Integrated guidance on health clearance of healthcare workers and the management of healthcare workers living with bloodborne viruses (hepatitis B, hepatitis C and HIV)

Quick Reference Guide

This document is intended as an aide-mémoire only and should be read in conjunction with the guidance document.
1a) Health Clearance for new healthcare workers: Identification of ‘new healthcare workers’

1b) Health Clearance for healthcare workers performing EPP/working in exposure prone environments

1c) Standard Health Clearance for all HCWs (including students) who have direct contact with blood, blood-stained body fluids or patient’s tissues

2a) Guidance for healthcare workers living with hepatitis B: Initial health clearance

2b) Guidance for healthcare workers living with hepatitis B: Occupational health monitoring for HCW performing EPP/clinical duties in renal units

3) Guidance for healthcare workers living with hepatitis C

4a) Guidance for healthcare workers living with HIV: Initial health clearance

4b) Guidance for healthcare workers living with HIV: Occupational health monitoring for HCW performing EPP
1a) Health clearance for new healthcare workers: Identification of ‘new healthcare workers’ (Chapter 6)

- The decision to clear individual HCWs to undertake EPPs is the responsibility of the consultant occupational physician in consultation with the treating physicians. UKAP may be consulted on the application of the policy, as needed.
- This flowchart is intended as an aide-mémoire only and should be read in conjunction with the guidance document.

Does the individual fall into one or more of the following categories:
- A HCW working in the NHS or independent sector for the first time.
- An existing HCW moving to a post/training that involves EPP for first time in their career.
- A HCW returning to work in the NHS, who may have been exposed to BBV while away.

Will HCW carry out EPP or are they unlikely to perform EPP but likely to practice in an exposure prone environment?

- Yes
- No

Standard health clearance applies.  
(Chapter 6; Quick reference 1c)

Will HCW carry out clinical duties in renal units?

- Yes
- No

Additional health clearance applies.  
(Chapter 6; Quick reference 1b)

Explanatory notes
1. The need for additional health checks for a HCW returning to work in the NHS should be based on a risk assessment, which should be carried out by the occupational health service. Examples of HCWs who might be considered ‘returners’ include those returning from research experience (including electives spent in countries of high prevalence for BBVs), voluntary service with medical charities, sabbaticals (including tours of active duty in the armed forces), exchanges, locum and agency work or periods of unemployment spent outside the UK.
2. Staff working in exposure prone environments include frontline paramedics and emergency technicians.
3. Staff working in renal units require clearance for HBV only.
HCW who requires additional health clearance

Test for Hepatitis B surface antigen (HBsAg) (for those performing EPP / working in exposure prone environments or performing clinical duties in renal units)

- HBsAg negative
  - No restrictions from performing clinical duties
  - Offer HBV immunisation and monitor response
- HBsAg positive
  - See guidance document (Chapter 6; Quick reference 2a)
- Previous Hep B infection with natural immunity
- Immune through vaccination (Hep B s Antibody ≥10 mIU/mL)
- Seek advice of virologist/clinical microbiologist
- No further OH monitoring required
- Continued clearance dependent on annual testing for HBsAg

Test for Hep C antibody (for those performing EPP/working in exposure prone environments)

- Hep C antibody negative
  - Can be cleared for EPP
  - Test for Hep C RNA (at an accredited UK laboratory)
    - Hep C RNA negative
      - No restrictions from performing EPPs
    - Hep C RNA positive
      - See guidance document (Chapter 6; Quick Reference 3)
- Hep C antibody positive
  - Test for Hep C RNA (at an accredited UK laboratory)
    - Hep C RNA negative
      - No restrictions from performing EPPs
    - Hep C RNA positive
      - See guidance document (Chapter 6; Quick Reference 3)

Test for HIV antibody (for those performing EPP/working in exposure prone environments)

- HIV Antibody negative
  - No restrictions from performing EPPs
- HIV Antibody positive
  - See guidance document (Chapter 6, Quick reference 4a)

1b) Health Clearance for HCWs performing EPP/working in exposure prone environments (Chapter 6)

- The decision to clear individual HCWs to undertake EPPs is the responsibility of the consultant occupational physician in consultation with the treating physician. UKAP may be consulted on the application of the policy, as needed.
- Those commissioning tests to assess the BBV status of HCWs/monitor effectiveness of treatment should ensure that identified and validated samples (IVS) are used. Testing should be carried out by an accredited laboratory that is experienced in performing such tests.
- This flowchart is intended as an aide-mémoire only and should be read in conjunction with the guidance document.
- In the case of any HCW diagnosed with hepatitis B, hepatitis C or HIV, a local risk assessment may be required. A patient notification exercise (PNE) will only be recommended if the risk assessment identifies factors that increase the risk of BBV transmission from the HCW (see Chapter 9).
1c) Standard Health Clearance for all HCWs (including students) who have direct contact with blood, blood-stained body fluids or patient’s tissues (Chapter 8)

- This flowchart is intended as an aide-mémoire only and should be read in conjunction with the guidance document.

<table>
<thead>
<tr>
<th>HCW who requires standard health clearance</th>
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<tbody>
<tr>
<td><strong>HBV vaccination</strong></td>
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<tr>
<td>Offer immunisation against hepatitis B and tests to check their response to immunisation, including investigation of non-response.</td>
</tr>
<tr>
<td>Guidance on immunisation against hepatitis B, which includes information about dosage, protocols and supplies, is contained in the relevant Chapter of the Green Book.</td>
</tr>
<tr>
<td>Declining a vaccination for HBV, or non-response to vaccine will not affect the employment or training of HCWs who will not perform EPPs/perform clinical duties in renal units.</td>
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| **Testing for HCV antibody**              |
| Offer a pre-test discussion and an HCV antibody test (and if positive, an HCV RNA test), in the context of their professional responsibilities. |
| Declining a test for hepatitis C, or having hepatitis C will not affect the employment or training of HCWs who will not perform EPPs. |

| **Testing for HIV**                       |
| Offer an HIV antibody test with appropriate pre-test discussion, including reference to their professional responsibilities. |
| Declining a test for HIV, or having HIV **will not** affect the employment or training of HCWs who will not perform EPPs. Occupational health physicians should, however, consider the impact of HIV positivity on the individual’s susceptibility to other infections when advising on suitability for particular posts. |

| **Restrictions on practice for HCW who do not perform EPP or work in exposure prone environments** |
| HCW living with either hepatitis B, hepatitis C or HIV who do not perform EPP **do not** require ongoing occupational health supervision. |
2a) Guidance for healthcare workers living with Hepatitis B: Initial health clearance (Chapter 6)

- For HCWs who will perform EPPs/work in an exposure prone environment or perform clinical duties in renal units
- The decision to clear individual HCWs to undertake EPPs is the responsibility of the consultant occupational physician in consultation with the treating physician. UKAP may be consulted on the application of the policy, as needed.
- Those commissioning tests to assess the BBV status of HCWs/monitor effectiveness of treatment should ensure that identified and validated samples (IVS) are used. Testing should be undertaken by an accredited laboratory.
- This flowchart is intended as an aide-mémoire only and should be read in conjunction with the guidance document.
- In the case of any HCW diagnosed with hepatitis B, hepatitis C or HIV, a local risk assessment may be required. A patient notification exercise (PNE) will only be recommended if the risk assessment identifies factors that increase the risk of BBV transmission from the HCW (see Chapter 9).

### New or existing Hepatitis B surface antigen positive HCW

#### Establish current viral load (Hepatitis B DNA)

- **Hepatitis B DNA <200IU/mL**
  - due to natural suppression
  - OR
  - 12 months after stopping a course of therapy

  - No restrictions from performing EPPs/working in an exposure prone environment on the condition that:
    - HCW’s viral load is <200IU/mL
    - Monitored every 12 months by consultant occupational physician.

- **Hepatitis B DNA <200IU/mL while on treatment**

  - No restrictions from performing EPPs/working in an exposure prone environment on the condition that:
    - HCW is on continuous antiviral therapy.
    - HCW’s viral load is suppressed to <200IU/mL
    - Monitored every 12 weeks by consultant occupational physician.

- **Hepatitis B DNA >200IU/mL, either while on treatment or not on treatment**

  - HCW should be restricted from carrying out EPP.

#### Explanatory notes

1. HCW who have Hep B DNA≥200IU/mL at initial assessment will need to achieve viral suppression before giving health clearance.
2. Two IVS taken no less than 4 weeks apart with both showing HBV DNA<200IU/mL are required for giving health clearance and allowing the HCW to commence EPP activities.

See Occupational Health Monitoring for HCW living with HBV (Chapter 7; Quick reference 2b).
For HCWs who will perform EPPs/work in an exposure prone environment or perform clinical duties in renal units:

- The decision to clear individual HCWs to undertake EPPs is the responsibility of the consultant occupational physician in consultation with the treating physician. UKAP may be consulted on the application of the policy, as needed.

- Those commissioning tests to assess the BBV status of HCWs/monitor effectiveness of treatment should ensure that identified and validated samples (IVS) are used. Testing should be undertaken by an accredited laboratory.

- This flowchart is intended as an aide-mémoire only and should be read in conjunction with the guidance document.

- In the case of any HCW diagnosed with hepatitis B, hepatitis C or HIV, a local risk assessment may be required. A patient notification exercise (PNE) will only be recommended if the risk assessment identifies factors that increase the risk of BBV transmission from the HCW (see Chapter 9).

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### Occupational health monitoring of HCW living with Hepatitis B

**HCW living with Hepatitis B with Hep B DNA<200 IU/mL either from natural suppression, or 12 months after stopping a course of antiviral therapy.**

- Hep B DNA tested annually¹

  - Hep B DNA <200 IU/mL
  - Hep B DNA ≥200 IU/mL

**HCW living with Hepatitis B on continuous antiviral therapy with Hep B DNA<200IU/mL**

- Hep B DNA tested every 12 weeks²

  - Hep B DNA ≥200 IU/mL
  - Hep B DNA <200 IU/mL

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**Explanatory notes**

¹Annual viral load testing can be performed no earlier than 50, and no later than 54 complete calendar weeks after the date of the preceding specimen taken for occupational health monitoring purposes.

²Quarterly viral load testing can be performed no earlier than 10, and no later than 14 complete calendar weeks after the date of the preceding specimen taken for occupational health monitoring purposes.

³Resumption of EPP activities following a period of interruption (for whatever reason) requires at least two IVS Hep B DNA <200 IU/mL, no less than 4 weeks apart.

⁴Guidance on performing a local risk assessment can be found in chapter 9.
3) Guidance for healthcare workers living with Hepatitis C (Chapters 6 and 7)

- For HCWs who will perform EPPs/work in an exposure prone environment
- The decision to clear individual HCWs to undertake EPPs is the responsibility of the consultant occupational physician in consultation with the treating physician. UKAP may be consulted on the application of the policy, as needed.
- Those commissioning tests to assess the BBV status of HCWs.monitor effectiveness of treatment should ensure that identified and validated samples (IVS) are used. Testing should be undertaken by an accredited laboratory.
- This flowchart is intended as an aide-mémoire only and should be read in conjunction with the guidance document.
- In the case of any HCW diagnosed with hepatitis B, hepatitis C or HIV, a local risk assessment may be required. A patient notification exercise (PNE) will only be recommended if the risk assessment identifies factors that increase the risk of BBV transmission from the HCW (see Chapter 9).

**New or existing Hep C RNA positive HCW**

- **Hep C RNA positive**
  - HCW should be restricted from carrying out EPP.
- **Hep C RNA negative**
  - HCW can return to perform EPP.
  - **Test for Hep C RNA at 3 months after initial RNA negative test**
    - **Hep C RNA negative**
      - No restrictions from performing EPPs/working in an exposure prone environment.
      - No further OH monitoring required. However, a local risk assessment may be required if any evidence of recrudescence at a later stage.
    - **Hep C RNA positive**
      - HCW should be restricted from carrying out EPP.
  - **Test for Hep C RNA 3 months after cessation of treatment**
    - **Hep C RNA negative**
      - HCW can return to perform EPP.
    - **Hep C RNA positive**
      - Referral for clinical follow up for consideration of antiviral treatment as appropriate
  - Referral for clinical follow up for clearance to perform if sustained viral response achieved following a course of treatment.

**Explanatory notes**

1 In the case of a HCW who spontaneously clears HCV and wishes to perform/return to EPP, advice should be sought from UKAP.
2 Guidance on performing a local risk assessment can be found in Chapter 9.
4a) Guidance for healthcare workers living with HIV: Initial health clearance (Chapter 6)

- For HCWs who will perform EPPs/work in an exposure prone environment
- The decision to clear individual HCWs to undertake EPPs is the responsibility of the consultant occupational physician in consultation with the treating physician. UKAP may be consulted on the application of the policy, as needed.
- Those commissioning tests to assess the BBV status of HCWs/monitor effectiveness of treatment should ensure that identified and validated samples (IVS) are used. Testing should be undertaken by an accredited laboratory.
- This flowchart is intended as an aide-mémoire only and should be read in conjunction with the guidance document.
- In the case of any HCW diagnosed with hepatitis B, hepatitis C or HIV, a local risk assessment may be required. A patient notification exercise (PNE) will only be recommended if the risk assessment identifies factors that increase the risk of BBV transmission from the HCW (see Chapter 9).

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### New or existing HCW living with HIV

1. Is the HCW an elite controller?  
   - Yes
   - Refer to UKAP
   - No

2. Is HCW on effective combination anti-retroviral therapy (cART)?
   - Yes
   - Test HIV plasma viral load
   - No

3. HIV plasma viral load
   - <200 copies/mL
   - >200 copies/mL

Explanatory notes

1. An elite controller is defined as a person living with HIV who is not receiving antiretroviral therapy and who has maintained their viral load below the limits of assay detection for at least 12 months, based on at least three separate viral load measurements.
2. For the purposes of initial health clearance, no less than 12 weeks apart is defined as between 12 and 16 complete calendar weeks.
3. Quarterly viral load testing can be performed no earlier than 10, and no later than 14 complete calendar weeks after the date of the preceding specimen taken for occupational health monitoring purposes.

See Occupational Health Monitoring for HCW living with HIV (chapter 7; Quick reference 4b).
Flowchart 4b) Guidance for healthcare workers living with HIV: Occupational health monitoring (Chapter 7)

- For HCWs who will perform EPPs/work in an exposure prone environment
- The decision to clear individual HCWs to undertake EPPs is the responsibility of the consultant occupational physician in consultation with the treating physician. UKAP may be consulted on the application of the policy, as needed.
- Those commissioning tests to assess the BBV status of HCWs/monitor effectiveness of treatment should ensure that identified and validated samples (IVS) are used. Testing should be undertaken by an accredited laboratory.
- This flowchart is intended as an aide-mémoire only and should be read in conjunction with the guidance document.
- In the case of any HCW diagnosed with hepatitis B, hepatitis C or HIV, a local risk assessment may be required. A patient notification exercise (PNE) will only be recommended if the risk assessment identifies factors that increase the risk of BBV transmission from the HCW (see Chapter 9).

### Occupational health monitoring of HCW living with HIV

1. Maintain UKAP-OHR registration (see chapter 7)
2. HIV plasma viral load tested every 12 weeks (IVS)

- **<50 copies/mL or below**
  - No action; retest in 12 weeks

- **≥50 but <200 copies/mL**
  - A case-by-case approach based on clinical judgement. This may result in no action or a second test done 10 days later to verify the first result. Further action would be informed by the test result.

- **≥200 but <1000 copies/mL**
  - A second test should automatically be done 10 days later on a new blood sample to verify the first result. If the viral load was still ≥200 copies/mL the HCW should cease conducting EPPs until their count, in two consecutive tests no less than 12 weeks apart, was reduced to <200 copies/mL.

- **≥1000 copies/mL**
  - The HCW should cease conducting EPPs/working in exposure prone environments immediately.
  - A second test must be done on a new blood sample 10 days later to verify the first result. If the count was still ≥1000 copies/mL, a local risk assessment should be triggered.

- **HCW does not attend for test/attends but refuses to have viral load tested.**
  - HCW should be restricted from EPP/working in exposure prone environments until it is established that is continuing with cART and their viral load (measured within the past 12 weeks) does not exceed 200 copies/mL.

### Explanatory notes

1. Quarterly viral load testing can be performed no earlier than 10, and no later than 14 complete calendar weeks after the date of the preceding specimen taken for occupational health monitoring purposes.
2. If missed test is not undertaken by 14 weeks from the date the previous IVS was drawn (for whatever reason) then resumption of EPP activities requires at least two viral loads <200 copies/mL, no less than 12 weeks apart.
3. The significance of any increase in plasma viral load above 200 copies/mL and below 1000 copies/mL, should be assessed jointly by the OH and treating physicians with input from appropriate local experts.
4. Guidance on performing a local risk assessment can be found in chapter 9.

Report any actions taken as a result of increased viral load to UKAP-OHR register.