



# Frequently Asked Questions (FAQs) to support the opt-out BBV testing policy

This information sheet has been put together by Public Health England (PHE) Health and Justice Team and The Hepatitis C Trust, National AIDS Trust (NAT) and the British Liver Trust to support the implementation of the opt-out blood-borne virus (BBV) testing policy. It includes information to support stakeholders in implementing this work and covers the following areas:

- Information about the opt-out BBV policy
- General information on BBVs
- Useful contacts for further information

## 1. Information about the opt-out BBV policy

### 1.1 Why are we introducing an opt-out BBV testing policy in English prescribed places of detention?

The burden of infection with BBVs is high amongst prisoners in England, for example in the Annual Report of the Chief Medical Officer's Surveillance Volume 2012, it is stated that among those tested between 2008 and 2012, hepatitis C antibodies were discovered in a greater proportion of prisoners (14%) than in people in the general population (3%), suggesting that prevalence of hepatitis C is considerably higher in the prison population than in the general population<sup>1</sup>. PHE has data from several different sources (Prison Health Performance Quality Indicators [PHPQIs], PHE Sentinel Surveillance of BBV testing, Genitourinary Medicine Clinic Activity Dataset [GUMCAD], Survey of Prevalent HIV Infections Diagnosed [SOPHID], and Public Health Intelligence for Prisons and Secure Settings Service [PHIPS] reports) which show a much higher prevalence of infection among prisoners than their peers in the community. However, all these data sources also show significant under-testing of prisoners. This is explained by several factors, with one of these being how prisoners are offered the opportunity to be tested. PHE, The Hepatitis C Trust, British Liver Trust and NAT therefore advocated for the development of an 'opt-out' testing programme in prisons, whereby prisoners are offered the chance to be tested for BBVs infection near reception and at several time points thereafter by appropriately trained healthcare staff. This model has worked in antenatal services in the community where there has been a significant rise in both the offer and uptake of testing for HIV by development of an 'opt out' method.

## 1.2 What do we mean by BBVs?

The BBVs being looked at in this context are HIV, hepatitis B and hepatitis C.

## 1.3 When was this policy agreed at national level?

NHS England, NOMS and PHE published their National Partnership Agreement<sup>2</sup> in 2013 which sets out the shared strategic intent and joint corporate commitments in the commissioning, enabling and delivery of healthcare services in adult prisons in England. The document listed 12 priorities for 2013/14, one of which was:

*'To work together to design and deliver an appropriate 'opt-out' model of testing for BBVs by April 2014, in collaboration with other non-statutory partners (e.g. National AIDS Trust and the Hepatitis C Trust).'*

## 1.4 When do prisons need to introduce the opt-out BBV testing?

It is hoped that most prisons will introduce the new policy during 2014/15; however we recognise that some establishments are at different stages in being ready to do this. Therefore 'pathfinder' prisons are being identified to introduce this initially; other prisons will then be able to learn from their experiences and when they introduce the policy later in 2014/15.

## 1.5 Who decides when to introduce the policy in a prison?

Arrangements to introduce the national policy should be agreed locally by the prison healthcare provider, PHE Health and Justice Public Health Specialist and the local NHS England Area Team commissioner.

## 1.6 Is there any information available to support stakeholders to implement the new policy?

A range of documents have been produced to assist stakeholders to introduce this policy, all of which can be accessed on the PHE Health and Justice PHiPs Team pages:

<https://www.gov.uk/government/collections/public-health-in-prisons#improving-testing-and-treatment-rates-for-bloodborne-viruses>

## 1.7 Should ALL prisoners be tested for BBVs?

BBV testing should be recommended to all prisoners including those already in prison **unless**:

- They have been tested in the last 12 months and have NOT subsequently put themselves at risk of infection.
- They have been tested and are positive.
- They are known to be positive for a BBV.
- For hepatitis B: If a patient has documented evidence of a negative result and have been **fully** vaccinated against hepatitis B they do not require further testing for this BBV infection.

## 1.8 What exactly should we be testing for?

- Hepatitis C - HCV antibody<sup>1</sup>
- Hepatitis B - HBsAg
- HIV – (Ab and Ag P24 test<sup>2</sup>)

## 1.9 What should I do when we receive a positive result for a prisoner?

- Refer to secondary care treatment pathways (for hepatitis B positive, suspend vaccination and refer for further testing to specialist service).
- Ensure patient receives assessment by specialist.
- Provide harm minimisation advice.

## 2. General Information on BBVs

### 1.1 Hepatitis B<sup>3</sup>

#### **What is hepatitis B?**

Hepatitis B is a BBV infection that can be prevented through vaccination. The hepatitis B virus (HBV) causes hepatitis (inflammation of the liver) and can also cause long term liver damage.

#### **What are the symptoms of hepatitis B?**

The average incubation period is 40-160 days. Many people have no symptoms while others experience a flu-like illness including a sore throat, tiredness, joint pains, and a loss of appetite. Other symptoms may include nausea and vomiting. Acute infection can be severe causing abdominal discomfort and jaundice. Mortality during the acute phase of infection is less than 1%.

#### **How common is hepatitis B?**

The World Health Organisation (WHO) estimates that in the UK the prevalence of chronic hepatitis B infection is 0.3%. Hepatitis B is much more common in other parts of the world such as South East Asia, Africa, the middle and Far East and southern and eastern Europe with prevalence in some countries as high as 10%. WHO estimates that there are 350 million chronically infected people world-wide.

#### **How is hepatitis B virus transmitted?**

The virus may be transmitted by contact with infected blood or body fluids such as through household or sexual contact with an infected person. The virus can be spread by the following routes:

- sharing or use of contaminated equipment during injecting drug use

<sup>1</sup> Where a patient is anti-HCV positive it is important that the same sample is used to test for HCV RNA via PCR. Samples should be of sufficient quantity that they can be immediately PCR tested following a positive antibody test. No prisoner should receive a positive antibody result without having a PCR result at the same time.

<sup>2</sup> A confirmatory test for HIV will need carrying out on positive results.

- vertical transmission (mother to baby) from an infectious mother to her unborn child
- sexual transmission
- receipt of infectious blood (via transfusion) or infectious blood products (for example clotting factors)
- needlestick or other sharps injuries (in particular those sustained by hospital personnel)
- tattooing and body piercing

### **What is chronic hepatitis B infection?**

The failure to clear hepatitis B infection after six months leads to the chronic carrier state. Many people who become chronic carriers have no symptoms and are unaware that they are infected. These individuals will remain infectious and will be at risk of developing cirrhosis and primary liver cancer.

### **How can hepatitis B be prevented?**

There is a vaccine available to prevent hepatitis B infection. The vaccine should be given to all individuals who are at risk from hepatitis B infection.

Consult Chapter 18 about Hepatitis B vaccination in the Green book: immunisation against infectious disease:

<https://www.gov.uk/search?q=Green+book%3A+immunisation+against+infectious+disease.+>

### **Is there a treatment for chronic hepatitis B infection and can it be cured?**

The main treatment for chronic hepatitis B is antiviral medication, which helps stop the hepatitis B virus from causing liver damage. Most patients do not require treatment, as although the virus is present in the body, it does not always damage the liver. In some patients, their immune system suppresses the virus without causing damage. However if there is evidence of ongoing liver damage then treatment is required.

There are now very effective medications that can suppress the virus over many years and this can slow down the damage that is being done to the liver, allowing the body to repair this. However, it is unusual for this treatment to clear the virus permanently.

## **2.2 Hepatitis C<sup>45</sup>**

### **What is hepatitis C?**

Hepatitis C is a BBV that predominantly affects the liver and if untreated can lead to severe liver disease. It can be prevented and in many cases it can be cured.

### **What are the symptoms of hepatitis C?**

Hepatitis C infection affects different people in different ways; many experience no symptoms at all while others experience extreme tiredness and can feel very unwell. Reported symptoms include fatigue, weight loss, nausea, 'flu like symptoms, problems concentrating, abdominal pain and jaundice.

It is estimated that around 15-20% of infected people clear their infections naturally within the first 6 months of infection. For the remainder, hepatitis C is a chronic infection that can span several decades and can be life-long if untreated.

### **How common is hepatitis C?**

The WHO estimates that there are 170 million carriers of hepatitis C worldwide. On a global scale, the United Kingdom is considered to be a relatively low prevalence country. However, among those tested in England between 2008 - 2012, the prevalence of chronic hepatitis C infection was discovered in a greater proportion of prisoners (14%) than in people in the general population (3%).

### **How is hepatitis C virus transmitted?**

Hepatitis C is a BBV, spread when blood from an infected person gets into the bloodstream of another.

Today, injecting drug use is the most common way to acquire hepatitis C virus infection. Individuals who inject drugs acquire their infections when they share contaminated injecting equipment (not just needles and syringes) with other infected individuals.

In the United Kingdom blood donations have been screened for hepatitis C since September 1991. Consequently, it is now very difficult to acquire hepatitis C virus infection by blood transfusion. However, some people who received blood or blood products before this date could be infected if they received blood from a donor who was carrying the hepatitis C virus.

Unlike many other BBVs, sexual transmission is relatively rare. Nevertheless, it may occur and people with new or casual sexual partners are advised to use condoms to protect them against all sexually transmitted infections.

Infection is not acquired through normal social contact, but it can occur in situations where blood can be transferred from one person to another, for example by sharing razors or toothbrushes. It is also possible to acquire hepatitis C infection during body piercing (like tattooing or acupuncture) if sterile needles are not used. Tattooing is obviously an issue in prisons and needs to be highlighted with prisoners.

The risk of a mother infecting her newborn baby with hepatitis C is estimated to be around 5%. This risk is highest in mothers who are also infected with HIV and in those who have particularly high levels of virus circulating in their blood. Current regulations do not advise HCV-infected women against breast-feeding as there is insufficient evidence to assess the risk of transmission via breast milk.

### **What is chronic hepatitis C infection?**

A hepatitis C infection can be categorised into two stages. The first stage is acute infection (following initial infection). The second stage is chronic infection. The acute stage refers to the first 6 months of infection and does not necessarily result in any noticeable symptoms. Approximately 15 - 20% of those infected with hepatitis C will naturally clear the virus from their body within the first six months. For the remaining 80-85% a chronic (long-term) infection will develop.

In those individuals who fail to clear their infections naturally, the outcome of infection is extremely variable. Many people never develop any signs or symptoms of liver disease in their lifetime and consequently may not even know that they have been infected. Other people go on to develop serious liver disease. It is not currently

possible to work out who will progress to serious liver disease and who will have only very mild, if any, disease.

In most cases the infection will not be apparent for many years. This is partly because the liver has a remarkable capacity to 'cope' with the infection. Symptoms do not often develop until the liver has been quite extensively damaged. Alcohol consumption, acquiring the infection at an older age, and being male, have all been shown to be associated with more progressive disease.

### **How can hepatitis C be prevented?**

Prevention is centred on stopping the blood from infected individuals from coming into contact with others. Injecting drug users are at high risk of infection and when injecting cannot be avoided, sterile injecting equipment (including water, cookers and filters) should always be used; injecting equipment should never be shared. Similarly, individuals who undergo body piercing and tattooing should ensure that disposable sterile needles are used. In the home, sharing of personal items, like toothbrushes and razors, should be avoided and all wounds and cuts should be cleaned and covered with waterproof dressings; blood spills should be cleaned-up with undiluted bleach. In a health care setting, universal precautions should be adhered to; all blood, body fluids and body tissues should be treated as potentially infectious at all times.

### **Is there a treatment for chronic hepatitis C infection and can it be cured?**

Up until 2012, the most effective pharmaceutical treatment for hepatitis C consisted of taking two drugs, pegylated Interferon and Ribavirin. This is known as dual or combination therapy. In trials, it has been shown to be effective in 50 - 80% of cases depending on genotype.

At the beginning of 2012 NICE approved two new drugs for the treatment of hepatitis C – Telaprevir and Boceprevir also known as Incivo and Victrelis. It is important to remember that these new drugs are taken WITH the old drugs - Interferon and Ribavirin. They are also only for those with Genotype 1.

These drugs are known as 'protease inhibitors'. In trials they have proved effective in around 70% of cases. These treatment regimes are usually 48 weeks but may be shortened in a significant number of patients who have a very rapid response.

Drug treatment to eradicate the virus has advanced greatly in the last few years. The success rates for genotype 1 are now as high as 70%. Genotype 2 still seems to be the easiest to treat having a success rate of 80%. Genotype 3 treatment is successful in approximately 70% of people. Genotype 4 treatment seems to be successful in approximately 40% of cases. However, the treatment can have significant side effects and is not suited to everyone. New treatments are on the horizon for hepatitis C which will hopefully be even more effective than the current regimes.

## **2.3 HIV<sup>6</sup>**

### **What is HIV?**

HIV is a virus that attacks the body's immune system-the body's defence against diseases. The latest research suggests that between 70 and 90 per cent of people may experience symptoms of infection a few days after having been infected. A

combination of symptoms, such as fever, sore throat, rash, fatigue, headaches, diarrhoea and loss of appetite, are a potential sign of recent HIV infection if they occur soon after a risk incident. These symptoms usually disappear within two or three weeks. Some people may not experience these early symptoms. In all cases, without effective treatment the immune system will become very weak and no longer be able to fight off illnesses.

### **Are HIV and AIDS the same?**

No. When someone is described as *living with HIV*, they have the HIV virus in their body. A person is considered to have developed AIDS when the immune system is so weak it can no longer fight off a range of diseases with which it would normally cope.

### **What are the symptoms of HIV?**

Around 10 days after HIV infection some people can experience flu-like symptoms, which can last anywhere from a few days to several weeks. However many people who are infected with HIV do not have any symptoms at all for 10 years or more.

If people with HIV are diagnosed early and respond to treatment they can be healthy, work and have relationships like anyone else and have a normal life expectancy. Coming to terms with an HIV diagnosis and getting used to treatment can be very difficult however, and people living with HIV will often need support from healthcare providers, friends and family, employers and support organisations.

### **How common is HIV?**

PHE state that an estimated 98,400 (93,500-104,300) people were living with HIV in the UK in 2012. The overall prevalence was 1.5 per 1,000 population (1.0 in women and 2.1 in men). An estimated 21,900 people living with HIV - over 20% - were unaware of their infection in 2012<sup>7</sup>. Gay and bisexual men and black African men and women continue to be disproportionately affected by HIV. These two groups together make up over three quarters of people with HIV in the UK.

The WHO report that globally around 35.3 million people were living with HIV at the end of 2012. An estimated 0.8% of adults aged 15–49 years worldwide are living with HIV, although the burden of the epidemic continues to vary considerably between countries and regions. Sub-Saharan Africa remains most severely affected, with nearly 1 in every 20 adults living with HIV and accounting for 71% of the people living with HIV worldwide<sup>8</sup>.

### **How is HIV transmitted?**

HIV can be passed on through infected blood, semen, vaginal fluids or breast milk. The most common ways HIV is passed on are:

- sex without a condom with someone living with HIV
- sharing infected needles, syringes or other injecting drug equipment
- from a HIV-positive mother (to her child) during pregnancy, childbirth or breastfeeding (if the right steps to prevent infection are not taken – with appropriate interventions the risk of transmission can be reduced to less than 1%)
- oral sex carries a much lower risk than vaginal or anal sex, but HIV can still be passed on through cuts or ulcers in the mouth if they come into contact with infected bodily fluids.

It is important to understand the impact of HIV treatment on transmission. Treatment reduces the amount of HIV virus in the blood stream to such a level that if someone is doing well on treatment they become virtually non-infectious.

### **How can HIV be prevented?**

If you are sexually active or share needles you could be at risk from getting HIV.

A condom should always be used when having vaginal or anal sex. If injecting drugs sterile needles and equipment should be used and never shared.

### **Is there a treatment for HIV and can it be cured?**

HIV treatment was transformed with the introduction in 1996 of Anti-Retroviral Therapy (ART) which now means that as long as someone is diagnosed in time and then adheres to their medication they can in the vast majority of cases manage their health condition and look forward to a normal life expectancy.

There are side-effects for some people who take ART, including fatigue, depression and diarrhoea, though these are increasingly well-managed.

There is no cure for HIV but treatment can keep the virus under control and the immune system healthy. People on HIV treatment can live a healthy, active life, although they may experience side effects from the treatment. If HIV is diagnosed late, treatment may be less effective in preventing AIDS. However, with antiretroviral treatment even if someone has AIDS, their long term prognosis can be excellent.

## **3. Useful contacts and further information**

There are a range of professionals you can contact to discuss any questions you may have:

### **3.1 General information on BBVs:**

The Hepatitis C Trust:	020 7089 6220 / <a href="mailto:admin@hepctrust.org.uk">admin@hepctrust.org.uk</a>
The British Liver Trust:	01425 481320 / <a href="mailto:info@britishlivertrust.org.uk">info@britishlivertrust.org.uk</a>
NAT (National AIDS Trust):	020 7814 6767 / <a href="mailto:info@nat.org.uk">info@nat.org.uk</a>

### **3.2 PHE Centres**

All PHE Centres across England have a prison lead for health protection as well as a Health and Justice Public Health Specialist. For contact details of your local centre:

#### **Named prison health protection and health and justice leads:**

<https://www.gov.uk/government/publications/public-health-in-prisons-and-other-secure-settings-contact-phe-specialist-leads>

#### **PHE Centre contact details:**

<https://www.gov.uk/government/publications/phe-centre-addresses-and-phone-numbers/phe-local-and-regional-contact-details#contact-details-for-your-region-and-local-centre>



### 3.3 NHS England Area Teams

There are lead Area Teams responsible for the commissioning of health and justice. Contact details can be accessed at:

<https://www.england.nhs.uk/commissioning/health-just/contacts/>

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<sup>1</sup> **Annual Report of the Chief Medical Officer's Surveillance Volume 2012, On the State of the Public's Health** <https://www.gov.uk/government/news/chief-medical-officer-publishes-annual-report-on-state-of-the-publics-health>

<sup>2</sup> **NOMS, NHS England and PHE, National Partnership Agreement, 2013**  
<http://www.justice.gov.uk/about/noms/working-with-partners/health-and-justice/partnership-agreement>

<sup>3</sup> **HPA website:** <https://www.gov.uk/government/collections/hepatitis-b-guidance-data-and-anal>

<sup>4</sup> **HPA website:** <https://www.gov.uk/government/collections/hepatitis-c-guidance-data-and-analysis>

<sup>5</sup> **The Hepatitis C Trust website:**  
<http://www.hepctrust.org.uk/Treatment/Treatment/Overview+of+treatment>

<sup>6</sup> **NAT website:** <http://www.nat.org.uk/HIV-Facts/The-basics.aspx>

<sup>7</sup> **PHE, HIV in the United Kingdom: 2013 Report**  
<https://www.gov.uk/government/publications/hiv-in-the-united-kingdom>

<sup>8</sup> **WHO website:** <http://www.who.int/gho/hiv/en/>