



**“But they never told me I had hepatitis!”  
The role of the MCHS in preventing hepatitis  
related liver cancer.**

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St Vincent’s Hospital

# Acknowledgment of country



# Outline



- Why is viral hepatitis important?
- Who is at risk of hepatitis B and C?
- Hepatitis B and C – transmission, testing, treatment
- The role of the MCHS
- Where to get more information

# Global burden of disease study 2016



## Deaths by disease 2016

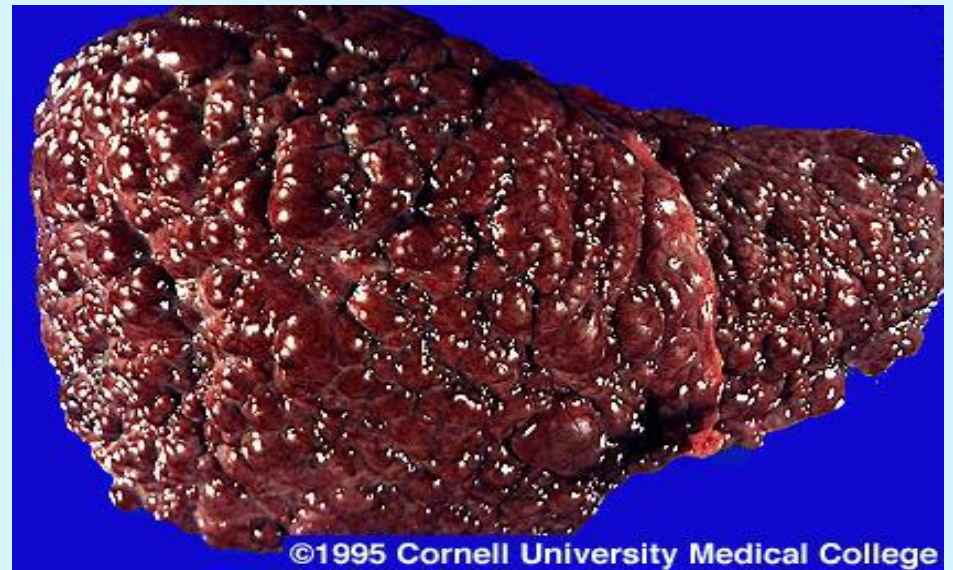
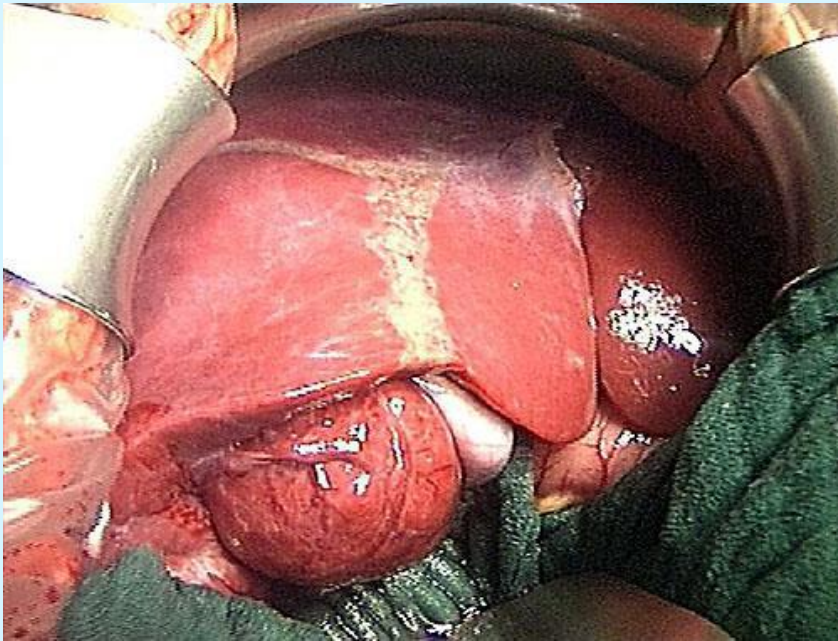
- HIV – 1 million, decreasing since 2005
- TB – 1.2 mill. decreasing since 1990
- Malaria – 719,000, decreasing 2004
  
- Viral hepatitis (B & C: cancer, liver disease).....  
1.34 million & steadily increasing

[www.thelancet.com/gbd](http://www.thelancet.com/gbd)

# Progression of viral hepatitis



Inflamed liver → scarring → fibrosis → cirrhosis → hepatocellular cancer





The annual number of new cases of liver cancer ... almost tripled between 1982 and 2007



MacLachlan  
et al

[www.health.gov.au/Internet/main/publishing.nsf/content/health-pbs-general-listing-duscmember.htm](http://www.health.gov.au/Internet/main/publishing.nsf/content/health-pbs-general-listing-duscmember.htm) (accessed Oct 2012). □

## Liver cancer is the fastest increasing cause of cancer death in Australians

**TO THE EDITOR:** In September 2012, the Australian Institute of Health and Welfare (AIHW) released its report on cancer survival and prevalence in Australia from 1982 to 2010, incorporating incidence and mortality estimates for all malignancies reported to Australian cancer registries.<sup>1</sup> Cancer is a leading cause of morbidity and mortality in Australia, accounting for about 20% of the total disease burden and 30% of deaths.<sup>2</sup>

Liver cancer causes an increasing number of deaths in Australia every year, primarily related to the increasing prevalence of chronic viral hepatitis —



# Hepatitis B & C in Australia



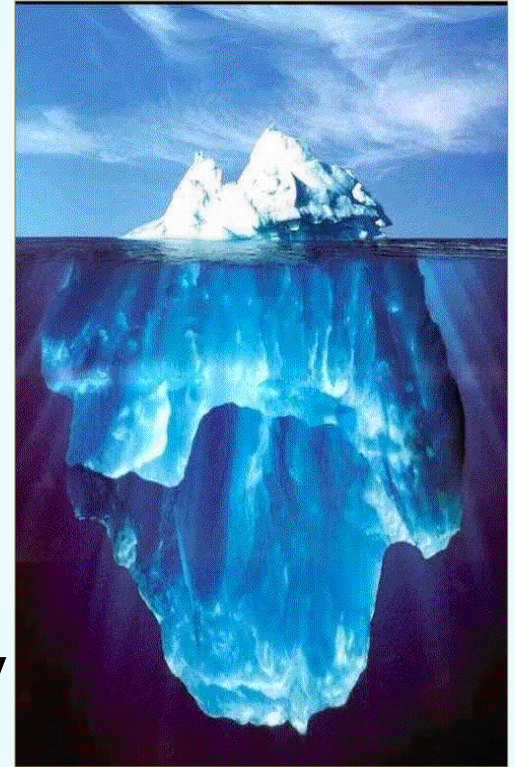
- 450,000 people live with HBV or HCV
- Leading cause: liver transplant & liver cancer
- Undiagnosed
- From vulnerable/marginalised communities
- Not engaged in healthcare
- Often no symptoms until advanced disease
- Have effective treatment (HBV) & cure(HCV)
- Most women tested for in pregnancy.
- Missed opportunity to cure/ link to care.

# Hepatitis B (HBV) in Australia

- 218,000 people have chronic HBV
- “Family business”

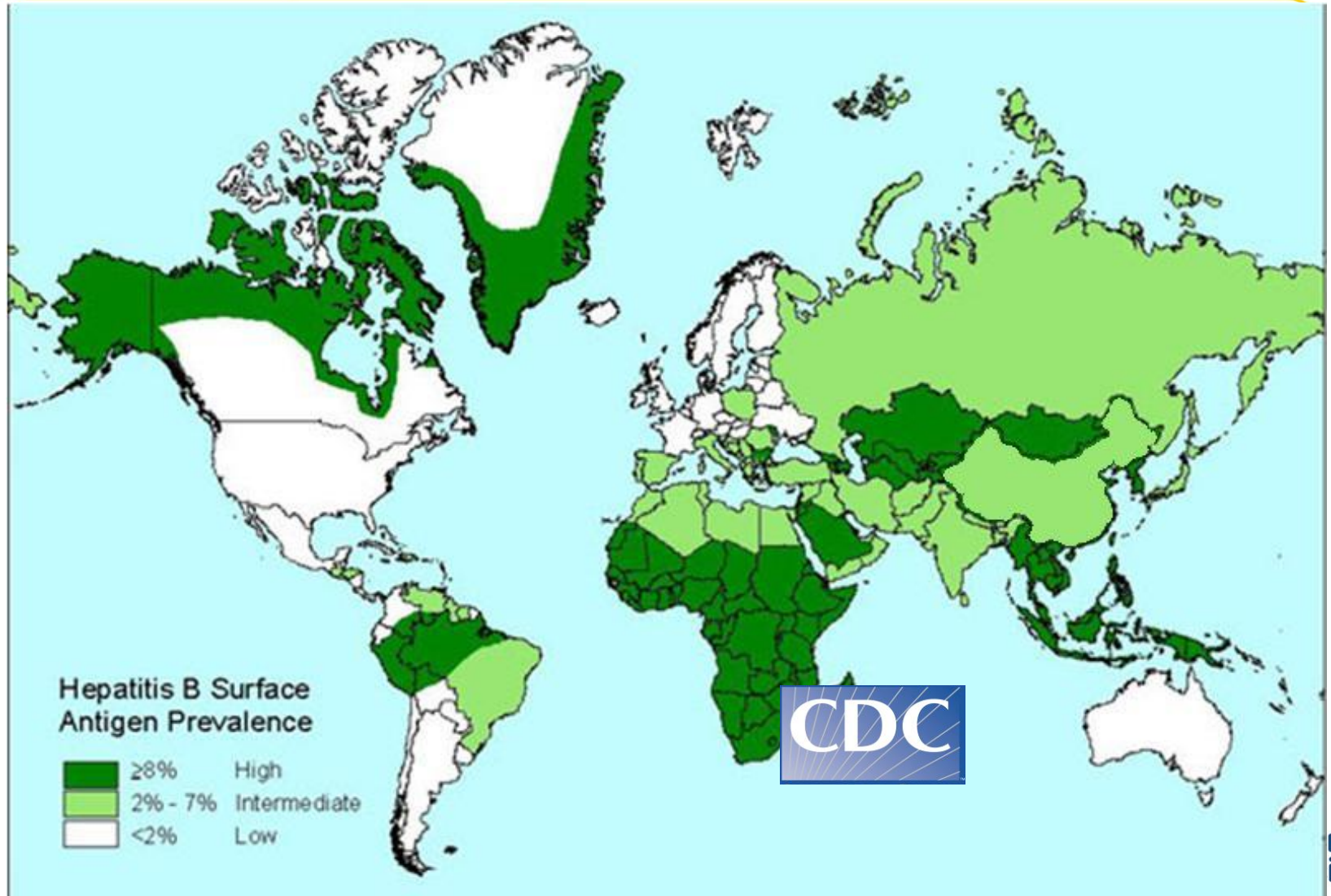
## Untreated chronic HBV

- 25% - early death from liver failure/cirrhosis/liver cancer
- Highly dynamic virus
- **EVERYONE** with CHB - 6 monthly checkup
- HBV + mums at risk of flare post partum





# Global prevalence of Chronic Hepatitis B in 2011



# Who has HBV in Australia?



2/3 people with Chronic HBV are either:

- Born in endemic areas overseas.
- Aboriginal and Torres Strait Islander (mainly in northern Aust)
- These communities already experience health inequities

# How is hep B spread?

Transmitted by contact with infected blood & body (sexual) fluids

**1. Perinatal - early life**

**2. Blood to blood contact**

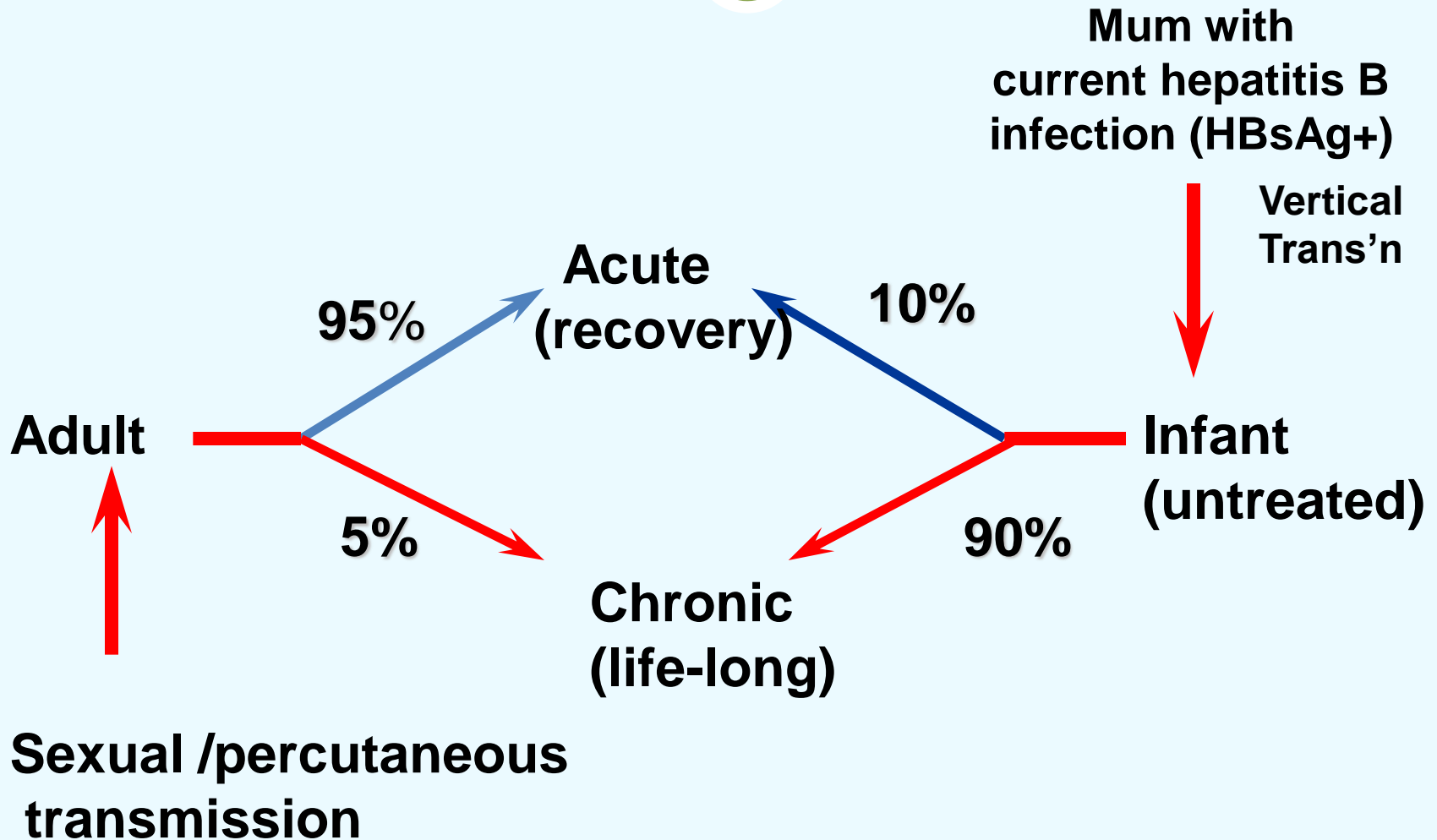
- Sharing injecting/grooming equipment, open wounds blood transfusions, hi prevalence country, etc

**3. Sexual – HBV is an STI**

**4. Horizontal - between young children, biting stage**



# Acute and Chronic Hepatitis B



# Estimate of cascade of care for people living with HBV in Aust. (Allard et al., ANZJPH, 2015)

**218,000 living with Chronic HBV**

**Diagnosed 57%**

**Undiagnosed 43%**

**13%  
annual  
DNA or  
Tx.**

**Not in care 87% (190,213)**

**5%  
on  
Rx**

**21796  
no Tx**

**21,798 not receiving Tx of 15% of total (32,785) estimated to need Tx**

# HBV: Postpartum

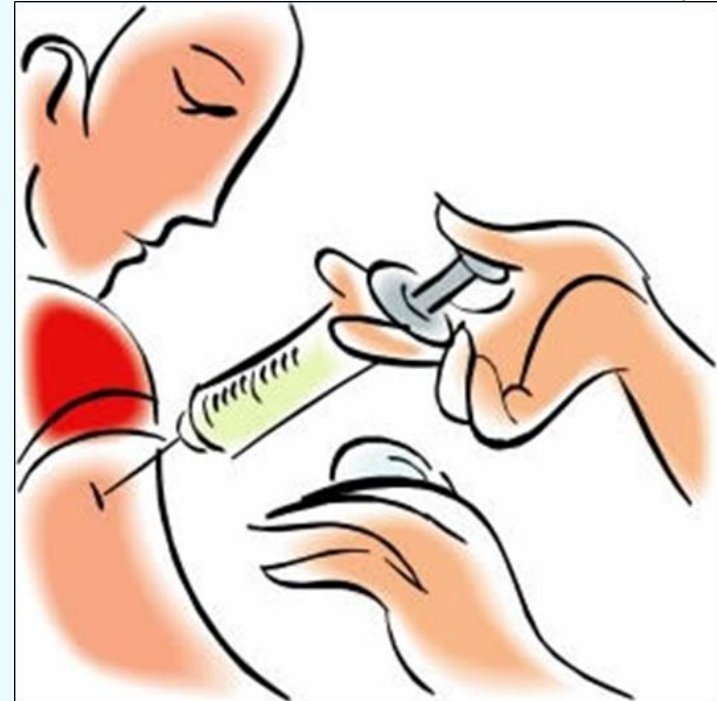


- 1<sup>st</sup> dose vaccine asap.
- HBV + mums: babe also needs HBIG w/i 12hrs.
- Encourage breastfeeding
- 2,4,6 mo. vaccine course
- Infant testing if mum is HBsAg +ve, referral to paed. gastroenterologist.
- **Check mum & family has follow-up. HCC surveillance**



# Worlds first anti cancer vaccine!!

- 4 doses newborns.
- Birth dose asap w/i 24h.
- You, the client and the extended family??
- Adults 3 doses 0, 1, 6 mo



# MCH nurses - a vital link!



## 2 NSW hospitals - 2% pregnant women +ve HBV (1)

- 98% born overseas
- 78% had previous documentation of infection.
- No doc'n re. receiving education regarding infectivity
- 93% no doc'n regarding referral/follow-up during/after delivery

## 3 Vic'n public hospitals (2)

- 87% HBV +ve mums born overseas
- 18% women referred for special't care
- >90% babes received HBIG and vaccine



1. Guirgis, M, Zerky, A et al. 2009, Journal of Gastroenterology & Hepatology, 24,:998-1001
2. Giles, M, Grace, R et al. 2013, ANZJOG; 53: 231-235



# MCH service



“.....promotion, prevention, early detection, and intervention of the physical, emotional or social factors affecting young children and their families in contemporary communities”

## Highly skilled clinicians

- Assessment & engagement skills
- Trusted
- Working with sensitive topics
- Build relationships over years
- Contact with most new mums
- Linking to services

# What can you do?.....



**Promotion** – check family knows about HBV.

Promote healthy lifestyle, eg healthy eating, exercise etc.

**Prevention** – Hepatitis B vaccine is world's first anti cancer vaccine. Preventing liver ca. in mums and babes.

**Early detection** – Antenatal tests for HBV have poor follow up. Encourage women to seek assessment & contact tracing

**Intervention** – support women on treatment. Check infant response to HBV vaccine.

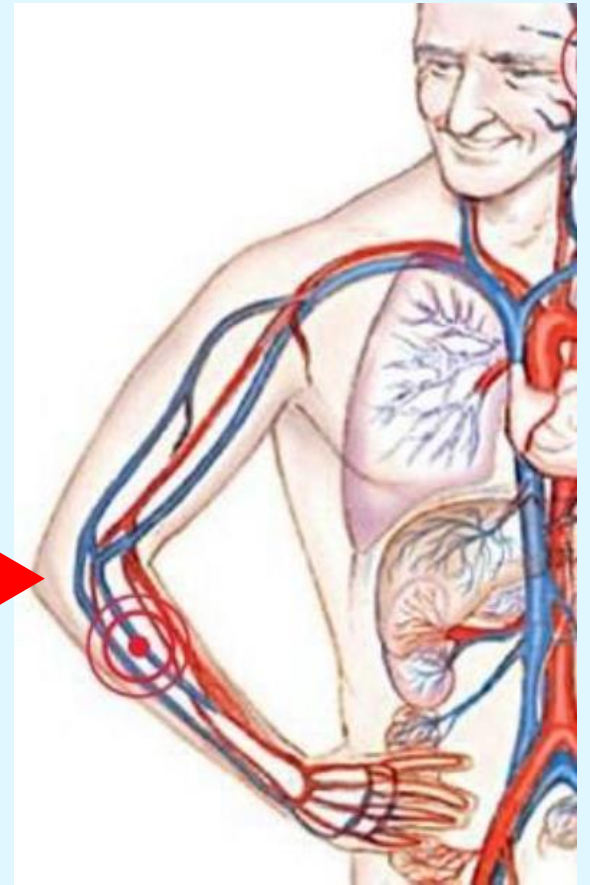
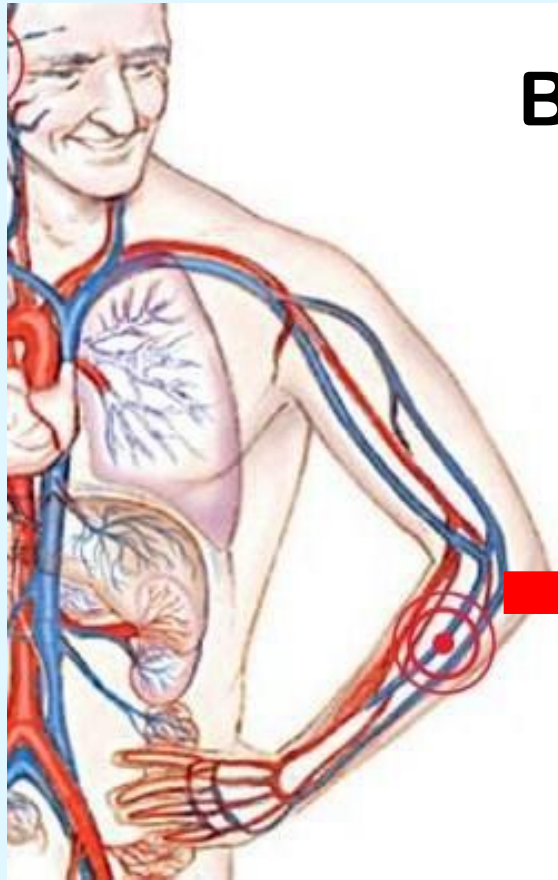
# Hepatitis C (HCV) in Australia

- About 230,000 Australians infected with HCV.
- New treatments cure 95%
- Most need tablets for 12 wk.
- Old treatments – ineffective, toxic
- 100 cured every day now
- Only country with free access to medications
- Highly stigmatised condition



**Hep C can be transmitted  
when blood of an  
infected person enters  
the body of another.**

**BLOOD to BLOOD**



# Transmission of HCV



# Curative & safe treatment for hep C



- Up to 95% cure
- Few side effects – headaches, nausea, fatigue
- Drug drug interactions – minor
  
- Treat everyone
- GPs and NPs can treat.
- Many nurse led models
  
- Cure has impact on social/emotional wellbeing

# Maternal & neonatal outcomes : Hep C+ mum



AOD service for pregnant women (570) in WA\*

- 37% women were HCV +
- More likely to have baby in SCN
- More likely to have baby dx. as NAS
- More likely to have IOL

**Red flags for hep C! Treat and cure**

\* O'Connor et al, 2015, Midwifery

# Your role could be.....



**Promotion** – “ We’re letting everybody know there are fantastic new hepatitis C treatments. They are free and most people only need take tablets for 12 weeks to be cured”

**Prevention** –Encourage testing. Preventing liver ca. in mums and babes.

**Early detection** – antenatal tests for viral hep have poor follow up. Remind/encourage women to seek treatment.

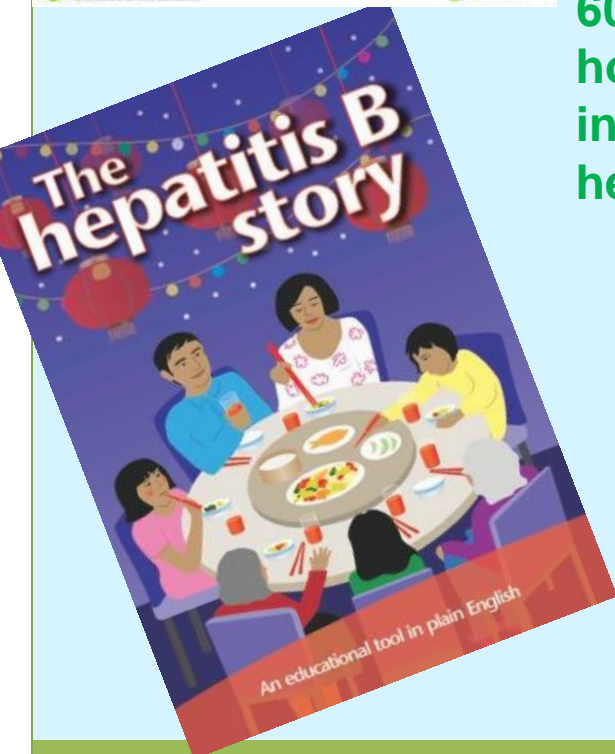
**Intervention** – support women to seek treatment. Check infant of HCV + mums at 6-12 months.



# WE have the tools!.....its not hard



**2018 Health Literacy Course**  
60 percent of Australians don't know how to find, understand and use information about their health and health care.



# In summary.....



- Many untreated & undiagnosed people w. hep B & hep C
- At risk of developing cirrhosis & hepatocellular ca.
- Can cure hep C
- Can manage hep B & prevent liver damage
- Most women tested during pregnancy – opportunity!
- MCHS highly skilled & role positioned to remind, refer & support families affected.

# Local, evidence based websites



- [www.hepbhelp.org.au](http://www.hepbhelp.org.au) - for clinicians
- [www.hepchelp.org.au](http://www.hepchelp.org.au)
- [www.ashm.org.au](http://www.ashm.org.au) - free resources for clinicians
- [www.gesa.org.au](http://www.gesa.org.au) - Gastroenterology Ass'n
- [www.hepatologyassociation.com.au](http://www.hepatologyassociation.com.au) Australasian Hepatology Association - Nursing guidelines
- [www.svhm.org.au/home/health-professionals/specialist-clinics/g/gastroenterology](http://www.svhm.org.au/home/health-professionals/specialist-clinics/g/gastroenterology)  
“The hepatitis B story” – education tool/booklets/videos in languages

**“ALONE WE CAN  
DO SO LITTLE;  
TOGETHER WE  
CAN DO SO MUCH.”**

- Helen Keller

**Together We Can Do It!**



# Thank-you



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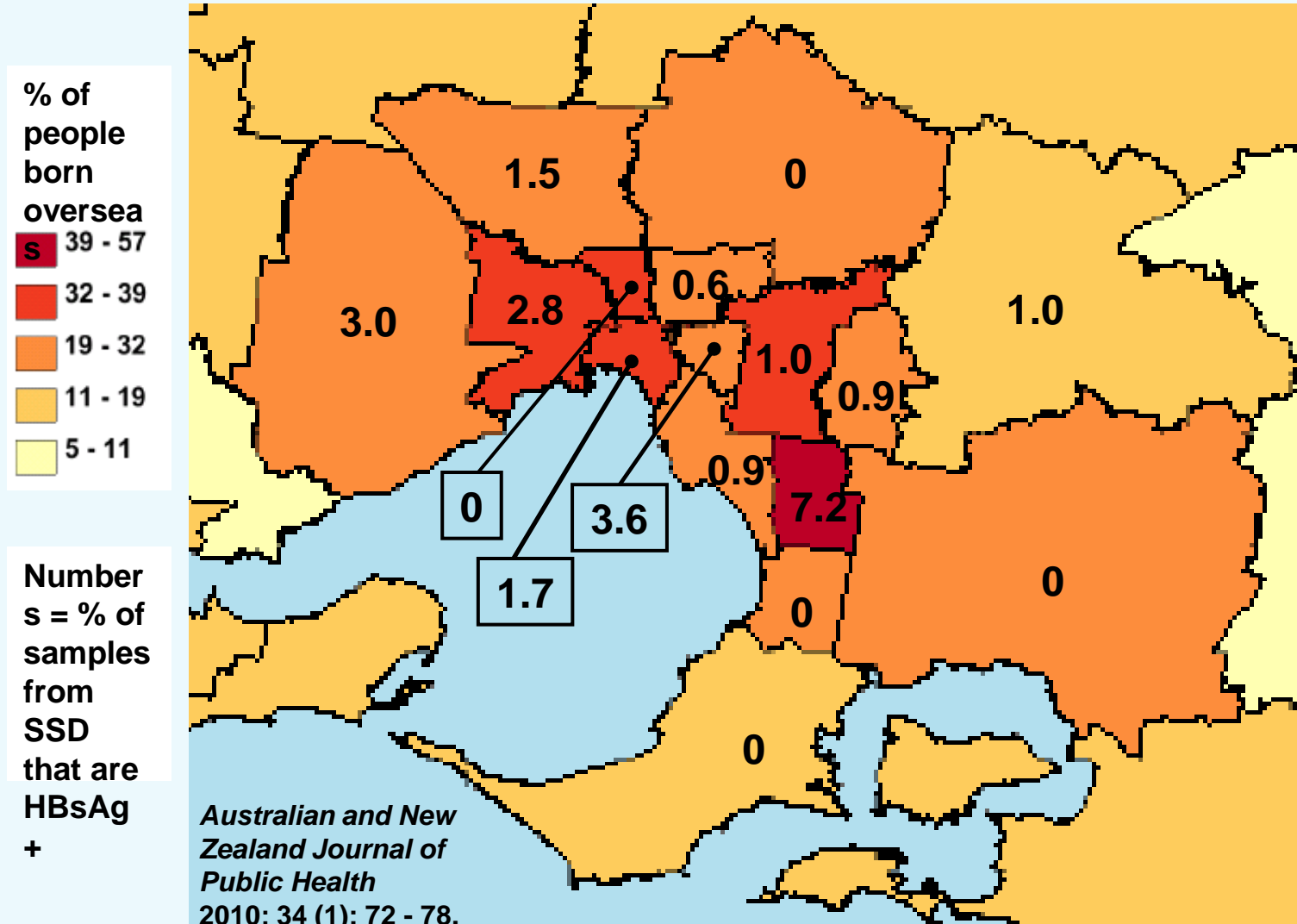
[gabrielle.bennett@svha.org.au](mailto:gabrielle.bennett@svha.org.au)

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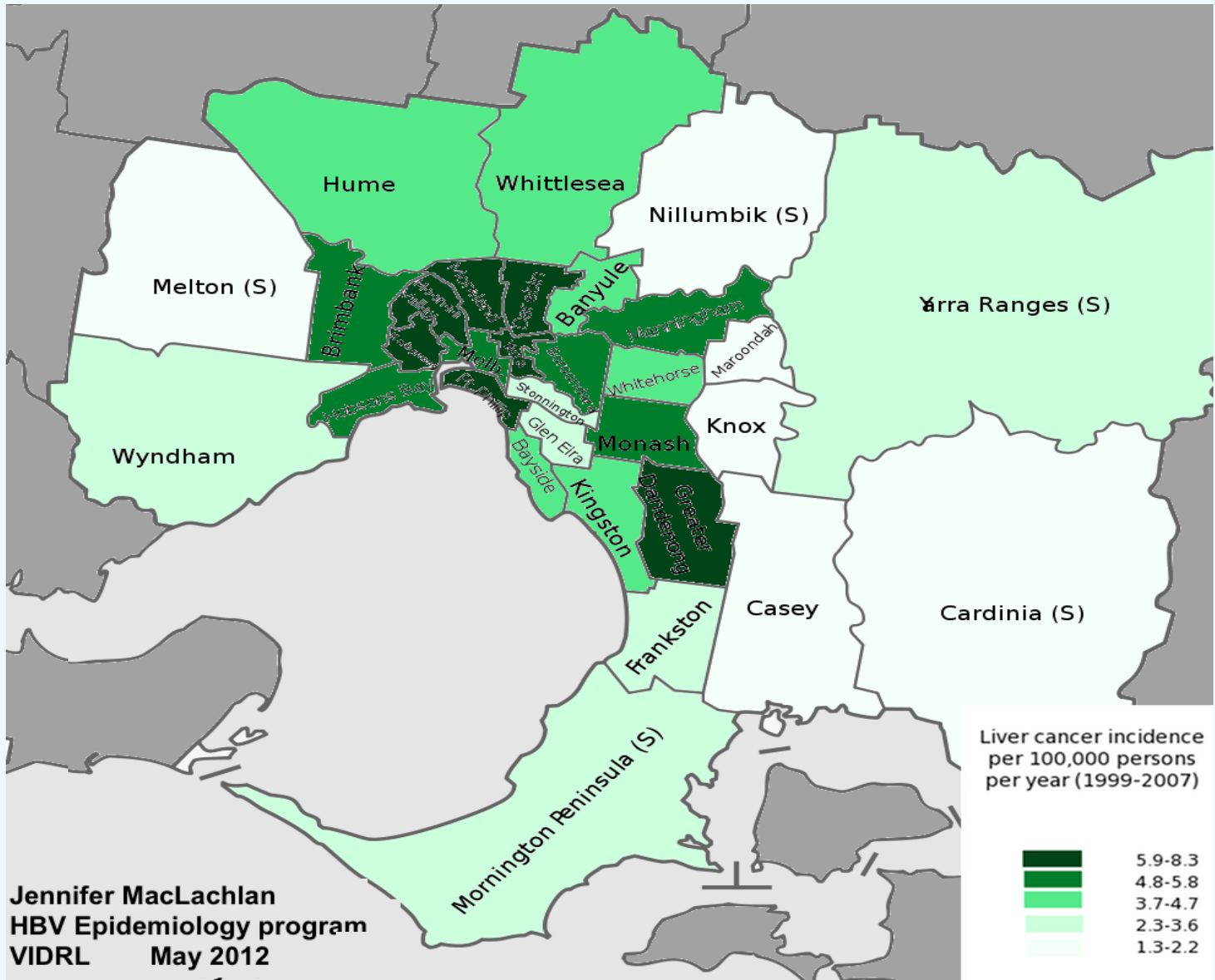
**Mob: 0447 865 140**

# Victorian Hepatitis B Serosurvey 1995 - 2005

## HBsAg seroprevalence by SSD, Melbourne



# Liver cancer incidence by LGA per 100,000 persons per year, Melbourne, 1999 - 2007



# Gov't funded hep B vaccine, Victoria, 2017



- Household contacts or sexual partners of people living with HBV
- People who inject drugs or are on OST
- People living with hepatitis C
- Men who have sex with men
- People living with HIV
- Prisoners & remandees
- People who did not complete course while in custody.
- Refugees & asylum seekers
- “Vulnerable citizen”
- **Aboriginal & Torres Strait Islander people**