

## Improving Hepatitis B Vaccination Coverage in Priority Populations

Hepatitis Australia National Advocacy Priority 3.3 – January 2014

### Key Messages

- There is an effective and affordable preventive vaccine for hepatitis B;
- An estimated 207,000 people in Australia are living with chronic hepatitis B;
- 6,702 Australians were diagnosed with hepatitis B in 2012.
- As a national prevalence (1%), the level of hepatitis B infection in Australia is greater than in New Zealand and the United Kingdom
- Hepatitis B can lead to liver cirrhosis, liver failure and liver cancer unless it is detected early, carefully managed and treated.
- The Australian Government provides funded hepatitis B vaccinations for all infants born in Australia and has conducted a school-based catch up program for younger adolescents.

But...

- Australia-wide there is a lack of consistency in the availability of funding and support for vaccination of those people, of all ages, who are at higher risk of infection; and
- There is an urgent need for all levels of government in Australia to re-think their approach to hepatitis B vaccinations to:
  - Promote awareness of the role that hepatitis B vaccination plays in preventing liver disease and liver cancer in high risk populations;
  - Improve vaccination coverage among all people from populations at higher risk of hepatitis B infection.

### The Issue

Hepatitis B is a blood borne and sexually transmitted infection. In 2012 it was estimated that 207,000<sup>1</sup> Australians were living with chronic hepatitis B. There is a growing burden of chronic hepatitis B in Australia related to undetected and untreated infection. Hepatitis B is a leading cause of liver transplants and a key-contributing factor to the sharp increase in deaths due to primary liver cancer<sup>2</sup> evident in recent years.

### Funding for Vaccination Programs

A safe and effective vaccine for hepatitis B has been available since 1982. Since May 2000, through the *Immunise Australia* program, all children born in Australia have been eligible for hepatitis B vaccination free of charge. School-based catch-up vaccination programs were also established free of charge to extend hepatitis B vaccination coverage across older age groups. It is expected that these school-based catch-up programs will soon be phased out enabling existing resources to be diverted to providing national funding for vaccinations all at risk populations who don't meet the current eligibility requirements for federally funded vaccination.

### Who should be vaccinated?

Aside from infants and younger adolescents covered by the *Immunise Australia* program, the Australian Immunisation Handbook (2013)<sup>3</sup> recommends hepatitis B vaccination for a range of other groups of people deemed to be at higher risk of infection. These include most (but not all) population groups listed in the National Hepatitis B Strategy<sup>4</sup>.

The National Hepatitis B Strategy identifies three priority populations:

1. People from culturally and linguistically diverse backgrounds;
2. Aboriginal and Torres Strait Islander peoples; and
3. Children born to mothers with chronic hepatitis B.

It also identifies other populations of interest:

- Unvaccinated adults at higher risk of infection specifically:

- Men who have sex with men
- Sex workers
- People who inject drugs
- Partners and other household and intimate contacts of people who have acute or chronic hepatitis B infection
- People in custodial settings
- People with HIV or hepatitis C, or both
- Healthcare workers and emergency services workers
- People travelling to and from high prevalence countries, particularly those visiting families and friends in the country of origin; and
- Vulnerable populations, including homeless and people with mental health issues.

State and Territory Governments decide which priority groups, not covered by the Immunise Australia Program, will have access to funded vaccination. The provision of and funding for vaccination programs for each of the populations listed above (apart from children born to mothers with chronic hepatitis B) varies greatly according to the policy and programs of the eight state and territory governments. This ad hoc approach must change to improve the low level of vaccination coverage in these priority populations.

#### The cost of prevention

The hepatitis B vaccine is not expensive. A full course costs between \$60-70 (vaccine costs only). In contrast the costs associated with a failure to prevent new cases of chronic hepatitis B are high. A substantial proportion of people with chronic hepatitis B will require long-term highly specialised antiviral medications. In the absence of appropriate management and treatment liver failure can result in the need for liver transplant. The initial cost of a liver transplant was estimated in 2008<sup>5</sup> to be approximately \$177,000 plus additional costs in follow-up. The avoidance of just one liver transplant would 'buy' several thousand courses of vaccination. In addition, chronic hepatitis B infection is the leading cause of liver cancer, which is the fastest increasing cause of cancer related death in Australians.

Improving the uptake of vaccination amongst those who remain most vulnerable to infection therefore makes economic sense and is a humane response to a vaccine preventable disease which is claiming the lives of many more people in Australia each year than HIV<sup>6</sup>.

#### **The Solution**

Hepatitis Australia believes the Australian Government must ensure greater alignment between the National Immunisation Strategy and the National Hepatitis B Strategy. To enable this the Australia Government must support and undertake the following:

1. The redistribution of federal funding for hepatitis B vaccinations to remove any financial barriers to the achievement of hepatitis B immunity among those people who remain most vulnerable to infection.
2. Active promotion among higher risk populations of the role of hepatitis B vaccination in the prevention of liver disease and liver cancer; and
3. The adoption of consistent and targeted strategies to improve the uptake and completion of vaccination schedules among higher risk populations.

#### **References:**

- <sup>1</sup> The Kirby Institute. *HIV, viral hepatitis and sexually transmissible infections in Australia Annual Surveillance Report 2013*. The Kirby
- <sup>2</sup> Australian Institute of Health and Welfare. 2012, *Cancer survival and prevalence in Australia: period estimates from 1982 to 2010*. Canberra. <http://www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id=10737422721>
- <sup>3</sup> Australian Government, Dept. of Health and Ageing, 2013, *Australian Immunisation Handbook 10<sup>th</sup> Edition*, <http://www.health.gov.au/internet/immunise/publishing.nsf/Content/Handbook10-home>
- <sup>4</sup> Australian Government, Dept of Health and Ageing, 2010, *National Hepatitis B Strategy 2010-2013* [http://www.health.gov.au/internet/main/publishing.nsf/Content/ohp-national-strategies-2010-hepb/\\$File/hepb.pdf](http://www.health.gov.au/internet/main/publishing.nsf/Content/ohp-national-strategies-2010-hepb/$File/hepb.pdf)
- <sup>5</sup> Australian Center for Economic Research on Health, *The Impact of Chronic hepatitis B in Australia: Projecting Mortality, Morbidity and Economic Impact*, ACERH Research Report Number 7, September 2009. Australia
- <sup>6</sup> Cowie B, MacLauchan J, *Shifting Scales: comparing viral hepatitis and HIV/AIDS mortality in the Global Burden of Disease Study 2010* WHO Regional Reference Laboratory for Hepatitis B, Victorian Infectious Diseases Reference Laboratory and University of Melbourne. 2013.