

# Hepatitis B and immunosuppression (including rituximab)

Chief Health Officer Advisory

<b>Status:</b>	Active
<b>Date issued:</b>	2 August 2017
<b>Issued by:</b>	Dr Brett Sutton, Deputy Chief Health Officer (Communicable Disease), Victoria
<b>Issued to:</b>	Health professionals, members of the public

## Key messages

- Increasing numbers of Victorians are undergoing immunosuppression or chemotherapy to manage serious health conditions.
- Significant immunosuppression can lead to reactivation of chronic hepatitis B – including in people with past (resolved) hepatitis B infection.
- **Test all people undergoing significant immunosuppression** for current or past hepatitis B infection (HBsAg and anti-HBc) in line with current Australian guidelines.
- **Refer patients with past or current hepatitis B infection** to a doctor experienced in the management of viral hepatitis prior to immunosuppression. This will prevent hepatitis flares and associated morbidity and mortality.
- **Offer free government-funded hepatitis B vaccine** to all household and sexual contacts of people living with hepatitis B, as well as other priority populations.

## What is the issue?

People living with chronic hepatitis B are known to be at risk of reactivation of hepatitis B infection and severe flares of hepatitis in the setting of immunosuppression. Australian and international guidelines recommend that all patients be offered testing for current or resolved hepatitis B infection before undergoing immunosuppression.

In addition, when undergoing profound immunosuppression, people with past, resolved hepatitis B infection (HBsAg negative but anti-HBc positive) can also experience reactivation of hepatitis B infection with severe - and sometimes life-threatening - flares. While this can occur in a number of contexts, it has particularly been observed in the setting of chemotherapy for lymphoma when including the anti-cancer monoclonal antibody, rituximab. Use of rituximab in this setting has been shown to be associated with deaths due to severe (fulminant) hepatitis B.

A case of probable hepatitis B reactivation in a HBsAg negative individual receiving rituximab (in addition to other immunosuppressive therapy) for an auto-immune condition has been reported to the Department. In addition to features of acute hepatitis, this probable reactivation also resulted in the transmission of hepatitis B to a susceptible household contact who developed acute hepatitis B.

## Who is at risk?

Over 60,000 Victorians are believed to be living with chronic hepatitis B, but it is estimated over one third have not been diagnosed and are unaware of their infection. Over 600,000 Victorians are estimated to have been previously exposed to hepatitis B (anti-HBc positive).

In 2015, nearly 46,000 scripts for rituximab were issued in Australia.

People with current or past hepatitis B infection who receive rituximab as part of cancer chemotherapy or immunosuppression for auto-immune disease are at risk of reactivation, whether they have been previously diagnosed with hepatitis B or not.

## Prevention/treatment

In accordance with current Australian evidence and clinical guidelines, all people who are about to be immunosuppressed should be tested for past or current hepatitis B infection. This includes all patients who will be receiving rituximab. Testing should include hepatitis B surface antigen (HBsAg), hepatitis B core antibody (anti-HBc) and hepatitis B surface antibody (anti-HBs).

If past or present hepatitis B infection is diagnosed (anti-HBc positive and/or HBsAg positive), the patient should be referred to a doctor with experience in the management of viral hepatitis for consideration of enhanced monitoring and antiviral treatment as appropriate. Some [clinics](#) with doctors experienced in hepatitis B management can be found at: [www.hepbhelp.org.au](http://www.hepbhelp.org.au). Antiviral treatment can be given prophylactically to prevent flares in hepatitis B. This presumptive approach has been associated with improved outcomes in some contexts.

In addition, all Victorians diagnosed with hepatitis B infection (HBsAg positive) must be [notified to the Department in writing within 5 days of diagnosis](#) by both the testing laboratory AND the diagnosing clinician. This can be done online at: [www2.health.vic.gov.au/public-health/infectious-diseases/notify-condition-now](http://www2.health.vic.gov.au/public-health/infectious-diseases/notify-condition-now).

The following groups of people are eligible for free government-funded hepatitis B vaccine in Victoria:

- Household contacts or sexual partners of people living with hepatitis B infection.
- All Aboriginal and Torres Strait Islander people.
- People who inject drugs or are on opioid substitution therapy.
- People living with hepatitis C.
- Men who have sex with men.
- People living with HIV.
- Prisoners and those on remand.
- People no longer in a custodial setting who started, but did not complete, the vaccine course while in custody.
- All refugees and humanitarian entrants including asylum seekers.
- All people under 20 years of age.

## Clinical information

- [Hepatitis B disease information and advice – Department of Health and Human Services](https://www2.health.vic.gov.au/public-health/infectious-diseases/disease-information-advice/hepatitis-b)  
<<https://www2.health.vic.gov.au/public-health/infectious-diseases/disease-information-advice/hepatitis-b>>
- [If you have diagnosed a patient with hepatitis B and need assistance – Hep B Help](http://www.hepbhelp.org.au)  
<<http://www.hepbhelp.org.au>>
- [Co-infection & Immunosuppression - Australasian Society for HIV Medicine](http://hepatitisb.org.au/11-0-complex-situations-co-infection-and-immunosuppression#11-3-immunosuppression-and-reactivation)  
<<http://hepatitisb.org.au/11-0-complex-situations-co-infection-and-immunosuppression#11-3-immunosuppression-and-reactivation>>
- [Notify a condition now - Department of Health and Human Services](https://www2.health.vic.gov.au/public-health/infectious-diseases/notify-condition-now)  
<<https://www2.health.vic.gov.au/public-health/infectious-diseases/notify-condition-now>>

- [Eligibility criteria for free vaccines – Department of Health and Human Services](https://www2.health.vic.gov.au/public-health/immunisation/immunisation-schedule-vaccine-eligibility-criteria/immunisation-schedule-victoria)  
<<https://www2.health.vic.gov.au/public-health/immunisation/immunisation-schedule-vaccine-eligibility-criteria/immunisation-schedule-victoria>>

## Consumer information

- [Hepatitis B – Better Health Channel](https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/hepatitis-b)  
<<https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/hepatitis-b>>



Dr Brett Sutton  
Deputy Chief Health Officer (Communicable Disease)

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Authorised and published by the Victorian Government, 1 Treasury Place, Melbourne.

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