



Herefordshire Needle Exchange and Blood Borne Viruses: An Overview, December 2004

How to reduce drug related harm - The challenge for Herefordshire

This summary report considers the operation of Herefordshire (DASH) Needle Exchange Scheme, with reference to national service delivery expectations and recent national and international research and evidence base supporting the requirements for a comprehensive delivery of needle exchange and associated harm reduction interventions for drug users.

It considers requirements for enhanced delivery that, by building on its locally developed platform, would play a significant role in reducing the prevalence of Blood Borne Virus transmission amongst injecting drug users (IDU's) in Herefordshire.

This report does not attempt to provide a deeper analysis to the function of injecting (and associated) behaviours or to describe in detail service provision responses other than to highlight key concerns and resultant outline service delivery proposals for consideration.

The Context

Recent national and international research has shown that although effective in reducing HIV transmission, NXS have had less impact in preventing the spread of hepatitis C (HCV).

However, the evidence strongly suggests that a comprehensive NXS provision with pro-active intervention aimed at behaviour change, assessment, individualised risk reduction, effective monitoring and referral to drug treatment can have a profound and positive impact in reducing drug related harm.

'The National Treatment Agency is committed to reducing drug-related deaths and the risks to public health caused by drug misuse. A recent report from the Health Protection Agency (Shooting Up, December 2003) reveals an increase in blood borne

viruses amongst injecting drug users. Two in five injectors have been exposed to Hepatitis C, but most of them remain unaware of their infection. A third of those who inject drugs are still sharing equipment, posing a serious health hazard to themselves and others.

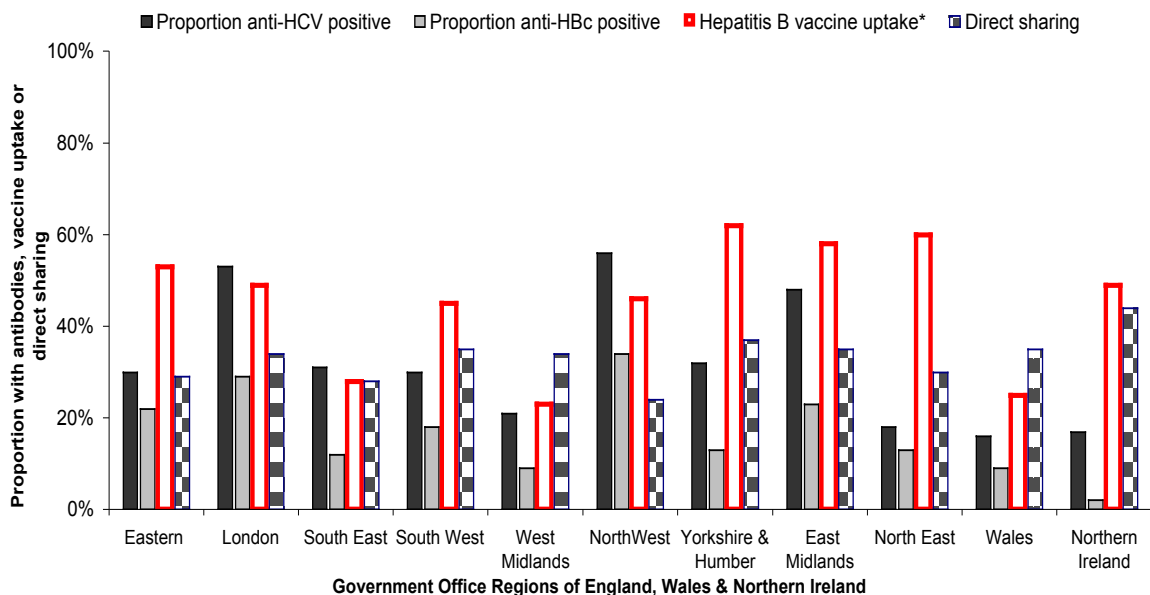
'The prevention of drug-related harm is central to the aims of all four tiers of drug treatment service provision and I would like to encourage all drug treatment agencies to work with drug action teams, commissioners and NTA regional teams on this important issue'.

Paul Hayes, Chief Executive, National Treatment Agency, February 2004

New figures published by the Health Protection Agency show that infections among injecting drug users (IDUs) are a growing public health concern. 'Shooting Up - Infections among injecting drug users in the United Kingdom 2003', brings together information on all infections among this group. The data published shows that the prevalence of hepatitis C has doubled between 2000 and 2003 amongst those who have recently started injecting. The most worrying trend is that these are largely in the 16-25 year old age group. Recent research undertaken by Judd, Hickman et al and published November 2004 in the British Medical Journal and reinforces these concerns although it recognizes that there is some regional variation.

Geographical Differences: UAP

Figure X: Current & Former Injecting Drug Users in England, Wales & Northern Ireland:
Prevalences of hepatitis C and B, hepatitis B vaccine uptake and equipment sharing+ (2002 and 2003 data combined)



* Self reports, those receiving one or more vaccine doses.
+ Sharing of needles or syringes in the previous four weeks.

At this stage there is little local comparative data that can give an accurate indication of indeed both the prevalence of IDU's or the the numbers infected with HCV living in Herefordshire and consideration should be given to undertaking a prevalence study locally to as to inform strategic and service delivery developments. However, reference to prevalence studies in other areas can help in estimating the numbers of IDU's that could be expected to be resident locally.

A study undertaken by Hickman, Higgins, Hope et al and presented at the 2004 National Conference on Injecting Drug Use and published in The Journal of Epidimiol Community Health showed that in the areas of their study (London, Liverpool, Brighton) the prevalence of injecting drug use among young adults was as common as diabetes and greater than many other chronic conditions such as epilepsy or psychosis. The research concluded that less than one in four IDU's are in treatment.

Using this 'formula' and based on the numbers of IDU's in treatment in Herefordshire, it is reasonable to suggest that ther are approximately 1200 - 1500 IDU's within county. This figure certainly reflects previous local prevalence estimates based on treatment numbers, NXS activity and police activity and drug seizure data.

It should be noted that the methods of estimating prevalence are inherently uncertain, and the figures produced need to be treated cautiously. Non-the-less, given government aims to double the number of drug users in treatment (DoH. Tackling drugs to build a better Britain. The government's 10-year strategy for tackling drug misuse 1998) the study suggests:

'there is ample opportunity for this, given that less than one in four IDUs are in receipt of treatment at any one time'

The study further estimated the coverage of syringe distribution at approximately one clean syringe per injector every two to 2.5 days (or 20% to 27% of all injections). Most users inject at least twice a day (this is variable and based largely on the type of drug injected with crack injectors using up to fifteen time a day or more) and lent further evidence of the high levels of sharing injecting paraphernalia.

'...underlying the evidence that over 40% of injectors were regularly sharing injecting equipment'

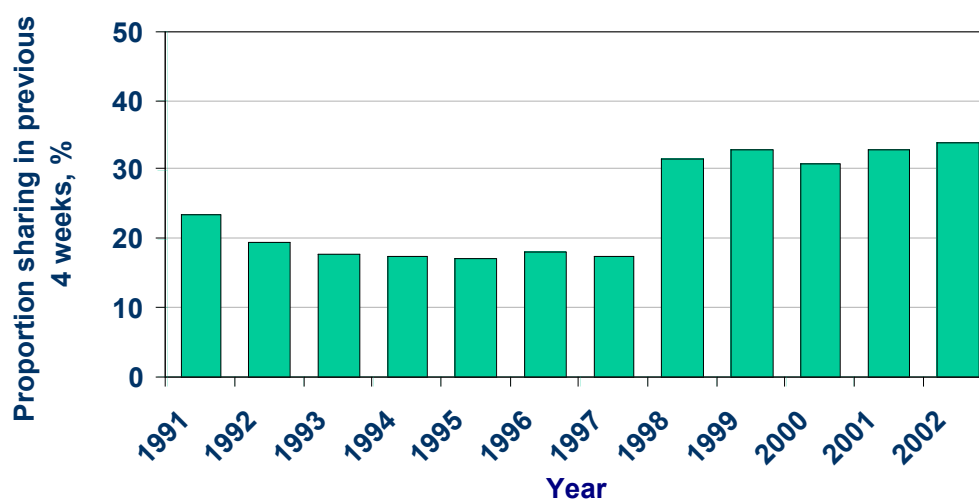
'Sharing injecting equipment' also includes the sharing of injecting equipment such as water, filters, cookers, swabs etc – all associated with high rates of HCV transmission. Certainly, reports from service users to Dash's Service User Forum would suggest that similar levels of sharing are

occurring locally with the most common reasons being lack of access to injecting supplies and strong feeling that harm reduction interventions and related educational input tending to be delivered via DASH NXS with hospital based outlets unable to offer enhanced provision.

The report further recognizes that while policy makers in England deserve credit for reaching such a high coverage in comparison with many other cities and countries worldwide it should still be regarded as insufficient The research stated that and goes on to warn:

'the shortage of sterile needles increases the risk of disease spread, particularly hepatitis C'

Injecting risk behaviour among IDUs: reported sharing* of needles & syringes

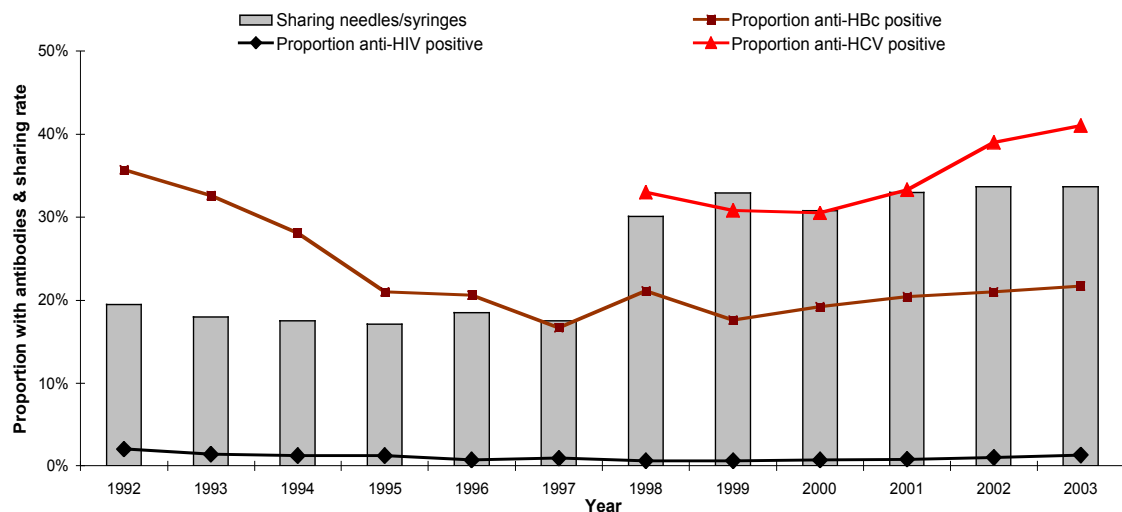


HPA. *Shooting up: Infections among injecting drug users in the United Kingdom 2002*. London: HPA; 2003.
* Sharing defined as passing on, or receiving, used needles or syringes in 4 weeks prior to participating in the survey

In addition to the rise in BBV transmission, Shooting Up also reports a growing problem with injecting site infections associated with both methicillin resistant *Staphylococcus aureus* (MRSA) and severe group A streptococcus (GAS) again indicative of the use of non-sterile (ie contaminated) injecting equipment. Transmission of both hepatitis A and B continues among IDUs even though there are effective vaccines. Although the proportion of IDUs vaccinated against hepatitis B has increased in recent years many still remain unvaccinated.

Supporting Evidence: UAP

Figure z: Current Injecting Drug Users* in England & Wales:
Equipment sharing+, past hepatitis B & C infection, and HIV infection (1992-2003)



* Those who last injected drugs in the four weeks prior to participating in the survey.

+ Sharing of needle or syringes in the previous four weeks.

Data Source: Unlinked Anonymous Prevalence Monitoring Programme survey of around 3,000 injectors in contact with drug agencies each year.

The report highlights a number of priorities for service providers, which will help reduce the burden of infection. These include developing high-quality needle-exchange services for those unable to stop injecting, with sufficient coverage to prevent the sharing of needles and syringes, provision of clear information, advice on safe injecting, access to regular health checks, vaccination services and ensuring easy access to treatment and support services for all those who wish to cease injecting, or to reduce, or stop their drug use.

“Most of these diseases are preventable and can be treated. It is vital that we continue to make every effort to encourage and support injectors to protect their health and also that of the wider population.”

Professor Pat Troop, Chief Executive HPA, October 2004

Needle Exchange and Harm Reduction – Potential for Developments

Historically, DASH has provide NXS in conjunction with a range of drug treatment as it has always been recognised that NXS is part of the drug treatment ‘continuum’ where IDUs can be engaged into a range of other services as assessed and required by individual need. The service has evolved I direct response to users needs (eg later and more flexible opening hours). However, this provision is recognised as variable across the county with some areas receiving high level input and others minimal or even no NXS support.

‘Needle exchange can help stem the hepatitis C epidemic (and transmission of other blood borne viruses) – but it takes high volume, high activity, high support and lateral thinking’

Mike Ashton, Drug and Alcohol Findings, Sep 2004

The requirement for enhanced NXS provision is well documented and supported by the NTA. In personal correspondence, Neil Hunt (Honorary Research Fellow, Centre For Research, Imperial College, London) identified that:

‘Needle exchange is one of the seven ‘drug misuse treatment modalities’ identified within Models of Care – the national framework for the commissioning of treatment for adult drug misusers in England (National Treatment Agency 2002).

Further, Models of Care refers closely across to other government reports, notably Hepatitis C - Guidance for those working with drug users (Department of Health 2001) and Reducing Drug Related Deaths (Advisory Council on the Misuse of Drugs 2000).’

The general functions of needle exchange have been identified for many years and are the functions on which DASH bases its NXS. *Models of Care* quotes the objectives of needle exchange as reported in the *Task Force to Review Services for Drug Misusers* (1996), which are to:

- ***offer sterile syringe and needle distribution***
- ***offer safe syringe and needle disposal, usually by return***
- ***offer advice and counselling on HIV, hepatitis and drug problems***
- ***offer hepatitis B immunisation***
- ***offer overdose prevention and response advice and information***
- ***reduce the number of new initiatives into injecting***
- ***offer advice on safer sex and sexual health***
- ***offer advice and counselling on other health, social and welfare problems***
- ***provide referral to other treatment services***
- ***provide easy access and a user-friendly service for all injecting drug misusers***
- ***collect routine information.***

Beyond this, *Models of Care* refers to the role of needle exchange in *reducing the spread of hepatitis C* (NTA 2002) and the growing interest in *reducing transitions into injecting* (NTA 2002). However, limited resourcing and increased demand without an overall strategic plan have left the provision of Needle Exchange and associated Harm Reduction services (largely but not exclusively encompassed within Tier 2 provision) hindered in its ability to provide comprehensive coverage.

Although NXS has developed in response to expressed need, lack of comprehensive injecting equipment supply and associated harm reduction advice outside Hereford City and very limited hepatitis B immunisation programme opportunities would appear to be predominant concerns with high risk injecting practices being reported from areas with little or no direct support.

Reducing injecting-related harm involves providing IDUs with both the means and opportunity to significantly reduce the risks associated with injecting. This includes providing easy access to: basic assessments, including risk assessments and basic physical health checks, a comprehensive range of sterile injecting equipment including injecting 'paraphernalia' (supplied in line with the recommendations of the Advisory Council on the Misuse of Drugs 2002).

Once IDU's have to opportunity to engage with DASH NXS worker, appropriate assessments information and advice on avoiding the transmission of blood-borne and other related viruses, particularly hepatitis A, B, C and HIV is readily available as is advice and information on safer injecting and the reducing of drug-related harm across a range of commonly injected drugs, which would include advice and information on avoiding medical complications of injecting, including thromboses, emboli, endocarditis, abscesses, ulcers and TB.

Referral for blood testing for viral status, particularly for hepatitis C and HIV can also be made (although this service is limited to 2hrs weekly and woefully insufficient to meet the perceived needs of the increasing numbers of IDU's). Enhanced NXS provision as described is restricted elsewhere across the county although Outreach support in both Leominster and South Wye areas provide some limited NXS and harm reduction response (including health educational input) to needs as they arise. NXS, without harm reduction intervention, assessment, referral-on etc is provided by receptionists at Leominster, Ross and Kington Cottage Hospitals.

In terms of potential future developments, consideration will need to be given to the resource requirements for the additional quantities of injecting equipment needed to reduce the opportunity of sharing and also to developing outlets for both distribution and injecting equipment and the provision of harm reduction interventions. It must be noted that while all other aspects of drug treatment have expanded in line with national expectations, NXS and related provision has, in terms of resourcing, remained fairly static.

Developments to ensure coverage and provision as outlined by the NTA would need to include a combination of the following:

- **Community Pharmacy NXS**
- **Outreach workers** - adaptation of current focus might allow expansion on current NXS provision
- **Mobile NXS distribution** - possibly utilising Herefordshire PCT Travellers Health Bus
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- **Secondary NXS distribution** - where appropriate by drug users or others where appropriate training, support and supervision can be provided
- **NXS provision via Custody** - being developed), A&E etc
- **NXS Vending Machines**

- **Overdose Prevention Training** and Ambulance Protocol development
- **BBV Screening** and vaccination programme
- **Needle Exchange Coordination** - to work with NXS post to ensure comprehensive delivery of NXS across Herefordshire in-line with local strategic plans
- **Waste Management** - There should be liaison between those distributing injecting equipment and appropriate local services/agencies to develop robust written strategies to minimise the likelihood of used injecting equipment being discarded in the community (by providing widespread access to secure disposal facilities, rather than by limiting supply of equipment)

Conclusion

It is becoming evident that due to insufficient provision of comprehensive NXS within Herefordshire, the ability to safeguard the health of drug users by intervening to reduce risk behaviours is being compromised. The framework for NXS in Herefordshire has been established since 1993. Since then we have seen an dramatic change in drug using patterns and there is now a requirement to consider what developments are required to ensure that the anticipated (and evidenced) rise in injecting related harm, particularly HCV transmission is reversed.

Projecting data gained from research would indicate that as many as 200 – 400 drug users in Herefordshire might be Hepatitis C positive. Enhancing NXS would ensure both a reduction in the transmission of all BBV's and injecting related harm (including Overdose) while engaging more users into treatment.

Although there are cost and strategic planning implications when considering the enhanced NXS developments that are required mounting evidence shows how investment in NXS has been shown to yield significant savings in health related costs for HIV and HCV.

The findings of an Australian study considering the cost effectiveness of implementing NXS programmes over a ten year period. The study was a collaborative effort between Health Outcomes International and the National Centre for HIV Epidemiology and Clinical Research (NCHECR), with specialist health economics advice provided by Prof Michael Drummond from the Centre of Health Economics at York University in the UK and presented at The 2004 National Conference on Injecting Drug Use.

The study focused on the impact of NXS within the Australian context. Importantly, however, the literature that supported the epidemiological aspects of the study was drawn from international experience in NXS and their effects on HIV and HCV prevalence among IDUs.

The underlying pathology of HIV and HCV, and the fundamentals of treatment do not vary significantly between different countries and the research was able to conclude

Under these circumstances, and given the overwhelmingly positive outcome demonstrated in this study, it is difficult to believe that similar results would not be achieved in other countries.

Jim Hales, The National Centre for HIV Epidemiology and Clinical Research

It is clear from local experience and research appraisal that not only that the investment in NXS to date has been warranted (this maybe reflected in lower than average HCV transmission in Herefordshire) but that future investment in not only desirable but essential and will contribute further to the outcomes achieved in line with expectations to comprehensively meet the needs of injecting drug users and the communities of Herefordshire.

Danny Morris,
Development Manager,
December 2004