

**Promoting  
hepatitis B  
vaccination**

hep  B

## Introduction

Hepatitis B is a serious blood borne infection that can exacerbate hepatitis C infection, can cause serious liver damage and sometimes results in death.

Hepatitis B infection is preventable with a simple course of three vaccinations.

Despite considerable improvements in the level of hepatitis B vaccinations amongst injecting drug users, much of this improvement has been in prison settings. Many more injectors could be offered vaccination through drug treatment services or needle exchanges. This guide and the supporting materials are designed to help promotion of the wide availability of vaccination.

This briefing forms a part of Harm Reduction Works, a National Treatment Agency and Department of Health initiative. It is intended to give professionals working with drug users, tools to implement essential harm reduction interventions among injecting drug users.

**If the strategy of vaccinating injecting drug users, and others at risk from contact with injecting drug users, is to be as effective as possible, services have to find effective ways of ensuring that:**

- Vaccinations are consistently offered to all those at risk (including those not currently in contact with treatment services);
- All available opportunities for vaccination are utilised;
- Getting vaccination is as simple as possible, without unnecessary obstacles; and
- The full vaccination schedule is completed in as many cases as possible.

**This guide gives information on:**

- The hepatitis B virus;
- Hepatitis B vaccination; and
- Possible strategies to increase uptake of hepatitis B vaccination.

## **Hepatitis B**

### **The hepatitis B virus:**

- Is common amongst injecting drug users;
- Requires only microscopic amounts of blood-to-blood transfer to cause risk of infection; and
- Is very tough and has been shown to have remained infectious even in dried blood

### **Transmission of hepatitis B infection can occur through:**

- Direct sharing of needles and syringes;
- Indirect sharing of paraphernalia used to prepare injections;
- Unprotected sex;
- A pregnant woman passing it to her unborn child;
- Needlestick injuries;
- Sharing toothbrushes and razors;
- Tattooing or acupuncture with unsterile equipment; and
- Body piercing with unsterile equipment.

Hepatitis B can cause serious liver disease. The majority of adults (85% to 90%) infected by the virus will clear it after a short (occasionally severe) illness and usually gain lifelong immunity. (However, the remaining 10% to 15% of people may continue to be infectious indefinitely and will be at greatly increased risk of developing cirrhosis and liver cancer.

For people who are infected with both hepatitis B and hepatitis C the risk of serious liver disease is MUCH higher.

Shooting Up, The Health Protection Agency report for 2008, shows that about 1 in 6 injecting drug users have had a hepatitis B infection.

This means that through immunisation hepatitis B can be prevented in the majority of the remaining 85% of injecting drug users.

## **Hepatitis B vaccination**

Hepatitis B vaccine coverage has continued to increase, mainly through improved provision of vaccination through drug services and through prison vaccination programmes with the majority of IDUs now having taken up the offer of vaccination.

However, there are wide regional variations in the levels of uptake of hepatitis B vaccination. In England, the 2006/07 Healthcare Commission NTA joint improvement review on harm reduction indicated only 4% of areas as either excellent or good in relation to hepatitis B vaccination. There are clear opportunities to build on the improvements to date.

The Health Protection Agency has also expressed concern that most dedicated needle exchanges, which may see injectors sooner than the other settings and could therefore provide protection earlier, do not provide onsite vaccinations.

### **A 2003/4 survey of injectors who had been vaccinated and looking at where the vaccination took place found:**

- 38% prison;
- 28% Drug treatment service;
- 17% General Practitioner; and
- 14% Needle exchange.

Whilst not all needle exchanges will be able to provide vaccination to injectors and their vulnerable family and friends, it appears that many that could be providing vaccination are not doing so or are not doing it as effectively as they could.

In 2006, the National Treatment Agency for Substance Misuse (NTA) second Annual Service User Satisfaction Survey reported that 1 in 5 injectors requested hepatitis B vaccination but did not receive it.

Hepatitis B vaccination can be monitored by services and commissioners. This can be used as a basis for achieving significant improvement.

## Vaccination practicalities

**The target groups for vaccination via drug treatment services and needle exchanges are:**

- Injecting drug users;
- Those who are living with an injecting drug user; and
- The sexual partner of someone who is, or has been, an injecting drug user.

Consideration should be given to use of the most accelerated option of 0, 7 and 21 days because it has most chance of being completed by the target group. However, this accelerated schedule is slightly less likely to be effective than other more protracted schedules and for this reason a booster should be offered at 12 months when it is used. In other cases, for example in the light of hepatitis A outbreaks, the combined hepatitis A and B vaccine may be used preferentially.

Although it is good practice to offer blood testing in needle exchanges for all three blood borne viruses (HBV, HCV and HIV), blood testing is not a necessity prior to vaccination since the vaccine will do no harm to those who have been previously infected with hepatitis B.

An example service protocol for hepatitis B vaccination is available at: <http://tinyurl.com/yjfna4b>

An example of a patient group direction for providing hepatitis B vaccination is available at: <http://tinyurl.com/yhwuy6s>

## **Strategies for improving vaccine uptake and course completion**

### **Drug partnerships such as Drug and Alcohol Action Teams can ensure:**

- All opportunities to offer and deliver hepatitis B vaccination are utilised;
- Training, information and other educational resources are made available to the workforce about prevention of hepatitis B infection; and
- Clear written information about the availability and benefits of hepatitis B vaccination is communicated to all injecting drug users by means of posters, leaflets and other media.

### **Target agencies for promotional media and dissemination of information could include:**

- Community pharmacies;
- Criminal justice agencies;
- Housing and employment agencies;
- Outreach services;
- Primary health-care teams; and
- Accident and emergency departments.

## **Vaccine safety**

The hepatitis B vaccine is recognised as very safe – the only commonly reported undesirable effect is soreness or swelling at the vaccination injection.

The risks of hepatitis B infection, especially to those who already have hepatitis C, mean that such small risks associated with vaccination are far outweighed by the benefits – which can be life-saving.

## **Hepatitis A vaccine**

The 2007 UK Clinical Guidelines document recommends that injecting drug users are vaccinated against hepatitis A and hepatitis B. The guidance states that the benefits of hepatitis A vaccination are modest and the benefits of hepatitis B vaccination are substantial and so recommends prioritising hepatitis B vaccination when necessary.

Hepatitis A vaccine can be given as a 2 dose schedule over 6 to 12 months when using the single component vaccine (usually the preferred option), or as a 3 dose schedule over 3 weeks to 6 months when using the combined hepatitis A/B vaccine.

As with hepatitis B, there is no need to blood test for viral status prior to vaccination.

## **Bibliography and further reading**

Health Protection Agency, Shooting Up: Infections among injecting drug users in the United Kingdom 2006. An update: October 2008

Baral S. Sherman S. Millson P. et al Vaccine immunogenicity in injecting drug users: a systematic review The Lancet Volume 7, Issue 10, October 2007, Pages 667-674

National Treatment Agency for Substance Misuse, Harm Reduction Strategy Guidance to support adult drug treatment planning 2008/09