HEPATITIS C – GUIDANCE FOR THOSE WORKING WITH DRUG USERS
Hepatitis C – Guidance for Those Working With Drug Users

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Introduction

Hepatitis C is a virus that can cause liver disease; it can lead to years of ill health and can kill. Yet hepatitis C is preventable. It can only be caught if blood, or more rarely other body fluids, from an infected person enter another person. For this reason the largest group of people affected by hepatitis C are those drug users who inject and share their needles or other injecting paraphernalia. If drug users can be persuaded to give up these harmful behaviours, the passage of hepatitis C will be disrupted as will the passage of other blood borne diseases such as HIV and hepatitis B. If giving up completely is not yet achievable, strategies to reduce the harmful behaviours will also help.

A range of prevention strategies have already proved effective in averting the expected rise in HIV cases, including the development of harm reduction approaches and setting up of needle exchange schemes. In addition to advice, support and counselling skills used by a wide range of drug workers, there are also specific approaches to enabling behaviour change that are used in the field of drug misuse (including Motivational Interviewing, Motivational Enhancement Therapy, Cognitive Behavioural Therapy etc.). Research has shown the value of even brief interventions in changing some behaviours, including level of alcohol use. Recent work has also tested an approach to reducing the initiation of others into injecting and the results so far are encouraging. As yet we do not have all the answers. The Department of Health has commissioned research to get a better understanding of the risk behaviour of ‘Injecting Drug Users’ (IDUs) but this will be not be reporting for two years.

The guidance sets out an approach, which is based, where possible, on current research knowledge but we believe this guidance is required now. The rationale underlying the document is fundamentally based on the assumption that change in behaviour is more likely to be achieved if everyone who is in contact with IDUs understands this virus and what it can do. This provides the basis to give users consistent and constant messages about the effects of injecting and sharing. This approach also involves services providing timely and sustained messages and support to IDUs (to stop injecting or to reduce its associated risks). Clear
information also needs to be available to those most at risk of starting to inject (non-injecting drug users and young people vulnerable to becoming drug users) about the risks of injecting and sharing. It is also important that those who are current injectors are persuaded and assisted not to initiate others into injecting.

This guidance is designed to encourage a ‘whole system’ approach to tackling the levels of injecting and to stem the recent worrying increase in sharing.

Taking a whole system approach means that it is the business of everyone providing a service to drug users to give prevention messages and advice to an appropriate level and consistent standard. There will also be people working in other services, such as youth justice and children’s and young people’s services, who can play their part. Primary health care teams and general practitioners who see IDUs can make use of this document. Those staff in the Prisons Service who have responsibility for, or who come into contact with, drug users will find this guidance of value. It provides a basis for preparing prisoners for release and also for developing within the prisons specific responses appropriate for that particular environment. This guidance will also be of interest to those responsible for commissioning drug services including Drug Action Teams and Joint Commissioning Groups. It is the responsibility of commissioners to ensure that this response happens in a co-ordinated way. However, the main purpose of the document is to provide assistance to those workers coming into contact with, drug users. It aims to achieve this by providing a relevant up-to-date knowledge base on hepatitis C. This knowledge underpins the delivery of a consistent message to drug users particularly to stop injecting or reduce risks of injecting. This should assist in reducing the risks to the drug users of contracting hepatitis C virus infection.

The Department has benefited from the advice of an expert working group in achieving this (detailed below).

The information in this document can be augmented by visiting the Department of Health drugs website at www.drugs.gov.uk. This site will provide access to an electronic version of this document and more detailed references and links to other resources related to this subject.

The document, in addition to complementing the current approaches to promoting safer sex advice, facilitating accessible HIV and hepatitis B testing and advice, particularly re-iterates the importance of very active promotion of hepatitis B immunisation. It has specific key messages to reduce the risks of and harm associated with hepatitis C infection.
The key messages of this document for drug users are:

- Do not start injecting
- If currently injecting then stop
- If unable to stop injecting then reduce harm:
  - Use safer injecting practices (this includes paraphernalia)
  - Avoid initiating others (or as a minimum provide them with harm reduction advice)
  - Use needle exchange schemes
The Virus

Hepatitis C virus was first identified in 1989 and is one of a range of hepatitis viruses that can infect and damage the liver (although other kinds of viruses can also sometimes infect the liver). The hepatitis C virus itself has a variety of subtypes (genotypes) and can alter its form.

Level of Hepatitis C Infection in the General Population

Current information suggests that the current numbers with chronic carriage of hepatitis C virus infection may be about 250,000 people in England (a prevalence rate of approximately 0.5%). Some areas will have higher rates than the average and some lower.

Level of Hepatitis C amongst Injecting Drug Users (IDUs)

The current numbers of those infected with hepatitis C amongst injecting drug users is very much higher than the general population:

- Over one third of IDUs attending specialist services have evidence of infection
  - Smaller studies have put this level nearer 50-80%
- When broken down by length of injecting career one community survey showed levels of:
  - Less than 10% for those injecting for 2 years or less
About \( \frac{1}{3} \) for those injecting for 6-8 years

Over \( \frac{3}{4} \) for those injecting for 15 years or more

The levels will vary depending on the makeup of the local drug using population and their practices.

It is important to remember that injecting is not confined to the use of opiates and such figures can include those who use stimulants and anabolic steroids or other injectable drugs.

Recent research does suggest that the numbers infected among more recent injecting drug users may have fallen, possibly in response to the introduction of previous harm minimisation approaches for hepatitis B and HIV.

Unfortunately there is evidence of a recent rise in sharing of injecting equipment. This makes even more urgent the need for services and drug workers to give attention to the issues raised in this document.

The Number of New Infections each Year (Incidence)

As the virus is usually acquired without recognised symptoms it is not possible accurately to estimate the number of new cases each year. Recent studies indicate incidence is less than 10% among those who have injected for less than 2 years.

This suggests a good window of opportunity to reduce new infections through intensive prevention strategies.

Transmission of the Virus

The hepatitis C virus is carried in the blood of people who have previously been infected and have become chronic carriers. Currently blood or blood products are almost universally the cause of spread to others. The commonest way of transmitting the virus in the UK is the sharing of blood contaminated injecting equipment by injecting drug users.

- Currently the highest risk group for new infections of hepatitis C is 'Injecting Drug Users' (IDUs) and comprises the majority of all new cases identified.
‘Injecting Drug Users’ who do not share needles and syringes may still be at significant risk of contracting hepatitis C by repeated exposure to other potentially risky events, such as the sharing of injecting paraphernalia (e.g. spoons, water, filters).

There are reports ‘suggestive’ of other potential risks of drug taking such as the snorting/sniffing from shared paper.

Vertical (mother to baby) transmission of hepatitis (possibly through pregnancy or during birth) has been recorded, but appears to be unusual with estimates of 5% or less. Breast feeding also appears to be low risk at this time.

The risk of sexual transmission of hepatitis C through sexual activity appears to be low with estimates that less than 5% of the regular partners of those infected also becoming infected (either through sexual or co-incidental household contact).

The risk of infection from a hepatitis C positive source following needle-stick injury is thought to be of the order of between 3% and 10%.

Other causes of transmission have been reported including body piercing, tattooing, electrolysis and acupuncture (if contaminated equipment or supplies are used).

Transmission of hepatitis C through blood transfusion and through treatment of haemophiliacs with factor concentrates was a significant route, but this is no longer the case.

It is important to recognise that reinfection can occur (including of a different strain/genotype of the virus or even a mutation of the same genotype) in someone already infected if they continue risky behaviours. This can then add to the risk of subsequent liver damage.

**Injecting And Sharing – The Facts And The Risks**

**Level of Injecting Equipment Sharing by Drug Users**

Recent data indicate that the level of current sharing of needles and syringes did not change greatly between 1991 and 1997 in England and Wales remaining at around 20%. This proportion increased in 1998 to 32% and in 1999 to 33%.
A survey for 1997/8 found 78% of the respondents reported sharing of any injecting equipment (including borrowing and lending of filters, spoons and water) in the previous 4 weeks. This raises the possibility that other monitoring systems indicating lower rates might be underestimating levels of risk.

**Risks of Injecting**

In addition to the risk of contracting hepatitis C infection, injecting and sharing also has other substantial risks and a reduction in these behaviours will, therefore, have other health benefits. These additional risks are:

- Blood-borne viruses – hepatitis B, C and HIV
- Bacterial infections – which can lead to septicaemia and sometimes infection of the heart (sub-acute bacterial endocarditis – SBE).
- Fungal infections – especially candida albicans
- Damage to the circulatory system (including loss of digits)
- Increased likelihood of overdose
- Increased dependence
- Injecting is also linked to increased mortality (the prime causes being overdose and septicaemia).

**Hepatitis**

Hepatitis refers to ‘inflammation of the liver’. This can be caused by:

- Viruses – a range of hepatitis viruses (A, B, C, D and E) and some other viruses
- Drugs – notably alcohol (cocaine with alcohol may be especially risky)
- Toxic chemicals – including some adulterants of illegal drugs
- Autoimmune disease
- Unknown causes

The actual type of virus causing a particular episode of liver inflammation can only be established by blood tests.
Those who have become infected with hepatitis C are more vulnerable to the effects of other causes of liver damage (especially alcohol). This is very important to emphasise in giving advice regarding those infected.

**Disease caused by Hepatitis C Virus**

See Appendix A

Hepatitis C virus causes a disease that generally progresses slowly, although at varying rates.

At the beginning of the infection, it is frequently unrecognised as there are usually no symptoms or only mild transient symptoms. There can be an acute illness, but only a small minority develop a full-blown syndrome with jaundice at the onset of the infection.

Hepatitis C infection is cleared in about 15-20% of those infected. Of those originally infected, 40% remain symptom free and may live out their normal lifespan (even if they have evidence on testing of on-going chronic infection with benign changes on liver biopsy).

Approximately 80% of those originally infected do go on to develop a chronic infection.

Most of those with chronic infection will have only mild or moderate liver damage (with or without symptoms). This may be, but is not always, detectable through blood tests of liver function. Liver biopsy can usually detect this damage.

Some of those with chronic hepatitis C infection, however, will show non-specific symptoms (such as fatigue, lethargy, anxiety or depression, poor concentration and joint pains). For some these non-specific symptoms can be debilitating.

The classical symptoms and signs of severe chronic liver disease, such as jaundice, are rare in the first ten years of chronic infection.

About 20% of patients with chronic infection do go on to develop cirrhosis (a form of severe chronic liver damage) usually after 10 - 30 years and may die of complications of cirrhosis or require liver transplantation.

Between 1 and 5% of that minority of patients who eventually do develop cirrhosis will also develop primary liver cancer.
Thus, hepatitis C is a disease with two broad patterns in which a subset of patients will die from liver-related causes, but in which the majority will probably live out their normal life span with or without symptoms.

The majority of those who have been infected and who do not clear virus continue to be at risk of passing the infection on to others.

**Factors relating to Poor Outcomes**

Several co-factors play an important role in the subsequent rate of development of cirrhosis. These include:

- Use of alcohol
- Co-infection with HIV or with hepatitis B virus
- Age the infection was acquired

**Alcohol**

Alcohol use is strongly associated with a greater likelihood of progression to serious liver complications. The risk of developing cirrhosis of the liver is increased substantially with heavy drinking, as is the risk of those who have liver cirrhosis developing primary cancer of the liver. Even small amounts of alcohol consumption may be harmful.

**Co-infection**

Some people are also co-infected with HIV. When this is the case, hepatitis C virus infection appears to progress to serious disease more rapidly, and is more resistant to treatment. This may also increase the risk of vertical (mother to baby) transmission. Co-infection with hepatitis B virus infection is also associated with the risk of a worse prognosis in those infected with hepatitis C virus.

**Age**

Progression of the disease tends to be slower in those who acquire the infection at a younger age. There is also some evidence suggesting that in the short term children may respond better than adults to the infection, but further advice on the long-term prognosis in children is not possible yet.
Additional potential factors

In addition, other factors may be important in prognosis for some.

- **Hepatitis A infection** may be more severe and life threatening if it develops in someone with pre-existing severe liver damage. Immunisation against hepatitis A virus infection may be offered on the advice of those providing specialist care for associated liver disease (in accordance with current guidance).

- Those already suffering from **severe underlying liver disease** may be at greater risk if subsequently infected, or re-infected, with hepatitis C virus.

- The interaction of any **prescribed drugs** and current or potential severe liver disease should always be considered by the prescribing doctor and with specialist hepatological advice if needed. This will apply equally to drugs used for substitution therapy or other drugs used for the treatment of drug dependence.

Tests for Hepatitis C Infection and Disease

**Blood Tests**

**Anti-hepatitis C Virus Antibody Test**

The majority of those who have been infected with hepatitis C virus will show a positive result from an anti-hepatitis C virus antibody test within three months of infection. However, it may take up to six months for some people to develop the antibodies.

An anti-hepatitis C virus antibody test will be needed six months after the last known exposure to the virus to rule out infection (even if an initial routine test was negative).

If a first test result is reported positive, a second confirmatory anti-hepatitis C virus antibody test on a second sample is often carried out in case of any labelling error. This will be dependent on local practice, which should be clarified to inform clear pre-test counselling.

Tests for antibodies do not distinguish previously resolved infection from established chronic infection.
**Polymerase Chain Reaction (PCR) Test**

At present the most reliable confirmatory test of current infection with hepatitis C virus is a polymerase chain reaction (PCR) test, which tests for the presence of circulating virus. This PCR test does not determine the amount of virus or the specific genotype (subtype). Such specific tests are only carried out as part of expert hepatological assessment.

**Liver Function Tests**

Some evidence of liver damage may be identified through simple liver function tests (LFTs). The enzyme ‘ALT’, in particular, can be abnormal in mild asymptomatic conditions. These tests may be abnormal through other causes and, conversely, normal LFTs do not exclude serious liver damage in all cases.

**Other Tests**

**Ultrasound Guided Liver Biopsy**

Ultrasound guided liver biopsy is able to determine the extent of liver injury, and is carried out on the advice of the liver specialist. The hepatitis specialist, following discussion with the patient, may also carry out further specialist investigations.

**Immunisation**

**Immunisation against Hepatitis C Virus Infection**

There is currently no vaccine to protect against hepatitis C infection, and it is unlikely there will be one in the near future. The virus is known to mutate at a particularly rapid rate (leading to a change in molecular structure), which makes the development of an effective vaccine difficult.

**Vaccines against Hepatitis A and B Virus Infections**

Immunisation against both hepatitis A and B virus infections is available. Immunisation against hepatitis B virus infection should continue to be very actively promoted amongst drug users. Immunisation against hepatitis A virus infection is currently promoted for those with severe liver disease, and would usually be given on the advice of the liver specialist for this indication.
Testing – At risk Groups

See Appendix B – Guidance on pre-test counselling

Because of the potential implications of a positive diagnosis of hepatitis C virus infection (including the knowledge that it can cause a chronic disease from which the person can develop long term symptoms, with the risk of death in a minority), all tests should be preceded by careful information and advice so that the implications of the testing are clearly understood.

It is very important to recognise the anxiety this subject can create for the drug user.

Those drug users who seek testing should be offered well-informed advice, and be made aware of the implications of both a positive result and of a negative result, to provide a basis for giving informed consent.

A wide range of health professionals in both primary and specialist substance misuse services are appropriate to deliver hepatitis C antibody pre- and post-test information, advice and discussion, as well as arranging onward assessment and care for those with positive results.

General practitioners and specialist drug services are generally experienced in discussing issues of confidentiality with patients. Sexual health or genito-urinary medicine (GUM) clinics do not usually manage hepatitis C infected patients after diagnosis (unlike with HIV positive patients) and most would refer on for expert hepatological follow-up. For many there may be little or no advantages in encouraging testing by such a route but this option does remain available for drug users to explore.

Advice for those who are not Anti-hepatitis C Virus Antibody Positive on Testing

Those who test negative should be advised on the meaning and implications of the test result and about ways of avoiding further exposure. If necessary, a further test should be arranged if the last risk of infection was within the last 6 months. In case of continued risky practices they should also be given advice on ways to minimise the risk of transmitting infection to others. They should also be given advice on the importance of caution in the use of alcohol, because of its damaging effects on those who have chronic liver disease caused by hepatitis C virus. The need for immunisation for hepatitis B should also be strongly reiterated.
Management of Hepatitis C Infection

Management and treatment for hepatitis C infection involves both specific and general approaches.

Immediate Management

Post-test information, advice and counselling should be offered by those who arranged testing and hence, should be available in specialist drug services and within primary care.

General Health and Welfare

Consideration needs to be given to the broader health (physical and emotional) and social care needs of those infected with hepatitis C infection to optimise their general health and to offer appropriate support, as well as any specific treatments.

Referral

All confirmed anti-hepatitis C virus antibody positive patients should be referred for hepatological advice to a specialist with an interest in liver disease (liver specialist, gastroenterologist or other local specialist working with this disorder), for appropriate confirmatory testing, and further assessment and advice on future monitoring and care.

Access to primary care services needs to be confirmed or facilitated.

Advice on Minimising Risks

Those who are infected with hepatitis C should be advised about minimising the risk of transmitting their infection to others and on the need to stop or reduce alcohol intake to reduce the risk of disease progression. It is important to provide immunisation against hepatitis B virus infection, and to give advice on testing for HIV and hepatitis B and on reducing risk of any further infection.

Local Pathways of Care

Services involved in the care of drug users will be faced with questions about the process and pathways of testing and subsequent care in their locality.

Such services will benefit from being aware of the pathways for testing for hepatitis C (directly or through another service). Such services will also need to
have considered the optimal management of care between local relevant agencies and services (primary and specialist hepatology advice) to minimise any obstacles to treatment.

It will be useful for services to clarify the local pathway for obtaining assessment and advice required from a liver specialist for those with evidence of hepatitis C virus infection.

It is in the interests of patients, and those involved in their care, that the specialist drug service and primary health care team do have sufficient liaison with their local specialists in the treatment of hepatitis C infection. This will help ensure a clear understanding of the appropriate approaches to the testing, monitoring and the management of care of hepatitis C positive patients and the optimal local pathways of care.

Where difficulties arise locally in testing, immunisation or in providing optimal pathways of care, there will be a role for service managers in responding to these issues, and also possibly the Drug Action Teams in considering their annual review of Treatment Plans.

**Maximising Attendance for Specialist Appointments**

Given the often complex needs of the drug users who show evidence of infection, it is not surprising that non attendance at appointments may be a significant problem in referral to specialist hepatological advice. There are examples of locally appropriate good practice to minimise this (See Department of Health’s drugs website – www.drugs.gov.uk). It may be useful to be aware of such potential problems and to consider mechanisms locally to respond.

**Specialist Assessment**

The care of those diagnosed as hepatitis C positive should involve a period of specialist hepatological assessment and observation. In most cases, it should also involve the carrying out of a liver biopsy with ultrasound examination to determine the level of inflammation and stage of the disease.

**Specialist Monitoring and Access to Treatment**

Hepatitis C virus infected patients may not require any specific interventions around the time of initial specialist assessment, but will need to be followed up for review of the progress of the disease from then on. Individuals with minimal disease will normally be kept under long-term regular review. This may require co-operation with primary care and specialist drug services to facilitate this over many years and to avoid drop-out and loss to follow-up.
For some drug users who may benefit from the specific treatments for hepatitis C infection, a period of stabilisation of drug use may be required.

Attention to general physical health and nutrition, as well as attention to mental health problems, may be needed. Such attention should increase the prospects of making optimal use of any specific medical treatments that are recommended. This is especially important because such treatments are often associated with significant side effects and the need for a commitment to a high level of compliance.

**NICE and Combined Therapy**

See Appendix C – NICE Guidance on Treatment for Hepatitis C

Recent clinical trials suggest that using interferon in conjunction with ribavirin significantly improves the success rate of treatment in appropriately selected patients.

In October 2000, the National Institute for Clinical Excellence (NICE) published guidance on this treatment. This supports the use of combination therapies, where appropriate.

The NICE guidance indicates that those who misuse drugs (but are not current injecting drug users), need not be excluded from therapy. Hence, former IDUs, and those on oral substitute treatment, should be considered for this combination treatment. The NICE guidance also states that combination treatment is not generally recommended for those who are currently injecting and at risk of re-infection. However, if a prescribing clinician is reliably assured that re-infection, compliance and drug interactions pose no problems, even if continuing to inject at times, a person in this group might be considered for combination therapy.

The current combined treatment includes injections under the skin three times a week for six months. This can be associated with unpleasant side effects. Considerable support may be required from those involved with the care of such patients.

The importance of hepatitis C infected drug users stabilising their health and lifestyle, in order to be able to make use of combination treatment, may present an excellent opportunity for professionals working with this group to offer increased help and encouragement to stop injecting and sharing.
Public health measures

There are broad measures in place to prevent the transmission of hepatitis C.

These include:

• Screening of blood donations
• Heat treatment of blood products
• Provision of needle exchange schemes
• National guidance
• Surveillance and research

Needle Exchanges Schemes

Nearly all health authorities now provide needle exchange facilities. It is important that those working with drug users are aware of, and actively promote, the use of the local schemes and provision. It is also helpful if drug workers, as part of their usual advocacy role, document, report and respond, where possible, to any local difficulties of access to such services. It is also important for these schemes to be aware of the local drug services.

There is recent evidence that the prevalence of hepatitis C virus infection amongst injecting drug users is less than had previously been expected. This suggests that syringe exchanges and other harm reduction measures are playing a key role in reducing the spread of hepatitis C.

It is important to remember that the hepatitis C virus can be spread not only through shared needles and syringes, but also other injecting paraphernalia.

Advice and Guidance

Areas of existing guidance.

• Advice on the management of drug users and hepatitis C is included in the Department of Health guidance - Drug Misuse and Dependence - Guidelines on Clinical Management.1. The document’s guidance on hepatitis C virus infection underpins this current document.

1 Drug Misuse and Dependence: Guidelines for Clinical Management. Department of Health, Scottish Office; Home and Health Department, Welsh Office; and Department of Health and Social Services, Northern Ireland. The Stationary Office 1999.
Government guidance for the NHS on the purchasing of services for injecting drug users includes advice about hepatitis C.

The Government have also issued guidance for health care workers on protection against occupationally acquired infection with blood-borne viruses.

Advice on minimising the risk of hepatitis C infection is included in Department of Health leaflets for the public e.g. on sexually transmitted diseases and travelling abroad.

Primary and secondary care services will be involved in testing and, to provide advice and guidance, will need sufficient knowledge and support structures to fulfil this role alone or with others.

Good quality information and advice is needed before testing because of the potential implications (insurance, health etc) of a positive result. Patients must be able to make an informed choice for testing. Post-test information, advice, support and possible counselling will vary according to the result and the individual. Some advice and information will be needed (regarding minimising risk behaviours) before those who have tested positive are referred to a specialist. Some drug users may also ask any of a range of detailed questions before seeing a hepatology specialist. Some, but not all of the specific advice, may need to be left to the specialist.

Further advice and support will be needed, thereafter, according to the results of detailed diagnostic tests and assessment by a hepatology specialist, and according to what treatment is offered, if any.

Thus, both primary and secondary care services need to include appropriate information, advice and support, as well as counselling services.

Hepatitis C virus infected patients often rely as much on supportive professionals and advisors as on their medication. The support that is provided is invaluable to many.

**Surveillance and Research**

- The Public Health Laboratories Service (PHLS) publishes the detail of antibody positive hepatitis C laboratory reports.

- The PHLS also runs a register of people with hepatitis C infections with known dates of acquisition. This provides a facility for studying the natural history of infection/disease.
• The Department of Health has recently started collecting data on a regular basis through an injecting drug user survey.

• The Department of Health have funded a longitudinal study of injectors to estimate incidence and significant risk and protective factors associated with infection.

• A programme of research in this area, funded by the Department of Health, is described in Appendix D.

Measures currently contributing to Reducing Risks

• Prescription of opiate substitute medications, particularly in the form of liquid methadone, and supervised consumption schemes reduce injecting and its associated risks.

• Access to community and residential drug treatment options (including detoxification) contributes to a broad framework of approaches to drug problems that have been shown to reduce risk of injecting and the harm associated with it.

• Provision of general health promotion messages; this includes literature for drug users on the dangers of injecting drugs, and of sharing needles and other paraphernalia.

• Drug Action Teams’ Annual Treatment Plans can be used to identify areas of local need – this might include treatment services for injecting stimulant users or anabolic steroid users where a local need is identified.
SECTION 2
Principles of a Local Prevention Strategy

This section sets out the principles on which a local prevention strategy should be based. These can be summarised as:

- The rights of drug users are paramount
- Approaches should include primary prevention (to avoid hepatitis C virus infection) and secondary prevention (to reduce the harm of hepatitis C virus infection)
- There should be consistency of approach
- A whole system approach should be adopted

Primary prevention includes preventing injecting (as well as the harms associated with injecting).

The rights of drug users

Whatever is commonly thought about the attitude of drug users to their own well being, this guidance recognises that most drug users are concerned about their health. They are not passive recipients of care. Most want to make informed choices about their treatment and need access to up-to-date information in order to do this.

Drug users are entitled to high quality information and advice regarding their health, including the current knowledge we have of hepatitis C infection and ways to reduce the risks of their drug use.

Drug users are also entitled to access to information, advice and to counselling, as well as to testing and immunisation when appropriate. They should receive high quality healthcare and referral for specialist assessment, advice and care if needed.
When services are drawing up protocols for the prevention of injecting and sharing every effort should be made by local managers and DATs to obtain advice and assistance from users. This may be through contact with national or local user groups or locally by using focus groups or user questionnaires.

The Evidence Base for Approaches to Changing Behaviour

There is a wide body of research supporting the value and effectiveness of the broad range of harm reduction and prevention approaches in the field of drug use and misuse.

There is no equivalent well-developed body of research specifically focussing directly on the reduction of injecting and sharing behaviour. Hence this guidance draws on experience of the field and from other areas of related research.

In addition to the broad principles that guide a good therapeutic relationship, more specific techniques may be useful to deliver prevention messages to help the drug user in changing their high risk behaviours related to injecting.

The Department of Health guidance – Drug Misuse and Dependence – Guidelines on Clinical Management was based on current research and best practice and considers harm reduction and Hepatitis C virus infection. It is available on the Department’s drug website – www.drugs.gov.uk.

Specialist drug workers may already have skills in assisting change in addictive behaviours that have a good research base, such as Motivational Interviewing, Motivational Enhancement Therapy or other specific approaches aimed at behavioural change, such as Cognitive Behavioural Therapy. The broad and relevant nature of these techniques suggest that they might usefully be applied in helping the drug user to consider the information about risks of hepatitis C and injecting practices, and to assist in pursuing the possibilities of behaviour change.

It is important to recognise that workers, without the specific techniques noted above, may be equally effective in helping drug users to change their behaviour by carefully assessing the factors influencing the drug user to inject, explaining the risks and exploring the alternatives with that individual.

Hunt et al. (1998) have reported an intervention aimed at current injecting drug users. This approach raises awareness of the risks, and helps to increase consideration and prior anticipation of the possibility of initiation of others into injecting drug use. The goals of the intervention are to reduce behaviours that may increase initiation of others, increase competence at managing initiation requests and to increase disapproval of initiation and increase reluctance to initiate others. They have reported some success with this approach. This study showed
promise and in particular, showed feasibility. Implementation of such an approach to reduce the initiation of others should be considered by services widely and preferably with any outcomes monitored and evaluated. A sample of issues to address with drug users in this area is given in Appendix E.

‘Brief interventions’ focussing on alcohol consumption have shown some effect on moderating use of alcohol in a range of settings. A "brief intervention" usually consists of an assessment of risk behaviour; information on risks and clear advice for that individual, often with booklets and details of local services (adapted from Wallace et al 1988). The interventions usually can be carried out by informed generalist workers in non-specialist settings and are brief and user-friendly.

Reduction of alcohol intake among drug users may be difficult. The National Treatment Outcome Research Study (NTORS) has confirmed previous research indicating that drug services may have little long-term impact on alcohol consumption and problematic use.

**Approaches to risk reduction**

**Risk Reduction to Prevent Infection**

The **ideal** goal of a local risk reduction programme is that drug users:

- do not start injecting
- stop any current injecting
- avoid initiating others
- do not share injecting equipment or paraphernalia with others
- pass on safer injecting advice to others

Services and drug workers should think, therefore, of **setting goals that focus in a stepped way** on:

1. Stopping initiation of injecting (do not start or avoid initiating others)
2. Stopping sharing of equipment and paraphernalia (and developing the use of safer techniques)
3. Stopping injecting
To achieve these goals a local strategy will include the following elements:

- Provision of information and advice on the risks of injecting (including hepatitis C virus)
- An agreed approach to reducing the initiation of others and to encourage current users not to move to injecting.
- Ready access to high quality and monitored needle and syringe exchange programmes.
- Targeted information to drug users on safer injecting and sharing practices.
- Access to a range of interventions such as advice and counselling, Motivational Interviewing, Motivational Enhancement Therapy, Cognitive Behavioural Therapy or other specific focussed interventions (including brief interventions), if clinically appropriate.
- Access to well-proven harm reduction approaches such as substitute medications or community or residential detoxification and rehabilitation.

**Risk Reduction for those Infected with Hepatitis C Virus**

It is possible to reduce the harm to people who are already infected with hepatitis C.

Even when drug users are already infected with hepatitis C virus, they should be advised to change their risky injecting behaviours. Re-infection with the virus can increase the damage that may subsequently occur. All the primary prevention techniques above therefore should be used appropriately. In addition, secondary prevention approaches including promoting changes in alcohol use, attention to general health, nutrition and lifestyle are important.

A local strategy to minimise harm among those infected with the virus should have the following elements:

- **Identification** by testing for anti-hepatitis C virus antibodies (including proper provision of pre- and post-test information and advice)
- **Referral** for appropriate specialist hepatological advice on diagnosis.
• **Assessment for treatment** and an approach to support those being monitored for or receiving treatment

• Involvement of the **primary care team** for those infected

• Advice on **stopping alcohol use** (including the taking of an alcohol history with specific intervention or referral to ‘alcohol services’ as appropriate)

• Advice on hepatitis B immunisation and testing and **urgent hepatitis B immunisation**

• **Primary prevention approaches** – advice to stop injecting, stop sharing and stop initiation of others

See Appendix F – for a detailed checklist of advice to give on safer injecting and cleaning of equipment

**Targeting**

Some risk reduction interventions may need appropriate targeting.

There is a potential high-risk period early in an injector’s career, prior to exposure to existing health interventions/information, where the usual approaches to reduce initiation and reducing harm may not be effective. Outreach services and peer education have a particular opportunity to reach this group with the key messages.

Special groups such as pregnant injectors, those in a prison setting, and stimulant users may need special advice and interventions aimed at reducing risk of harm relevant to their specific experience and/or setting.

**Consistency of approach**

Within any locality, drug treatment and prevention interventions can be provided by a number of separate services and agencies. Often drug users will have contact with a number of these. Steps should be taken, therefore, to ensure that the risk reduction messages that they receive are consistent.

All services and agencies working with drug users should have agreed protocols in place that clearly define the harm reduction goals and set out exactly what is expected of staff at all levels to achieve these based on the key messages identified above.
Where a number of local services co-exist, the local Drug Action Team (DAT) should encourage development of agreed protocols between agencies that are consistent. The overall approach to harm minimisation and, in particular the reduction of injecting and sharing behaviour, should be an express statement within the DAT local treatment plans.

A whole system approach

As well as ensuring consistency of approach, services should consider ways of reinforcing prevention messages and harm reduction approaches by all of those working within a service. Responsibility should not lie in the hands of a few professionals. All workers involved with drug users have an important contribution to make. Equally, all workers should have an understanding of the basic principles of harm reduction – why it is necessary and how prevention messages should be delivered. Each role will differ but this guidance has been written so that all who are participating in a programme to reduce injecting and sharing understand the underlying principles and background research.

A service that has adopted a whole system approach will be working to the following principles:

- Regardless of the level or duration of contact drug users have with a service, key prevention and harm minimisation messages, support and advice are made available
- Roles of all staff in contact with drug users are described in local harm reduction protocols
- All staff, regardless of the level of their contribution receive training to enable them to meet the requirements of the local protocol
- All staff are aware of the routes of referral open to them if a drug user requires support from another agency/service or more experienced worker
- Service managers actively work to ensure consistency of approach across agencies, involving the local DAT if appropriate
There is considerable variation in skill mix and staffing profiles in services working with drug users. Rather than cover this diversity precisely, this section has divided staff into five levels. The guidance suggests the jobs that are likely to be included in each level and set out appropriate roles and responsibilities that the jobholders might have. It starts by outlining the responsibilities at the level of administrative support staff. It assumes that at each level above this, staff are able to undertake the full range of activity of the lower levels so only describes in detail the additional responsibilities the staff would have as they are more highly trained. At service level, the distinctions between these roles may be rather more blurred than this section suggests. Depending on the way a service is organised, some of the roles described may be properly undertaken by staff in a different level.

In addition to describing this hierarchy of responsibility, the proposed roles and responsibilities of two other groups, service managers and DATs, who have wider responsibility for providing comprehensive services, are described.

The most important principles to be followed when deciding who should do what are that:

- A comprehensive programme covering the range of prevention and risk reduction approaches is in place locally or is easily accessible
- All staff understand their role and where they fit into the programme
- The roles and responsibilities of staff are described in the programme’s protocol including appropriate referral procedures
- All staff receive training to enable them to deliver their part of the programme
First Level

Administrative staff, including front of house staff and receptionists for drug services, have a key frontline role. This may also include front of house staff in other services, particularly if they have significant contact with drug users or groups at risk of drug use (for example in some general practices and in some pharmacy premises).

Roles and Responsibilities

- Ensure immediate availability of pre-printed information leaflets
- Ensure access to a list of local and national sources of hepatitis C advice and testing (see website)
- Monitor the waiting rooms, public notice boards and stocks of displayed leaflets etc., to make sure they remain available and up to date
- Give information if requested about available helplines
- Refer clients to a more experienced worker in their area of work if they request help

Second Level

Those workers who may have brief or limited contact with the drug users or where only a very brief informal assessment is feasible are included in this group. These may include those who deliver needle exchange schemes, outreach workers, youth workers, street workers, national and local helpline staff, some generic social workers, supported housing/hostel managers, A&E staff, primary care staff and community and some hospital pharmacists.

In addition to attending to any relevant first level responsibilities:

Roles and Responsibilities

- Actively encourage the taking of advice leaflets (place the leaflet in the user’s hand)
- Engage in brief discussion if possible regarding the availability of advice and counselling and highlighting the key messages of risk reduction
• Negotiate further discussion, if possible

• Ensure advice/information on gaining access to a fuller assessment or other services is available

• Facilitate access to immediate needle exchange

• Refer to more experienced worker in the same or another service, if required

**Third Level**

Included in this group are those workers who have a more formalised assessment of drug users, though this is still only to a limited degree (e.g. low threshold service workers). This could include a wide range of trained drug workers, counsellors, midwives, generic community psychiatric nurses, outreach workers and others who carry out such limited assessments.

In addition to attending to any first and second level responsibilities where appropriate more focussed interventions will be possible:

**Roles and Responsibilities**

• Assess the previous or current risk behaviours including injecting and sharing risks

• Screen for alcohol use and give appropriate advice in relation to the risks with hepatitis C infection

• Explore options for stabilisation or reduction of drug use and arrange for more detailed assessment or intervention if agreeable

• Provide specific interventions to deliver information regarding the risks of hepatitis C virus and to facilitate change in behaviours using approach agreed locally

• Apply structured brief interventions as agreed locally if insufficient time for more extensive intervention

• Promote access to hepatitis B immunisation
Fourth Level

These workers offer more detailed assessment usually leading to determination of a care plan. This is based on assessment of the drug users needs, and includes initial goal setting and consideration of appropriate longer-term interventions. These workers will usually also focus on longer-term goal setting, including issues such as cessation of drug use, assisted detoxification, substitution treatments and longer term stabilisation and rehabilitation. Such workers include specialist addiction nurses and social workers and other more highly trained drug workers (including some outreach workers), and those providing drug services in primary care to drug users.

This level of worker will be provided by most specialist drug services and will frequently incorporate the offer of pre-test and post-test information, advice and discussion in regard to hepatitis C virus infection, but also in regard to hepatitis B virus and HIV.

In addition to attending to any first, second and third level approaches where appropriate:

Roles and Responsibilities

- Identify any health concerns that may be related to hepatitis C infection (malaise, history of jaundice etc.)
- Offer testing for hepatitis C virus or referral on for testing to appropriate local service
- Provide pre-test counselling for blood borne viruses with reference to the service protocol
- Discuss detailed treatment options to stop or reduce drug use
- Discuss substitution treatments such as Methadone (and the opportunity and importance of using this treatment to stop injecting)
- Discuss other treatment options including assisted detoxification, relapse prevention and rehabilitation
- Discuss the support available as part of a longer-term strategy, including the importance of primary care access
- Assess current hepatitis B status and promote immunisation for hepatitis B without delay (including possible accelerated immunisation)
• Provide post-test support, information, advice and counselling as appropriate

• Inform hepatitis C positive users in particular regarding the implications of the NICE guidance

• Re-iterate to hepatitis C infected patients the advice on reducing harm associated with hepatitis C and obtaining appropriate support from primary care and specialist hepatology services

• Use general or specific approaches to facilitate behaviour change agreed locally

**Fifth Level**

This will include those who will be involved in making decisions regarding prescribing and immunisation (often including doctors in a multidisciplinary forum) and can include experienced GPs, psychiatrists and addiction specialists, as well as clinical psychologists. Senior nurses and other senior practitioners in a service may also carry some of the following responsibilities, as may an increasing number of community pharmacists.

In addition to attending to any one of the first, second, third and fourth level approaches as appropriate:

**Roles and Responsibilities**

• Conduct physical health or full medical examination to identify any concurrent health problems

• Assess for and prescribe, or refer for prescribing of, substitute medication

• Monitor compliance with substitute medication regimen

• Arrange further investigations as needed

• Prescribe or deliver vaccine for hepatitis B immunisation

• Monitor the evidence base on hepatitis C and contribute to the updating of protocols and training as appropriate

• Contribute to development and maintenance of team protocols
• Provide training and act as a source of advice locally on drug users and hepatitis C

• Contribute to the development of links with non-specialist services that deal with drug users and disseminate the messages and guidance on hepatitis C (including promoting these messages where possible in primary care, mental health, criminal justice system, child and family, youth and outreach services etc.)

• Contribute to data collection and implementation of national guidance (such as NICE)

• Develop links with and refer to treatment specialists for hepatitis C and actively contribute to ensuring good communication and understanding of referral procedures to support the optimal assessment and care for the patients

• Lead audit of outcomes

• Provide supervision for others

Those who have Indirect Responsibility for Drug Users

These are those who have an important operational responsibility for the success of these approaches, rather than providing direct interventions with the users.

Managers of Drug Services and Co-ordinators of Needle Exchange Schemes

Roles and Responsibilities:

• Ensure awareness training for all workers who come into contact with drug users (including the importance of a consistent and active approach to hepatitis C)

• Ensure clear internal protocols are in place and are understood that include the responsibilities of all their service workers on this particular issue

• Ensure implementation of local and national policy and associated training
Ensure that resources for hepatitis C testing and hepatitis B immunisation and testing are identified or the gaps highlighted

Support the communication with, and development of links with, primary care and specialist hepatology services, as well as other relevant agencies to assist in disseminating a consistent approach to this issue

Ensure that any resource or delivery issues in relation to hepatitis C are raised within the organisation and with those commissioning the services

**Drug Action Teams**

Drug Action Teams are multi-agency bodies, and are well placed to examine how the content of this guidance document can be developed within health and social care agencies, criminal justice agencies and other voluntary and statutory agencies involved with and supporting people with substance misuse problems. DATs need to consider how they influence the development of good practice in this area to assist in delivering consistent messages across agencies and treatment providers and promoting high quality hepatitis C virus testing practice.

**Roles and Responsibilities**

- Commissioning responsibilities may be influenced by the local assessment of need and priority given to this issue by the DAT

- DATs should consider any local gaps in service provision on this issue

- The DAT can play a role to encourage consistency between agencies (e.g. specialist and generic e.g. children’s and young people’s services) through their senior multi-agency representation.

- DATs can encourage all constituent services to have protocols in place if appropriate

- The DAT should ensure it has reflected in its local treatment plans the needs of drug users in its area with regard to the issue of hepatitis C infection.

- The DAT could consider the development of local goals and targets for reduction in injecting and sharing
The range of resources in this area will be collated at the Department of Health “Drugs” website at:

www.drugs.gov.uk

Resources include:

- Electronic version of this document
- More detailed data and references
- Links to additional information and resources
- Links to key organisations
- Examples of good practice
- Electronic version of Drug Misuse and Dependence – Guidelines on Clinical Management
- Further updates
Acute Infection

Not commonly identified with hepatitis C infection but it does occur in some and may present as a flu-like illness with symptoms and signs including:

- Tiredness
- Loss of Appetite, Nausea and Vomiting
- Muscle pains
- Right upper abdominal pain
- Jaundice - unusual
- Severe vomiting and dehydration or liver failure – very rare

Chronic Asymptomatic Infection

- Inflammation of, and damage to, the liver caused by a hepatitis virus may develop without symptoms over many years.

Chronic Symptomatic Infection

Where liver disease causes significant liver damage, symptoms and signs may include:

- Extreme tiredness/lethargy/chronic fatigue
- Nausea and lack of appetite
- Weight loss
• Pale stools
• Dark urine
• Jaundice
• Joint pains and muscle pains
• Depression
• Raised level of liver enzymes (that can be measured by a simple liver function blood test)

Cirrhosis

• May lead to liver failure

Hepatocellular Carcinoma (HCC)

• This is a primary cancer of the liver (unlike some secondary cancers that not uncommonly spread to the liver)

Extra-Hepatic Manifestations

These are disorders secondary to the liver disease that occur in the body outside of the liver

• Autoimmune disorders
• Skin rashes

Death
Further Guidance

Extract from *Drug Misuse and Dependence – Guidelines on Clinical Management*

Issues to discuss before testing for any blood-borne virus should include:

- the likelihood of a positive test result;
- the potential social and financial implications of a positive result;
- the patient’s understanding of what a positive test means medically;
- what supports are available to him or her;
- what forms of treatment might be available;
- results should ideally be given by the person who organised the test, as a planned consultation on a definite day;
- patients with positive results will need clear advice about onward medical treatment and referral.
NICE has published recommendations on the use of combination therapy (alpha interferon with ribavirin).

NICE published its Final Appraisal Document on 31 October 2000, giving its recommendations for the use of combination therapy – alpha interferon with ribavirin – to treat hepatitis C virus infection.

Combination therapy is recommended as the treatment of first choice for moderate to severe hepatitis C virus infection in the following:

- previously untreated patients
- patients treated with interferon monotherapy, who responded but have relapsed.

Treatment should be given for 6 months, except for those with genotype 1 virus who, if they show a response, should have 12 months therapy.

Treatment is not recommended for:

a) continuing injecting drug users – though they may be treated if the prescribing clinician can be sure that re-infection, compliance and drug interactions pose no problems

b) current heavy drinkers, because of the increased risk of liver damage

c) non-responders to monotherapy (further research is needed on clinical and cost effectiveness of treatment for this group)

d) decompensated cirrhosis; it is contra-indicated
There is insufficient evidence for recommendations on use in under-18s, or after transplantation; also for mild disease, though unpublished evidence suggests this may need to be reviewed.

Monotherapy should be considered only if ribavirin is contra-indicated, or cannot be tolerated.

Recommendations for further research are made on:

a) the prognostic value of monitoring viral load to reduce length of therapy

b) audit of biopsy rates

c) treatment of current injecting drug users (usually omitted from trials)

d) clinical and cost effectiveness of treating mild disease (DH-commissioned trial under way)

e) treatment for non-responders to monotherapy.

Two recommendations are made for implementation: that viral genotyping facilities will need to be upgraded, and that counselling facilities will need to be reviewed.

**Those without treatment**

There is a significant number of patients for whom treatment will not usually be available:

a) Continuing injecting drug users, and heavy drinkers

b) Those with decompensated cirrhosis

c) Those who did not respond to monotherapy (as opposed to relapsing after it)

d) Those with conditions for which the drugs are contra-indicated, or who have to discontinue treatment because they do not tolerate the drugs:
i) Interferon: psychosis or severe depression; symptomatic heart disease; seizures; organ transplant (except liver); uncontrolled diabetes; autoimmune disorders, especially thyroiditis.

ii) Ribavirin: renal failure; anaemia; pregnancy; haemoglobinopathy; severe heart disease.

iii) Children.

iv) Those with mild disease.

For these patients, some treatment of their symptoms may be possible, but further research is needed. Many will need counselling and support.

NICE recommends non-responders to monotherapy be included in trials for newly-developed therapies. This group will include some infected through blood products before it was possible to make supplies safe.

**Further Guidance**

Evidence-based clinical guidelines for the treatment of patients with hepatitis C infection will be developed and elaborated by the scientific and clinical experts in the field, which will be wider and more detailed than the NICE recommendations, including issues such as testing for diagnosis; risk behaviour; different needs according to different infection routes etc.

These will help ensure that patients receive high-quality treatment.
The research topics currently funded by the Department of Health in this area include:

- Health Benefits from Anti-Viral Therapy for Mild Chronic Hepatitis C
- What is the cost effectiveness of combination therapy (interferon alfa and ribavirin) in the treatment of chronic hepatitis C
- Comparisons of sensitivity and specificity of oral fluid and dried blood spot laboratory tests to detect antibodies to hepatitis C virus among injecting drug users
- The efficacy of counselling in the primary prevention of hepatitis C among injecting drug users: a randomised controlled trial
- A cohort study to assess the prevalence and incidence of and risk factors for hepatitis C virus infection among injecting drug users
- Addition of anti-HCV testing to unlinked anonymous survey of injecting drug users in 2001
- A study of the impact of HCV screening on injecting risk behaviour reported by injecting drug users
- A cohort study of patients infected with the hepatitis C virus
- National registry of hepatitis C virus
This appendix is based on approaches used by Hunt et al. (1998), which has shown some evidence of success.

Sample guidance that can be addressed with injecting drug users to assist them in reducing the risk of their initiation of others could include the following questions and ideas to discuss with the IDU:

- If you don’t want to encourage others to start injecting, then there are things you can do to make sure you don’t contribute to someone’s decision to start injecting.
- Try not to talk about injecting at all with non-injectors.
- If you do discuss injecting, think carefully about how you talk about it because even when you give a balanced account of the pros and cons, people tend just to hear the good bits, and think that the bad bits only affect other people.
- Try to ensure that as few non-injectors as possible know that you inject.
- Avoid fixing in front of non-injectors as seeing someone do it often makes people realise it is not as scary as they had thought.
- Talk about your views with other injectors to see what they think.
- Think back to when you started injecting and try to avoid putting non-injectors in the situations that led you to start injecting.

If appropriate use an approach of peer education to encourage the passing on of advice on risks of injecting and sharing and harm reduction approaches.
Drug Misuse and Dependence – Guidelines on Clinical Management recommend:

- “The first principle of minimising harm should be to stop injecting practice.
- The ramifications of sharing any injecting equipment (spoons, water, filters, needles, syringes etc.) must be addressed with every misuser.”

**Overall Message**

- Ideally **STOP** drug misuse.
- **MOVE** from injecting to other forms of drug administration.
- If you continue injecting **USE SAFER INJECTING TECHNIQUES**
- Ideally **NEVER INTRODUCE OTHERS** to injecting.
- If you do introduce others to injecting, **SHOW THEM HOW TO USE SAFER INJECTING TECHNIQUES**

**Specific Risk Reduction Item Checklist**

- Wash hands with soap and water before and after injecting.
- Use new sterile equipment from a needle exchange for every injection.
- If you have to re-use equipment, reuse your own.
• Do not draw up from a communal pot of water; draw up your own water which no-one else has used.
• Do not draw up from a container or spoon into which someone else has put a used syringe.
• Do not put a used needle into a container or spoon that might then be used by someone else.
• Do not use a filter into which someone else has put a used syringe.
• Do not let someone else use a filter into which you have put a used syringe.
• Do not lend or borrow any injecting equipment including syringes, needles, spoons, filters, stirrers, swabs, tourniquets, cups or water.
• Do not "frontload" or "backload" (see below).
• Maintain your own space for injecting and keep your own equipment for sole personal use carefully separate from any others.
• Clean up blood from floors, door knobs and work surfaces with undiluted household bleach.
• Carefully clean cuts and wounds and cover with a waterproof dressing.
• Do not use anyone else’s toothbrush, razor, scissors or other personal items.
• Do not share a straw for snorting cocaine or other drugs with any other person.
• Practise safer sex (or consider the risks in monogamous relationship).
• Do not register as an organ donor or donate blood or semen.
• Ensure that disposable sterile needles are used for acupuncture, tattooing, body or ear piercing (and proper hygienic techniques used by the technician).
• Dispose of injecting paraphernalia safely in a sharps bin (preferably a personal sharps bin or consider using a resealable jar).
• Return personal sharps bin to needle exchange for safe disposal and destruction

**Frontloading and Backloading**

These are methods of sharing drug solutions using the syringe as a measuring device.

Other terms used for these methods include ‘dividing’, ‘splitting’, ‘halving’ and ‘slurping’.

Neither frontloading nor backloading increase the risks of transmission of blood-borne viruses if all the equipment involved is sterile, and previously unused. However it is difficult for drug injectors to be certain that this is case, in what can be a busy and confused environment. For this reason education around this issue would aim to discourage these practices.

**Frontloading**

Frontloading is the practice of drawing up a drug solution into a ‘donor’ syringe, and then measuring out appropriate amounts into one or more other syringes.

It is termed frontloading, because the solution is squirted through the hub or front of the syringe. Frontloading is done with syringes, which have detachable needles: the donor syringe has a needle attached; the ‘recipient’ syringes do not.

**Backloading**

Backloading differs from frontloading in that it is done with insulin type syringes with fixed needles. The plunger is removed from the recipient syringe and the drug solution squirted in through the back opening. It requires considerably more dexterity than frontloading, as an air gap has to be allowed between the drug solution and the front of the syringe, to allow for the reintroduction of the plunger without pushing out the drug solution.
Extract from Drug Misuse and Dependence – Guidelines on Clinical Management (1999)

The Importance of Sterile Injecting Equipment

Injecting drug misuse carries a significant risk of infection, particularly when equipment is shared or cursorily cleaned. Dirty and unhygienic injecting habits can result in local or systemic infections, and poor injecting technique can cause venous or arterial thrombosis.

Nearly all localities have organised provision for accessing sterile injecting equipment, either through pharmacy-based needle exchange, or other forms of needle exchange. Information on these services should be available to those who are injecting drugs and at a risk of injecting drugs. Injectors should be informed of the dangers of using used injecting equipment, and encouraged to be scrupulous in their hygiene technique if injecting drugs. They should be advised to use sterile or at least their own equipment on each occasion, if they are to reduce their risk of acquiring hepatitis C, B or HIV.

The harm associated with injection can be reduced by advising about poor injecting technique, providing clean needles and syringes, and by giving correct advice on cleaning injecting equipment. Most significantly, the sharing of needles, syringes and injection equipment (spoons, filters, water) needs to be clearly addressed with the patient. Many drug misusers only consider sharing to be the joint use of the needle or syringe and have not considered that water used for preparation and disposal, and other injecting paraphernalia such as filters, can also run significant contamination risks, and possibly play a significant role in the transmission not only of HIV, but also of the hepatitis B and C viruses.

Cleaning injecting equipment

It is best to always use sterile needles and syringes each time. Although cleaning equipment is a safer practice than not cleaning at all, there is no absolutely certain way of cleaning needles, syringes and drug paraphernalia that will guarantee no infection risk. Such practice is of course less secure when paraphernalia are still being shared, or not adequately cleaned.

The advice about cleaning injecting equipment has only been shown to reduce the risk of HIV and may offer little or no protection against the more enduring and prevalent hepatitis C.

N.B: This is NOT guaranteed to kill the hepatitis C virus (but if there is no alternative it is better than not cleaning at all).
The following are needed to bleach clean injecting equipment:

- Needle and syringe
- Thin, undiluted household bleach
- Clean, cold water
- Two clean cups, or wide-topped bottles

Method

1. Pour bleach into one cup (or bottle) and water into another (If using a disinfecting/bleach tablet e.g. in a prison setting, dissolve it to make up a solution according to the instructions).
2. Draw bleach up with the dirty needle and syringe, expel bleach into sink and repeat.
3. Draw water up through needle and syringe, expel water into sink and repeat at least two or three times.

Points to remember when cleaning equipment

- Boiling plastic syringes melts them
- Thick bleach is impossible to draw up through a needle.
- Cold water is recommended as warm water may encourage blood to coagulate and hence will be harder to expel through the needle.
Information on Hepatitis C was made available to all prison medical officers in a “Dear Doctor Letter” (DDL96.3) by the Prison’s Service’s former Directorate of Health. This letter was prepared in consultation with the Department of Health and the Public Health Laboratory Service and endorsed by them. It provided prison doctors with information on the natural history, epidemiology, prevention, treatment and guidance in those areas.

**Prevalence of Hepatitis C and History of Injecting in Prisoners**

A study of the prevalence of HIV, Hepatitis B and hepatitis C in eight prisons in England and Wales conducted by Public Health Laboratory Service (PHLS) in 1997/8 showed, for Hepatitis C, that amongst:

- the total prison population sampled the rate was 7%
- those who had ever injected the rate was 30%
- By comparison – the total prison population rate for Hepatitis B was 8%, with 0.4% for HIV. The rate for Hepatitis B amongst those who had ever injected was 20%.

The 1997 ONS survey of psychiatric morbidity amongst prisoners in England and Wales reported that 28% of men on remand, 40% of women on remand, 23% of sentenced men and 23% of sentenced women said that they had ever injected drugs. The numbers of those who said that they inject regularly, or had done so in the month prior to reception into prison custody, were lower. The prevalence of injecting in the last month was as follows: Male remands 17%, Female remands 28%, Male sentenced 13%, Female sentenced 14%.
Testing in Prisons

In accordance with clinical criteria previously agreed with the local NHS specialist, prisoners who test positive for hepatitis C virus infection will be referred for advice on further management. Testing is available for those who wish to be tested on request. Such testing will be undertaken in line with professional guidelines. It involves pre and post testing and counselling. The results are confidential to the patient.

Treatment for Prisoners

If clinically indicated prisoners who test positive for hepatitis C will be referred to an NHS specialist for advice on further management. This is consistent with the agreed aim to provide prisoners with health care on a par with that received from the NHS by the general population (as proposed and accepted following the report by the joint NHS Executive/Prison Service working group in The Future Organisation of Prison Health Care). Such closer working is anticipated should lead to the better management of services for prisoners diagnosed with communicable diseases, whilst they are in prison, and following their release.

Harm minimisation issues

The Prison Service’s harm minimisation policy includes provision of disinfecting tablets for the purpose of cleaning illicitly-held drug taking equipment; this has been piloted in 11 establishments since 1998 and will gradually be made available in more prisons over time.

The Prison Service has a strategy for preventing the spread of communicable diseases in prisons covering training, education, prevention, and risk reduction and harm minimisation.

The Prison Service’s Drug Strategy complements this.

Key points in these strategies include:

- the successful introduction of disinfecting tablets through pilot projects in 11 establishments since 1998 that will gradually be made available in more prisons over time;

- treatment of substance misusers which includes the management of symptoms of withdrawal in line with Department of Health guidelines; rehabilitation programmes and therapeutic communities;
• health promotion and harm minimisation information;
• and the provision of drug workers in all prisons who provide
counselling, assessment, referral, advice and facilitate throughcare for
substance misusers.
APPENDIX H
Guidance on the Presentation of Leaflets

Thought should be given to the relevance and appropriateness of leaflets. They can be useful in re-enforcing verbal messages. The Safer Injecting Briefing (1999) lists many of the following key attributes of a good quality leaflet:

- Accurate
- Understandable and not liable to misinterpretation
- Credible
- Appropriate to the person in terms of information and reading level
- Relevant to local injectors
- Available in large print

Options for those with Difficulty with Literacy

It is important to consider those with poor or no reading skills.

Information presented in pictorial form can be useful but approaches to delivery of hepatitis C messages will be part of a services overall response to the needs of those with difficulty in reading.

Identification of those with additional communication needs and alternatives for message delivery may include increased time for verbal interaction.
REFERENCES


Other relevant references to in this document will be listed at the website – www.drugs.gov.uk