

DRUG & ALCOHOL FINDINGS

Research analysis

This entry is our analysis of a study considered particularly relevant to improving outcomes from drug or alcohol interventions in the UK. The original study was not published by Findings; click [Title](#) to order a copy. Free reprints may be available from the authors – click [prepared e-mail](#). The summary conveys the findings and views expressed in the study. Below is a commentary from Drug and Alcohol Findings.

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► [Evaluating peer-supported screening as a hepatitis C case-finding model in prisoners.](#)

Crowley D., Murtagh R., Cullen W. et al.

Harm Reduction Journal: 2019, 16(42).

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For prison populations with multiple risk factors for acquiring hepatitis C, can a peer-supported screening programme improve the uptake of testing and treatment?

SUMMARY Untreated hepatitis C poses a major public health problem and is endemic in prisons (1 2), which are associated with multiple risk factors for acquiring hepatitis C, the most important being injecting drug use (1 2 3 4).

The European Centre for Disease Prevention and Control and European Monitoring Centre for Drugs and Drug Addiction [advise](#) that hepatitis C screening be offered to all prisoners. Despite evidence that most prisons offer this screening (1 2), uptake is poor, and protocols for managing hepatitis C are the exception (1 2 3).

For many years the [Irish Prison Service](#) and [Irish Red Cross](#) have trained prisoners as peer educators to improve prison health and safety. The benefits of peer involvement in hepatitis C care are well documented. Peer workers are in a unique position to dispel the myths and fears associated with hepatitis C treatment, reduce stigma, enhance mutual trust, increase social support, and increase knowledge and engagement in hepatitis C care (1 2).

The featured study examined the feasibility and impact of a screening intervention delivered by prison peer workers in an Irish men's prison on: the number of hepatitis C infections detected, in particular infections not known or disclosed on arrival at prison; linkage to care; engagement with treatment; and treatment outcomes in the Irish Prison Service.

Prisoners who had volunteered for the Irish Red Cross were invited to a focus group to discuss their experiences of hepatitis C screening and treatment in prison, and to provide input into the design and implementation of the study. The draft intervention was then presented to a larger group, consisting of prison healthcare and custodial management staff, prison officers, nurses and doctors, and Irish Red Cross staff overseeing the prison volunteer programme. The final intervention included educational posters and leaflets, a risk-based questionnaire, hepatitis C screening and results, referrals for liver ultrasounds (to determine liver damage, which can occur as a consequence of untreated hepatitis C), and linkage to treatment, as well as an awareness and educational session for prison volunteers.

Peer workers accompanied prisoners to the screening sites and promoted the intervention on the landing areas of the prisons. Results were given four weeks after screening. Ultrasound tests were available on-site, and referrals were made to hepatology (liver) services for prisoners who required treatment.

Prisoners who underwent hepatitis C screening between March 2017 to August 2017 were eligible for inclusion in the study, with the exception of prisoners with a severe mental illness undergoing active treatment and prisoners considered to pose a security risk to the research team. In total, 425 male prisoners consented to participate. On average, they were 33 years old, aged 20 when first incarcerated, had spent a total of 7.7 years in prison, and been in prison six times. Half of participants (49%) had a history of drug use, and of those who answered further questions, 45% had a history of heroin use, 33% a history of injecting drug use, and 36% had a history of methadone treatment, with an average duration of 4.9 years in treatment. Many participants had additional risk factors for acquiring hepatitis C: 35% had a history of sharing drugtaking equipment; 16% had shared needles; 17% had a prison tattoo; and 14% had a non-sterile community tattoo.

Prisoner outcomes were collected more than 12 months after the peer-supported screening. The study's ethical approval did not allow for data to be collected on prisoners after their release.



Key points From summary and commentary

For many years the Irish Prison Service and Irish Red Cross have trained prisoners as peer educators to improve prison health and safety. The featured study examined whether people in this role could improve the uptake of testing and treatment for hepatitis C, which is endemic in prison populations.

The intervention was successful in testing a large number of prisoners for hepatitis C. Of the 419 prisoners screened, 87 tested positive for hepatitis C antibodies and 50 tested positive for an active hepatitis C infection, of whom 19 were 'new cases' (ie, had not been identified on arrival at prison).

The findings support the focus on prisons as key locations for public health interventions to increase hepatitis C diagnoses and access to treatment.

Main findings

Of the 419 participants with test results, 21% tested positive for the presence of hepatitis C antibodies. Over half (57%) of these participants had results indicating an active hepatitis C infection, 31% had self-cleared the infection, and 27% no longer had the virus in their system. Additionally, 1% of participants tested positive for HIV antibodies, and less than 1% for antibodies for hepatitis B.

Confirming disclosed cases and identifying new cases

A total of 19 new cases of active hepatitis C infection were identified through peer-supported screening (5% of participants screened).

There was close agreement between results from the peer screening programme and what (among the 252 for whom this data was available) the prisoners had said in their prison admission interviews. During their interviews 48 participants had said they had hepatitis C. All but two also tested positive for hepatitis C antibodies in the screening programme. Conversely, of the 171 who during their interviews said they did not have hepatitis C, 19 or 4% tested positive in the peer screening programme, and eight (2%) had an active infection.

Among those who on arrival at prison had said they were unaware of their infection status, 22 (11%) tested positive for hepatitis C and 11 (5%) had an active infection.

Linking to treatment

Of the 50 prisoners with an active hepatitis C infection, 40 (80%) received further testing to determine the extent of damage to their liver. Five participants had results indicating fibrosis (scarring of the liver, but liver function so far unaffected), five had results indicating cirrhosis (scarring to the point of impaired liver function), and the majority (30 or 75%) came under the umbrella of minimal liver damage.

A total of 43 were linked to specialist services, and of this group, 12 had completed treatment, 10 achieving 'sustained virological response', whereby the virus remained undetectable three months after treatment, two were in receipt of treatment, and eight were being assessed:

- Four participants with both hepatitis C and HIV were linked with specialist hospital services. Three had completed treatment (two achieved sustained virological response, and one was awaiting their results) and one was undergoing assessment for treatment.
- 39 participants were linked to or referred to a nurse specialising in liver care. Nine had completed treatment (eight achieving sustained virological response and one awaiting their results), two were in receipt of treatment, six were under assessment for treatment, and 18 prisoners were referred to the hospital.
- Seven participants were not linked with treatment services either due to being released from prison or being transferred.

The authors' conclusions

The intervention was successful in testing a large number of prisoners for hepatitis C, and had the added benefit of testing for HIV and hepatitis B – blood-borne viruses with a high prevalence in prison populations (1 2). Of the 419 prisoners screened, 87 tested positive for hepatitis C antibodies and 50 tested positive for an active hepatitis C infection, of whom 19 were 'new cases' (ie, had not been identified on arrival at prison).

While a [small number](#) of published studies have reported on the effectiveness of hepatitis C screening initiatives in prisons, the study was unique both nationally and internationally in evaluating a peer-supported hepatitis C screening initiative.

There remains a lack of clarity about what hepatitis C infection means among people who test positive, and what the difference is between past infection, chronic infection, active infection, self-clearance, sustained virological response, and re-infection. As treatment for hepatitis C is scaled up, it is important to have measures of levels of active untreated infections, treated infections, and re-infections. Furthermore, it is important that people who have been exposed to hepatitis C are educated on the different phases of infection and the implications of their blood results so that they can provide accurate medical information to healthcare staff, including on admission to prison. Increased accuracy could also reduce the need for unnecessary and expensive repeat screening.

Overall, the findings support the focus on prisons as key locations for public health interventions to increase hepatitis C diagnoses and access to treatment (1 2 3), and highlight the ongoing need to increase harm reduction services within prisons to reduce the risks of blood-borne virus transmission in closed settings (1 2).

FINDINGS COMMENTARY The featured study evaluated the impact of a peer-supported hepatitis C screening intervention in an Irish men's prison, finding it to be an effective way of finding new cases of

HEPATITIS C

A positive test for hepatitis C antibodies indicates exposure to the hepatitis C virus at some point, but cannot confirm current infection.

During the period when [hepatitis C](#) is first contracted, most people either do not experience any noticeable symptoms, or experience symptoms that are similar to many other short-term infections. This means that they are unlikely to seek medical attention, and if they do, doctors would not necessarily suspect or test for hepatitis C.

A [small proportion](#) of those infected with hepatitis C will naturally clear the virus from their body in the first six months. However, [estimates](#) from Public Health England suggest that 3 in 4 people will develop a chronic infection, a primary cause of cirrhosis and liver cancer.

hepatitis C, linking people to treatment, and strengthening the quality of health information about prisoners by confirming who has been exposed to hepatitis C but is not currently infected, who has an active infection, and who has liver damage as a result of hepatitis C.

In [guidance](#) produced by the [Hepatitis C Trust](#), a national UK charity, peer-supported interventions are explicitly encouraged ([▶ guidance](#)). The document states that “prisons and healthcare commissioners and public health should collaborate to develop and support peer-led health improvement programmes”. Involving peers in the delivery of healthcare may not only help to build trust in services, and dispel fear and stigma associated with hepatitis C and treatment (1 2), but it could also alleviate the strain on prison staff, who may see facilitating access to healthcare as just [one of many](#) competing priorities in their day-to-work (1 2 3), and something that ultimately [comes second](#) to ensuring the security of the prison.

Another study set in the Irish Prison Service found that staff responsible for delivering frontline services [perceived](#) their primary duty to be ensuring the safety of both staff and inmates. Increased concerns about security, for example due to feuds between gangs and other rival factions, made prison officers’ jobs very difficult, and diverted them from other activities, such as accompanying prisoners to medical appointments. From the [perspectives](#) of prison guards, screening on admission to prison was the ideal time. Hospital visits outside the prison were viewed as an inefficient and resource-heavy way of providing healthcare to prisoners. Minimising hospital visits by expanding in-reach services (bringing specialist medical services into the prison) were supported and viewed as facilitating prisoners’ access to healthcare including treatment for hepatitis C.

While screening on arrival may be perceived as the most convenient time for staff, and indeed be ideal if the goal is to deliver vital healthcare to people who need it when they need it, a study documented in the Effectiveness Bank [found that](#) even when a prison implemented a universal offer of testing to new prisoners, the rate of prisoners rejecting the offer remained high. A prison in the North East of England trialled a new testing pathway, which involved offering dry blood spot testing (less invasive than drawing blood from a vein) to each new admission. Over 2016 and 2017, the prison achieved an offer rate of 66% and an acceptance rate of 53%, representing a substantial increase from 2013–2014. However, the large proportion of prisoners declining testing stressed the need to further understand why people say ‘no’, and to continue providing opportunities at other times. In the same study, another prison piloted in-reach treatment services along with opportunities for remote health consultations with physicians based in a hospital. Whereas in 2013-2014 only four patients had received treatment for hepatitis C, between 2015 and 2017 80 people received care through the new clinics and 57 started treatment for hepatitis C.

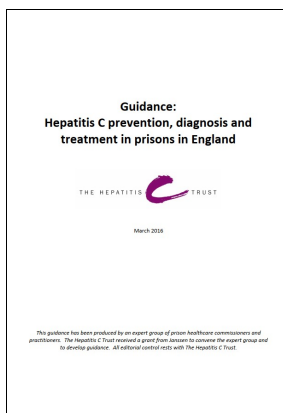
How can we eradicate hepatitis C?

A UK study [determined that](#) an approach combining hepatitis C treatment with harm reduction is needed to reduce hepatitis C incidence to the low levels [advocated by](#) the World Health Organization. The featured study exemplified efforts in custodial settings to strengthen the first pillar, while access to harm reduction (including sterile needles and syringes, opioid substitution therapy, and naloxone) remained compromised.

Prisons are [high-risk environments](#) for the transmission of blood-borne diseases. Factors including overcrowding, poor sanitation, inadequate health care, and a greater likelihood of sharing injecting equipment (with more people) raise the need for the provision of harm reduction resources as well as advice. Outside of prison settings, current levels of harm reduction (specifically, high-coverage needle and syringe provision and opioid substitution therapy) in the United Kingdom are [averting](#) considerable numbers of hepatitis C infections. In its [guidance](#), the Hepatitis C Trust acknowledged that “harm reduction is key” to minimising the transmission of blood-borne viruses, yet said the “nature of the intra prison setting” has prevented the full range of harm reduction approaches from being implemented. The guidance [advocated](#) harm reduction advice in prisons, but did not challenge the premise that interventions such as needle exchanges were incompatible with prisons.

The [European Union Drugs Strategy 2013–2020](#) advocates “[scaling] up the development, availability and coverage of drug demand reduction measures in prison settings, as appropriate and based on a proper assessment of the health situation and the needs of prisoners, with the aim of achieving a quality of care equivalent to that provided in the community and in accordance with the right to health care and human dignity as enshrined in the European Convention on Human Rights and the EU Charter of Fundamental Rights”. Under their definition, this would include “a range of equally important and mutually reinforcing measures, including prevention (environmental, universal, selective and indicated), early detection and intervention, risk and harm reduction, treatment, rehabilitation, social reintegration and recovery”.

An overview of harm reduction in prisons in seven European countries (not including the UK) [found that](#) provision of harm reduction in prisons continues to be largely inadequate compared to the progress achieved outside prisons. All of the countries reviewed provide a wide range of harm reduction services in the broader community, but most failed to provide these same services, or the



same quality of these services, in prison settings, in clear violation of international human rights law and minimum standards on the treatment of prisoners. Where harm reduction services have been available and easily accessible in prison settings for some time, better health outcomes were observed, including significantly reduced prevalence and incidence of both HIV and hepatitis C.

Much like the UK drug strategy before it, harm reduction was **all but absent** in the text of the *Prison Drugs Strategy* for prison and probation services in England and Wales. The terms 'hepatitis', 'HIV' and 'blood-borne viruses' were not mentioned, and although one of the aims of the strategy was to reduce the number of drug-related deaths in custody, the methods advocated for achieving this did not include **evidence-based** harm reduction.

In 2015, the Scottish Prison Service published a **framework** for the management of substance use in custody. This included a pledge to "take all reasonable measures to reduce the availability of illicit substances and provide services broadly equivalent to those available in the community, whilst recognising that prisoners require different routes to recovery". Ensuring parity of services with the community echoes the **European drug strategy** as well as **UK treatment guidelines**, and in Scotland **includes** "offering a range of harm reduction measures to reduce the transmission of blood borne viruses".

Another consideration for reducing hepatitis C in prisons is sending fewer people who use drugs to prison. For this, a relevant resource is a **2019 report** by the UK House of Commons Health and Social Care Committee, which stated:

We support consultation on decriminalisation of drug possession for personal use, by changing it from a criminal offence to a civil matter. We recommend that the Government should look closely at how decriminalisation has been underpinned by a strong system of monitoring and referral for those who use illegal drugs through the Dissuasion Committees in Portugal, as well as the experience of police diversion schemes in England. Decriminalisation must only be introduced as one part of a full, comprehensive approach to drugs, the central plank of which is improving treatment and harm reduction services, underpinned by better education, prevention and social support.

The committee heard evidence that a "radical change in UK drugs policy from a criminal justice to a health approach ... would not only benefit those who are using drugs but reduce harm to and the costs for their wider communities", and recommended that the Government consult on the decriminalisation of drug possession for personal use from a criminal offence to a civil matter, in tandem with investment in holistic harm reduction, support, and treatment services for substance use problems.

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STUDY 2019 [Increased diagnosis and treatment of hepatitis C in prison by universal offer of testing and use of telemedicine](#)

DOCUMENT 2017 [Drug misuse and dependence: UK guidelines on clinical management](#)

STUDY 2018 [Impact of current and scaled-up levels of hepatitis C prevention and treatment interventions for people who inject drugs in three UK settings – what is required to achieve the WHO's HCV elimination targets?](#)

REVIEW 2012 [The effectiveness of opioid maintenance treatment in prison settings: a systematic review](#)

DOCUMENT 2013 [Community losses from failure to offer maintenance prescribing in prisons](#)

DOCUMENT 2011 [Prevention and control of infectious diseases among people who inject drugs](#)

DOCUMENT 2014 [Consolidated guidelines on HIV prevention, diagnosis, treatment and care for key populations](#)

MATRIX CELL 2017 [Drug Treatment Matrix cell D1: Organisational functioning; Reducing harm](#)

STUDY 2015 [Randomized controlled trial of motivational interviewing for reducing injection risk behaviours among people who inject drugs](#)

STUDY 2018 [A randomized, open label trial of methadone continuation versus forced withdrawal in a combined US prison and jail: findings at 12 months post-release](#)