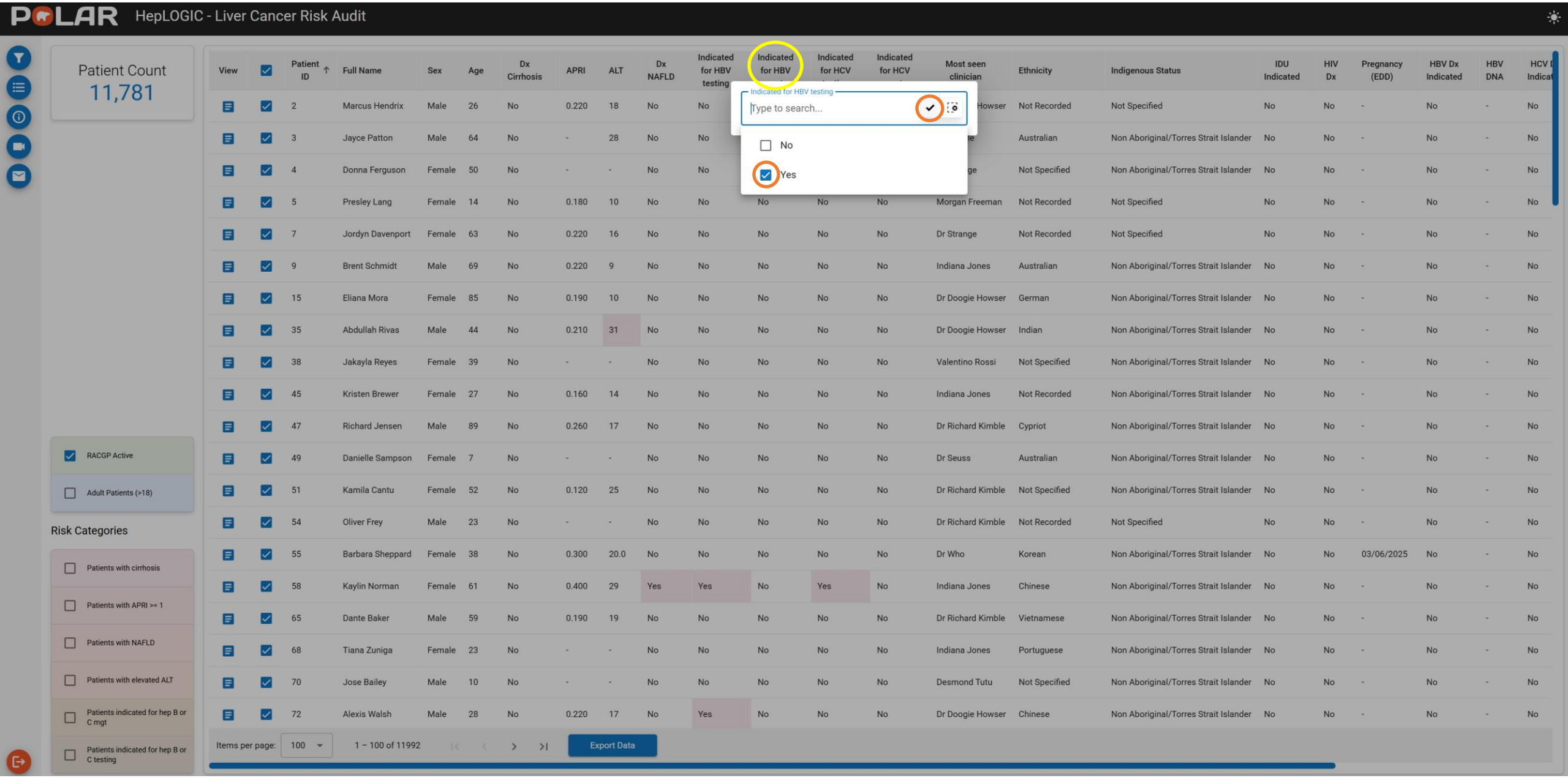
- [x] RACGP Active
- [ ] Adult Patients (>18)

Risk Categories

- [ ] Patients with cirrhosis
- [ ] Patients with APRI >= 1
- [ ] Patients with NAFLD
- [ ] Patients with elevated ALT
- [ ] Patients indicated for hep B or C mgt
- [ ] Patients indicated for hep B or C testing

View	Patient ID	Full Name	Sex	Age	Dx Cirrhosis	APRI	ALT	Dx NAFLD	Indicated for HBV testing	Indicated for HBV mgt	Indicated for HCV testing	Indicated for HCV mgt	Most seen clinician	Ethnicity	Indigenous Status	IDU Indicated	HIV Dx	Pregnancy (EDD)	HBV Dx Indicated	HBV DNA	HCV D Indicat
	2	Marcus Hendrix	Male	26	No	0.220	18	No	No	No	No	No	Dr Doogie Howser	Not Recorded	Not Specified	No	No	-	No	-	No
	3	Jayce Patton	Male	64	No	-	28	No	No	No	No	No	Dr Dolittle	Australian	Non Aboriginal/Torres Strait Islander	No	No	-	No	-	No
	4	Donna Ferguson	Female	50	No	-	-	No	No	No	No	No	Dr Strange	Not Specified	Non Aboriginal/Torres Strait Islander	No	No	-	No	-	No
	5	Presley Lang	Female	14	No	0.180	10	No	No	No	No	No	Morgan Freeman	Not Recorded	Not Specified	No	No	-	No	-	No
	7	Jordyn Davenport	Female	63	No	0.220	16	No	No	No	No	No	Dr Strange	Not Recorded	Not Specified	No	No	-	No	-	No
	9	Brent Schmidt	Male	69	No	0.220	9	No	No	No	No	No	Indiana Jones	Australian	Non Aboriginal/Torres Strait Islander	No	No	-	No	-	No
	15	Eliana Mora	Female	85	No	0.190	10	No	No	No	No	No	Dr Doogie Howser	German	Non Aboriginal/Torres Strait Islander	No	No	-	No	-	No
	35	Abdullah Rivas	Male	44	No	0.210	31	No	No	No	No	No	Dr Doogie Howser	Indian	Non Aboriginal/Torres Strait Islander	No	No	-	No	-	No
	38	Jakayla Reyes	Female	39	No	-	-	No	No	No	No	No	Valentino Rossi	Not Specified	Non Aboriginal/Torres Strait Islander	No	No	-	No	-	No
	45	Kristen Brewer	Female	27	No	0.160	14	No	No	No	No	No	Indiana Jones	Not Recorded	Non Aboriginal/Torres Strait Islander	No	No	-	No	-	No
	47	Richard Jensen	Male	89	No	0.260	17	No	No	No	No	No	Dr Richard Kimble	Cypriot	Non Aboriginal/Torres Strait Islander	No	No	-	No	-	No
	49	Danielle Sampson	Female	7	No	-	-	No	No	No	No	No	Dr Seuss	Australian	Non Aboriginal/Torres Strait Islander	No	No	-	No	-	No
	51	Kamila Cantu	Female	52	No	0.120	25	No	No	No	No	No	Dr Richard Kimble	Not Specified	Non Aboriginal/Torres Strait Islander	No	No	-	No	-	No
	54	Oliver Frey	Male	23	No	-	-	No	No	No	No	No	Dr Richard Kimble	Not Recorded	Not Specified	No	No	-	No	-	No
	55	Barbara Sheppard	Female	38	No	0.300	20.0	No	No	No	No	No	Dr Who	Korean	Non Aboriginal/Torres Strait Islander	No	No	03/06/2025	No	-	No
	58	Kaylin Norman	Female	61	No	0.400	29	Yes	Yes	No	Yes	No	Indiana Jones	Chinese	Non Aboriginal/Torres Strait Islander	No	No	-	No	-	No
	65	Dante Baker	Male	59	No	0.190	19	No	No	No	No	No	Dr Richard Kimble	Vietnamese	Non Aboriginal/Torres Strait Islander	No	No	-	No	-	No
	68	Tiana Zuniga	Female	23	No	-	-	No	No	No	No	No	Indiana Jones	Portuguese	Non Aboriginal/Torres Strait Islander	No	No	-	No	-	No
	70	Jose Bailey	Male	10	No	-	-	No	No	No	No	No	Desmond Tutu	Not Specified	Non Aboriginal/Torres Strait Islander	No	No	-	No	-	No
	72	Alexis Walsh	Male	28	No	0.220	17	No	Yes	No	No	No	Dr Doogie Howser	Chinese	Non Aboriginal/Torres Strait Islander	No	No	-	No	-	No

Items per page: 100 | 1 – 100 of 11992 | Export Data


POLAR HepLOGIC - Liver Cancer Risk Audit
Patient Count
11,781
RACGP Active
Adult Patients (>18)
Risk Categories
Patients with cirrhosis
Patients with APRI >= 1
Patients with NAFLD
Patients with elevated ALT
Patients indicated for hep B or C mgt
Patients indicated for hep B or C testing
Indicated for HBV testing
Type to search...
No
Yes
Items per page: 100
1 – 100 of 11992
Export Data

POLAR HepLOGIC - Liver Cancer Risk Audit

Patient Count
2,085

RACGP Active

Adult Patients (>18)

Risk Categories

Patients with cirrhosis

Patients with APRI >= 1

Patients with NAFLD

Patients with elevated ALT

Patients indicated for hep B or C mgt

Patients indicated for hep B or C testing

View	Patient ID	Full Name	Sex	Age	Dx Cirrhosis	APRI	ALT	Dx NAFLD	Indicated for HBV testing	Indicated for HBV mgt	Indicated for HCV testing	Indicated for HCV mgt	Most seen clinician	Ethnicity	Indigenous Status	IDU Indicated	HIV Dx	Pregnancy (EDD)	HBV Dx Indicated	HBV DNA	HCV Indic
	58	Kaylin Norman	Female	61	No	0.400	29	Yes	Yes	No	Yes	No	Indiana Jones	Chinese	Non Aboriginal/Torres Strait Islander	No	No	-	No	-	No
	72	Alexis Walsh	Male	28	No	0.220	17	No	Yes	No	No	No	Dr Doogie Howser	Chinese	Non Aboriginal/Torres Strait Islander	No	No	-	No	-	No
	85	Rafael Stark	Male	30	No	0.240	17	No	Yes	No	No	No	Indiana Jones	Chinese	Non Aboriginal/Torres Strait Islander	No	No	-	No	-	No
	98	Jorden Mayo	Male	18	No	-	-	No	Yes	No	No	No	Morgan Freeman	Filipino	Non Aboriginal/Torres Strait Islander	No	No	-	No	-	No
	100	Angeline Jennings	Female	25	No	0.200	14	No	Yes	No	Yes	No	Dr Strange	Italian	Non Aboriginal/Torres Strait Islander	No	No	-	No	-	No
	119	Kaylynn Mason	Female	41	No	0.170	19	No	Yes	No	Yes	No	Indiana Jones	Russian	Non Aboriginal/Torres Strait Islander	No	No	-	No	-	No
	131	Nora Ashley	Female	52	No	0.430	38	No	Yes	No	Yes	No	Desmond Tutu	Australian	Non Aboriginal/Torres Strait Islander	No	No	-	No	-	No
	140	Karter Young	Male	75	No	0.250	31	No	Yes	No	No	No	Valentino Rossi	Greek	Non Aboriginal/Torres Strait Islander	No	No	-	No	-	No
	181	Alfredo Esparza	Male	74	No	-	9	No	Yes	No	No	No	Dr Doogie Howser	Chinese	Non Aboriginal/Torres Strait Islander	No	No	-	No	-	No
	207	Azaria Richardson	Female	46	No	0.150	12	No	Yes	No	No	No	Desmond Tutu	Chinese	Non Aboriginal/Torres Strait Islander	No	No	-	No	-	No
	227	Sage Hawkins	Male	69	No	0.360	25	No	Yes	No	No	No	Desmond Tutu	Chinese	Non Aboriginal/Torres Strait Islander	No	No	-	No	-	No
	234	Sara Lin	Female	60	No	0.270	26	No	Yes	No	No	No	Valentino Rossi	Chinese	Non Aboriginal/Torres Strait Islander	No	No	-	No	-	No
	249	Steven Vang	Male	70	No	0.280	45	No	Yes	No	No	No	Morgan Freeman	Greek	Non Aboriginal/Torres Strait Islander	No	No	-	No	-	No
	289	Lyric Giles	Female	56	No	0.230	32	No	Yes	No	Yes	No	Dr Doogie Howser	Australian	Non Aboriginal/Torres Strait Islander	No	No	-	No	-	No
	324	Alberto Jones	Male	56	No	0.160	30	Yes	Yes	No	Yes	No	Desmond Tutu	Not Specified	Non Aboriginal/Torres Strait Islander	No	No	-	No	-	No
	372	Alfred Buckley	Male	35	No	0.220	48	No	Yes	No	Yes	No	Dr Dolittle	Brazilian	Non Aboriginal/Torres Strait Islander	No	No	-	No	-	No
	412	Piper Sawyer	Female	52	No	0.190	46	No	Yes	No	Yes	No	Desmond Tutu	Not Recorded	Not Specified	No	No	-	No	-	No
	484	Aliyah Peterson	Female	73	No	-	31	No	Yes	No	Yes	No	Indiana Jones	Australian	Non Aboriginal/Torres Strait Islander	No	No	-	No	-	No
	491	Angelica Branch	Female	71	No	0.260	33	No	Yes	No	Yes	No	Dr Richard Kimble	Australian	Non Aboriginal/Torres Strait Islander	No	No	-	No	-	No
	546	Aliana Hancock	Female	39	No	-	-	No	Yes	No	Yes	No	Desmond Tutu	Indonesian	Non Aboriginal/Torres Strait Islander	No	No	-	No	-	No

Items per page: 100 | 1 – 100 of 2142 | Export Data

2.2 Baseline data

Date baseline data was collected	*[enter date]*
Target patient cohort: Number of patients with one or more risk factor for hepatitis B *or with your chosen risk factor(s)**	*[enter number]*
Number of patients at an increased risk of hepatitis B* that have not been screened (using all 3 tests - HBsAg, anti-HBc and anti-HBs)	*[enter number]*

2.3 Reflect on the data with your QI team

Predicted?

Surprised?

Record reflections

Share findings with the practice

2.4 Set a goal & develop a plan

Goal	**What are we trying to accomplish? By when?**
	"Increase the number/proportion of at-risk patients screened for hepatitis B from ____ to ____ by __/__/__ ."
Measure	**How will we know if we have made an improvement?**
	"We will use ____ to measure the number of at-risk patients who have been screened for hepatitis B before and after implementing our strategies." "We will know that we have made an improvement if the number of at-risk patients screened for hepatitis B increases." "_____ will be responsible for collecting this data."
Strategies	**What changes can we implement that will lead to an improvement?**

Improvement ideas

- Identify patients who have never been screened for hepatitis B.
- Improve recording of ethnicity or country of birth to identify priority populations for screening and immunisation.
- Identify patients not vaccinated or under-vaccinated against hepatitis B.
- Identify practice workflow improvements to increase screening. This might include:
  - An improved reception or administrative focus on updating patient information.
  - Utilising nurses to identify patients who are under-screened when they present for other routine care.
- Identifying patients eligible for government-funded hepatitis B vaccinations who have not commenced or completed the full course.

Suggested strategies

Specific appointment types

- 45 -49 yo check
- New patients
- Immunisation appointments – flu, covid etc
- Travel appointments

Recalls / Reminders / Actions for specific population groups

Pathology request templates

eg LFTs + Hep BsAg, sAb, cAb

Step 3: Plan, Do, Study, Act (PDSA cycle): **PLAN**

PICK ONE OF YOUR STRATEGIES	
Plan what you will do to implement this strategy, including who is responsible for each step and when you expect to complete the strategy by:	
1.	Person(s) responsible: By when:
1.	Person(s) responsible: By when:
1.	Person(s) responsible: By when:
1.	Person(s) responsible: By when:
Detail your expected outcomes of this strategy:	

3: PDSA cycle: **DO**

Implement your plan!

Document anything unexpected along the way

Collect post-implementation data to compare with baseline data

3: PDSA cycle: **Study**

Did your strategy work well?

- If yes, why?
- If no, what needs to be changed?

Did you encounter any unexpected issues or problems?

- If so, how can these be mitigated or avoided in the future?

3: PDSA cycle: **Act**

What next?

Step 4: Evaluate and Celebrate

- Reflect on how the process went and share your achievements with your team
- Record your CPD hours


Questions

Session Conclusion

We value your feedback, let us know your thoughts.

Scan this QR code

You will receive a post session email within a week which will include slides and resources discussed during this session.

Attendance certificate will be received within 4-6 weeks.

RACGP CPD hours will be uploaded within 30 days.

To attend further education sessions, visit,

https://nwmphn.org.au/resources-events/events/

This session was recorded, and you will be able to view the recording at this link within the next week.

https://nwmphn.org.au/resources-events/resources/