



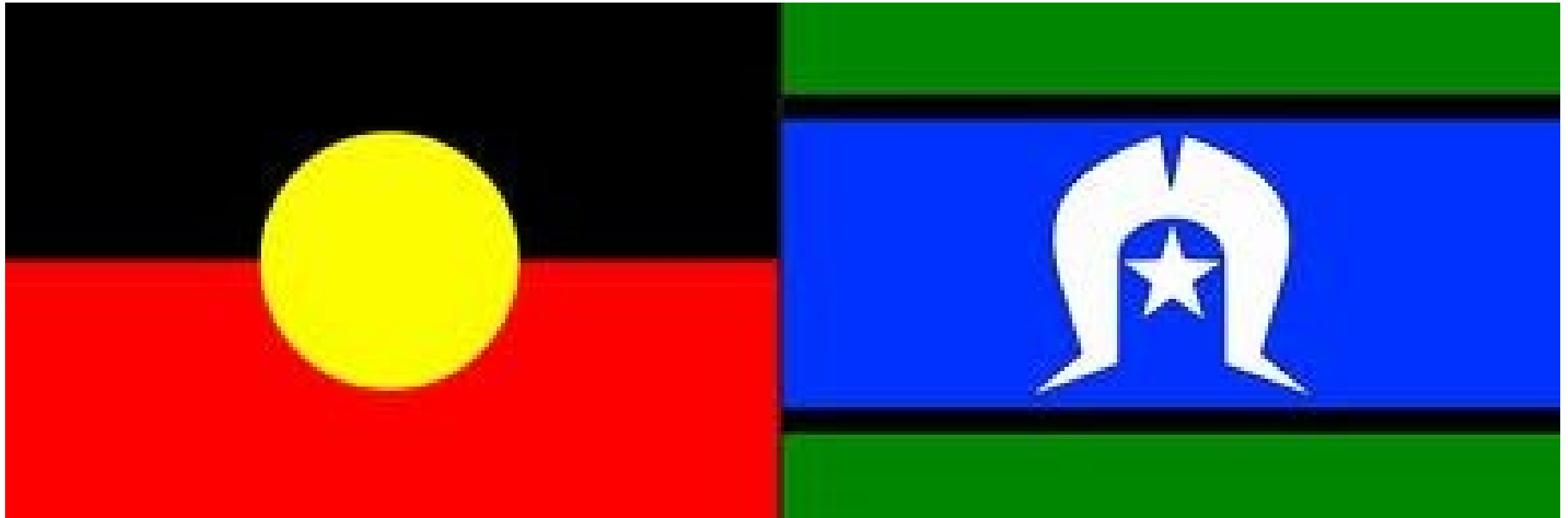
Maternal & Child Health Nurses

A vital link in managing hepatitis B and reducing liver cancer

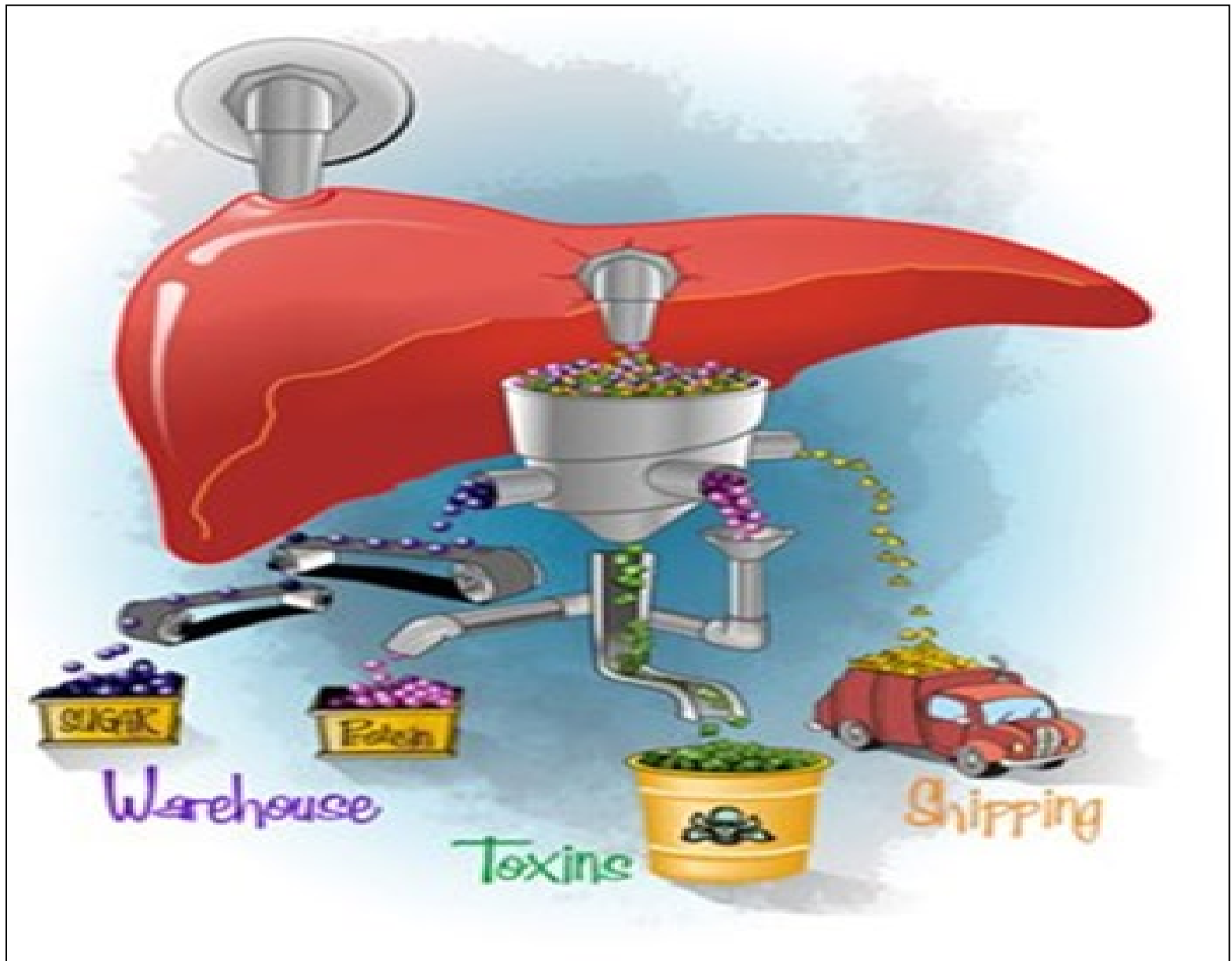
Mieken Grant (RN, MPH)

Victorian Viral Hepatitis Educator

St Vincent's Hospital Melbourne



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



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

What is hepatitis?

- A general term that means inflammation of the liver
- **Caused by** Viruses, infection, chemicals, alcohol, drug use or other toxins; can also be autoimmune
- **5 known hepatitis viruses** A, B, C, D, E
- Hepatitis A and B are **vaccine preventable!!**

The progression of disease

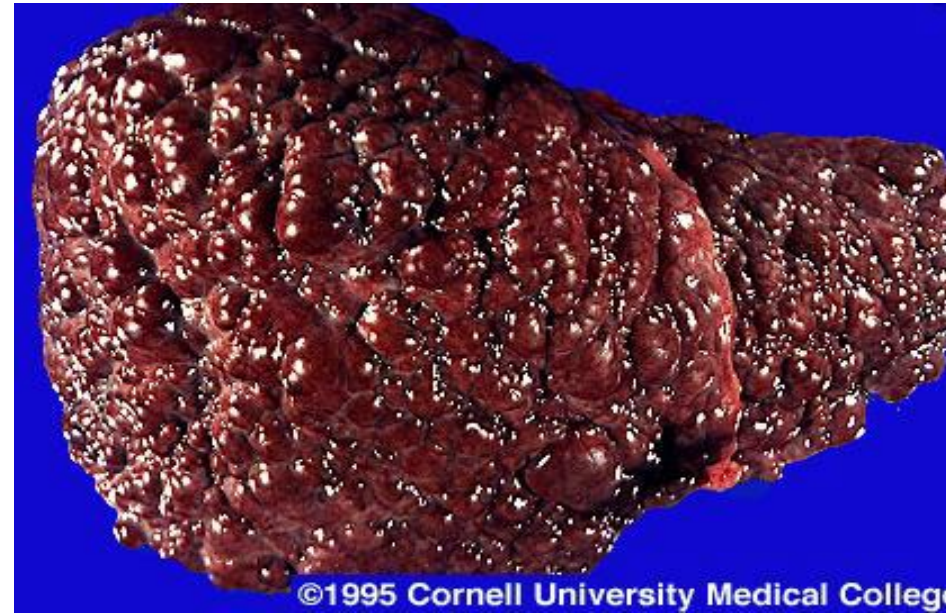
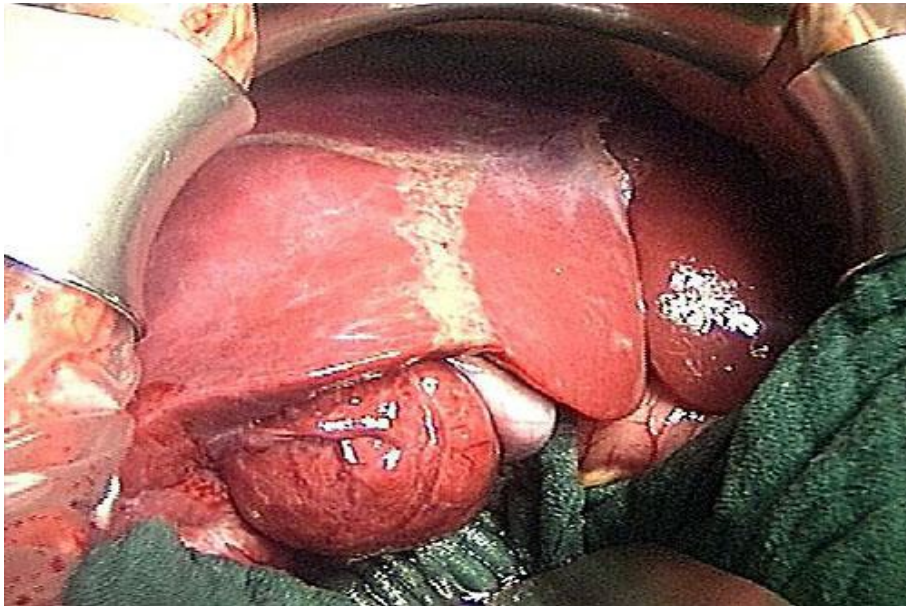
Inflammation

Scarring

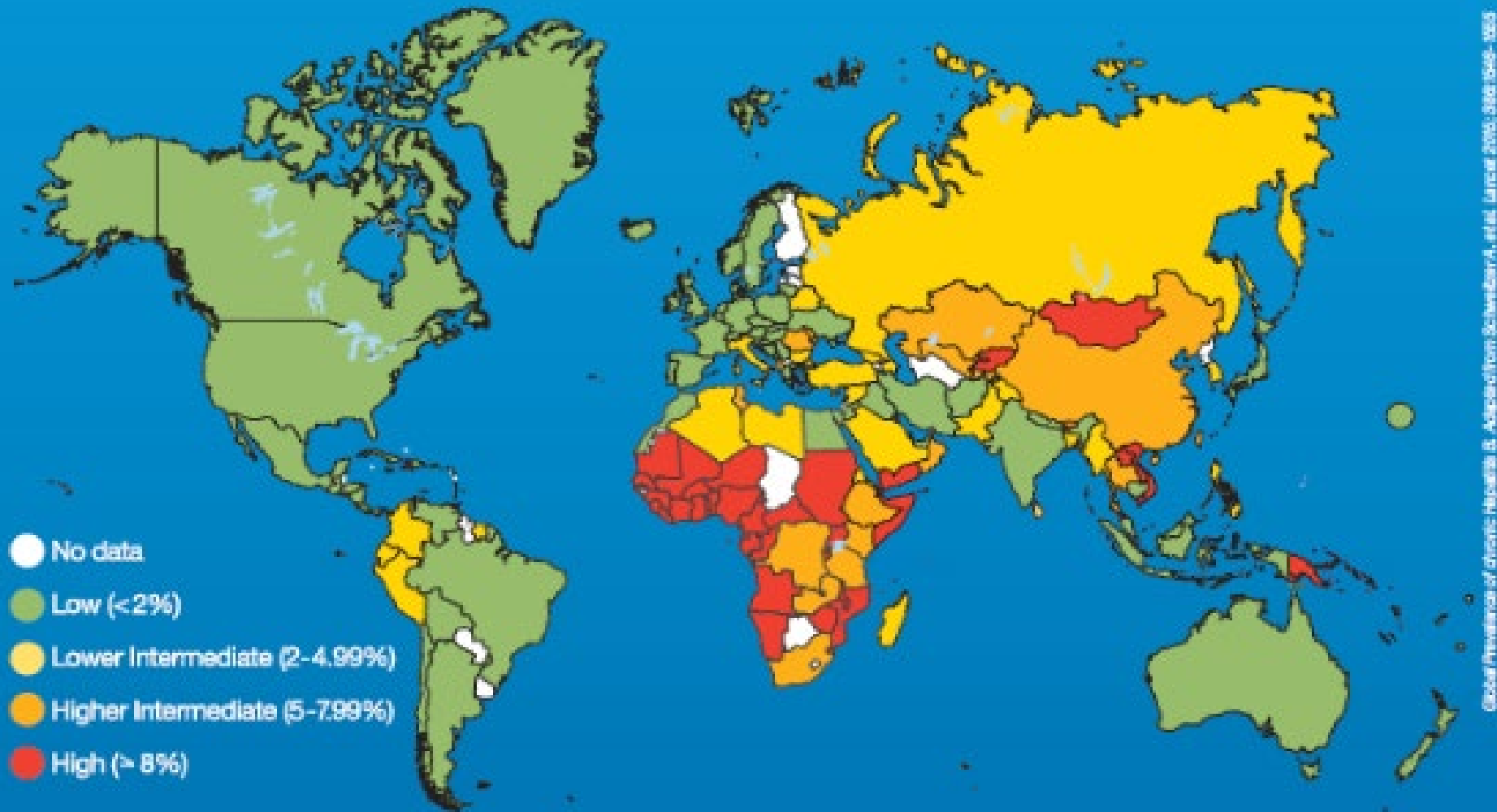
Fibrosis

Cirrhosis

Cancer



Hepatitis B



Xiao et al. 2020. 'Think Hep B' in primary care: A before and after evaluation of a self-guided learning package. *Australian Journal of General Practice*. 2020 Jan; 49(1-2):66-69

Australia: 200,385 people living with chronic HBV in 2021

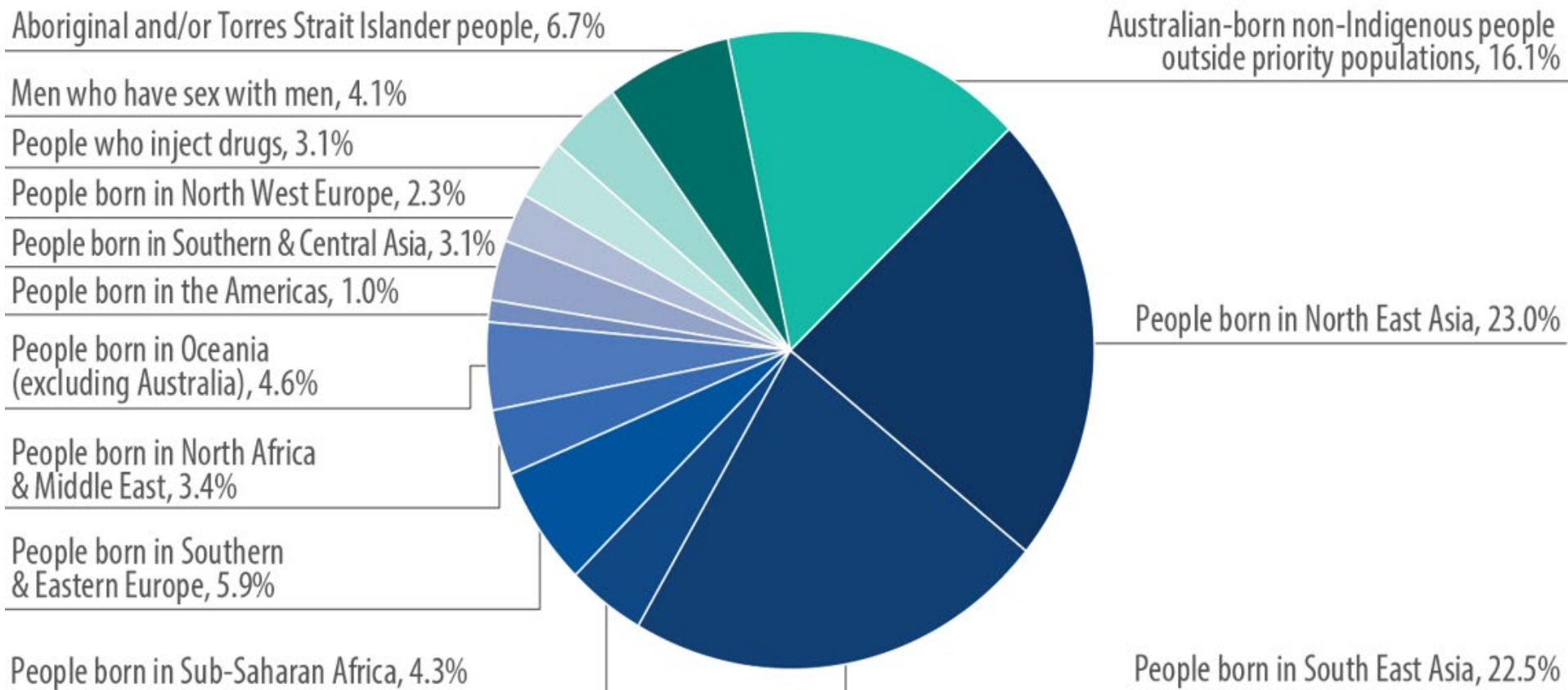
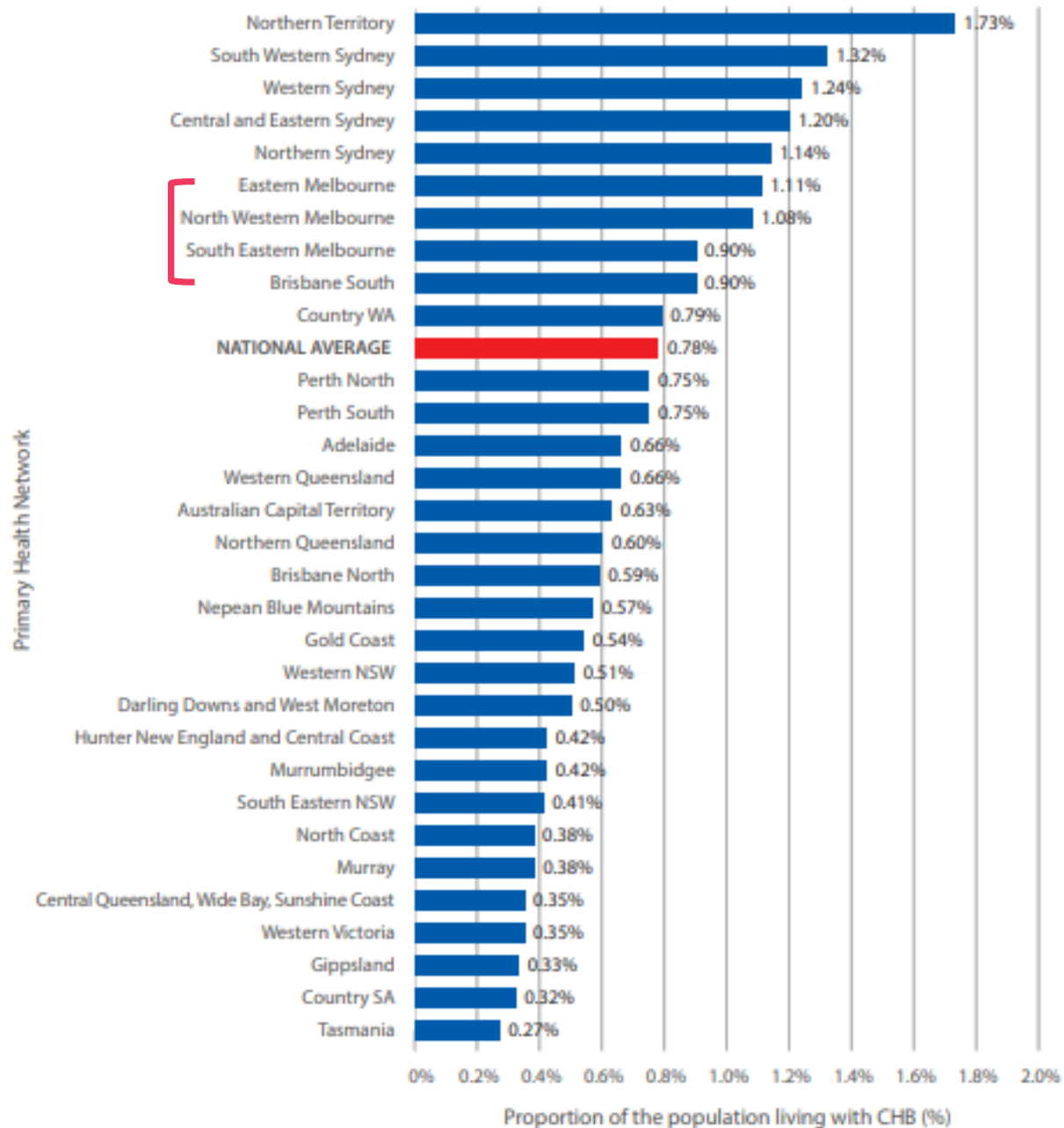
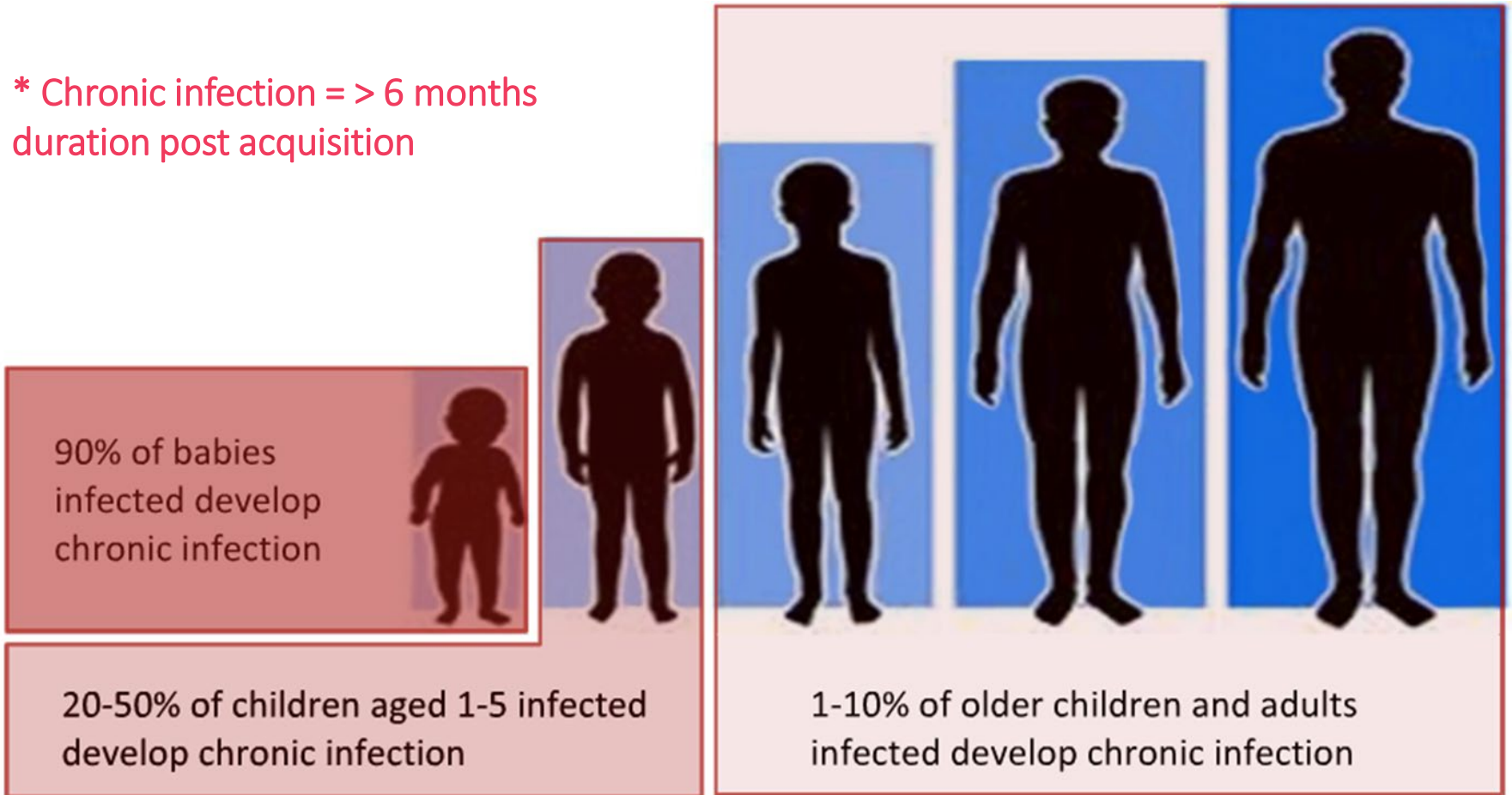


Figure A.2: Estimated prevalence of CHB by PHN, 2021



Acute or Chronic?

* Chronic infection = > 6 months duration post acquisition



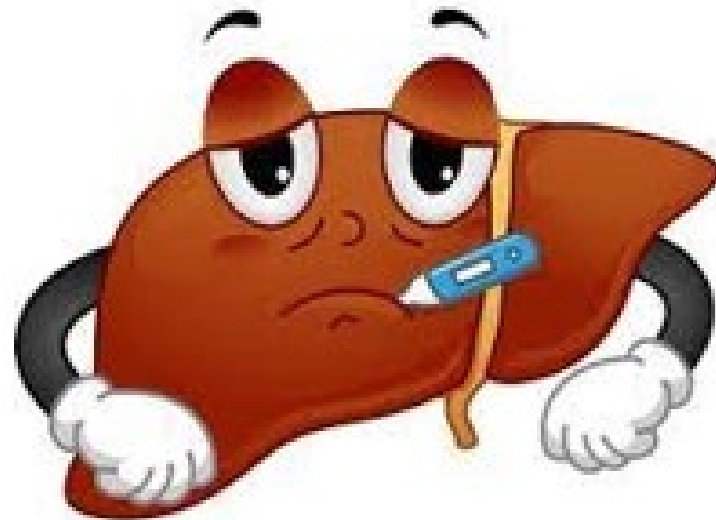
Symptoms of chronic hepatitis B

Compensated

- Fatigue
- Nausea/loss of appetite
- Aches and pains – joints, upper abdomen, generalised
- Depressed mood
- Intermittent fever

Decompensated

- Varices
- Ascites
- Jaundice
- Hepatic Encephalopathy
- Enlarged spleen



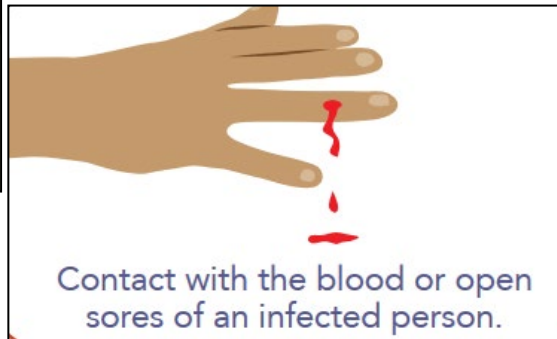
Transmission



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



Having sex without a condom.



Contact with the blood or open sores of an infected person.



Sharing needles and equipment for tattoos, piercing, injecting drugs.

Sharing razors, toothbrushes, nail clippers and earrings.

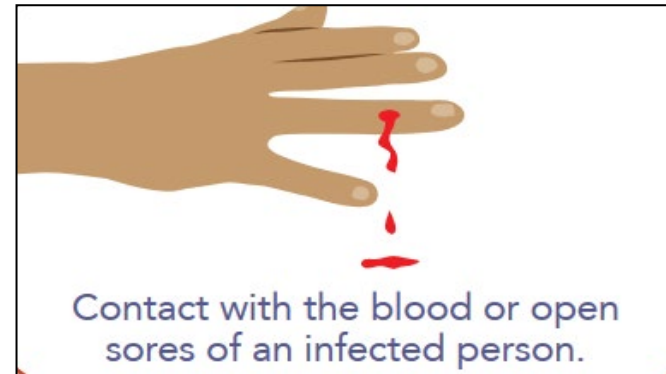
Perinatal (Mother to Child)

- Family disease
- Leading transmission risk worldwide, not common in Australia
- Preventable – transmission happens with no screening or interventions



Blood to blood

- Sharing injecting, tattoo and body piercing equipment
- Sharing household items such as razors, toothbrushes, nail clippers
- History of incarceration
- Cultural practices – cutting, scarring
- Receipt of blood products and organs before 1970
- Medical and dental procedures with poor infection control
- Occupational exposure



Sexual transmission



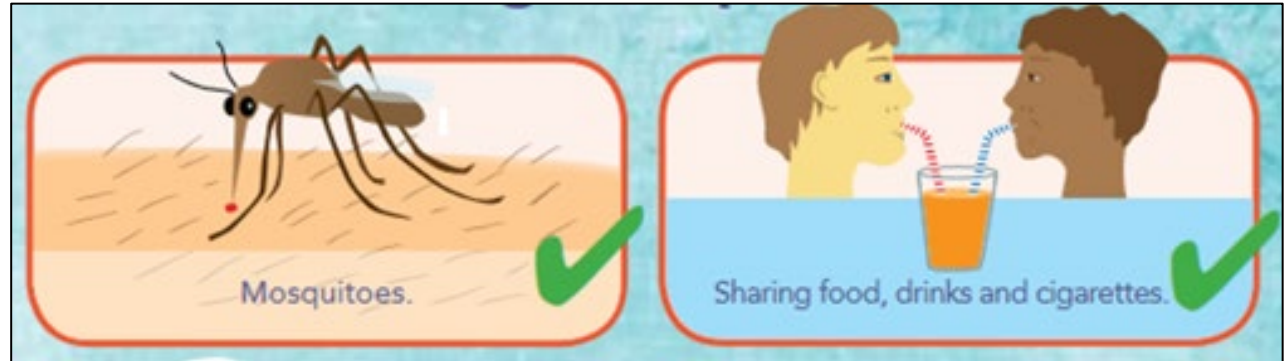
- Condomless sex
- Unvaccinated partner

Child to child

- Skin/mucosal break
- Biting/scratching/uncovered, open sores
- In unvaccinated children



Hepatitis B is NOT spread by



Testing – the basics

Test result	What does it mean?
Surface antigen (HBsAg)	<i>Do they have hep B virus? Chronic Hepatitis B if HBsAg > 6 months</i>
Surface antibody (anti-HBs)	<i>Are they protected? Do they have immunity?</i>
Core antibody (anti-HBc)	<i>Has there been infection in the past or present?</i>

Management

- 6–12 monthly check up
- Blood test; usually a liver ultrasound



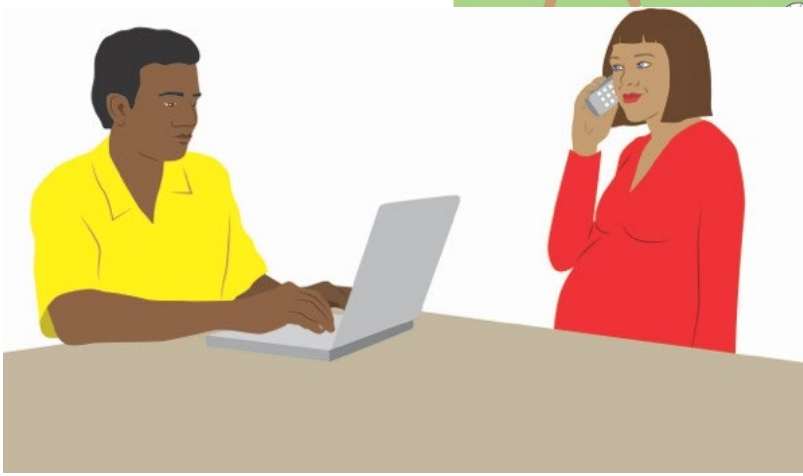
- Antiviral Rx determined by phase of infection
- Not everyone needs Rx straight away
- Lots of GPs and nurses are now 'co-managing' people with HBV

Treatment

- Oral – minimal side effects
- ↓ risk of advanced liver disease & cancer
- Once started, most people stay on tablets for life
- Start tablets at particular stages of infection
- Tenofovir (Viread®) or Entecavir (Baraclude®)

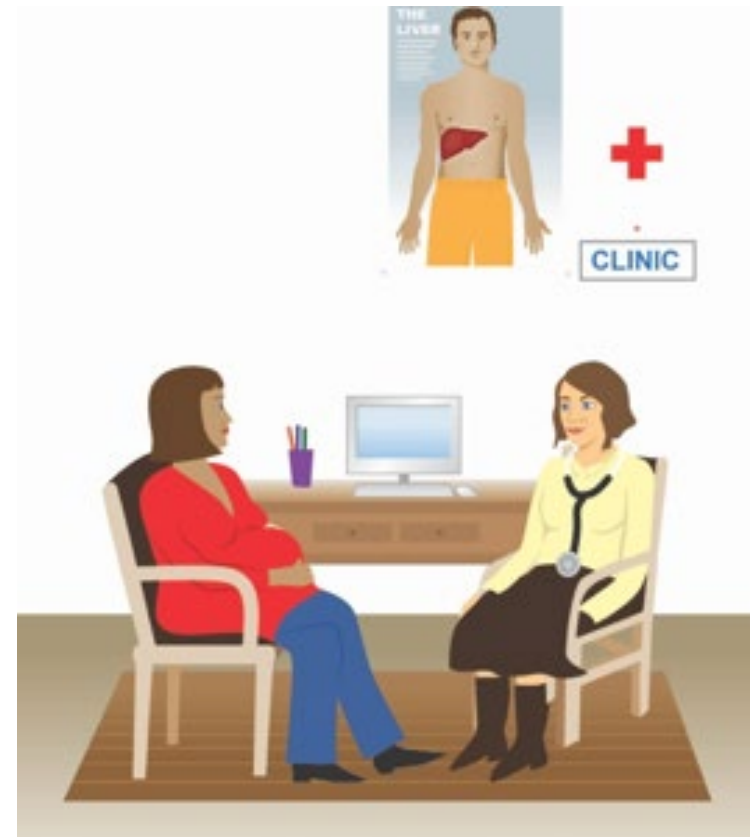


Supporting people with CHB



Why is pregnancy important in HBV?

- Pregnancy is a common diagnostic setting for hepatitis B (universal screening)
- Effective management crucial to reduce risks of transmission to infant
- Prevent liver disease and cancer



What's supposed to happen...



Clear guidelines exist for interventions to prevent perinatal transmission



- Universal antenatal screening
- Positive HBsAg - viral load testing +/- antiviral therapy from 28 weeks
- Labour – avoid / minimise procedures that may damage baby's skin
- HBV infection in the mother should not alter the mode of delivery

What's supposed to happen...



Clear guidelines exist for interventions to prevent perinatal transmission



- HBV birth dose within first 24 hours of life
- Hepatitis B Immunoglobulin (HBIG) recommended within 12 hours

What's supposed to happen...



Clear guidelines exist for interventions to prevent perinatal transmission



- Delay non urgent invasive procedures until infant is bathed
- Breastfeeding encouraged
- Follow up vaccines at 2, 4, 6 months + *post vaccination serological testing*
- Referral to a paediatrician with expertise in viral hepatitis is recommended if HBsAg positive

Breastfeeding

Breastfeeding by women who are HBsAg positive is encouraged and has not been shown to increase the risk of perinatal transmission.



What's supposed to happen...

Long term follow up

- Antiviral treatment is often stopped for women 4-12 weeks pp
- Women are monitored closely for several months pp for hepatitis 'flares'
- Lifelong follow up
- Are partners and family members vaccinated ?
- Are they linked into care?
- Are they pregnant again?

Slow improvement in HBV care

2003 - 2006

2 Sydney hospitals
(n=295)

65% had HBeAg test,
3.5% had viral load
test; 7% had
specialist care

2006 - 2011

3 Melbourne
hospitals (n=398)

34% had HBeAg or
viral load test, 18%
had specialist care

2008 - 2013

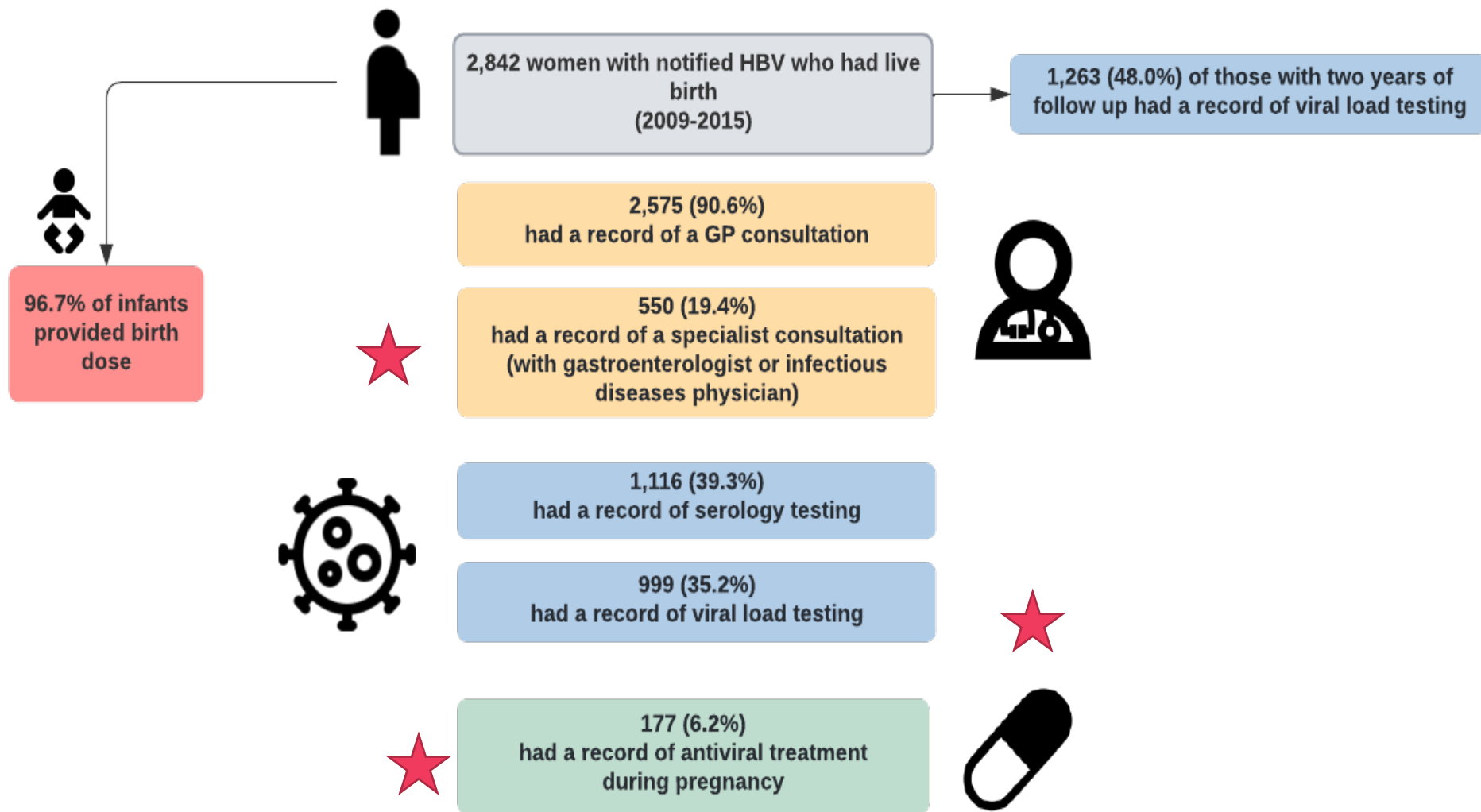
1 Melbourne
hospital (n=451)

15.3% had HBeAg
test, 28.4% had viral
load test, 55.7% had
specialist care

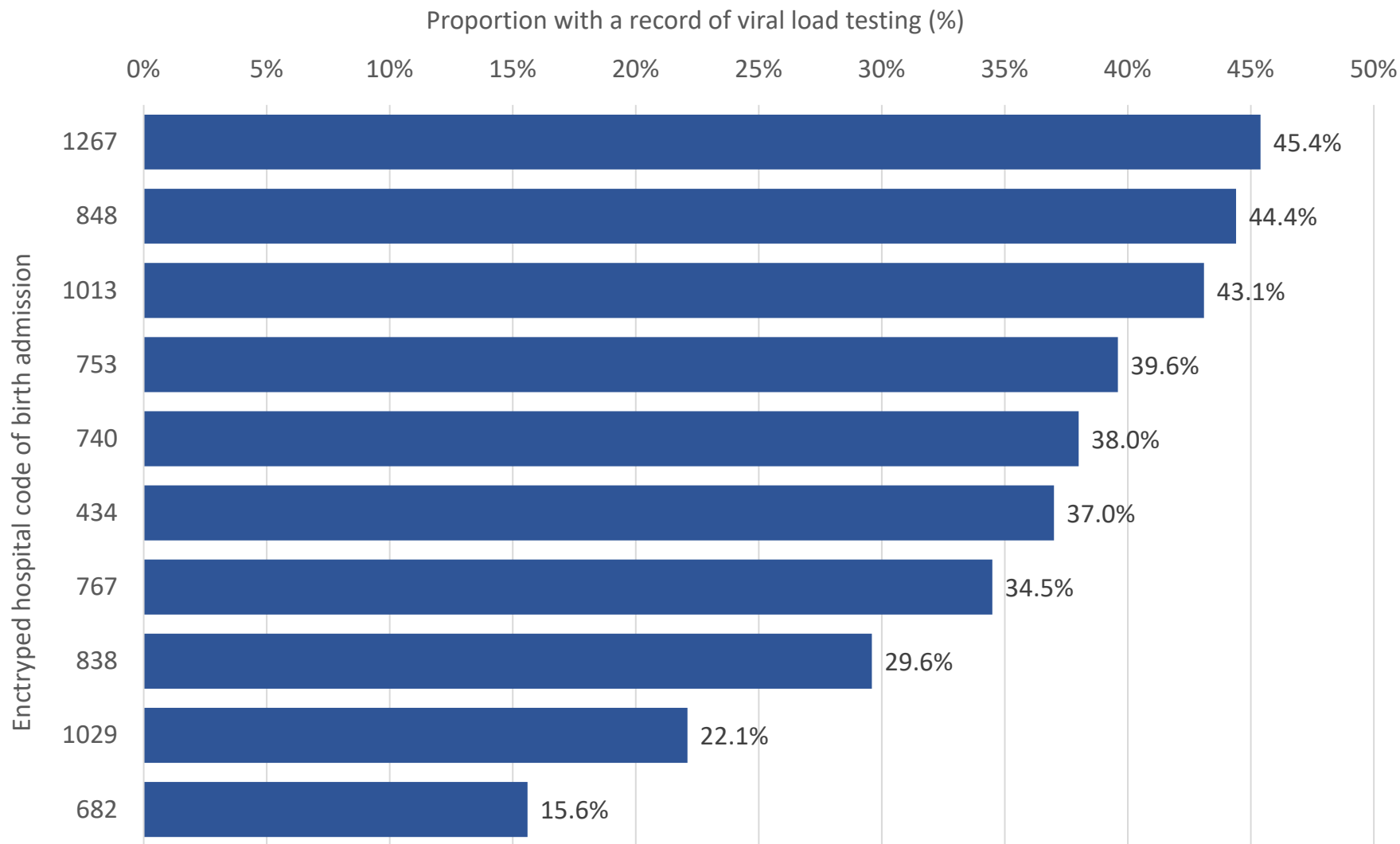
“The cascade of care for women with hepatitis B during pregnancy: progress, gaps and opportunities” - MacLachlan et al.

Total individuals with a notification for hepatitis B and a record of a live birth during 2009-2015	2,842
Timing of hepatitis B notification	
Prior to this pregnancy	1,886 (66.4%)
<i>Median (IQR) time since diagnosis, if prior to pregnancy</i>	<i>6 (3-11) years</i>
During this pregnancy	923 (32.5%)
After this pregnancy	33 (1.2%)
Living in Metropolitan Melbourne	2,621 (92.2%)
Born overseas	2,500 (88.0%)
Interpreter required	839 (29.5%)

“The cascade of care for women with hepatitis B during pregnancy: progress, gaps and opportunities” - MacLachlan et al.



Results: hospital variation in viral load testing



Key findings and implications

- Pregnancy is a key diagnostic opportunity for HBV – 16% of all HBV diagnoses in females in VIC occurred in this setting
- Potential for enhanced follow up of new diagnoses
- Disparities were evident by hospital, suggesting guideline implementation needs improvement at the service level
- Despite improvements over time, most women did not receive guideline-based care for HBV during pregnancy

Implications for transmission

Missed opportunity for ongoing care

MCHNs – a vital link!

- MCHN trusted & known to mum and family
- Often long-term
- Can sometimes be only contact with health system post baby
- To check baby has had appropriate follow up (usual vaccine schedule PLUS HBV test at 9-18 m)
- To educate mum
- To ensure mum and baby linked into ongoing care (6-12 monthly check-ups for mum)
- Don't stress about knowing everything hep b! If in doubt - refer back to GP
- **You can help reduce shame associated with HBV infection and health care related stigma and discrimination**

Hepatitis C

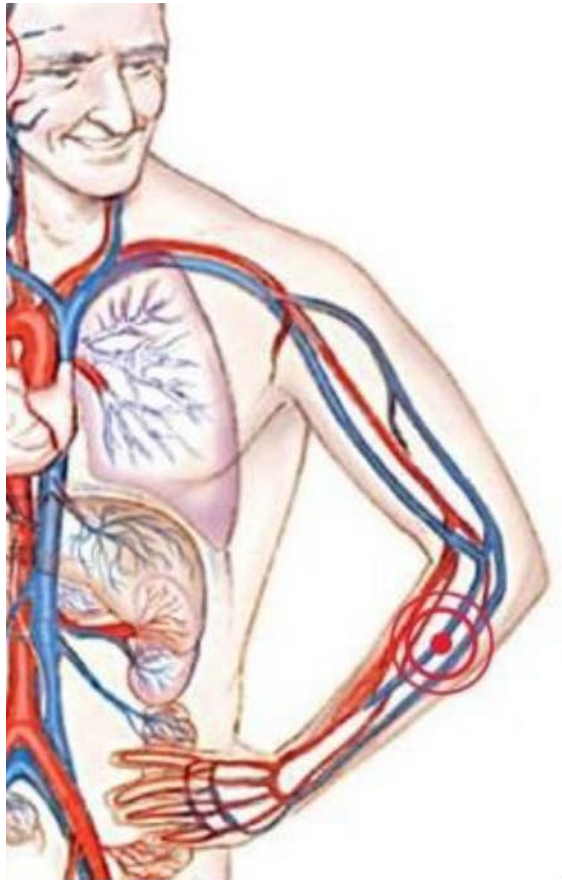
Hepatitis C in Australia

- 117,800 with hepatitis C in Australia (2020)
- 80% were infected through sharing of injecting equipment
- 1 in 5 Australians with hepatitis C do not know they have it
- 95% cure 8-12 weeks oral medication

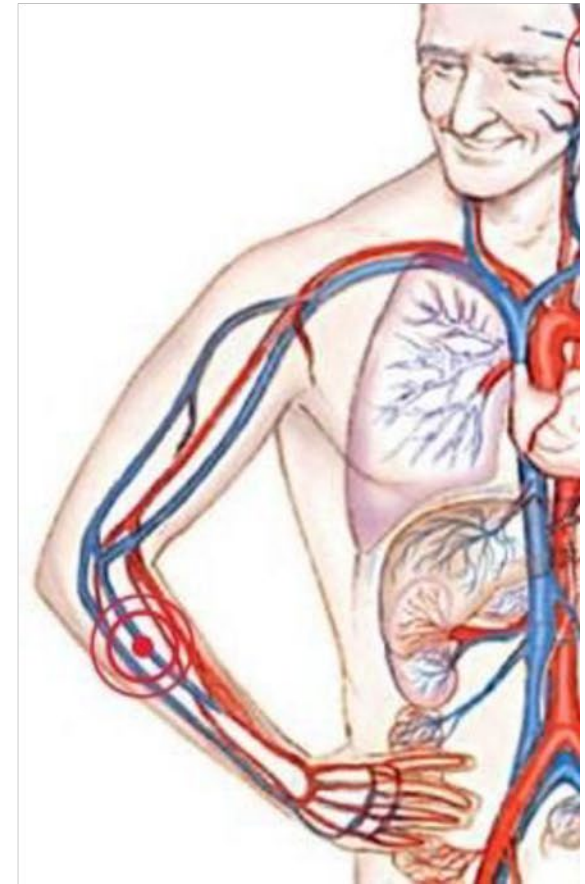


MacLachlan J, Smith C, Towell V, Cowie B. Viral Hepatitis Mapping Project: Geographic diversity in chronic hepatitis B and C prevalence, management and treatment National Report 2018–19 [Internet]. Darlinghurst: Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine (ASHM); 2020. Available from: <https://ashm.org.au/programs/Viral-Hepatitis-Mapping-Project/>;
HIV, viral hepatitis and sexually transmissible infections in Australia: Annual surveillance report 2018 | UNSW - The Kirby Institute for infection and immunity in society [Internet]. Kirby.unsw.edu.au. 2020. Available from: <https://kirby.unsw.edu.au/report/hiv-viral-hepatitis-and-sexually-transmissible-infections-australia-annual-surveillance>

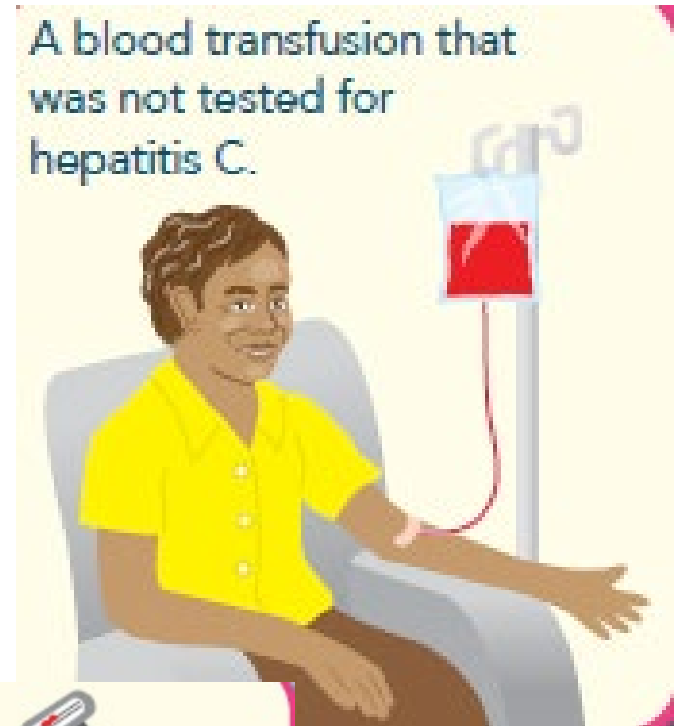
Transmission



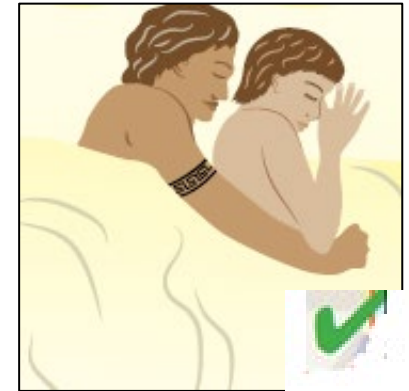
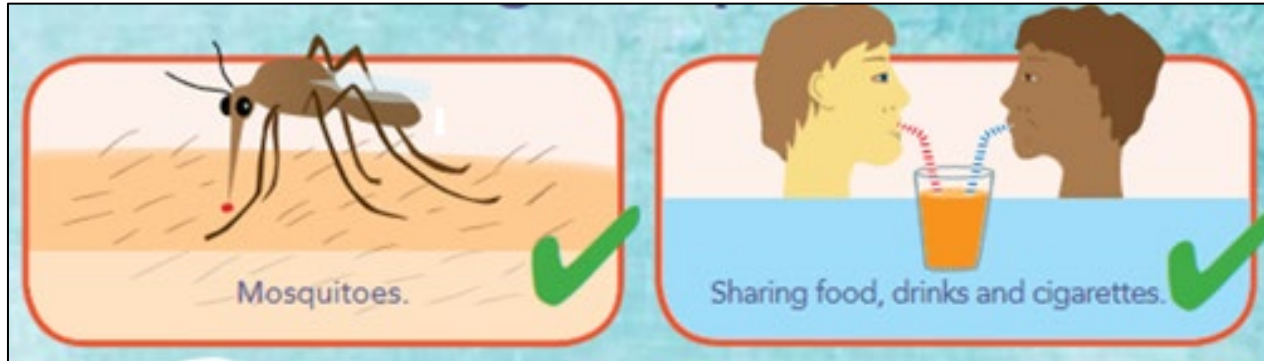
**Blood
to
blood**



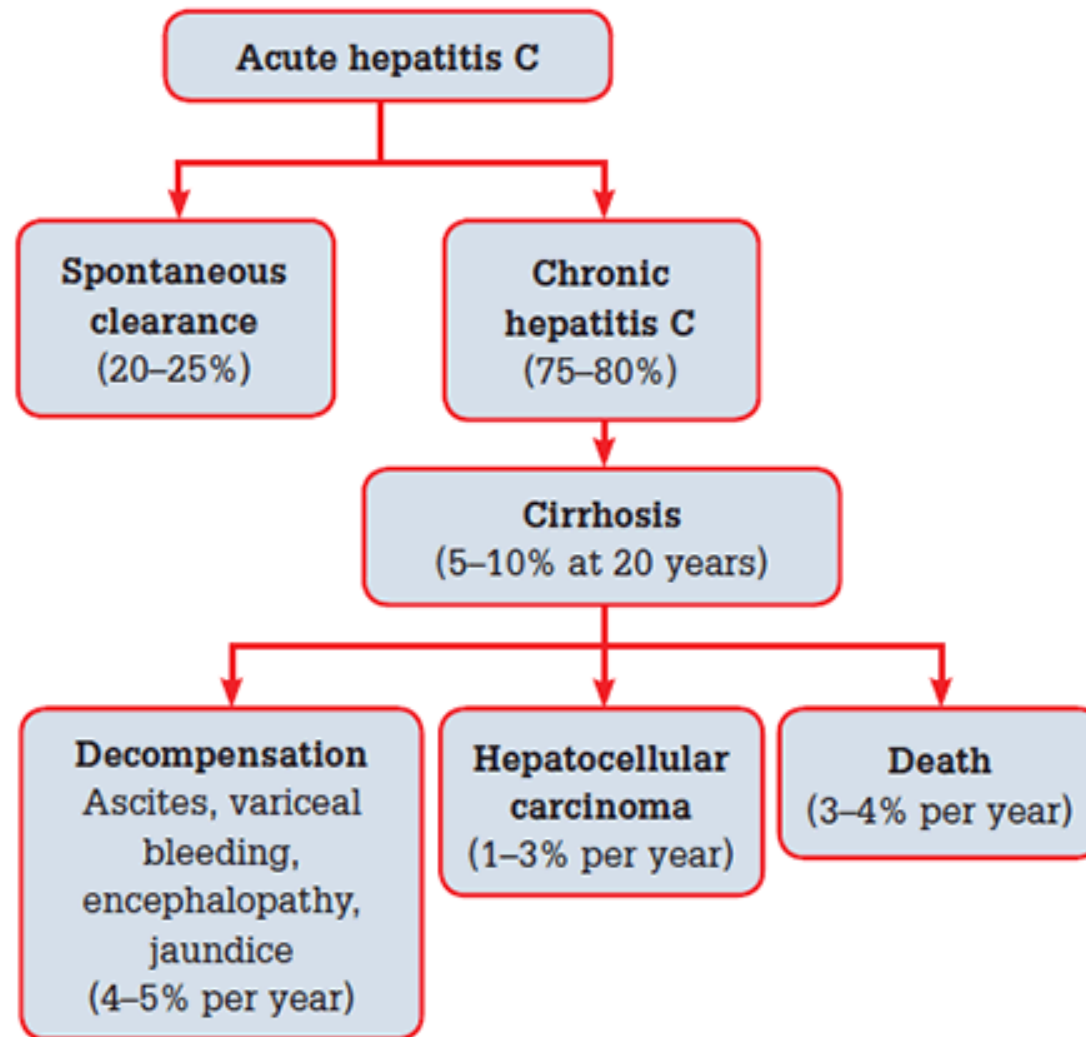
Risk factors



Hepatitis C is NOT spread by ...



Natural progression hepatitis C



Hepatitis C testing

Ab + + RNA + = **Infected**
with HCV
NOW

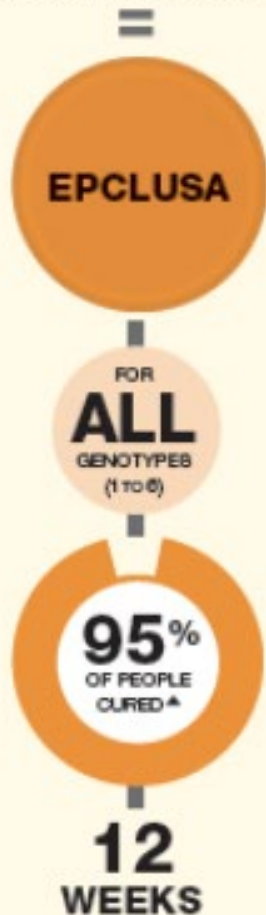
Ab + + RNA - = **Infected**
with HCV in
the PAST

Ab - = **NEVER**
infected
with HCV

THE LATEST HEP C TREATMENTS

TALK TO YOUR DOCTOR, NURSE OR CLINIC ABOUT THE NEW CURES FOR HEP C

SOFOBUVIR AND VELPATASVIR



Similarities

Pan-genotypic

Risk of reactivating HBV

Adverse reactions: headache, nausea and fatigue

GLECAPREVIR AND PIBRENTASVIR



WHO ARE THEY FOR? ANYONE WHO HAS HEP C AND A MEDICARE CARD

▲ MOST PEOPLE HAVE NO OR VERY MILD SIDE-EFFECTS * FOR A SMALL NUMBER OF PEOPLE, TREATMENT MAY LAST LONGER

THE 5% OF PEOPLE WHO ARE NOT CURED WITH THE ABOVE ARE TYPICALLY OFFERED ANOTHER TREATMENT, VOSEVI.

IMPORTANT NOTE: TO MAKE SURE YOU ARE CURED, YOU NEED TO GET A PCR BLOOD TEST AT LEAST 12 WEEKS AFTER YOU FINISH YOUR TREATMENT.



Pregnancy and Hepatitis C

- Most babies are not at risk of catching their mum's hep C (4-6%)
- 50% chance natural clearance within the first 12 months
- Risk of transmission increased with high viral load, prolonged rupture of membranes and invasive procedures
- C-section not needed
- HCV infection not a contraindication to breastfeeding except in the presence of cracked or bleeding nipples
- There is no safety data for the use of any HCV antiviral therapy during pregnancy or lactation, therefore not recommended

Case study: Introducing Kim

- Kim is 23 years old G1P1 and you are meeting her for the first time postnatally for her MCH Home visit
- Kim and baby feeling well
- On questioning you discover:
 - *Kim came to Australia from China last year with her husband*
 - *Kim stated her Dad passed away a few years ago in China because of “liver sickness”*
 - *Is not sure what vaccinations she has had but said the nurse gave her baby some extra needles in hospital*
 - *Kim stated she is on some tablets but is not sure what for*
 - *Kim stated she was told to see her doctor but she doesn't have one and is happy to just see you for her baby's health*

Knowledge check - Kim

Flags in my mind to wonder about hep B for Kim

1. Born in China (endemic region for HBV)
2. Unsure of vaccination status
3. Family history of liver problems
4. Is taking some medication
5. Has had sex
6. Baby has had some “extra” needles

Kim – putting the puzzle pieces together...

- Why is Kim on medication?
- What “extra needles” did baby have?
- Is Kim supposed to follow up with her GP?

Refer to discharge summary

Kim – putting the puzzle pieces together...

- HBV is noted in summary
- Check for baby interventions ? HBV birth dose ? HBIG
- Check mums medication ? Tenofovir > CHB
- Is there a plan for mum or referrals ?
- Any mention of any education or counselling for Kim re next steps?
- Does Kim understand that she has HBV ?
- If in doubt > refer to GP or listed specialist**

Kim – Puzzle assembled

- Kim was diagnosed with HBV on her antenatal screen, she was unaware
- Kim needed medication at 28/40 as she had a high viral load
- Otherwise progressed well and delivered a healthy baby girl PV at 38/40
- The baby received HBIG and HBV vaccine 1 hour after birth
- Documented Kim needed to see her GP about her HBV, but no mention of whether Kim understood these instructions

Kim – next steps

- ✓ Assist Kim to plan baby's 2, 4 and 6m HBV vaccination
- ✓ Refer Kim to a local GP who will monitor Kim for HBV 'flairs'
- ✓ The GP will also test baby for HBV at 9-12 months of age
- ✓ Use a plain language resource to help Kim understand her chronic disease
- ✓ Kim told you she told her family to test for HBV. They also have CHB, however they are now linked into care, are monitored for liver disease and have improved their diet

Take home messages

- Hepatitis B is a virus that affects the liver & a leading cause of liver cancer
- Globally hepatitis B is most commonly transmitted perinatally
- All pregnant women should be tested for HBsAg. Those who test positive should be referred for specialist assessment
- MTCT of HBV can be safely prevented by appropriate interventions during pregnancy and birth, an effective course of vaccine and standard precautions
- Chronic hepatitis can be managed to reduce mortality & morbidity
- MCHN's are a vital link to women who have birthed – to check baby has had appropriate follow up, to educate mum, and to ensure mum is linked into ongoing care
- If in doubt – refer back to antenatal team and/or GP!

Resources for women & family



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.

St. Vincent's Melbourne



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

ANTENATAL CARE

Screen pregnant women for hepatitis B at first antenatal visit.
Three tests required: (MUST write "Chronic Hepatitis B" on the request form).

- Hepatitis B surface antigen (HBsAg)
- Hepatitis B surface antibody (anti-HBs)
- Hepatitis B core antibody (anti-HBc).

HBsAg⁺
(irrespective of anti-HBs and anti-HBc results)

Order additional testing:

- LFTs
- Platelets
- HBeAg and anti-HBe
- HBV DNA viral load
- Hepatitis C serology
- Hepatitis D serology
- HIV serology.

- Check mother's understanding.
- Offer reassurance.
- Refer to HBV or Liver Specialist.

HBV DNA viral load
≥ 200 000IU/mL

HBV DNA viral load
< 200 000IU/mL

Offer anti-viral therapy to the mother in 3rd trimester (Tenofovir disoproxil fumarate).

BIRTH

Give hepatitis B vaccine and HBIG to baby in opposite thighs as soon as possible after washing baby (ideally within 12 hours of birth).

Non-infected and non-immune
HBsAg⁻ AND anti-HBs⁻
AND anti-HBc⁻

Recommended hepatitis B vaccination to mother post-birth
OR
during pregnancy if at high risk (e.g. household member HBV positive).

Non-infected and immune
HBsAg⁻ AND anti-HBs⁺ AND anti-HBc⁻
OR
HBsAg⁻ AND anti-HBs^{+/-*} AND anti-HBc⁺

* Note that in some patients anti-HBs titres may wane and become undetectable after many years.

Give hepatitis B vaccine birth dose to baby ideally within 12 hours of birth. (Then as per schedule)

POSTNATAL FOLLOW UP

Follow up care: Mother

- Continue to offer assurance
- Encourage breastfeeding
- 6 week postnatal check at GP. Discuss ongoing monitoring/cessation or continue treatment?
- Reinforce ongoing 6–12 monthly check-ups for mum.

Follow up care: Baby

- Reinforce importance of follow-up
- HBV vaccinations as per schedule
- HBV test for baby at 9–18 months
- MCHN checks in green book.

Does mother require hepatitis B vaccine?

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-Obis-50.pdf>

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



Resources for women & family



“The hepatitis B story”

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



The hepatitis B story - Arabic

808 views · Aug 9, 2016

8 0 SHARE SAVE ...

St Vincent's Hospital Melbourne

SUBSCRIBE

Resources for women & family



“The Hepatitis C Story” – St Vincents Hospital

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

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

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

† Refer to hepatitis.us.edu/page/clinical-calculators/prp for an APRI calculator

©ASHM 2013. PRODUCED MAY 2013 ISBN 978-1-901850-45-5. UPDATED IN 2022

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 rebateable 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 positive.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)

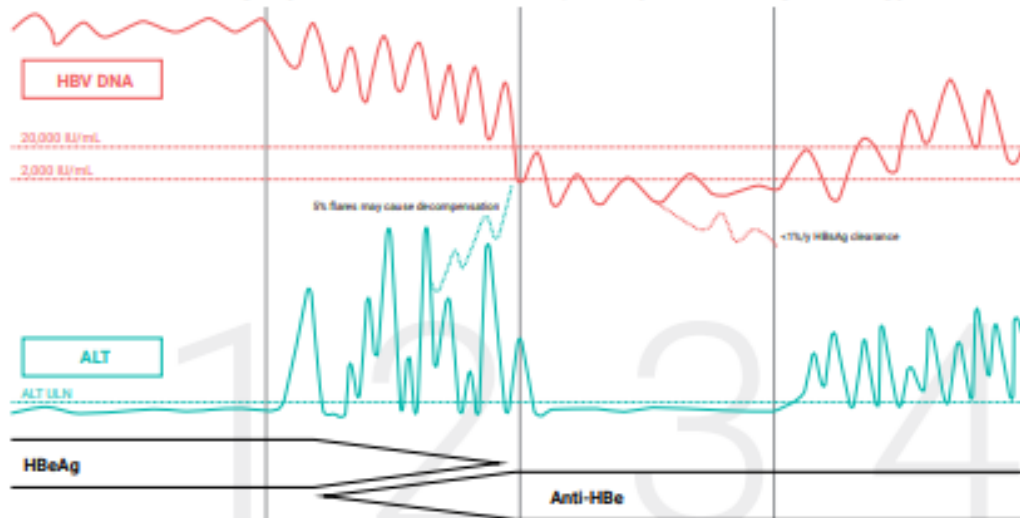


REFER TO OR DISCUSS WITH A SPECIALIST IF:

- 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

5 Assess phase of infection

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



HBsAg-positive chronic infection (Immune tolerance)	HBsAg-positive chronic hepatitis (Immune clearance)	HBsAg-negative chronic infection (Immune control)	HBsAg-negative chronic hepatitis (Immune escape)
<ul style="list-style-type: none"> HBV DNA: high[†] >10⁷ IU/mL ALT: normal HBeAg positive 	<ul style="list-style-type: none"> HBV DNA: high[†] >20 000 IU/mL ALT: elevated Elevated is >30 IU/L men; >19 IU/L women HBeAg positive 	<ul style="list-style-type: none"> HBV DNA: low[†] <2000 IU/mL ALT: normal HBeAg negative anti-HBe positive 	<ul style="list-style-type: none"> 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.

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
HBsAg-positive chronic infection (Immune tolerance)	<ul style="list-style-type: none"> Liver function tests (6-monthly) HBV DNA (12-monthly)[†] HBeAg and anti-HBe (6-12 monthly) Assess for liver fibrosis (12-monthly) 	
HBsAg-negative chronic infection (Immune control)	<ul style="list-style-type: none"> Liver function tests (6-monthly) HBV DNA (12-monthly)[†] Assess for liver fibrosis (12-monthly) 	<ul style="list-style-type: none"> Periodic review of household contacts and sexual partners where appropriate
On treatment	<p>HBsAg-negative chronic hepatitis (Immune escape)</p> <ul style="list-style-type: none"> 3-monthly for the first year, then 6-monthly: Liver and renal function tests HBV DNA[†] Serum phosphate if on tenofovir disoproxil fumarate (TDF) <p>In addition:</p> <ul style="list-style-type: none"> 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) <p>Also assess adherence to treatment every review.</p>	<ul style="list-style-type: none"> If indicated (see below): HCC surveillance
HBsAg-positive chronic hepatitis (Immune clearance)		

HEPATOCELLULAR CARCINOMA SURVEILLANCE

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

- People with cirrhosis
- Asian males > 40 years
- Sub-Saharan African people > 20 years
- Aboriginal and Torres Strait Islander people > 50 years
- Anyone with observed HBsAg loss with prior indications of HCC
- Māori and Pacific Islander males > 40 years
- Māori and Pacific Islander females > 50 years
- Asian females > 50 years
- Anyone with coinfection with hepatitis delta virus
- Anyone with a family history of HCC (first-degree relative)
- People from other racial groups, according to risk scores (e.g., PAGE-B)

Disclaimer: Guidance provided on this resource is based on guidelines and best-practices at the time of publication.

Resources to help!

- [Hepatitis B Virus \(HBV\) Consensus Statement \(gesa.org.au\)](https://gesa.org.au)
- [Management of Hepatitis B in pregnancy \(ranzocg.edu.au\)](https://ranzocg.edu.au)
- [Hepatitis B | The Australian Immunisation Handbook \(health.gov.au\)](https://health.gov.au)
- [ASHM Decision-Making-in-Hepatitis-B-Toolkit-Update Nov.pdf](#)
- [HepBHelp](#)
- [ASHM-BBVs-STIs-in-Antenatal-Care-Resource-2022.pdf](#)
- [Resources - St Vincent's Hospital Melbourne \(svhm.org.au\)](https://svhm.org.au) (virtual resources by us!)

B Seen, B Heard: Hepatitis B From Our Perspective – a video from ASHM

Women tell their story about living with CHB, their pregnancies and the family.

ashm.blob.core.windows.net/ashmpublic/6_HepB_and_Family.mp4

Victorian Viral Hepatitis Nurse Educator

Mieken Grant

Victorian Viral Hepatitis Nurse Educator

St Vincents Hospital Melbourne

Mieken.grant@svha.org.au

Please get in touch if you need a bespoke session on viral hepatitis and some hard copy resources!

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