



Yorkshire and the Humber Quality Standards Framework For Hepatitis B and C

2012

Reader Information Box

Document Purpose	To provide guidance to key stakeholders in the development and provision of hepatitis B and C services.
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Description	The document provides a quality standards framework for hepatitis B and C for commissioners and providers to use when commissioning and/or delivering a new or existing service.
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Acronyms

BBV	Blood borne viruses
CDRP	Community and Disorder Reduction Partnership
DAAT	Drug and Alcohol Action Team
DAT	Drug Action Team
DBST	Dried blood spot test
DIR	Drug Interventions Record
DH	Department of Health
DNA	Did not attend
HBV	Hepatitis B Virus
HCV	Hepatitis C virus
HPA	Health Protection Agency
HPU	Health Protection Unit
HSE	Health and Safety Executive
IDU	Injecting drug user
JSNA	Joint Strategic Needs Assessment
NDTMS	National Drug Treatment Monitoring System
NTA	National Treatment Agency
PCR	Polymerase Chain Reaction
PCT	Primary Care Trust
PHE	Public Health England
RCGP	Royal College of General Practitioners
RHBCSG	Regional Hepatitis B and C Steering Group
RNA	Ribonucleic Acid
SHA	Strategic Health Authority
SVR	Sustained Virological Response
WHO	World Health Organisation

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1. Introduction

Hepatitis B and C are blood borne infections of the liver that can be transmitted through blood contact from an infected person to a non infected person, for example through needlestick or other sharps injuries, tattooing and body piercing, sexual transmission (although uncommon with hepatitis C), through infectious blood products (for example transfusion) and sharing or use of contaminated equipment during injecting drug use. Hepatitis B can also be transmitted vertically from mothers to babies, and through contaminated body fluids including sexual transmission (both of these routes of transmission can occur with hepatitis C but are far less common than for hepatitis B).

In order to address the prevention and burden of hepatitis C (and B) effectively it is important that the four key elements of the pathway are in place as defined by the Department of Health¹:

Surveillance and research: Surveillance and research should be improved so that trends in hepatitis C infection and the effectiveness of prevention measures can be monitored.

Increasing awareness and reducing undiagnosed infections: Awareness of hepatitis C amongst health professionals, the public and high-risk groups should be increased and the promotion of testing in a range of accessible clinical and community settings in place.

High-quality health and social care services: High-quality services for the assessment and treatment of all patients with hepatitis C needs to be co-ordinated and accessible.

Prevention: Prevention efforts need to be intensified to reduce the spread of hepatitis B and C in at-risk populations, these include access to hepatitis B immunisation, advice about the risks of hepatitis C infection abroad (including information for people from minority ethnic groups visiting their countries of origin), access to a range of sterile injecting equipment for injecting drug users, safe disposal of used needles and syringes and the provision of outreach and peer education services.

Since the publication of the Department of Health's Action Plan on Hepatitis C there have been various national developments in the field, for example the HPA have increased their surveillance of hepatitis C and now produce an annual report, many drug services now offer immunisation against hepatitis B and testing for hepatitis C and various campaigns and awareness raising activities have taken place such as the Department of Health's 'Get Tested Get Treated' campaign². Furthermore the accessibility of treatment for hepatitis C has increased with some hospitals now providing in reach services into prisons and the community and more peer networks have developed to support people accessing treatment.

Whilst there have been many developments since 2004, this Quality Standards Framework still focuses on the four key elements of the hepatitis B and C pathway but provides more detail on how, in Yorkshire and the Humber, stakeholders can work effectively to deliver a quality pathway to patients regarding hepatitis B and C.

¹ Department of Health, Hepatitis C Action Plan for England, 2004
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4084521

² <http://www.nhs.uk/hepatitisc/Pages/default.aspx>
Yorkshire and the Humber Hepatitis B and C Steering Group

2. Background

This document has been produced by the Yorkshire and the Humber Hepatitis B and C Steering Group in Yorkshire and Humber to provide guidance to key stakeholders in the development and provision of hepatitis B and C services. The work initially focussed on hepatitis C only, but a decision was made to incorporate hepatitis B into the work plan. However, the main focus in the document is hepatitis C with reference to hepatitis B.

A wide range of representatives attend the Steering Group including NHS North of England, the Health Protection Agency, the National Treatment Agency, Hospital Consultants and Nurses, Drug Action Teams, Virology Services, Primary Care Trusts (commissioners and public health), Prison Healthcare and Service Users.

Following concerns raised regionally by NHS Yorkshire and the Humber, the Health Protection Agency and the National Treatment Agency, funding was made available in 2010 to commission a post to oversee the development of hepatitis B and C pathways across the region. One of the aims of the project was to develop a Quality Standards Framework for hepatitis B and C which has been created by regional experts in the field.

2.1 Aim of the Quality Standards Framework for hepatitis B and C

This document supports Domain 1 of the NHS Outcomes Framework (Preventing People from Dying Prematurely) and Domain 4 of the Public Health Outcomes Framework for England, 2013-2016 (Healthcare Public Health and Preventing Premature Mortality of which mortality for which liver disease is one of the indicators).

The target audience for the Framework are commissioners and providers (public and private) of hepatitis B and C services. However the document also refers to private businesses, for example cosmetic services (skin piercing businesses, provision of botox injections etc), tattoo businesses and alternative therapy businesses as well as non providers of hepatitis B and C services for example cleansing services. Whilst it is not expected that these organisations play an active role in the overall monitoring of the Standards below, agencies responsible for the commissioning and/or monitoring of them should ensure their compliance with the Standards.

The document is intended to provide support to commissioners and providers of hepatitis services. It is divided into eight different sections:

1. Strategic Planning and Partnerships;
2. Local Authorities;
3. Workforce;
4. Public Health;
5. NHS Commissioning;
6. Service Providers;
7. Offender Health;
8. Monitoring and Data Collection.

Yorkshire and the Humber Quality Standards Framework for Hepatitis B and C, 2012

Some areas may want to measure themselves against all eight Standards; however other areas may want to just focus on planning or service provision and therefore address those sections. **The four stages of the hepatitis pathway, i.e. awareness raising, prevention, case finding and diagnostics and treatment and care are detailed across all the Standards.**

This document is not intended to be used as an outcomes framework tool but can be used to develop outcomes at a local level.

3. Quality Standards

3.1	STRATEGIC PLANNING & PARTNERSHIPS	EVIDENCE REQUIRED	ACHIEVED – YES (include evidence)	PARTIALLY MET (note progress to date and further work required with lead/timescales)	ACHIEVED - NO (note work required and lead/timescales)
3.1.1	Hepatitis B and C will be included in the JSNA (Joint Strategic Needs Assessment) and be set within the national guidelines 'Joint Strategic Needs Assessment and joint health and wellbeing strategies explained, DH 2011'	JSNA.			
3.1.2	Hepatitis B and C will be included within the local Health and Well Being Strategy.	Health and Well Being Strategy.			
3.1.3	There should be a local action plan for tackling hepatitis B and C which involves all key stakeholders.	An action plan which includes clear targets and is regularly reviewed by stakeholders.			
3.1.4	There should be clear leadership arrangements for the development of hepatitis B and C work locally.	The name and employing agency of the identified lead.			

3.2	LOCAL AUTHORITIES	EVIDENCE REQUIRED	ACHIEVED – YES (include evidence)	PARTIALLY MET (note progress to date and further work required with lead/timescales)	ACHIEVED - NO (note work required and lead/timescales)
3.2.1	The Local Authority will have a system of registration to enable effective monitoring of infection control in commercial places.	Evidence of audit and monitoring of a current registration system.			
3.2.2	The Local Authority will have a system in place to ensure safe disposal of injecting equipment.	Evidence of audit and monitoring of a system to ensure safe disposal of equipment.			
3.2.3	The Local Authority should demonstrate how they engage and encourage the private sector to take responsibility regarding infection control for employees and customers.	Evidence of how the Local Authority consults with customers and employers.			

3.3	WORKFORCE (private and public sector where hepatitis B and C is relevant)	EVIDENCE REQUIRED	ACHIEVED – YES (include evidence)	PARTIALLY MET (note progress to date and further work required with lead/timescales)	ACHIEVED - NO (note work required and lead/timescales)
3.3.1	In businesses and services where there is a risk hepatitis B and C transmission (see 'high risk businesses and services' definition below), local employers should demonstrate how they protect employees and customers in terms of infection control.	Evidence of policy and its implementation.			
3.3.2	In services where hepatitis B and C is prevalent amongst its patient group, healthcare employers should ensure that sufficient numbers of employees are equipped with the skills and knowledge to provide accurate advice and support around hepatitis B and C.	Evidence of formal training and existence of a locally agreed pathway.			

3.4	PUBLIC HEALTH	EVIDENCE REQUIRED	ACHIEVED – YES (include evidence)	PARTIALLY MET (note progress to date and further work required with lead/timescales)	ACHIEVED - NO (note work required and lead/timescales)
3.4.1	Public Health will facilitate a partnership approach to tackle stigma and raise awareness of hepatitis B and C locally and co-ordinate a minimum of one campaign each year.	Evidence of ongoing multi agency initiatives to raise awareness. Evidence of planned and past campaigns.			
3.4.2	Through awareness raising Public Health will ensure that personal responsibility in terms of preventing hepatitis B and C is improved for those travelling abroad for personal, work and medical reasons.	Evidence of ongoing awareness raising aimed at individuals travelling abroad.			
3.4.3	Public Health will be responsible for facilitating improved immunisation of high risk groups as well as increased case finding, diagnostics and referrals for treatment locally.	Evidence of active engagement of Public Health and an increase in vaccinations, testing and referrals to treatment.			

3.5	NHS COMMISSIONING	EVIDENCE REQUIRED	ACHIEVED – YES (include evidence)	PARTIALLY MET (note progress to date and further work required with lead/timescales)	ACHIEVED - NO (note work required and lead/timescales)
3.5.1	The local commissioning framework should include appropriate arrangements for the prevention, case finding and diagnostics and management of hepatitis B and C.	Evidence of: An assessment of need; Local provision of a commissioned pathway; Joint working by commissioners responsible for different parts of the pathway.			
3.5.2	Commissioners should ensure that commissioned services are of high quality.	Regular monitoring of services should take place against a Service Level Agreement.			

3.6	SERVICE PROVIDERS <i>(this is defined as any organisation providing a direct service to patients in relation to the prevention, testing, treatment and management of hepatitis B and C, e.g. drug services, primary care, laboratory and hospitals)</i>	EVIDENCE REQUIRED	ACHIEVED – YES (include evidence)	PARTIALLY MET (note progress to date and further work required with lead/timescales)	ACHIEVED - NO (note work required and lead/timescales)
3.6.1	All providers of hepatitis B and C testing will ensure the most appropriate test is used for the setting.	Evidence to show that the different tests available have been evaluated and the appropriate method has been introduced.			
3.6.2	There should be agreement with the local laboratory that any venous blood samples that are antibody positive for hepatitis C are automatically tested for PCR.	That all antibody positive samples are automatically tested for PCR and the results communicated to the service provider.			
3.6.3	Where required drug services should facilitate a peer mentoring / buddying system to encourage service users to attend secondary care appointments for assessment / treatment.	An assessment of need should have been carried out (5.1) and where required a peer mentoring or buddying system should be in place.			

3.6.4	Providers should inform the local HPU about any positive diagnoses for hepatitis B and C.	Evidence of positive diagnoses being communicated to the HPU.			
3.6.5	Providers of hepatitis B and C treatment should carry out an annual review of the service to ensure it is being provided in the most efficient and cost effective way.	Evidence of a formal annual review based on regional and national guidance.			

3.7	OFFENDER HEALTH	EVIDENCE REQUIRED	ACHIEVED – YES (include evidence)	PARTIALLY MET (note progress to date and further work required with lead/timescales)	ACHIEVED - NO (note work required and lead/timescales)
3.7.1	Commissioners of offender health services should ensure that the needs of offenders relating to hepatitis B and C are included in local plans and are equitable to that available in the community.	Evidence of an assessment of equity should have been carried out which includes any plans for improvements. There should also be evidence of the inclusion of offender needs in local plans, e.g. JSNA, Health and Well Being Strategy and specific hepatitis plan.			
3.7.2	Prison establishments should have a clear policy around hepatitis B and C which is agreed by prison healthcare commissioners and the Prison Partnership Board.	Evidence of policy which is regularly monitored and audited.			
3.7.3	Individuals in the criminal justice system within the community should be provided with advice and support around hepatitis B and C.	Evidence of policy which is regularly monitored and audited for example through DIR.			

3.8	MONITORING & DATA COLLECTION	EVIDENCE REQUIRED	ACHIEVED – YES (include evidence)	PARTIALLY MET (note progress to date and further work required with lead/timescales)	ACHIEVED - NO (note work required and lead/timescales)
3.8.1	Providers and commissioners of services should collect and analyse the dataset set out in the guidance notes on a six monthly basis and use this to inform service developments.	Evidence of the dataset being collected and used to improve service delivery.			

4. Guidance Notes

Throughout the document the guidance notes make reference to a number of key terms which are defined below:

- **High risk groups** – current and ex injecting drug users, current and ex non injecting drug users (e.g. where they have shared paraphernalia for snorting) and prisoners. Other groups include those from countries where prevalence of hepatitis B and C infection exceeds 2% as defined by the World Health Organisation (WHO)³ or where they have travelled abroad to those countries to receive medical treatment and where there is inadequate infection control e.g. South Asia – Pakistan and Bangladesh, Eastern Europe and Egypt and more specifically related to hepatitis B, China and Sub Zharan Africa.
- **Other groups** may include steroid users, sex workers, men who have sex with men (MSM), cosmetic services (e.g. skin piercing businesses, provision of botox injections etc), tattoo businesses, alternative therapy businesses and parents and carers of at risk groups.
- **High risk businesses and services** (private and public where infection control is required) – these include cosmetic services (e.g. skin piercing businesses, provision of botox injections etc), tattoo businesses, alternative therapy businesses, drug services, primary care, hospitals, environmental health, cleansing services and sex worker establishments, for example flats and saunas. Other businesses which may need consideration include landscape gardening, the building trade and the Local Authority where employees may encounter discarded used sharps.
- **Full pathway** – this refers to the ‘full pathway’ for hepatitis B and C, i.e. from awareness raising and prevention through to case finding, diagnostics, treatment and management.

Please note the prevalence of at risk groups will vary in areas and appropriate mapping should be undertaken to identify which groups are at risk in the locality.

³ <http://www.who.int/en/>

4.1 STRATEGIC PLANNING & PARTNERSHIPS

4.1.1 Hepatitis B and C will be included in the JSNA (Joint Strategic Needs Assessment) and be set within the national guidelines 'Joint Strategic Needs Assessment and joint health and wellbeing strategies explained, 2011'

- The JSNA is the responsibility of the Health and Well Being Boards and the Guidance on JSNA, 2011 is available at: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_131702
- Strategic planners should ensure that attention is given to the prevalence of hepatitis B and C and a multi agency approach is taken to assess local need regarding the full pathway.
- The needs of high risk groups should be assessed in terms of hepatitis B and C and attention also paid to the needs of different ethnic groups.
- The Department of Health developed an additional Key Performance Indicator for prison health in July 2010 stating that 100% of JSNAs should identify the health needs of all residents, including those in contact with the criminal justice system and translate this into joint and single agency commissioning strategy to meet their needs.
- Various data should be sought to assess local need for example through the National Drug Treatment Monitoring System, Health Protection Agency, Hospital Episodes Statistics and Primary Care.

4.1.2 Hepatitis B and C will be included within the local Health and Well Being Strategy

- Following an assessment of need (carried out within the JSNA) the detailed strategic work required to address hepatitis B and C will be included in the Health and Well Being Strategy.
- The Yorkshire and Humber Hepatitis B and C Steering Group have developed a template to assess local need in relation to testing and treatment for hepatitis C (see Appendix).

4.1.3 There should be a local action plan for tackling hepatitis B and C which involves all key stakeholders

- The action plan should set out clear targets and be regularly reviewed by stakeholders.
- The action plan should also meet local need but include the following key elements:
 - **Local 'case definition'**. There should be agreement locally regarding a 'case definition' for identifying individuals at higher risk of having hepatitis B or C. This will vary across the region depending on the local population but should include as a minimum the 'high risk' groups as defined above.
 - **Mapping of existing provision**. This should detail where vaccinations are available, where tests are carried out as well as the types of tests used, the pathway for testing, where treatment is available, workforce used to carry out vaccinations, testing and treatment

and any gaps in provision. The mapping should also include identifying local services and community provision that come into regular contact with high risk groups.

- **A review of needle and syringe provision should be carried out.** In the HPA's Annual Report on Hepatitis C, 2009⁴, the HPA state that 'Commissioners and providers of services for drug users should review their programmes to ensure that a broad range of prevention services (in addition to needle exchange) are available and that individuals receive information, advice, injecting equipment and brief interventions to help reduce potential harm from blood borne viruses.'
- **An evidence base and good practice guidance.** The action plan should follow a published evidence base or peer reviewed published evidence such as NICE guidance (TA200, 2010⁵) and BASL (British Viral Hepatitis Group) Provision of antiviral services for patients with chronic viral hepatitis, 2010⁶. In assessing the effectiveness of local needle and syringe programmes the NICE guidance PH18, Needle and Syringe Programmes: Providing people who inject drugs with injecting equipment, 2009⁷ should be used as a benchmark.
- **Wide access to hepatitis vaccination, testing and treatment.** Innovative ways to reach high risk groups should be looked at and settings may include drug services, primary care, pharmacies, mosques and community centres. Targeted testing should be in place in GU services to ensure that only those individuals who have been at risk receive appropriate testing.
- **Clear pathway.** There should be a clear pathway in place developed with stakeholder agreement which identifies the availability of vaccinations, testing and treatment.
- **An awareness raising plan.** This should be in place to target high risk groups around hepatitis B and C prevention as well as raise awareness about the local pathway and successes of treatment. A range of approaches should be adopted to target specific groups, for example a social marketing approach could be used to ensure those individuals who do not see themselves at risk are being reached. The plan should also include how prevention messages are targeted through local education establishments such as schools, colleges and universities, antenatal and newborn screening, drug services and the general community. Attention should be given to the different audiences affected by hepatitis B and hepatitis C as well as the needs of different groups, for example the availability of information in different languages.
- **A common dataset.** Service providers should be asked to submit monitoring information on a regular basis (see regional common dataset, Standard 8).
- The development and monitoring of a local action plan will include all key stakeholders, e.g. local Hospitals, Drug Action Team/Community Disorder Reduction Partnerships, Public Health, Drug Services, Primary Care and Service Users and Carers. It should link in to other key strategic plans for example the Community Disorder Reduction Partnership/Drug Action Team needs assessment and treatment planning process.

⁴ <http://www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/HepatitisC/HepatitisCReports/>

⁵ <http://guidance.nice.org.uk/TA200>

⁶ http://www.basl.org.uk/uploaded_files/Referral%20guidelines.pdf

⁷ <http://guidance.nice.org.uk/PH18>

Good practice examples

NHS North Lincolnshire (NL) and North East Lincolnshire (NEL) Care Trust Plus developed a Strategy for the Control of Hepatitis C in 2007. Both areas have a local steering group overseeing the implementation of the Strategy.

Contact: NEL Pauline Bamgbala, Head of Substance Misuse – Pauline.bamgbala@nhs.net

NL Natasha Philips, Commissioning Manager – natasha.philips@nhs.net

The Association of Greater Manchester PCTs produced their hepatitis C strategy in 2006. Since then various work has taken place to develop the hepatitis C pathway, further details can be found at - <http://greatermanchesterhepc.com>

4.1.4 There should be clear leadership arrangements for the development of hepatitis B and C work locally

- The Health and Well Being Board should ensure a lead for hepatitis B and C is identified locally (within the Local Authority area).
- The nominated lead should be a suitably senior professional. Stakeholders should be informed of who the lead is and they should have local accountabilities and be supported by experts in the hepatitis B and C pathway.
- Responsibilities of the nominated individual will include engaging with stakeholders to develop the local action plan for tackling hepatitis B and C, collating and updating the plan on a regular basis and ensuring there is the infrastructure in place to allow the plan to be overseen and governed appropriately.

Good practice examples

Areas where there is a clearly defined lead for hepatitis C and where pro active work has taken place include:

NHS Doncaster: Dr. Rupert Suckling, Deputy Director of Public Health – rupert.suckling@doncasterpct.nhs.uk

NHS North Lincolnshire: Natasha Philips, Commissioning Manager - natasha.philips@nhs.net

NHS Rotherham: Kathy Wakefield, Health Protection/Infection Prevention Manager - Kathy.Wakefield@rotherham.nhs.uk

4.2 LOCAL AUTHORITIES

4.2.1 The Local Authority will have a system of registration to enable effective monitoring of infection control in commercial places.

- There should be evidence of audit and monitoring of the current registration system.
- There should be a robust system in place which details specific settings where there is a risk of hepatitis B and C transmission (see high risk businesses definition above).
- Where there is a local prevalence of sex worker establishments, in conjunction with health, consideration should be given to how the risk of transmission can be minimised.

Good practice examples

Kirklees Local Authority has worked closely with tattooing and skin piercing businesses to provide them with support and guidance around infection control. In addition to offering training sessions to businesses, leaflets were also developed to assist them to implement effective infection control measures. For further information contact:

Louise Marshall, Environmental Health Officer, West Yorkshire HPU – louise.marshall@hpa.org.uk

The Health and Safety Executive (HSE) developed a Local Authority Circular on tattooing and piercing which can be found at: www.hse.gov.uk/lau/lacs/76-2.htm

Habia have a website including health and safety issues for beauty treatments which can be found at: www.habia.org/healthandsafety

4.2.2 The Local Authority will have a system in place to ensure safe disposal of injecting equipment

The Local Authority should ensure the following:

- **A system is in place to collect drug using equipment.** This should be well advertised to the public and local businesses and meet local need.
- **A robust system is used to monitor community sharp finds as well as other paraphernalia.** This information should be shared with the local DAT and needle exchange services to ensure plans can be put in place to reduce discarded equipment. The system should be regularly audited and monitored to ensure safe disposal of equipment.
- **There is provision of sharps disposal as well as good access to sterile equipment.** In Local Authority owned services where drug use is an issue there should be access to sharps disposal and sterile equipment.

Good practice examples

Leeds City Council has a needle removal scheme. A 24hour freephone number is advertised which anyone can contact to request that discarded injecting equipment be removed. This is funded by the Local Authority and was developed with the DAT. For further details contact:

Neil O'Byrne, Harm Reduction and Drug Related Death Investigator - neil.o'byrne@leeds.gov.uk

Scarborough: The Cambridge Centre (drug service) work closely with the Local Authority Cleansing Department and British Transport Police to address discarded equipment. The drug service receives weekly feedback from services about discarded equipment so they can then target certain areas, e.g. public toilets. The Cambridge Centre also provides training for cleansing staff to ensure they are aware of what equipment to look out for. The contact for this work is:

Ash Robinson, Needle Exchange Team Leader, The Cambridge Centre - 01723 367475 / ash.robinson@cambridgecentre.org

Bradford: The Drug Action Team (DAT) and the Local Authority Cleansing Department work in partnership in an attempt to reduce discarded equipment. There are fixed site disposal bins located in areas where drug using litter is more commonly found and the DAT and Cleansing Department meet on a quarterly basis to monitor drug litter. For further details contact:

Nina Smith, Programme Lead (Alcohol and drugs), Bradford Metropolitan District Council - nina.smith@bradford.gov.uk

4.2.3 The Local Authority should demonstrate how they engage and encourage the private sector to take responsibility regarding infection control for employees and customers

With the support of Public Health, the Local Authority should provide support to local services and businesses to implement appropriate measures to protect staff and customers with regards to hepatitis B and C transmission. Risks would include needle stick injury for cleansing services as well as employees in the private sector working in high risk areas. This could be done via existing Local Authority events, publicity and training.

Good practice examples

Kirklees Local Authority has worked closely with tattooing and skin piercing businesses to provide them with support and guidance around infection control. In addition to offering training sessions to businesses, leaflets were also developed to assist them to implement effective infection control measures. For further information contact:

Louise Marshall, Environmental Health Officer, West Yorkshire HPU – louise.marshall@hpa.org.uk

Scarborough: The Cambridge Centre (drug service) work closely with the Local Authority Cleansing Department and British Transport Police to address discarded equipment. The Cambridge Centre also provides training for cleansing staff to ensure they are aware of what injecting equipment to look out for. The contact for this work is:

Ash Robinson, Needle Exchange Team Leader, The Cambridge Centre, 01723 367475 / ash.robinson@cambridgecentre.org

4.3 WORKFORCE (private and public sector where hepatitis B and C is relevant)

4.3.1 In businesses and services where there is a risk hepatitis B and C transmission (see 'high risk businesses and services' definition above), local employers should demonstrate how they protect employees and customers in terms of infection control

- In businesses and services where there is a risk hepatitis B and C transmission (see 'high risk businesses and services' definition above), employers should have a policy in place to ensure that measures are implemented to protect staff and customers. Organisations should meet national regulations relevant to their area of work but measures to safeguard staff and customers could include protective equipment, the use of sterile needles and the safe disposal of needles and other equipment.
- Employers are responsible for ensuring that appropriate occupational health arrangements are in place, for example prevention services to staff providing clinical services through way of access to hepatitis B vaccination for employees.
- Employees should receive training around occupational health risks, infection control precautions and the management of occupational blood exposure incidents.
- Local employers will include primary care (GPs, nurses and pharmacies), secondary care (e.g. maternity services for risks during and after pregnancy), drug services, offender health services etc.

4.3.2 In services where hepatitis B and C is prevalent amongst its patient group, healthcare employers should ensure that sufficient numbers of employees are equipped with the skills and knowledge to provide accurate advice and support around hepatitis B and C

- Where testing is being carried out employers should ensure that employees are fully aware of the locally identified groups to target and have also received formal training regarding pre and post test discussion (this can be done in house providing the expertise is available).
- Employers should be able to provide a list of their staff trained and qualified to offer accurate advice around hepatitis B and C appropriate for the setting.
- Employers will ensure that there is a pathway in place for testing within their setting which includes referral following a positive result.
- National guidance for pre and post test discussion include the RCGP, Guidance for the prevention, testing, treatment and management of hepatitis C in primary care, 2007⁸ and the Department of Health Hepatitis C - Essential information for professionals and guidance on testing, 2004⁹.
- National training funded by the Department of Health for hepatitis B and C is the RCGP Certificate in the Testing, Diagnosis and Management of Hepatitis B and C which can be accessed by both professionals and service users.

⁸ <http://www.smmgp.org.uk/html/guidance.php>

⁹ http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4097933

Good practice examples

Bradford Hospital Trust provide regular multi agency training on hepatitis B and C for local health professionals to equip them with the skills (appropriate for their level) to support patients. For further information contact:

Kelly Forrester, Nurse Specialist, Bradford Hospital Trust – Kelly.forrester@bthft.nhs.uk

Department of Health guidance on pre and post test discussion can be found at:

<http://www.nhs.uk/hepatitisc/SiteCollectionDocuments/pdf/hepatitis-c-quick-reference-guide-for-primary-care.pdf>

4.4 PUBLIC HEALTH

4.4.1 Public Health will facilitate a partnership approach to tackle stigma and raise awareness of hepatitis B and C locally and co-ordinate a minimum of one campaign each year

- Rolling public awareness campaigns should be agreed on an annual basis to target local high risk groups in identified settings, for example in GP surgeries regarding the risks of travelling to and from high risk countries where infection control is poor and amongst health professionals to reduce the stigma individuals affected by hepatitis C can often face.
- World Hepatitis Day takes place annually on 28 July. Arranging a multi agency campaign around this date is often effective.
- Information on hepatitis B and C should be made available in different languages to reflect the needs of the local population.
- Innovate approaches to raising awareness should be adopted, for example through the use of social marketing or electronic social networking.

Good practice examples

The Department of Health has developed a range of resources for use in local campaigns. Their national campaign in 2009/10 focused on raising awareness amongst ex drug users, professionals and the South Asian community and they developed a toolkit for professionals to use. Resources can be adapted locally to include logos and local messages. The campaign website can be accessed at <http://www.nhs.uk/hepatitisc/Pages/default.aspx>

For further information contact: Gerry Robb, DH Policy Lead on BBVs – gerry.robb@dh.gsi.gov.uk

A range of resources are also available through the following:

NTA Harm Reduction Works campaign by Exchange Supplies (targets drug users): <http://www.harmreductionworks.org.uk>

The Hepatitis C Trust: <http://www.hepctrust.org.uk>

The British Liver Trust: www.britishlivertrust.org.uk

Mainliners Hepatitis C Resource Centre: <http://www.mainliners.org.uk/pages/hepc.html>

The World Hepatitis Alliance: <http://worldhepatitisalliance.org/en/Home.aspx>

Yorkshire and Humber areas that carry out regular campaigns include the following:

Barnsley has arranged information events for the general public as well as a local hepatitis C logo designed by students. For further information contact: Diana Powell, Barnsley DAAT- dianapowell@barnsley.gov.uk

Kirklees provide information to both health professionals and the public. This is done via the PCT intranet and website, staff newsletter display boards in health centres and local media work. For further information contact: Maxine Worden, Kirklees DAT - maxine.worden@kirklees.nhs.uk

Sheffield and East Riding arranged for the use of the Hepatitis C Trust testing bus which was situated in public areas to raise awareness and encourage the public to access testing. For further details about the bus go to: <http://www.hepctrust.org.uk/World+Hepatitis+Day/Testing+Van+Tour+2010>

York and North Yorkshire: Local drug services arrange activities to mark World Hepatitis Day, including staff training, open sessions for clients, games and activities on hepatitis C and DVD showings for example Louie, Me & Hep C (Hepatitis C Trust). For further information contact:

The Cambridge Centre, Scarborough: Nikki Orrell, Chief Executive – nikki.orrell@cambridgecentre.org

Compass One, York: Angela Waite, Manager – angela.waite@compass-uk.org

CODA, Craven: Jane Taylor, Manager – Jane.taylor@codacraven.org

4.4.2 Through awareness raising Public Health will ensure that personal responsibility in terms of preventing hepatitis B and C is improved for those travelling abroad for personal, work and medical reasons

- Rolling public awareness campaigns should be agreed on an annual basis to target local high risk groups in identified settings, for example in GP surgeries regarding the risks of travelling to and from high risk countries such as Pakistan and Bangladesh, Eastern Europe and Egypt and more specifically related to hepatitis B, China and Sub Zharan Africa where infection control is poor.

4.4.3 Public Health will be responsible for facilitating improved immunisation of high risk groups as well as increased case finding, diagnostics and referrals for treatment locally

- Public Health will support providers and commissioners to ensure that immunisation and testing is provided in appropriate settings as identified by the local action plan.
- Public Health will support providers and commissioners to ensure that an increase in referrals are made to treatment.
- Targeted hepatitis C testing for pregnant women should be in place.

- The local Patient Group Direction (PGD) for hepatitis B immunisation should include all local at risk groups. The PGD should also include all at risk groups as outlined in the Department of Health. Immunisation against Infectious Diseases. 2006: The Green Book.
- Babies born to Mothers infected with hepatitis B should be immunised against hepatitis B, see: http://www.dh.gov.uk/en/Publichealth/Immunisation/Keyvaccineinformation/DH_125275
- It is good practice to offer hepatitis B immunisation to babies born to Mothers who are hepatitis C positive where there is a risk of infection.

Good practice examples

Hull: In addition to including high risk groups as outlined in the Green Book, NHS Hull have mapped local at risk groups and have ensured these are covered in the Locally Enhanced Service for Primary Care.

Contact: Paul Laing, Public Health – paul.laing@hullpct.nhs.uk

Pharmacy based vaccinations:

NHS Rotherham has commissioned the provision of hepatitis A and B vaccinations in pharmacies also providing needle exchange. For further details contact:

Debbie Stovin, NHS Rotherham (DAT), 01709 423503 - debbie.stovin@rotherham.nhs.uk

Pharmacy testing:

The Hepatitis C Trust offers training and supporting materials to pharmacies who would like to offer testing. For further information contact: Leila Reid, Pharmacy Testing Project Manager – 020 7089 622 0020 / Leila.Reid@hepctrust.org.uk

Barnsley DAAT, NHS Doncaster and NHS East Yorkshire have all commissioned testing in pharmacies with the support of The Hepatitis C Trust. For further information contact:

Barnsley: Diana Powell, Commissioning Manager Substance Misuse - DianaPowell@barnsley.gov.uk

Doncaster: Helen Conroy, Doncaster DAT - Helen.conroy@doncasterpct.nhs.uk

East Yorkshire: Tim Allison, Director of Public Health - tim.allison@nhs.net

Hull, Rotherham and Sheffield: These areas provide targeted hepatitis C testing for pregnant women. For further information on the local policy contact:

Hull: Dr. Peter Moss, Consultant - 01482 622031 / peter.moss@hey.nhs.uk

Rotherham: Dr. Barbara Hoeroldt, Consultant - 01709 307346 / Barbara.hoeroldt@rothgen.nhs.uk

Sheffield: Sue Alston, Specialist Midwife, Royal Hallamshire Hospital – sue.alston@sth.nhs.uk

4.5 NHS COMMISSIONING

4.5.1 The local commissioning framework should include appropriate arrangements for the prevention, case finding and diagnostics and treatment and management of hepatitis B and C

- Commissioners of hepatitis B and C services should evaluate the coverage of testing services in their area and ensure that laboratories have appropriate pathways for referring samples for confirmatory testing (HPA Annual Report, 2009).
- Services should be configured to best meet the needs of local patients. An assessment of need should be carried out with professionals, service users and carers to review the effectiveness of the current model.
- The full pathway for hepatitis B and C should be clearly commissioned and publicised. Treatment for hepatitis C should be available in area where possible and hepatitis B where there is the local expertise.
- Appropriate arrangements for high risk groups should be available for example those co-infected, sexual groups e.g. MSM, transient/travelling populations, new entrants and ethnic minorities.
- Providers of treatment should be commissioned to offer treatment in local prisons as appropriate.
- Contracts should reflect best practice for example Department of Health, Immunisation against Infectious Diseases. 2006: The Green Book and NICE (or more recent published guidance) - see Literature and Reference section below.
- Commissioners should ensure that the local workforce is being effectively utilised in managing hepatitis B and C.
- Treatment models will vary depending on the needs of the local population. As a minimum a specialist nurse should be commissioned to provide treatment in area overseen by a hospital consultant in Infectious Diseases Hepatology or Gastroenterology. A range of models could be available locally to meet the different needs of patients, for example:
 - a. Hospital based
 - A hospital based treatment model should reflect the Department of Health Hepatitis C Strategy 2002¹⁰ and the British Viral Hepatitis Group Guidelines 2010¹¹.
 - Hepatitis B treatment should be accessible and available through the local hospital where appropriate expertise exists.

¹⁰ http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4009316

¹¹ http://www.basl.org.uk/uploaded_files/Referral%20guidelines.pdf

b. Community based

- It is not always necessary to provide treatment in the hospital setting providing a named clinician retains oversight. However, complex cases should be managed within a hospital and based within Infectious Diseases, Gastroenterology or Hepatology with nurse support.
- Community provision can vary but should be developed to best meet the needs of the local population. There are different models which can be adopted including:
 - Within drug services where the hospital based nurse provides outreach to oversee a patient's treatment such as in Bradford, Hull and the East Riding;
 - Within a local hospital such as in North Lincolnshire and North Yorkshire (Northallerton) which involves the hospital nurse from a neighbouring area providing an in reach clinic;
 - Hospital outreach within a local health centre such as in Calderdale and North Yorkshire (Scarborough);
 - Treatment can also be provided within a primary care setting such as in Cornwall and Nottingham. These are GP led.
- Whichever model is adopted locally, all care should be the ultimate responsibility of the responsible clinician. A clear governance framework should be implemented which states the role of everyone involved.

c. Prison based

- The commissioning of treatment for prisoners is the responsibility of the National Commissioning Board.
- Models of provision vary but can involve the hospital consultant and nurse doing regular in reach like in Hull or it can be done as part of an MDT by the prison doctor as it is in Leeds. Some prisons may not require a regular session where hepatitis C is less prevalent, however a clear and accessible pathway should still be in place to ensure that if a prisoner requires treatment, they are able to access it.

Good practice examples

Hospital based – Hospital based treatment is provided in all areas across Yorkshire and Humber except in York, Wakefield and some areas of North Yorkshire.

Community based – Nurse led community based treatment is available in drug services in Bradford, East Riding, and Hull. A similar model is also available through community health centres in Calderdale, North East Lincolnshire and Scarborough (North Yorkshire).

Prison based - Regionally, different models exist, for example in Leeds the medical officer oversees treatment as part of an MDT with the local hospital, in Hull and East Riding the consultant provides sessions and in Doncaster the PCT nurse sees patients within the prison overseen by the hospital consultant.

Doncaster has reviewed their local pathway for hepatitis C. Previously patients accessed Sheffield for treatment, however the PCT has now commissioned a service in area. For further information contact:

Dr. Rupert Suckling, Associate Director Public Health - rupert.suckling@doncasterpct.nhs.uk

Leeds carried out some detailed work regarding providing community based treatment for hepatitis C. A business case was prepared which outlined costs and benefits for patients. For further information contact:

Dr. Simon Balmer, Health Protection Lead - simon.balmer@nhsleeds.nhs.uk

4.5.2 Commissioners should ensure that commissioned services are of high quality

- Commissioners of Health and Social Care should ensure that contracted services have a Service Level Agreement (SLA) in place which covers the sections outlined in Section 6. In addition to this the SLA should detail requirements around infection control. Infection control measures will vary depending on the service being provided. However attention should be given to the following:
 - The standards set out in the Health and Social Care Act, 2008 regarding the registration of social care premises;
 - Local hospitals and primary care being equipped to deal with community exposures to hepatitis B and C.
- Regular monitoring of services should take place based on the regional common data set and SLA.
- Monitoring of treatment providers should include the proportion of patients achieving SVR against referral and commencement of treatment (through common data set).
- Commissioners will ensure that the appropriate tests for individuals are used in the right setting as outlined by the Yorkshire and the Humber Hepatitis B and C Steering Group¹². This work should be carried out in conjunction with stakeholders involved in testing, e.g. the local laboratory, drug services, primary care, hospital and prisons to look at types of tests used and whether or not these are appropriate in terms of efficiency and patient care.
- Services Level Agreements should include Key Performance Indicators to assure quality of services based on the regional common dataset (see Standard 8).

¹² Yorkshire and the Humber Hepatitis B and C Steering Group, Guidance on testing for hepatitis B and C (with reference to HIV), March 2012

4.6 SERVICE PROVIDERS (this is defined as any organisation providing a direct service to patients in relation to the prevention, testing, treatment and management of hepatitis B and C, e.g. drug services, primary care, laboratory and hospitals)

4.6.1 All providers of hepatitis B and C testing will ensure the most appropriate test is used for the setting

- Guidance on testing developed by the Yorkshire and Humber Hepatitis B and C Steering Group is available on the regional website at <http://www.hpa.org.uk/ProductsServices/LocalServices/YorkshireHumber/Services/yorksHepatitisProject/>.
- Types of tests used will vary depending on the setting and client group. Tests can be carried out using venous blood, dried blood spot testing and oral fluid.
- PCR tests should be carried out in primary care before a referral is made to secondary care.
- Providers should regularly review rates of positivity if using alternative tests to venous blood.
- The offering of testing for hepatitis B and C should be carried out pro actively within the service.
- Providers should regularly monitor their patient list and pro actively test and vaccinate all individuals at risk.
- Where there is a continued risk of infection amongst service users (for example in the case of injecting drug users) the service should re test at least every 12 months as stated in the Department of Health, Drug misuse and dependence: guidelines on clinical management, 2007¹³.
- Pro active testing should be auditable, for example through case file audit.

Good practice examples

Hull offers dried blood spot testing to drug users. The Manchester kits are used but all tests are sent via the local laboratory in Hull to make sure that data is kept locally regarding numbers tested and results. For further information contact:

Dr. Rolf Meigh, Hull laboratory - 01482 626762 / rolf.meigh@hey.nhs.uk

Bradford and Airedale – The Primary Healthcare Nursing Team provide regular sessions across Bradford and Airedale drug services which include vaccinations and testing. For further information contact:

Tina Maddocks, Team Leader – 01274 322657 / Tina.Maddocks@bdct.nhs.uk

¹³ http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_104819

4.6.2 There should be agreement with the local laboratory that any venous blood samples that are antibody positive for hepatitis C are automatically tested for PCR

- Local laboratories should use the HPAs Standard Operating Procedure when testing for hepatitis A and B¹⁴.
- All hepatitis C tests that are antibody positive should be automatically tested for PCR and this information should be communicated back to the service provider.
- Where appropriate services should also request the sample to be tested for genotype.

4.6.3 Where required drug agencies should facilitate a peer mentoring/buddying system to encourage service users to attend secondary care appointments for assessment/treatment.

- It is recognised that it can be difficult to ensure that drug users attend appointments for hepatitis C assessment and treatment. In areas where a buddying or peer mentoring system have been set up, it has shown a decrease in DNAs for hospital and community appointments and has encouraged more drug users to access treatment for hepatitis C.
- An assessment of need should have been carried out (5.1) and where required a peer mentoring or buddying system should be in place.
- Other ways to encourage attendance include text or telephone reminders, reducing delay from referral to appointment and outreach clinics.

Good practice examples

Project 6, Airedale set up a buddying system whereby a member of staff was responsible for accompanying individuals to their hospital appointment when being assessed for treatment. Although this has now been decommissioned it showed an increase in patients accessing treatment. For further details contact:

Ellie McNeill, Manager - 01535 610180 / Ellie.mcneil@project6.org.uk

Hepatitis Coventry is a support service for people affected by hepatitis C. They offer peer support for people at the different stages of the hepatitis C pathway. Their helpline number is: 0845 223 4424.

The Hepatitis C Trust Peer to Peer Education Service: This is a service which is available free of charge to all drug treatment centres in England and Wales. It involves the Trust visiting drug services to raise awareness about hepatitis C and encourage increased access to testing and where appropriate treatment.

Contact: The Hepatitis C Trust Peer to Peer Educator - gary.hemphill@hepctrust.org.uk / 020 7089 6220.

¹⁴ Investigation of hepatitis C infection by antibody testing or combined antigen/antibody assay, HPA, 2010 <http://www.hpa-standardmethods.org.uk/documents/vsop/pdf/vsop5.pdf>
Yorkshire and the Humber Hepatitis B and C Steering Group

4.6.4 Providers should inform the local HPU about any positive diagnoses for hepatitis B and C

- The laboratory is responsible for informing the local HPU about any positive diagnoses for hepatitis B and C.
- Where the laboratory is not been used for testing samples and this is being done privately (for example through Altrix/Concateno) there should be a lead **clinician** identified within the service who takes responsibility for informing the HPA.
- Providers should adhere to the revised measures in the amended *Public Health (Control of Disease) Act 1984*¹⁵ and it's accompanying Regulations. The new Regulations for clinical notifications came into force on 6 April 2010, and those relating to laboratory notifications started on 1 October 2010.

4.6.5 Providers of hepatitis B and C treatment should carry out an annual review of the service to ensure it is being provided in the most efficient and cost effective way

- An annual audit should be carried out to review the service, this should include the following:
 - Patient and professional consultation;
 - DNA rates;
 - SVR ;
 - Effectiveness of a multi disciplinary approach. A regular MDT should be attended by clinical nurse specialists/consultant, physicians, virologist, psychologist, social worker, mental health services and drug services;
 - Effectiveness of clinical governance structure;
 - Transparency in all decision making, for example ensuring those still actively injecting are assessed and not excluded from treatment because of their drug use;
 - Waiting time for treatment – which should be no more than 12 weeks unless the patient decides to defer;
 - How the needs of local ethnic groups are being met for example where there are language barriers there should be access to an interpreter service.
 - Awareness raising campaigns amongst professionals and the public.

Good practice examples

Rotherham General Hospital works closely with the substance misuse service and psychiatric service; this includes teaching sessions to key workers, sessions in local psychiatric units, information and support to psychiatric nurses and key workers of patients receiving treatment. Rotherham also has a fast track pathway into psychiatric services. Their waiting list is less than 6 weeks and all DNAs for first appointments are contacted by letter offering patients to get in touch and rebook an appointment. This has reduced DNA rates for new outpatient appointments. For further information contact:

Dr. Barbara Hoeroldt, Consultant - 01709 0307346 / Barbara.hoeroldt@rothgen.nhs.uk

¹⁵ <http://www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/NotificationsOfInfectiousDiseases/>

Royal Hallamshire Hospital, Sheffield holds regular MDT meetings involving a variety of disciplines. They also have a dedicated psychologist for patients undergoing treatment. For further information contact:

Ray Poll, Nurse Consultant – 0114 2711776 / ray.poll@sth.nhs.uk

Regional professional networks:

Nurses – there is a regular meeting for nurse specialists which is arranged by Susan Sheridan and Catherine Wigglesworth, St James' Leeds. For further details contact:

Susan Sheridan, Specialist Nurse - 0113 206 5949 / susan.sheridan@leedsth.nhs.uk

Consultants – there is a West and East Yorkshire Hepatology Network (which now covers the whole of Yorkshire except South Yorkshire). For further information contact:

Dr. Rebecca Jones, Consultant, St James's, Leeds - 0113 206 7230 rebecca.jones@leedsth.nhs.uk

4.7 OFFENDER HEALTH (including custodial services, YOT, Community Offender Facilities and prisons)

4.7.1 Commissioners of offender health services should ensure that the needs of offenders relating to hepatitis B and C are included in local plans and are equitable to that available in the community

- The needs of offenders in relation to hepatitis B and C should be included in local plans, e.g. JSNA, Health and Well Being Plan and specific hepatitis plan.
- A Key Performance Indicator for prison health was issued by Offender Health at the DH in July 2010 stating that 100% of JSNAs identify the health needs of all residents, including those in contact with the criminal justice system and translate this into joint and single agency commissioning strategies to meet their needs. The Prison Health Performance Indicators should be further developed to include assessment of quality across the offender pathway and ensure that it is equivalent to that in the community.

4.7.2 Prison establishments should have a clear policy around hepatitis B and C which is agreed by prison healthcare commissioners and the Prison Partnership Board.

- The prison policy should link with other local plans around hepatitis B and C, for example within public health and Drug Action Teams partnerships, detailing all elements of the care pathway i.e. prevention, awareness raising, testing and treatment and management and include as a minimum:
 - Health promotion;
 - Protocols on dissemination of risk-awareness messages, testing, diagnosis and treatment;
 - Agreement that if a prisoner is not put on medical hold whilst receiving treatment for hepatitis C and they are to be released or transferred, that their medical records should be immediately available to, and treatment provision pre-arranged with, the receiving health service/s;
 - Provision of care to prisoners should be augmented by the use of a 'medical hold' so that care can be delivered in a single institution. However, if prisoners need to be moved around the estate or into the community, prisons should work with NHS partners to ensure their care-plan follows them to allow effective and accessible continuity of care with minimal interruption;
 - Access to information on harm minimisation, provided through both healthcare and education programmes;
 - Training for employees to reduce the stigma around hepatitis B and C;
 - Access to disinfectant tablets for drug using paraphernalia. As stated by Offender Health, Department of Health in 2003, disinfecting tablets should be made available to prisoners across all establishments. This will enable those prisoners who continue to inject drugs to clean illicitly held injecting and other equipment before it is passed on to others;
 - A written immunisation policy which states that all new prisoners are advised about hepatitis B infection, assessed for need for vaccine (either no good evidence of previous infection or completed vaccination course elsewhere) and then offered vaccine on a 0,7,21 day regimen beginning at, or close to, the time of reception;

- Prisons will provide robust quarterly surveillance data to prison healthcare commissioners.

4.7.3 Individuals in the criminal justice system within the community should be provided with advice and support around hepatitis B and C

- Providers (e.g. police custody and courts) should have a policy in place regarding how offenders in the community are provided with advice and support around hepatitis B and C.
- Local Drug Intervention Programme teams should provide advice and support to drug users in custody regarding hepatitis B and C.

4.8 MONITORING & DATA COLLECTION

Commissioners and providers of services should collect and analyse the dataset set out in the Guidance Notes on an annual basis and use this to inform service developments.

4.8.1 Primary Care dataset

Source: Primary care - General Practice, Drug Services, GUM clinics, Pharmacies, Ante-Natal, Blood Service (donors), Occupational Health, Prisons and Laboratories

- Number of individuals offered hepatitis B vaccination;
- Number of individuals fully vaccinated against hepatitis B;
- Number of individuals offered hepatitis B testing;
- Number of individuals offered hepatitis C testing;
- Number of individuals (include demographics if possible*):
 - Found positive for hepatitis B surface antigen;
 - Found positive for hepatitis C antibody (blood or saliva);
 - Found positive for hepatitis C PCR (blood and saliva).
- Number of individuals referred to specialist services for treatment/management.

** Demographics - age, gender, ethnicity, country of birth and non identifiable postcode.*

4.8.2 Secondary Care dataset

Source: Secondary care (treatment/management)

Hepatitis C

- Number of individuals (include demographics if possible*):
 - Referred to specialist services including referral source;
 - DNAs for first appointment;
 - Offered treatment;
 - Treated;
 - Not offered treatment and reasons for this:

- Drug use;
 - Alcohol use;
 - Lifestyle;
 - Other.
- Number of individuals achieving a sustained virological response.

Hepatitis B

- Number of individuals (include demographics if possible*):
 - Referred to secondary care including referral source;
 - DNAs for first appointment;
 - Offered treatment;
 - Treated.

4.8.3 Other data sources available to monitor local activity

In addition to local provider data, other sources which can be used to monitor performance and assess local need are:

Labbase

The HPA, Yorkshire and the Humber region collect data on all positive hepatitis B and C tests from laboratories. However this data does not include numbers tested nor does it include the setting where the individual was tested.

Sentinel surveillance

The HPA Sentinel Surveillance of Hepatitis Testing Study collects data on laboratory test results as well as demographic details for individuals tested for hepatitis C antibody and hepatitis B surface antigen across 24 sentinel laboratories in England. The only participating laboratories in Yorkshire and the Humber are in Leeds, nevertheless this data can still be broken down to Local Authority level and can provide more detailed information than Labbase such as numbers found negative, likely transmission source etc.

Concateno and Manchester NHS Trust dried blood spot testing

The HPA receive data from both Concateno and Manchester Royal Infirmary which can be broken down to Local Authority level to monitor numbers tested and numbers found to be positive. Concateno also provides data on oral fluid testing.

National Drug Treatment Monitoring System (NDTMS)

The NDTMS is managed by the NTA to monitor drug treatment in England. The dataset includes data on hepatitis C testing and hepatitis B vaccinations which can be accessed at a local level via the DAT.

References

- Amended Public Health (Control of Disease) Act 1984 and its accompanying Regulations, Statutory guidance for reporting to HPA – <http://www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/NotificationsOfInfectiousDiseases/>
- BASL (British Viral Hepatitis Group) Provision of antiviral services for patients with chronic viral hepatitis, 2010
- Care Quality Commission, Essential Standards of Quality and Safety, March 2010
- Department for Education, Working Together to Safeguard Children: A Guide to inter-agency working to safeguard and promote the welfare of Children, 2010
- Department of Health and National Treatment Agency for Substance Misuse, Reducing Drug-related Harm: An Action Plan 2007
- Department of Health Hepatitis C - Essential information for professionals and guidance on testing, 2004
- Department of Health, Drug misuse and dependence: guidelines on clinical management, 2007
- Department of Health, Drug misuse and dependence: guidelines on clinical management, 2007
- Department of Health, Guidance Notes, Prison Health Performance and Quality Indicators, 2009
- Department of Health, Guidelines for Health Protection Legislation (England) Guidance 2010
- Department of Health, Hepatitis B antenatal screening and newborn immunisation programme: Best practice guidance, 2011
- Department of Health, Hepatitis C Action Plan for England, 2004
- Department of Health, Hepatitis C strategy for England, 2002
- Department of Health, Improving outcomes and supporting transparency Part 1: A public health outcomes framework for England, 2013-2016
- Department of Health, Joint Strategic Needs Assessment and joint health and wellbeing strategies explained *Commissioning for populations, 2011*
- Department of Health, Offender Health, Prison Health Performance and Quality Indicators issued July 2010
- Department of Health, Prison Health Performance and Quality Indicators 2011
- Department of Health, The NHS Outcomes Framework 2012/13
- Department of Health. Immunisation against Infectious Diseases. 2006: The Green Book.
- HMP, Prison Service Instruction, Re-introduction of Disinfecting Tablets, 2003
- HPA, Hepatitis C in the UK, 2009 Report
- HPA, Investigation of hepatitis C infection by antibody testing or combined antigen/antibody assay, HPA, 2010
- Hutchinson SJ, Wadd S, Taylor A, Bird SM, Mitchell A, Morrison DS, Ahmed S, Goldberg DJ. Sudden rise in uptake of hepatitis B vaccination among injecting drug users associated with a universal vaccine programme in prisons. *Vaccine* 2004;23:210-214
- National Treatment Agency, Treatment Planning Guidance for the Community and Prisons 2010/11, 2009
- NICE Public Health Guidance PH18, Needle and Syringe Programmes: Providing people who inject drugs with injecting equipment, 2009
- NICE TA200, 2010
- NICE, Peginterferon alfa and ribavirin for the treatment of mild chronic hepatitis C, technology appraisal guidance 106, August 2006
- NICE, The use of interferon alfa, peginterferon alfa and ribavirin for the treatment of chronic hepatitis C, technology appraisal 75, Jan 2004
- Offender Health, Department of Health, Prison Service Instruction on the re-introduction of disinfecting tablets, 2007
- RCGP, Guidance for the prevention, testing, treatment and management of hepatitis C in primary care, 2007
- World Health Organisation prevalence data

- Yorkshire and the Humber Hepatitis B and C Steering Group, Guidance on testing for hepatitis B and C (with reference to HIV), March 2012

Useful links

- **The Hepatitis C Trust** – www.hepctrust.org.uk
Patient led national charity providing advice and guidance to anyone affected by hepatitis C as well as professionals.
- **HCV Action** - <http://www.hcvaction.org.uk/>
HCV Action is an online resource for professionals which includes examples of promising practice from across the UK in hepatitis C awareness, testing, diagnosis, treatment and prison services.
- **Department of Health 'Get Tested Get Treated'** - www.nhs.uk/hepc
Advice and guidance for anyone affected by hep C as well as tools for professionals.
- **Health Protection Agency** - www.hpa.org.uk
The Health Protection Agency is an independent NHS UK organisation to provide advice and information to the general public and professionals.
- **The World Hepatitis Alliance** – <http://www.worldhepatitisalliance.org/Home.aspx>
Patient led organisation that aims to raise global awareness around hepatitis.
- **The World Health Organisation** - <http://www.who.int/en/>
Responsible for providing leadership on global health matters and collates information on hepatitis B and C prevalence.
- **The Greater Manchester Hepatitis C Strategy** – <http://www.greatermanchesterhepc.com>
The Association of Greater Manchester PCTs have developed various useful resources for professionals and anyone affected by hepatitis C.
- **Mainliners UK Hepatitis C Resource Centre** – <http://www.mainliners.org.uk/pages/hepc>
A national organisation set up to raise awareness about hepatitis C.
- **British Liver Trust** – <http://www.britishlivertrust.org.uk>
A national charity providing advice and resources to professionals and anyone affected by liver disease.
- **National Treatment Agency** www.nta.nhs.uk
A national NHS organisation responsible for overseeing the improvement of drug treatment.
- **The British Association for the Study of the Liver** – www.basl.org.uk
BASLs' membership is made up of both scientists and clinicians whose aim is to improve our knowledge and understanding of the biology and pathology of the liver for the optimal care of patients. They arrange regular conferences and have developed resources for professionals.

Appendices

Appendix 1: Yorkshire and the Humber Guidance on testing for hepatitis B and C (with reference to HIV), March 2012

1. Introduction

Individuals with chronic hepatitis (B and C) can be treated which reduces the likelihood of chronic illness and premature death. Recognition of infection and treatment may also reduce the spread of infection. In 2010, across Yorkshire and the Humber there were 427 cases of hepatitis B (of which 39 were acute) and 980 newly identified hepatitis C infections reported through NHS/HPA laboratory testing, however HPA estimates calculate that there are over 20,000 people actually infected with hepatitis C in the region.

More pro active testing, especially for hepatitis C, needs to take place throughout a range of healthcare settings. Regular testing is now being carried out for some at risk groups, for example testing of drug users within drug treatment services. However there are other risk groups, such as ex-drug users, or individuals who have had invasive medical procedures/blood transfusions in countries where no routine blood screening for hepatitis C is done, who are not been identified and offered testing. The Steering Group have identified the following groups as being most at risk of hepatitis B and C infection:

- **High risk groups:** Ex and current injecting drug users, current and ex non injecting drug users (e.g. where equipment has been shared for 'snorting') and prisoners. Other groups include those from countries where prevalence of hepatitis B and C infection exceeds 2% as defined by the World Health Organisation (WHO)¹⁶ or those who received medical treatment in countries abroad where infection control is more likely to be inadequate e.g. South Asia – Pakistan and Bangladesh, Eastern Europe and Egypt and more specifically related to hepatitis B, China and Sub Saharan Africa.
- **Other groups:** May include steroid users, sex workers, men who have sex with men (MSM), cosmetic services (e.g. skin piercing businesses, provision of botox injections etc), tattoo businesses, alternative therapy businesses and parents or carers of at risk groups.

Healthcare professionals should ensure that individuals who may be infected with hepatitis B or C are offered a test.

This guidance is aimed at testing for infection in at risk individuals and is not intended to replace existing guidance, for example, testing during pregnancy or screening of patients undergoing dialysis.

Whilst HIV testing is included in this document, it is not intended to be used for commissioning HIV services; rather the Steering Group sees HIV testing as a component of services offered to individuals at risk of hepatitis B and C infection.

All patients identified with chronic hepatitis B, C (or HIV) infection should be offered referral to specialist services. Not all of those infected with hepatitis B and/or C will require immediate treatment but the majority will require long term monitoring and possibly treatment in the future.

¹⁶ <http://www.who.int/en/>

Laboratories, under the Health Protection (Notification) Regulations 2010, have a legal obligation to report positive tests of causative agents of infectious diseases as listed in Schedule 2 of the regulations to their local HPA office (HPU)¹⁷. Private laboratories are also under obligation to inform the HPU, however where personal identifiable information is not used when sending samples for testing, the testing service should inform their local HPU of the results (see section 7 for further details).

2. Definitions

For the purposes of this document:-

Chronic Hepatitis C (HCV) infection is defined by the presence of HCV RNA in the blood (PCR positive). Individuals with chronic infection will also be positive for antibody to HCV (anti-HCV). Not all individuals with anti-HCV will have chronic infection (where the infection is active), as a proportion of people will clear HCV infection naturally, usually within 6 months from when first infected.

Acute HCV infection is defined by the presence of HCV RNA but not anti-HCV (in the absence of an immunocompromised state). Although, such findings are rare, this may be more common in settings where high risk individuals are tested.

HCV antigen tests are becoming available as an alternative to the RNA test, but are less sensitive.

Chronic Hepatitis B (HBV) infection is defined by the presence of hepatitis B surface antigen (HBsAg) in the blood for longer than 6 months.

Acute HBV is defined as anti core IgM positive and this is used to differentiate acute from chronic infections at a single point in time.

HIV infection is defined by the presence of antibody to HIV (anti-HIV) in the blood.

¹⁷ The Health Protection (Notification) Regulations 2010 (Regulation 2) oblige registered medical practitioners to notify the proper officer (usually the Consultant in Communicable Disease Control – CCDC) of the relevant local authority if a patient they are attending is believed to have a disease listed in Schedule 1. This includes **acute** infectious hepatitis.

The above regulations (Regulation 4) oblige laboratories (the corporate body that operates the laboratory or the director of the laboratory if there is not a corporate body) to report to the HPA causative agents of infectious disease listed in Schedule 2.

For the purposes of the Notification Regulations, the recipient of laboratory notifications is the **Local HPA office (HPU)**, given that health protection actions are taken at local level. (*Extract from the Department of Health's Guidelines for Health Protection Legislation (England) Guidance 2010*).

3. Recommendations for testing for hepatitis B and C

3.1 Venous Blood Sampling

- 3.1.1 A venous blood sample is the preferred sample for testing for blood borne virus infections such as hepatitis B and C as this allows for the full range of screening and confirmatory tests, including nucleic acid testing, to be performed.
- 3.1.2 The range of viruses tested will depend on the clinical situation and should be evidence based.
- 3.1.3 The following tests should be requested for screening for the full range of BBVs. Negative results will exclude chronic infection:

**Anti-HCV
HBsAg
(Anti-HIV)**

In addition, to investigate past HBV infection in individuals requiring HBV immunisation, the following tests should also be requested:

Anti-HBV core antibody IgG or total antibody (anti-HBcAb).

- 3.1.4 Providers should ensure that the laboratories providing their testing services undertake the following confirmatory tests on the same sample (or alternatively, that they refer these on to specialist virology laboratories for testing):

Anti-HCV positive:

Where a patient is anti-HCV positive it is important that they are automatically tested for HCV RNA (PCR) as this shows whether the virus is actually active or not. This can either be done using the same sample or with another sample which should have been taken at the same time as the one needed to test for antibodies. Automatic RNA (PCR) testing will reduce the time it takes to confirm diagnosis, thus speeding up referral to specialist services while avoiding unnecessary worry for the patient.

HBsAg positive:

HBV serological (which can only be carried out through venous blood sample) markers including HBe antigen and anti-HBe, anti-HBc both total antibody and IgM specific.

(Anti-HIV positive):

At least two confirmatory antibody tests including a subtype specific test (to differentiate HIV-1 from HIV-2 infection).

- 3.1.5 Self taken venous sampling may be appropriate in some situations. However, this should only be done where a standard operating procedure is in place and following a full risk assessment.

3.2 Alternatives to venous blood sampling

- 3.2.1 There will be situations when venous blood sampling is much more challenging (such as in drug services) or where less invasive testing or rapid result reporting may increase testing up-take.
- 3.2.2 Services (such as drug services) should be aware of the shortcomings of any alternative testing strategy and should continually assess the performance of the tests that they use (by auditing results).
- 3.2.3 Technologies for point of care tests and dried blood spot testing are likely to improve as health care moves to more home-based management of chronic illnesses.

3.3 Capillary Blood Sampling

- 3.3.1 This technique involves collecting blood following fingerstick using a disposable lancet.
- 3.3.2 A standard operating procedure should be in place in the clinic that is developed in collaboration with the testing laboratory.
- 3.3.3 As smaller volumes of blood are collected, testing laboratories will need to have specific procedures in place to test these samples and full confirmatory testing may not be available.

3.4 Point of care (near patient) tests (POCT)

- 3.4.1 Point of care tests (POCT) are available for anti-HCV, HBsAg and *anti-HIV*.
- 3.4.2 Point of care tests can use a variety of samples such as saliva or finger prick blood. However, finger prick blood samples are preferred over saliva samples.
- 3.4.3 At the time of writing, no multiplex assays exist (which allow simultaneous testing of different blood borne virus infections). It is therefore impractical and too costly to perform the full range of tests via POCT.
- 3.4.4 The use of single POCT may be appropriate for defined populations where there is a high prevalence of a particular blood borne virus. For example anti-HCV in drug users in community settings where/when venous blood testing cannot be performed.

3.5 Dry Blood Spot Testing (DBST)

- 3.5.1 Tests using dried blood spots (such as Guthrie cards) were initially developed for epidemiological purposes only, but have been further developed and can now be used for antibody, antigen and testing for viral nucleic acid (NA) on a routine basis.
- 3.5.2 This technique involves taking a finger prick sample of blood. The low volume of blood collected and resulting sample dilution reduces sensitivity compared to tests using venous blood samples.

- 3.5.3 Testing is offered by a small number of NHS/HPA laboratories and currently at least one commercial company, usually based on modification of commercial tests designed for venous blood samples.
- 3.5.4 DBST offers advantages when compared to POCTs in that the full range of viruses can be tested including viral NA (both RNA or DNA) tests. Testing algorithms as applied to venous blood samples (3.1) should be applied to DBST samples.
- 3.5.5 Problems can arise through failure to collect sufficient samples or due to degradation of the sample during transit or processing.
- 3.5.6 Automatic testing for HCV RNA should be requested by the provider on all anti-HCV positive samples.

3.6 Testing saliva

- 3.6.1 Saliva can be used as an alternative to blood in some point of care tests and can also be tested in a small number of laboratories where samples are provided in bespoke collection devices.
- 3.6.2 The levels of antibody and HBsAg in saliva are considerably lower than those found in blood. Thus, tests based on saliva will have a lower sensitivity to those based on blood.
- 3.6.3 Saliva testing is only recommended in circumstances where finger prick blood collection is not possible. Nucleic acid testing using saliva is not appropriate.

4. Selecting appropriate tests

The following table provides a comparison of BBV tests based on particular characteristics. This is provided as a guide to selecting the most appropriate testing modality.

	Venous Blood Sample	Capillary Blood Sample	Dried Blood Spot Sample	Point of Care Test (blood spot)	Salivary Sample
Sensitivity	++++	+++	+++	+++	++
Specificity	++++	++++	++++	++	++
Rapidity of result	++	++	++	++++	++++ or +*
Suitability for nucleic acid testing	++++	+++	+++	Not possible	Not possible
Least requirement for training	++	+++	+++	++	++++
Least invasive	+	+++	+++	+++	++++
Least complexity of clinical environment	+	+++	+++	++	++++
Cost effectiveness**	++++	+++	+++	++	+

* Depending whether POCT or referred to a laboratory

** Reflects performing tests for all 3 blood borne viruses

Venous blood sampling is the most preferable test to use for hepatitis B and C. However where this is not possible due to difficult venous access or the availability of a nurse/phlebotomist, the second most preferable test to use is dried blood spot. Dried blood spot testing also allows for testing for active virus (RNA) with hepatitis C, but this is not possible for POCT or salivary tests.

5. Quality assurance

5.1.1 Laboratories performing BBV tests should be accredited with Clinical Pathology Accreditation (CPA) and follow Health Protection Agency algorithms¹⁸.

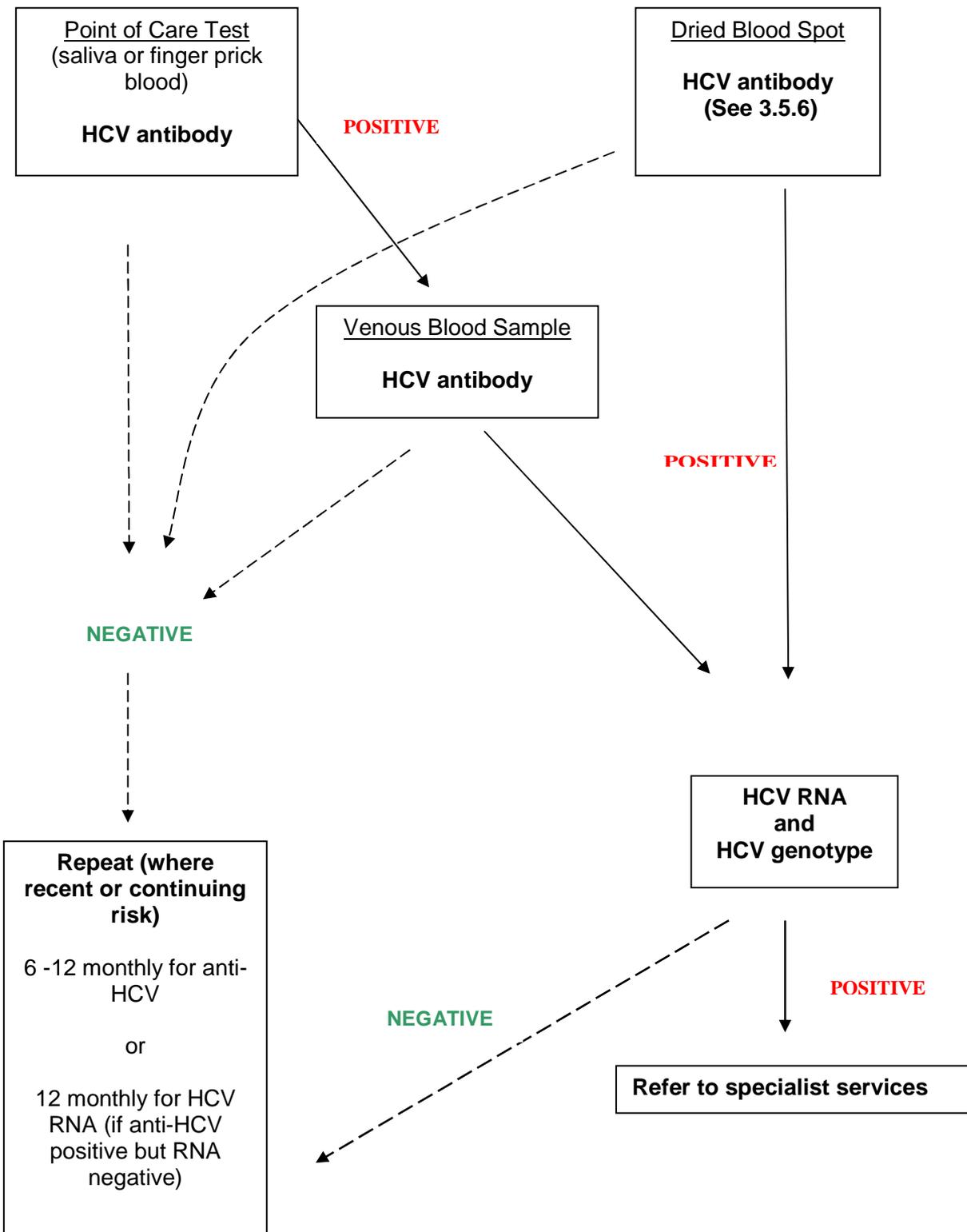
¹⁸ The national Health Protection Agency algorithms can be found at:

http://www.hpa-standardmethods.org.uk/pdf_sops.asp#virology

- 5.1.2 Where tests are being performed in the clinical setting (such as POCT) assays, these should be conformation marked for use within Europe (known as CE marking).
- 5.1.3 Currently, no CE marked assays exist for DBST and laboratories undertaking such testing should therefore use self-validated sample collection and assay procedures.
- 5.1.4 Where providers are employing non-standard methods (i.e. those other than venous blood sampling) then regular audit of results should be undertaken. Audit should involve measuring positivity rates, numbers of false positives and numbers of test failures.
- 5.1.5 Providers should report any adverse incidents arising from testing through appropriate governance structures.
- 5.1.6 The local HPU should receive notification of all positive hepatitis B and C results (see point 7 for further details).

6. Hepatitis C testing flowchart

The following diagram indicates the process for testing for HCV, the need for further sampling and referral of individuals to specialist services. Repeat testing is recommended for those at continuing risk although the timing of this will depend on risks and resources and, as such, need to be defined by providers.



7. Reporting positive results to the HPA

The local HPU should receive notification of all positive hepatitis B and C results. Venous blood samples will be reported automatically through the local laboratory, however where alternative methods are used via private companies (i.e. dried blood spot or blood spot), services should complete a Notification of Infectious Diseases (NOIDs) form and attach the sample results and send these to their local HPU surveillance team. **Please note that only PCR positive hepatitis C results should be reported and not antibody positive. Also, saliva test results do not need to be reported as they are not used for diagnostic purposes and only provide some indication of infection, which then needs to be confirmed by a blood test (i.e. full venous blood or DBST).**

For further information on reporting contact:

For North Yorkshire and the Humber: Dr Autilia Newton, 01904 468900

For West Yorkshire: Dr Ebere Okereke, 0113 386 0300

For South Yorkshire: Dr Rosemary McNaught, 0114 242 8850

Glossary

Antigen:	A substance foreign to the body which stimulates antibody production.
Antibody:	Produced by the body's immune system to neutralise or destroy antigens.
HCV RNA positive (PCR):	Shows infection of hepatitis C.
Anti-HCV positive:	Previous or ongoing infection of HCV so patient will need an RNA (PCR) test to confirm if the virus is active.
HBsAg positive:	Indicates infection of HBV.
Total anti-HBc:	Previous or on going infection to HBV.
IgM anti-HBc:	Indicates acute infection of HBV.
HBV Markers:	Different antibody and antigen results for HBV which indicates differing stages of the infection.
Anti-HBe/HBeAg:	Indicates level of infectivity.
Anti-HIV:	Indicates HIV infection.

Appendix 2: Yorkshire and the Humber template to estimate need in a Local Authority area regarding hepatitis C



YORKSHIRE & THE HUMBER HEPATITIS B & C PROJECT

TEMPLATE TO ESTIMATE NEED IN A LOCAL AUTHORITY AREA REGARDING HEPATITIS C

This paper has been developed to assist Health and Well Being Boards and DATs in trying to establish the need in their area with regards to hepatitis C. The document provides a template summary which can be used when estimating the number of individuals who are infected with hepatitis C and are yet to be identified as well as those infected who are still to be treated.

1. INTRODUCTION

Provide overview of the aim of the paper regarding hepatitis C. The document could detail the following sections:

- An overview of hepatitis C cases, numbers treated and estimated future burden of the disease in the area;
- Current service provision mapping;
- Awareness raising activities;
- Commissioning;
- Summary.

2. EPIDEMIOLOGY

A number of information sources are available to provide us with data on the current burden of hepatitis C within a specific area.

Data	Source
HPA December 2011: Commissioning template for estimating HCV prevalence and numbers eligible for treatment by Drug Action Team	http://www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/HepatitisC/
Positive hepatitis C tests	Labbase, HPA Sentinel surveillance, HPA Concateno via HPA Manchester Royal Infirmary dried blood spot testing
Numbers treated	Hospital

2.1 To estimate need (*agree a time period*):

Identification

$$\frac{\text{Nos. testing positive} \times 100}{\text{Estimated infected population (HPA)}}$$

= % of individuals that have been identified as being infected with hepatitis C locally

Treatment

$$\frac{\text{Nos. treated} \times 100}{\text{Estimated number of individuals eligible for treatment (HPA)}}$$

= % of individuals with hepatitis C who have been treated locally

NB: This calculation should only be used to give an indication of the need in a given area.