



## OPERATIONAL DIRECTIVE

**Enquiries to:** Dr Donna Mak – Tel: 9388 4828  
**Supersedes:** OP 1995/05 (22/09/2005)  
**Superseded by:**

**Number:** OD 0146/08  
**Date:** 25 August 2008  
**File No:** 04-04458

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**Subject:** **Guidelines for the Provision of Hepatitis A and B Vaccine to Adults in Western Australia at Risk of Acquiring these Infections by Sexual Transmission and Injecting Drug Use**

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***This Operational Circular is designed to advise Department of Health staff on Departmental policies and procedures.***

### 1. BACKGROUND

These guidelines have been designed to increase the accessibility of hepatitis A and B vaccines for adults at risk of acquiring these infections by sexual transmission and/or injecting drug use.

Refer to OP 1529/02 “Hepatitis B vaccination program” and OD 0074/07 “Management of Hepatitis A” for guidelines for vaccinating people at risk of acquiring hepatitis B or A via other transmission routes.

These guidelines have been developed in accordance with the National Health and Medical Research Council (NHMRC) recommendations for hepatitis B vaccination (Commonwealth of Australia, 2008). However, these guidelines do not apply to all groups that the National Health and Medical Research Council (NHMRC) recommends be vaccinated against hepatitis B.

The NHMRC recommends that combined hepatitis A and B vaccine be considered for certain groups, including: expatriates and long-term visitors to developing countries; medical, dental and nursing undergraduate students; men who have sex with men; injecting drug users; patients with chronic liver disease; the intellectually disabled and their carers; and people with haemophilia who may receive pooled plasma concentrates. People who are not eligible to receive free hepatitis A or B vaccine under the program outlined in this operational circular are encouraged to be vaccinated for hepatitis B, although they may be liable for any associated costs. (Note: The Department of Justice provides free hepatitis B vaccination for Prison Officers and inmates, and free combined hepatitis A and B vaccine for prisoners who are hepatitis C and/or HIV positive.)

The Department of Health will provide combined hepatitis A and B vaccine and monovalent hepatitis A and hepatitis B vaccine to approved non-for-profit organisations that have a high proportion of at risk clients (see Sections 2.1 and 2.2) to be provided free to their at risk clients.

## **2. PROVISION OF COMBINED HEPATITIS A AND B VACCINE OR MONOVALENT HEPATITIS A OR HEPATITIS B VACCINE FOR HIGH RISK GROUPS**

### **2.1 Groups eligible to receive free hepatitis A and/or B vaccination**

- 2.1.1 Men who have sex with men
- 2.1.2 People with chronic liver disease and/or hepatitis C infection
- 2.1.3 People who inject drugs
- 2.1.4 People with HIV infection
- 2.1.5 People with multiple sex partners, e.g. sex workers

**Note:** Inmates of correctional facilities are not eligible for Department of Health funded Hepatitis A and Hepatitis B vaccines as the Department of Justice provides vaccines in these settings.

### **2.2 Organisations authorised to provide free hepatitis A and/or B vaccination**

The following not-for-profit organisations and government agencies are authorised to provide hepatitis A and/or B vaccination funded by the Department of Health WA free-of-charge to clients in the high risk groups detailed in Section 2.1:

- 2.2.1 Western Australian Substance Users' Association
- 2.2.2 WA AIDS Council
- 2.2.3 Perth and Fremantle Streetdoctor
- 2.2.4 AMPRF – Perth Naltrexone Clinic
- 2.2.5 Magenta/Street Workers Outreach Project WA (SOPWA)
- 2.2.6 Next Step Clinical Services
- 2.2.7 Mobile GP
- 2.2.8 Harry Hunter Rehabilitation Clinic
- 2.2.9 Perth Bridge Program
- 2.2.10 Kimberley, Pilbara, Goldfields and Midwest Population Health Units

Other non-for-profit organisations with a high proportion of at risk clients may apply to Communicable Disease Control Directorate (CDCD) for authorisation to provide hepatitis A and/or B vaccination funded by the Department of Health WA free-of-charge to clients in the high risk groups detailed in Section 2.1. Applications should include written evidence of the organisation's non-for-profit status and demonstrate an appropriate structure for clinical and financial governance.

General Practitioners who notify a new case of hepatitis C on or after 1 September 2005 may provide hepatitis A and/or B vaccination funded by the Department of Health WA free--of-charge to this patient.

Patients who wish to access hepatitis A and/or B vaccination outside of the systems described above, need to pay for their own vaccine.

### **2.3 Serology**

It is commonly accepted that a patient population would need to have >30% prevalence of hepatitis B immunity/carriage before it becomes cost-effective to do pre-vaccination testing (Jacobs, 2003). However, if pre-vaccination testing is not performed, then people who are hepatitis B carriers (i.e. hepatitis B surface antigen positive) will not learn of their HBsAg positive status, nor of the preventive measures

that they and their household/sexual contacts should follow. Thus, although the prevalence of hepatitis B immunity/carriage in Australian populations is unlikely to be >30%, it is recommended that at the first visit, patients in the defined high-risk groups to which this circular applies receive the first dose of vaccine and have their hepatitis B immunity tested. Those who are already immune or are a hepatitis B carrier do not require further doses of hepatitis B vaccine, but should complete a course of hepatitis A vaccination. Testing for hepatitis A immunity is not recommended because prevalence of immunity in Australian populations is low and because knowledge of immunity confers no advantage to either the patient or their household/sexual contacts (unlike knowledge of hepatitis B carriage status). Pre-vaccination screening for hepatitis A at the time of first vaccine dose may be considered on an individual case-by-case basis if the patient is from a high prevalence group, e.g. born before 1945, born or lived in an area of high endemicity, Aboriginal and Torres Strait Islanders, men who have sex with men (MSM), past history of jaundice.

## **2.4 Vaccine Schedule**

Patients known to be either immune to hepatitis B or a hepatitis B carrier before commencement of vaccination should have two doses of hepatitis A vaccine, 6-12 months apart.

Patients known to be immune to hepatitis A before commencement of vaccination should have three doses of hepatitis B vaccine administered at 0, 1 and 6 months. In high-risk groups, the use of an accelerated schedule may improve compliance and the speed at which immunity is achieved. An accelerated four dose schedule at 0, 7, 21 days, with a booster dose after 12 months, is approved for adult Enderix-B®.

The routine schedule for combined hepatitis A and B vaccination in adults is three doses administered at 0, 1 and 6 months. In high-risk groups, the use of an accelerated schedule may improve compliance and the speed at which immunity is achieved. An accelerated four dose schedule at 0, 7, 21 days, with a booster dose after 12 months, is approved for adult Twinrix® (720/20).

Patients who have an initial dose of Twinrix®, but are then found to be either immune to hepatitis B or a hepatitis B carrier, do not require further doses of Twinrix®. However, they should have a second dose of hepatitis A vaccine 6 to 12 months after the initial dose of Twinrix®.

## **2.5 Ordering and Record Keeping**

### **2.5.1 Metropolitan, Wheatbelt, South West and Great Southern regions:**

The STI/BBV program, CDCD, will post a letter (Appendix 1) vaccine order forms (Appendix 2) to medical practitioners who have diagnosed a patient with hepatitis C infection as indicated by receipt of either a laboratory or a medical practitioner's notification of a newly diagnosed case of hepatitis C. Medical practitioners should then fax the order form back to CDCD, which will coordinate vaccine supply by either CSL (metropolitan area) or the appropriate regional supply point.

### 2.5.2 Kimberley, Pilbara, Goldfields and Midwest regions:

Population Health Units in these regions will post a vaccine order form to medical practitioners who notify a newly diagnosed case of hepatitis C to the regional Population Health Unit. Medical practitioners should then fax the order form back to the population health unit, which may then order vaccines directly from CSL. Population health unit staff may also order vaccines directly from CSL for patients in the risk groups defined in section 2.1 who live in these regions.

### 2.5.3 Other organisations authorised to provide free hepatitis A and/or B vaccination:

The organisations listed in Section 2.2 may order vaccines directly from CSL for patients in the risk groups defined in section 2.1 using Hepatitis A and B Vaccine Order Form for authorised not-for-profit organisations (Appendix 4).

## 3. FURTHER INFORMATION

For further information about this program contact Dr Donna Mak (telephone 9388 4828), Medical Adviser, STI/BBV program, Communicable Disease Control Directorate, Department of Health, Western Australia.

## 4. REFERENCES

1. Commonwealth of Australia (2008), *Australian Immunisation Handbook 9th Edition 2008*, National Health and Medical Research Council.
2. Jacobs RJ, Saab S, Meyerhoff AS, Koff RS. An economic assessment of pre-vaccination screening for hepatitis A and B. *Public Health Rep.* 2003 Nov-Dec;118(6):550-8.

## 5. APPENDICES

Appendix 1: Letter to medical practitioners: Metropolitan, Wheatbelt, South West and Great Southern regions.

Appendix 2: Hepatitis A and/or B vaccination program for patients with newly diagnosed hepatitis C – Initial Hepatitis A and/or B Vaccine Order Form for GPs, and: Hepatitis A and/or B vaccination program for patients with newly diagnosed hepatitis C – Final Hepatitis A and/or B Vaccine Order Form for GPs.

Appendix 3: Hepatitis A and B Vaccine Order Form for Regional Population Health Units and Regional Hospital Pharmacies.

Appendix 4: Hepatitis A and B Vaccine Order Form for authorised not-for-profit organisations.

Dr Peter Flett  
**ACTING DIRECTOR GENERAL**



Department of Health  
Government of Western Australia

Dr Donna Mak  
Medical Adviser, STI/BBV Program  
Communicable Disease Control Directorate  
Department of Health WA  
PO Box 8172  
PERTH BUSINESS CENTRE WA 6849

TO: Dr \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Dear Dr

The Communicable Disease Control Directorate has received a laboratory or doctor's notification of hepatitis C in the following patient whom you have tested:

Name:

DOB: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

Sex: M  F

Address:

\_\_\_\_\_  
\_\_\_\_\_  
Postcode: \_\_\_\_\_

If your organisation already provides free hepatitis A and B vaccination to people with hepatitis C, you do not need to read any further.

The Department of Health WA now provides a course of free hepatitis A and B vaccination (Twinrix<sup>®</sup> 720/20 **standard schedule** of 3 doses at 0, 1 and 6 months **or accelerated schedule** of 4 doses at 0, 7 and 21 days with 12 month booster) to people with hepatitis C in accordance with National Health and Medical Research Council's recommendations (Commonwealth of Australia (2008), *Australian Immunisation Handbook 9<sup>th</sup> Edition 2008*, National Health and Medical Research Council). In high risk groups, the use of an accelerated schedule may improve compliance and the speed at which immunity is achieved.

If your patient's hepatitis B status is unknown, it is recommended that they be tested for HbsAg on the day of the first dose of vaccine so that those who are hepatitis B carriers can take appropriate preventive measures with their household/sexual contacts, and to prevent further unnecessary vaccine doses. Patients who are immune to hepatitis B or are a hepatitis B carrier do not require further doses of Twinrix<sup>®</sup>, but should have a second dose of hepatitis A vaccine 6 to 12 months after the initial dose of Twinrix<sup>®</sup>.

If you know that your patient is either a hepatitis B carrier or immune to hepatitis B already, then you may offer them a course of hepatitis A vaccine alone. In this case they should have two doses of hepatitis A vaccine, 6-12 months apart.

This vaccination program is provided through the patient's general practitioner as uptake and completion of vaccination programs are higher in primary health care settings.

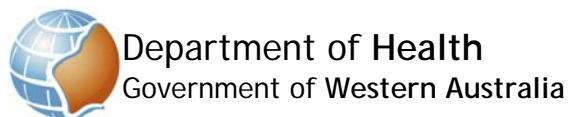
- If you are this patient's GP and your patient wants to have hepatitis A and B vaccination, please complete the attached order form.
- If you do not see this patient in a GP or primary health care setting, please a) inform them of the opportunity for free vaccination and ask them to give this letter and order forms to their GP or b) forward this letter and order forms to the patient's referring GP.

Please contact me if you have questions about this program. Remember you still need to fill out a doctor's Notification Form for this case, if you have not already done so.

Yours sincerely

DR DONNA MAK

Date



**Hepatitis A and/or B vaccination program for patients with newly diagnosed hepatitis C**

Hepatitis A and/or B Vaccine

Initial Order Form

**FAX TO: (08) 93884888**

To: Dr Donna Mak  
 Medical Adviser, STI/BBV Program  
 Communicable Disease Control Directorate  
 Department of Health WA  
 PO Box 8172  
 PERTH BUSINESS CENTRE WA 6849

Office Use Only
WANIDD ID: WA-2008-00000

FROM: Dr \_\_\_\_\_

Address: \_\_\_\_\_

Tel: \_\_\_\_\_ Fax: \_\_\_\_\_ (Update details if incorrect or absent)

Practice number:      (essential for CSL to process your order)

Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

**Please supply for:**

**Name:** (initials only) \_\_\_\_\_ **DOB:** \_\_\_\_ / \_\_\_\_ / \_\_\_\_ **Sex:** M  F   
 \_\_\_\_\_ Mm / dd / yyyy /

<b>Standard Schedule - Combined hepatitis A and B vaccine</b> <i>Tick appropriate dose.</i> <b>May order first 2 doses at same time if patient compliance is good AND not hepatitis B immune/carrier</b>	<b>Accelerated Schedule * - Combined hepatitis A and B vaccine</b> <i>Tick appropriate doses.</i> <b>May order first 3 doses at same time if patient compliance is good AND not hepatitis B immune/carrier</b>	<b>Patient is hepatitis B immune/carrier - Hepatitis A vaccine</b> <i>Tick this option if required.</i> <b>One dose per order</b>	<b>Patient is hepatitis A immune Hepatitis B vaccine</b> <i>Tick appropriate doses.</i> <b>May order first 2 doses at same time if patient compliance is good</b>
1 <sup>st</sup> (0 months) <input type="checkbox"/> 2 <sup>nd</sup> (1 month) <input type="checkbox"/> 3 <sup>rd</sup> dose - order in 5- 6 months use final dose order form	1 <sup>st</sup> (0 days) <input type="checkbox"/> 2 <sup>nd</sup> (7 days) <input type="checkbox"/> 3 <sup>rd</sup> (21 days) <input type="checkbox"/> 4 <sup>th</sup> dose order in 11-12 months use final dose order form	1 <sup>st</sup> (0 months) <input type="checkbox"/>  2 <sup>nd</sup> dose order in 5-11 months - use final dose order form	1 <sup>st</sup> (0 months) <input type="checkbox"/> 2 <sup>nd</sup> (1 month) <input type="checkbox"/> 3 <sup>rd</sup> dose - order in 5- 6 months use final dose order form

\* In high risk groups, the use of an **accelerated schedule** may improve compliance and the speed at which immunity is achieved.

Options for delivery (tick **one** box):

**Metropolitan area**

Free delivery by CSL Ltd with your next routine vaccine order.

**Wheatbelt, South West and Great Southern regions**

Free delivery with your next vaccine order.

Vaccine may be collected from the Regional Pharmacy at either Narrogin, Bunbury or Albany Hospitals.

**STI/BBV program office use only**

Authorisation for CSL Ltd / Regional Pharmacy Bunbury/ Regional Pharmacy Narrogin / Regional Pharmacy Albany to release vaccine request

Signature: \_\_\_\_\_ Date : \_\_\_\_ / \_\_\_\_ / \_\_\_\_

Dr Donna Mak

**ORDER FORM FOR FINAL DOSE**

TO BE ORDERED WHEN FINAL DOSE IS DUE

### Hepatitis A and/or B vaccination program for patients with newly diagnosed hepatitis C Hepatitis A and/or B Vaccine Order Form

**FAX TO: (08) 9388 4888**

To: Dr Donna Mak  
Medical Adviser, STI/BBV Program  
Communicable Disease Control Directorate  
Department of Health WA  
PO Box 8172  
PERTH BUSINESS CENTRE WA 6849

Office Use Only  
WANIDD ID: WA-2008-00000

FROM: Dr \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_

Tel: \_\_\_\_\_ Fax: \_\_\_\_\_ (Update details if incorrect or absent)

Practice number:      (essential for CSL to process your order)

Date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

Please supply for:

Name: (initials only) DAM DOB: 3/17/1973 Sex:   
Mm/dd/yyyy

Standard Schedule - Combined hepatitis A and B vaccine <i>Final dose – order 5-6 months after 1<sup>st</sup> dose</i>	Accelerated Schedule * - Combined hepatitis A and B vaccine <i>Final dose – order 11-12 months after 1<sup>st</sup> dose</i>	Patient is hepatitis B immune/carrier - Hepatitis A vaccine <i>Final dose – order 5-11 months after 1<sup>st</sup> dose</i>	Patient is hepatitis A immune Hepatitis B vaccine <i>Final dose – order 5-6 months after 1<sup>st</sup> dose</i>
3 <sup>rd</sup> dose (6 months) <input type="checkbox"/>	4 <sup>th</sup> dose (12 months) <input type="checkbox"/>	2nd dose (6 to 12 months) <input type="checkbox"/>	3 <sup>rd</sup> dose (6 months) <input type="checkbox"/>

\* In high risk groups, the use of an **accelerated schedule** may improve compliance and the speed at which immunity is achieved.

Options for delivery (tick **one** box):

**Metropolitan area**

Free delivery by CSL Ltd with your next routine vaccine order.

**Wheatbelt, South West and Great Southern regions**

Free delivery with your next vaccine order.

Vaccine may be collected from the Regional Pharmacy at either Narrogin, Bunbury, or Albany Hospitals.

**STI/BBV program office use only**

Authorisation for CSL Ltd / Regional Pharmacy Bunbury/ Regional Pharmacy Narrogin / Regional Pharmacy Albany to release vaccine request

Signature: \_\_\_\_\_ Date : \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
Dr Donna Mak



Department of Health  
Government of Western Australia

## Hepatitis A and B Vaccine Order Form for Regional Hospital Pharmacies

### HIGH RISK ADOLESCENTS AND ADULTS

**FAX: (08) 9227 6196 (CSL Ltd) cc to (08) 9388 4888 (CDCD)**  
**PHONE: (08) 9328 7322**

**TIME**

**DATE**

.....a.m./p.m. ....../...../.....

**From:**

- Kimberley Population Health Unit
- Pilbara Population Health Unit
- Goldfields Population Health Unit
- Midwest Population Health Unit
- Wheatbelt Population Health Unit
- Regional Pharmacy Bunbury
- Regional Pharmacy Narrogin
- Regional Pharmacy Albany

VACCINE	Number of doses
Twinrix <sup>®</sup> 720/20	
Hepatitis A - Adult	
Hepatitis B - Adult	

Maximum combined Twinrix and hepatitis A vaccine “float” not to exceed 15 vials.

Contact Dr Donna Mak (08) 9388 4828 to increase the quantity in your “float”.



Department of Health  
Government of Western Australia

# Hepatitis A and B Vaccine Order Form

for authorised not-for-profit organisations

## HIGH RISK ADOLESCENTS AND ADULTS

**FAX:** 9227 6196  
**PHONE:** 9328 7322

**TIME**

**DATE**

.....

.....

<b>Practice Name:</b>	.....
<b>Practice Number:</b>	..... .....
<b>Delivery Notes:</b>	..... ..... .....

VACCINE	Number of doses
Twinrix® 720/20	
Hepatitis A - Adult	
Hepatitis B - Adult	

**NOTES:**

- Twinrix 720/20 can be given in a standard 3-dose schedule (0, 1, 6 months) or in an accelerated 4-dose schedule (0, 7, 21 days, 12 months).
- Adult hepatitis A vaccine can be given in a standard 2-dose schedule (0, 6-12 months).
- Adult hepatitis B vaccine can be given in a standard 3-dose schedule (0, 1, 6 months).
- Vaccine deliveries are free to metropolitan immunisation providers once each week from February to April inclusive and once each month thereafter.

CSL charges \$20 per additional vaccine delivery.