

Geographic variation in CHB prevalence in Aboriginal and Torres Strait Islander People across Australia

MacLachlan JH^{1,2}, Allard N^{1,2}, Haynes K³, Smith C³, Cowie BC^{1,2,4}

1. WHO Collaborating Centre for Viral Hepatitis, The Doherty Institute
2. Department of Medicine, University of Melbourne
3. Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine
4. Victorian Infectious Diseases Service, Royal Melbourne Hospital

Jennifer.maclachlan@mh.org.au

Australasian Viral Hepatitis Elimination Conference
August 5th, 2019



ashm

Supporting the HIV, Viral Hepatitis
and Sexual Health Workforce



A joint venture between The University of Melbourne and The Royal Melbourne Hospital



David R Horton (creator), © Aboriginal Studies Press, AIATSIS, and Auslig/Sinclair, Knight, Merz, 1996.

Background

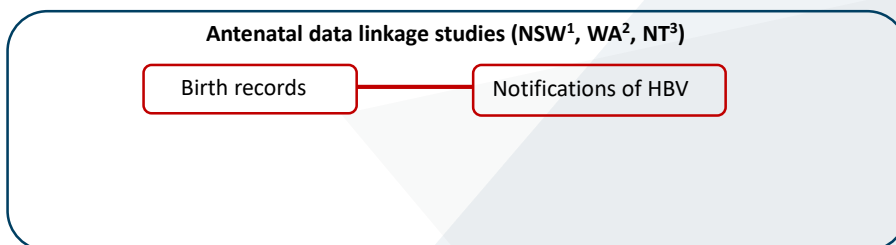
- Mapping hepatitis B across Australia requires population-specific prevalence estimates
- Previously summary estimates of HBV prevalence among Aboriginal and Torres Strait Islander Australians were used for the whole population
 - Graham 2019: 3.9% prevalence
- New data sources allow tailoring for each state/territory and remoteness area

Data sources

Antenatal data linkage studies (NSW¹, WA², NT³)

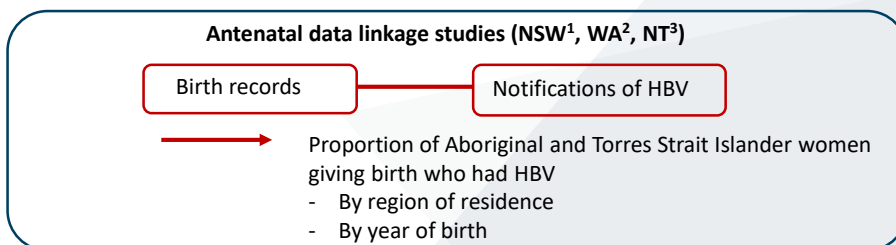
1. Deng 2017 2. Reekie 2018 3. Liu 2013

Data sources



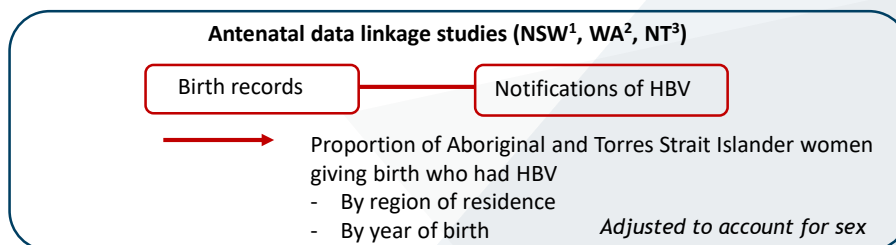
1. Deng 2017 2. Reekie 2018 3. Liu 2013

Data sources



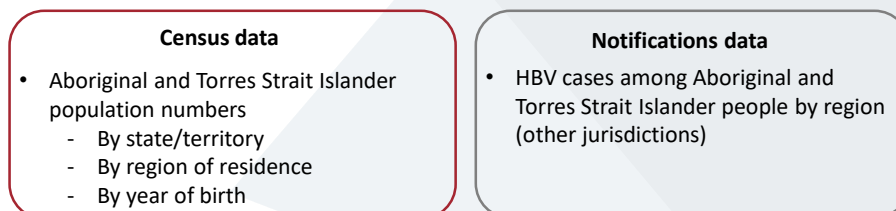
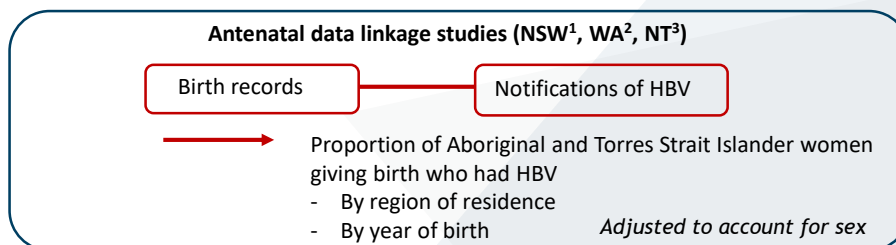
1. Deng 2017 2. Reekie 2018 3. Liu 2013

Data sources



1. Deng 2017 2. Reekie 2018 3. Liu 2013

Data sources



1. Deng 2017 2. Reekie 2018 3. Liu 2013

HBV prevalence findings

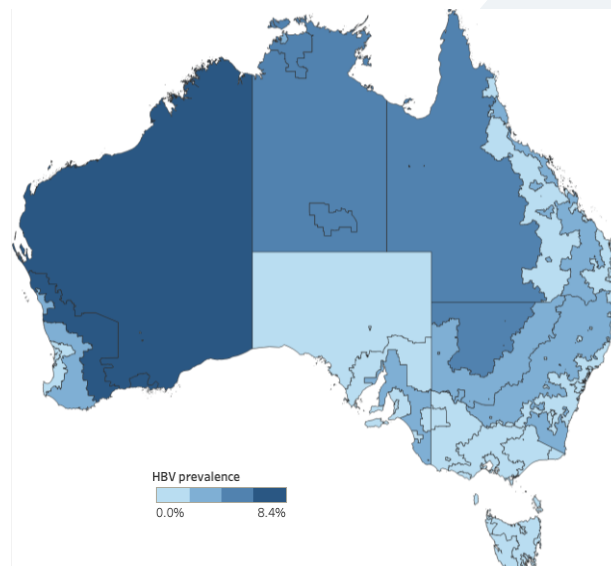
Table A.4 CHB prevalence estimates in Aboriginal and Torres Strait Islander Australians, by state and by remoteness region of Australia, 2017

State/Territory	Major cities	Inner regional	Outer regional	Remote	Very remote	TOTAL
ACT	0.7%	N/A	N/A	N/A	N/A	0.7%
NSW	0.7%	1.6%	2.9%	3.8%	5.3%	1.5%
NT	N/A	N/A	2.2%	5.1%	5.3%	4.6%
QLD	1.5%	0.8%	2.9%	1.4%	4.5%	2.1%
SA	1.7%	1.3%	2.2%	2.0%	1.7%	1.8%
TAS	N/A	0.7%	0.7%	N/A	N/A	1.4%
VIC	0.8%	0.7%	0.9%	N/A	N/A	1.5%
WA	1.2%	1.4%	3.9%	6.5%	8.4%	4.1%
AUSTRALIA	1.1%	1.4%	3.8%	5.3%	5.5%	2.5%

Data source: CHB prevalence estimates in Aboriginal and Torres Strait Islander people based on established population prevalence from published studies, adjusted according to region using notifications data and ABS population distribution information. N/A = not applicable (no regions with this level of remoteness exist in the jurisdiction).

National Viral Hepatitis Mapping Report 2019

HBV prevalence findings



Impacts and conclusions

- Number of people living with CHB in a given area
 - Changes in various regions
- Number of Aboriginal and Torres Strait Islander people affected by CHB overall
 - Impacts on the cascade of care
- Routinely collected data are key to accurate mapping of burden of disease
- Feedback on local experiences and clinical datasets
- Continued expansion necessary for refinement of estimates in other states

Acknowledgements

- Epidemiology team, The Doherty Institute
- ASHM, partners in Mapping Project
- Department of Health, Australian Government
- National Notifiable Diseases Surveillance System
- WHO CC VH Research Advisory Group
- Simon Graham, Praveena Gunaratnam
- Individuals who provided review and data
 - Kelly Hosking and Geoff Stewart, Simon Graham, Josh Hanson