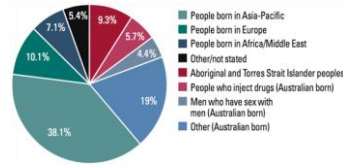


# The impact of overseas hepatitis B vaccination programs on the future burden of hepatitis B in Australia

Stephens ZA<sup>1,2</sup>, MacLachlan JH<sup>1,3</sup>, and Cowie BC<sup>1,3</sup>

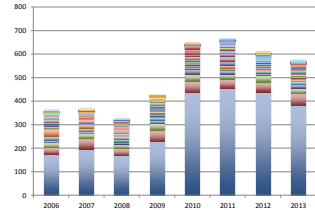
<sup>1</sup>Epidemiology Unit VIDRL, Doherty Institute, Melbourne  
<sup>2</sup>RMIT University, Melbourne  
<sup>3</sup>Department of Medicine, University of Melbourne



## Chronic hepatitis B in Australia

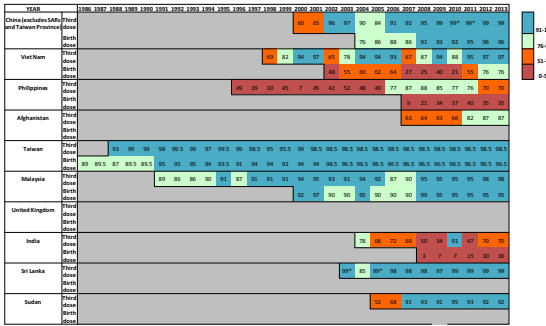
MacLachlan 2013 AFP

Unspecified HBV notifications for those aged less than 30 years by country of birth, Victoria, 2006-2013



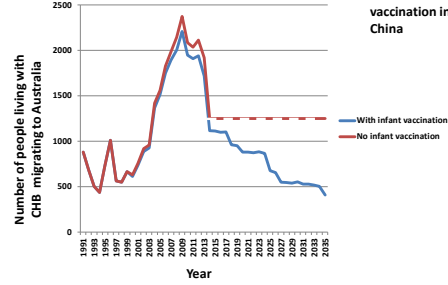
## Level of vaccination uptake by country

WHO/UNICEF - data extracted August 2014



[http://apps.who.int/immunization\\_monitoring/en/](http://apps.who.int/immunization_monitoring/en/)

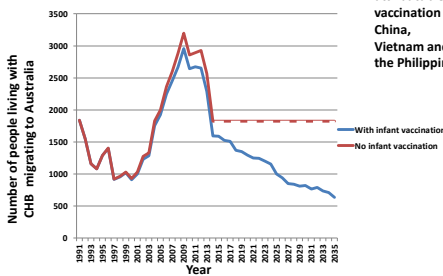
## Effect of current vaccination programs in China on the future burden of hepatitis B in Australia



Annual reduction in number of people living with CHB attributable to vaccination in China

1991	0
1992	0
1993	0
1994	0
1995	0
1996	0
1997	0
1998	0
1999	0
2000	0
2001	0
2002	0
2003	0
2004	0
2005	0
2006	0
2007	0
2008	0
2009	0
2010	0
2011	0
2012	0
2013	0
2014	0
2015	0
2016	0
2017	0
2018	0
2019	0
2020	0
2021	0
2022	0
2023	0
2024	0
2025	0
2026	0
2027	0
2028	0
2029	0
2030	0
2031	0
2032	0
2033	0
2034	0
2035	0
TOTAL	12078

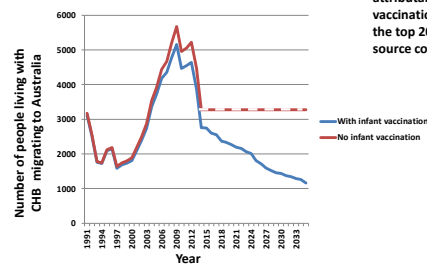
## Effect of current vaccination programs in China, Vietnam and the Philippines on the future burden of hepatitis B in Australia



Annual reduction in number of people living with CHB attributable to vaccination in China, Vietnam and the Philippines

1991	0
1992	0
1993	0
1994	0
1995	0
1996	0
1997	0
1998	0
1999	0
2000	0
2001	0
2002	0
2003	0
2004	0
2005	0
2006	0
2007	0
2008	0
2009	0
2010	0
2011	0
2012	0
2013	0
2014	0
2015	0
2016	0
2017	0
2018	0
2019	0
2020	0
2021	0
2022	0
2023	0
2024	0
2025	0
2026	0
2027	0
2028	0
2029	0
2030	0
2031	0
2032	0
2033	0
2034	0
2035	0
TOTAL	18092

## Effect of current vaccination programs in the top 20 countries on the future burden of hepatitis B in Australia



Annual reduction in number of people living with CHB attributable to vaccination in the top 20 source countries

1991	0
1992	0
1993	0
1994	0
1995	0
1996	0
1997	0
1998	0
1999	0
2000	0
2001	0
2002	0
2003	0
2004	0
2005	0
2006	0
2007	0
2008	0
2009	0
2010	0
2011	0
2012	0
2013	0
2014	0
2015	0
2016	0
2017	0
2018	0
2019	0
2020	0
2021	0
2022	0
2023	0
2024	0
2025	0
2026	0
2027	0
2028	0
2029	0
2030	0
2031	0
2032	0
2033	0
2034	0
2035	0
TOTAL	24963

## Limitations

- Incomplete vaccination
- Future migration trends
- Vaccination uptake
- Reliability of data
- Timing of vaccination in newborns

## Conclusions

- A profound reduction in the prevalence of CHB in migrants in Australia is projected in the coming decades as a result of infant vaccination programs.
- Australian support for overseas hepatitis B vaccination programs, will lead to a significant reduction in the burden of CHB in Australia.

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- Nicole Allard, VIDRL
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- World Indigenous Peoples' Conference on Viral Hepatitis Scholarship
- RMIT University