

Protecting and improving the nation's health

Shooting Up: infections among people who inject drugs in the UK, 2019

An update, December 2020







Contents

Acknowledgements	3
Suggested citation	5
List of abbreviations	5
Foreword	6
Key messages and recommendations	8
Introduction	10
Data sources	11
HIV levels continue to be low, but some missed opportunities remain	14
HBV remains rare, but vaccine uptake needs to be sustained	16
Chronic HCV prevalence has continued to decline, however rates of new infection are unchanged	19
Preventable bacterial infections remain a problem	26
There has been no reduction in risk behaviours	32
Changing patterns of psychoactive drug use remains a concern	34
Preliminary data suggest the COVID-19 pandemic has had an impact on PWID and	
service provision	38
References	48

Acknowledgements

Prepared by: Sara Croxford, Eva Emanuel and Emily Phipps

Authors and lead contributors: Koye Balogun, Juliana Coelho, Brian Eastwood, Claire Edmundson, Vivian Hope, Samreen Ijaz, Andrew McAuley, Annelies McCurley, Bruno Pichon, Graeme Rooney, Bengu Said, Josie Smith and Robert Wolstenholme

Other contributors: Gillian Armstrong, A-Lan Banks, Lee Barnsdale, Alison Brown, Pete Burkinshaw, Tracey Cairns, Ines Campos-Matos, Cuong Chau, Annastella Costella, Noel Craine, Gill Donnan, Hannah Family, Lauren Gibson, David Goldberg, Krishna Gupta, Rebecca Guy, Magdalena Harris, Matt Hickman, Lindsey Hines, Gwenda Hughes, Sharon Hutchinson, Helen Harris, Ross Harris, Adam Holland, Russell Hope, Ayeshat Ibitoye, Jo Kesten, Jameel Khawam, Freja Kirsebom, Joanne Lacey, Con Lafferty, Jaroslaw Lang, Myles-Jay Linton, Sema Mandal, Janice Morgan, Debbie Mou, Fiona Murdoch, Jacquelyn Njoroge, Olisaeloka Nsonwu, Eamonn O'Moore, Norah Palmateer, Laura Pechey, John Poh, Derren Ready, Jenny Scott, Robert Seremani, Jim Shanley, Justin Shute, Ruth Simmons, Lucinda Slater, Jez Stannard, Joe Tay, Steve Taylor, Simon Thelwall, Peter Vickerman, Lesley Wallace, Martin White, Mark Whitfield, Karen Wright, Fatima Wurie and Alan Yeung

We would like to thank all the staff of collaborating drug services and participants in the Unlinked Anonymous Monitoring Survey of People Who Inject Drugs. We would also like to thank all the staff of supporting injection equipment provision services and participants in the Needle Exchange Surveillance Initiative survey of people who inject drugs.

In England and Wales, we would like to thank the clinicians, microbiologists, public health practitioners and other colleagues who have contributed to the surveillance systems used in this report and the NHS Wales Informatics Service.

In Scotland, we would like to thank the blood-borne virus co-ordinators in each NHS Board, the Hepatitis C Clinical Database Monitoring Committee, hepatitis C testing laboratories and treatment centres, services providing injecting equipment, Glasgow Caledonian University, University of the West of Scotland, the West of Scotland Specialist Virology Centre and the Scottish Government for their support and contributions to the surveillance systems used in this report.

In Northern Ireland, we would like to thank the Northern Ireland Hepatitis B and C Managed Clinical Network, the Regional Virus Laboratory and Hepatology Service, the information staff of the Health Protection Service, Public Health Agency and all those working in drugs services for providing the data used in this report.

Retrospective testing of samples from the UAM Survey (2011 to 2016) for hepatitis C RNA was performed as part of the EPIToPe study, funded by the National Institute for Health Research

(NIHR) Programme Grants for Applied Research programme (RP-PG-0616-20008). The views expressed are those of the authors and not necessarily those of the NIHR or the Department of Health and Social Care.

Suggested citation

Public Health England, Public Health Scotland, Public Health Wales and Public Health Agency Northern Ireland. Shooting Up: Infections among people who inject drugs in the UK, 2019. London: Public Health England, December 2020.

List of abbreviations

BBV	Blood-borne virus
COVID-19	Coronavirus-19 disease
DAA	Direct acting antivirals
DBS	Dried blood spot
GAS	Group A streptococci
GP	General practice
HARS	HIV and AIDS Reporting System
HAV	Hepatitis A virus
HBV	Hepatitis B virus
HCV	Hepatitis C virus
HIV	Human immunodeficiency virus
HRD	Harm Reduction Database
iGAS	Invasive group A streptococci
IMS	Integrated Monitoring System
LUCID-B	Living Under Coronavirus and Injecting Drugs in Bristol
MRSA	Meticillin-resistant Staphylococcus aureus
MSSA	Meticillin-sensitive Staphylococcus aureus
NDTMS	National Drug Treatment Monitoring System
NESI	Needle Exchange Surveillance Initiative
NHS	National Health Service
NIHR	National Institute for Health Research
NSP	Needle and syringe programme
OST	Opioid substitution therapy
PHE	Public Health England
PHS	Public Health Scotland
PWID	People who inject drugs
RNA	Ribonucleic acid
SDMD	Scottish Drug Misuse Database
SGSS	Second Generation Surveillance System
UAM	Unlinked Anonymous Monitoring
UK	United Kingdom
WAND	Wound care, assessment of injecting risk, naloxone and DBS testing
WAWY	We Are with You

Foreword

Drug use in the United Kingdom (UK) is among the highest reported in Western Europe and people who inject drugs (PWID) experience stark health inequalities, with increased morbidity and early mortality. Through this report, we explore infections, associated risks and behaviours among PWID in the UK to the end of 2019, as well as presenting preliminary data on the impact of COVID-19 on PWID and services in 2020.

Prevention, detection and cure of infections related to injecting drug use and associated risk factors remains an issue of public health concern in the UK. In particular, around 1 in 4 PWID are chronically infected with hepatitis C (HCV). Although there is early evidence for a modest reduction in chronic HCV prevalence concomitant with the scale-up of direct acting antiviral treatment, we are yet to see a similar reduction in new HCV infections. Prevalence of HIV and hepatitis B (HBV) remain comparatively low, but concerted effort is still required to maintain levels of HBV vaccination and to ensure that everyone living with HIV is aware of their status and can access treatment.

Levels of reported sharing and re-use of injecting equipment remain unchanged in recent years and are a concern as they continue to drive of blood-borne virus (BBV) transmission. Availability and access to sufficient supplies of clean injecting equipment through needle and syringe programmes (NSP), as well as opioid substitution therapy (OST), are key to preventing the further spread of infections. Primary care and sexual health services also play an important role in providing information and advice on safe injecting practice, preventing infections and the safe disposal of used equipment. A collaborative, whole-system approach to the prevention, detection and cure of infections is crucial for reducing health inequalities among this marginalised group, and to meet international elimination goals for HIV, HBV and HCV.

In 2020, the COVID-19 pandemic has presented serious challenges for delivering services for PWID. Through concerted effort, novel delivery methods have been developed at pace to maintain access to NSP, OST and other drug services. There are, however, indications that access to essential services such as BBV testing and HCV treatment have been disrupted for some PWID, and when services recover from the impact of the pandemic, specific work will be needed to reach those who have been affected.

People who work with PWID continue to strive to improve the health and outcomes of this population group, and this passion is essential if we are to meet elimination goals for BBVs and reduce the spread of other infections through prevention, treatment and interventions that address the wider determinants of health. In these unprecedented times, it is especially encouraging to see stakeholders who work with PWID at all levels and across all sectors coming together through this joint purpose. This will be an essential tool for the road ahead.



Professor Gwenda Hughes Deputy Director for Blood Safety, Hepatitis, Sexually Transmitted Infections and HIV Service National Infection Service

Key messages and recommendations

HIV levels continue to be low, but some missed opportunities remain

HIV infections and outbreaks continue to occur among people who inject drugs (PWID). However, overall HIV prevalence in this group remains comparatively low. Most of those with HIV are aware of their infection and uptake of treatment and care for HIV among those diagnosed is high, but gaps remain. It is important that testing for HIV is offered regularly to all those at risk and that care pathways for those with HIV are optimised and maintained.

HBV remains rare, but vaccine uptake needs to be sustained

Although hepatitis B (HBV) vaccination is recommended as high priority for all people who currently inject drugs, around a quarter of PWID have never been vaccinated. Even though HBV infection among this group is currently rare, it is essential that high vaccination levels are maintained in line with guidance, particularly in younger age groups of PWID, to keep high levels of population immunity. Strategies for improving vaccine uptake should be developed.

Chronic HCV prevalence has continued to decline, however rates of new infection are unchanged

Hepatitis C (HCV) continues to be a major problem among PWID in the United Kingdom (UK), with around 1 in 4 currently infected with HCV and no evidence of a reduction in new HCV infections over recent years. There is early evidence for a modest reduction in chronic HCV prevalence concomitant with the scale-up of direct acting antiviral (DAA) treatment among PWID. An increase in testing among PWID in line with HCV elimination activities can also be observed in 2019, yet the high proportion of individuals who report they have not been tested recently indicates there is scope for improvement. It is of utmost importance that diagnostic testing services and care and treatment pathways for those infected are continued and optimised to meet the needs of PWID.

Preventable bacterial infections remain a problem

To prevent rates of bacterial infections increasing, provision of low threshold and outreach wound care services, as well as prompt treatment for injection site infections and tetanus vaccination is necessary. Furthermore, it is important for drug and alcohol services to facilitate safer injecting through enabling easy access to needle and syringe programmes (NSP) and embedding regular opportunities to discuss safe and hygienic injection practices with clients.

There has been no reduction in risk behaviours

Continued sharing and re-use of injecting equipment remains a concern. A range of easily accessible services for all PWID, including NSP, needs to be provided in line with guidance. Clients should be supported to use low dead space equipment, including detachable needles and syringes that have lower dead space, to further reduce the risk of blood-borne virus (BBV)

transmission. NSP should distribute enough injecting-related equipment to prevent sharing and re-use and support hygienic injecting practices.

Interventions to prevent BBV infections among PWID, such as NSP and opioid substitution therapy (OST) and other drug treatment need to be sustained and monitored to ensure equitable access for all. As well as these dedicated services, primary care and sexual health services should provide information and advice on safer injecting practices, how to prevent infections and the safe disposal of used equipment. Socially excluded communities, such as PWID experiencing homelessness and those not currently in contact with addiction services, should be specifically supported to access BBV testing and care services.

Changing patterns of psychoactive drug use remains a concern

The changing patterns of psychoactive drug injection in the UK also remain a concern, as changes in psychoactive drug preferences can lead to riskier injecting practices. Injection of crack cocaine remained high in England and Wales, and injection of powder cocaine has increased in Scotland. There is a need for local treatment and harm reduction systems that can respond to both the increasing numbers and the specific needs of crack and powder cocaine users.

Preliminary data suggest the COVID-19 pandemic has had an impact on PWID and service provision

Preliminary data from 2020 suggest that PWID surveyed through the Unlinked Anonymous Monitoring (UAM) Survey in England, Wales and Northern Ireland have been affected by coronavirus disease-19 (COVID-19). It will be crucial to monitor trends in COVID-19 and health outcomes among this cohort to understand whether PWID are disproportionately affected by the disease compared to the general population, and to assess the impact of the UK government's 'Everybody In' policy to house people experiencing homelessness on COVID-19 transmission, morbidity and mortality.

Despite disruption in services for PWID as a result of COVID-19 in 2020, novel approaches to service delivery have been implemented to ensure continuity of access to interventions. However, preliminary bio-behavioural survey findings indicate that 1 in 5 PWID have found it more difficult to access HIV and viral hepatitis testing and 1 in 4 to access injecting equipment in 2020, than in 2019. Continued monitoring is needed to understand the impact of COVID-19 on national HIV and HCV elimination efforts, and the impact on health inequalities among PWID.

Introduction

Drug use in the United Kingdom (UK) is among the highest reported in Western Europe (1). Between 2019 and 2020, 9.4% of people aged 16 to 59 years in England and Wales reported using an illicit drug in the last year (2). In Scotland, this figure was 7.4% between 2017 and 2018 (3). The number of people who inject drugs (PWID) in England was last estimated in 2011 at 87,302 (95% CI: 85,307 to 90,353) (aged 15 to 64) (4). Work is ongoing to update this estimate, with results expected in 2021.

PWID are vulnerable to a wide range of blood-borne viral and bacterial infections, which can result in high levels of morbidity and mortality. HIV, hepatitis B virus (HBV) and hepatitis C virus (HCV) are effectively transmitted through the sharing of injecting equipment, such as needles and syringes. Unsterile injection practices are also associated with bacterial infections such as *Staphylococcus aureus* and Group A streptococci (GAS), which are often worsened by poor wound care and delays in seeking healthcare. PWID are at risk of rare but life-threatening infections with spore-forming bacteria such as tetanus, botulism and anthrax, which can be associated with contaminated drugs. Furthermore, infection risk among PWID is amplified by structural barriers related to accessing testing, care and treatment, such as homelessness, imprisonment and discrimination. Public health surveillance of infectious diseases, and the associated risk and protective behaviours among PWID, provides important information to understand the characteristics of the PWID population, the frequency of these infections, the risk factors for their acquisition and for monitoring the accessibility of services and effectiveness of prevention measures.

This annual national report describes infections and associated risks and behaviours among PWID in the UK to the end of 2019, as well as preliminary data on the impacts of the coronavirus pandemic during 2020. Further information can be found in the set of data tables that accompany this report (5).

Data sources

The data for this report are extracted from various national surveillance systems:

Unlinked Anonymous Monitoring (UAM) Survey

This annual cross-sectional survey monitors HIV, HBV and HCV, and associated risk and protective behaviours in people ever injecting psychoactive drugs in contact with specialist services in England, Wales and Northern Ireland. Those who agree to participate provide a biological specimen (oral fluid prior to 2010 and dried blood spot (DBS) from 2011 onwards) which is tested for HIV, HBV and HCV, and self-complete a behavioural questionnaire. In 2020, eligible PWID were given the option to complete a short second questionnaire on coronavirus disease-19 (COVID-19) rather than providing a DBS sample. This report presents trends in infections and behaviours among PWID between 2010 and 2019 and preliminary data of participants completing both the UAM and COVID-19 questionnaires in 2020. Additional demographic data on the sample of PWID recruited to the UAM Survey can be found in the annual UAM Survey data tables and Health Protection Report (6, 7).

UAM Provider Survey

In September 2020, a short, online questionnaire was sent out to centres participating in the UAM Survey to better understand how COVID-19 impacted their service provision and recruitment of PWID clients to the UAM Survey.

Needle Exchange Surveillance Initiative (NESI)

This survey monitors the prevalence of blood-borne viruses (BBV) and injecting risk behaviours among PWID in Scotland. Participants are mainly recruited from selected needle and syringe programmes (NSPs) and pharmacies that provide injecting equipment. Participants complete a short interviewer-administered questionnaire and provide a voluntary DBS sample for anonymous HCV and HIV testing. The 2019 to 2020 NESI survey was suspended before completion due to the COVID-19 pandemic. As a result, the sample includes data from 8 of 11 mainland National Health Service (NHS) Boards originally included in the sampling framework. The 3 missing NHS Boards in the 2019 to 2020 survey account for just 10% of the total NESI sampling framework. Data are provisional.

Harm Reduction Database Wales (HRD)

A BBV module was implemented in 2017 in all substance misuse services, as well as selected enhanced service community pharmacy providers across Wales to support ongoing surveillance of BBV infections and treatment among individuals accessing these services. The HRD collects information on demographics, risk behaviours, vaccination history, BBV screening and results, onward referral to treatment and treatment milestones and outcomes. Client details are collected so repeated records can be identified.

Scottish Drug Misuse Database (SDMD)

SDMD was set up in 1990 to collect information about people who were in contact with specialist drug treatment services in Scotland. Services contributing to the SDMD include specialist drug services and some medical services. Data are collected when individuals make contact with services providing tier 3 and 4 interventions (structured community and residential treatment), or reinitiate contact following a gap of at least 6 months since last attendance. This provides insights into drug treatment needs and the social circumstances and behaviours of people at the point when they contact services for treatment.

Second Generation Surveillance System (SGSS)

Laboratory-confirmed infections in England, Wales and Northern Ireland are statutorily notified and routinely reported to Public Health England (PHE). Data on HBV and HCV infections were extracted from this reporting system, as well as data on COVID-19 infections among those with no fixed abode. These reports contain demographic and risk information, although risk factor information is not always provided. For acute HBV infections, laboratory surveillance data for England are combined with risk factor data collected by Health Protection Teams.

Sentinel Surveillance of BBV Testing

BBV testing data, including both negative and positive test results, are reported to PHE from sentinel laboratories in England. The place of sample collection is reported for each test. Data on trends in testing in drug services are presented to December 2019 in the accompanying data tables. However, trends in prison testing from sentinel laboratories were not able to be updated for publication of this report.

National Drug Treatment Monitoring System (NDTMS)

NDTMS collects patient-level information about the people using drug and alcohol treatment services across England. All services that provide structured treatment for drug and/or alcohol users are asked to submit data.

HIV and AIDS Reporting System (HARS)

Data on new HIV diagnoses are submitted to PHE from diagnosing laboratories and clinicians in England, Wales and Northern Ireland, while data on patients accessing care are reported by NHS specialist HIV outpatient clinics. Scottish data are collected separately by Public Health Scotland (PHS) and incorporated with data from England, Wales and Northern Ireland to create a UK dataset.

Surveillance of clinical and laboratory reports

Information on bacterial pathogens is available through surveillance of clinical and laboratory reports, which include risk factor data on injecting drug use. Reporting of meticillin-resistant *Staphylococcus aureus* (MRSA) and meticillin-sensitive *Staphylococcus aureus* (MSSA)

bacteraemias has been mandatory for NHS Trusts since 2005 and 2011, respectively. Data on MRSA and MSSA infections in PWID are also available through referral of isolates for reference microbiology. Isolate referrals are also one of the primary sources of data on GAS infections. For tetanus, wound botulism and anthrax among PWID, enhanced surveillance involves the follow up of laboratory or clinical reports with a surveillance questionnaire.

Investigations of infectious disease outbreaks

During investigations of infectious disease outbreaks, additional data are often collected to understand the cause and extent of the outbreak. This is done by collecting details from affected individuals using questionnaires and additional laboratory investigations, such as molecular typing or whole genome sequencing, which can help to determine whether cases in an outbreak are linked to each other.

HIV levels continue to be low, but some missed opportunities remain

HIV prevalence

Overall HIV infection is uncommon among PWID in the UK, with prevalence much lower than in many other European countries (8). In England, Wales and Northern Ireland, 0.82% of the people who inject psychoactive drugs surveyed in 2019 were living with HIV (Data Table 1d) (6, 7). Among those attending NSPs in Scotland, the proportion testing positive for HIV antibodies increased from <1.0% between 2011 and 2014 to 3.8% in the 2019 to 2020 NESI survey; the vast majority of cases were linked to an outbreak of HIV among PWID in Greater Glasgow and Clyde which has been ongoing since 2014 (Data Table 1d) (9).

HIV diagnosis

In 2019, there were 104 new HIV diagnoses in the UK which were likely to have been acquired through injecting drug use. New diagnoses acquired through injecting drug use have remained low over the past decade (Figure 1; Data Table 1d) (10, 11). Late HIV diagnosis (CD4 cell count <350 cells/mm³) among people who acquired their infection through injecting drugs was 40% in 2019, compared to 42% overall, and 35% among those exposed through sex between men (10, 11).



Figure 1. New HIV diagnoses probably acquired through injecting drug use: UK, 2010 to 2019

Data source for Figure 1: HIV and AIDS Reporting System (HARS).

HIV testing

The majority (81%) of PWID in England, Wales and Northern Ireland reported ever being tested for HIV, with 39% reported being tested for HIV in the current or previous year (Data, Table 3b) (6, 7). In Scotland, 86% of PWID who had injected drugs in the last 6 months reported ever being tested for HIV in the 2019 to 2020 NESI survey.

Although the majority of the 2,300 PWID (95% credible interval: 2,200 to 2,600) living with HIV in the UK in 2019 were diagnosed and are aware of their infection, an estimated 3% (95% credible interval: 0% to 12%) were living with undiagnosed HIV.

Data from the 2019 UAM Survey show that there are missed opportunities for HIV testing. The majority (97%) of those who reported never being tested for HIV or not testing recently (more than 2 years ago), reported that they had attended their general practice (GP), had been prescribed an opioid substitution medicine, or had used an NSP in the previous year.

HIV care and treatment

Owing to improved survival, the number of PWID accessing HIV outpatient services has increased over the past decade, with 1,872 people seen for care in 2019 (Data Table 1d) (10, 11). Among those in HIV care, antiretroviral therapy coverage and viral suppression (<200 copies/mL) were high at 98% and 94% respectively (10, 11).

HBV remains rare, but vaccine uptake needs to be sustained

HBV prevalence

Data from the UAM Survey indicate that the proportion of PWID with antibodies to HBV core antigen, who have ever been infected with HBV, in England, Wales and Northern Ireland has declined over the past 10 years, falling from 16% in 2010 to 9.5% in 2019 (Data Table 1c) (6, 7). Only 0.28% of UAM Survey participants in 2019 were currently infected with HBV, with detectable levels of HBV surface antigen (Data Table 1c). The decline in HBV across the UK likely reflects a decline in exposure to, and transmission of, HBV over time, as a result of increased uptake of HBV vaccination, including in prison settings (12), and/or harm reduction interventions. Sustained high HBV vaccination rates are crucial to maintain this.

HBV vaccination

HBV vaccination is recommended for all people who currently inject drugs and those who are likely to 'progress' to injecting, for example those who are currently smoking heroin and/or crack (13).

In England, Wales and Northern Ireland, self-reported uptake of the HBV vaccine, that is, receiving at least one dose, has plateaued at around 73% between 2010 and 2019 (Figure 2a; Data Table 3b) (6, 7). In 2019, HBV vaccine uptake was particularly low in the under 25 age group at 57%, a decrease from 76% in 2011, when vaccine update was highest (6, 7). Vaccine uptake also decreased in the 25 to 34 age group from 79% in 2011 to 66% in 2019 and among those who began injecting in the last 3 years at 49% in 2019, down from 67% in 2011 (Data Table 3b) (6, 7). Among people in Scotland participating in the 2019 to 2020 NESI survey who had injected in the past 6 months, 70% reported uptake of the HBV vaccine (Figure 2b; Data Table 3b). Increased HBV vaccination uptake in Scotland has been driven by the introduction of universal prison vaccination in 1999 (12).

Data from NDTMS in England indicate that, of those presenting for treatment for their drug use who were at risk of HBV and had ever injected drugs, 48% were offered and had accepted vaccination against HBV in the tax year 2018 to 2019, compared to 60% in the 2009 to 2010 tax year (Data Table 3b).

Figure 2. Uptake of the vaccine against HBV among PWID: UK, 2010 to 2019

a) England, Wales and Northern Ireland



b) Scotland†



Footnotes for Figure 2

† As the 2019 to 2020 NESI survey was suspended before completion due to the COVID-19 pandemic, data presented are provisional. Data sources for Figure 2: Unlinked Anonymous Monitoring Survey of People Who Inject Drugs (England, Wales and Northern Ireland) and Needle Exchange Surveillance Initiative (Scotland).

Chronic HCV prevalence has continued to decline, however rates of new infection are unchanged

HCV prevalence

National action plans to tackle HCV prevalence and incidence are available across the UK and include strategies to enhance case finding and improve access to and uptake of HCV treatment (14). Current and former PWID are the group most affected by HCV in the UK, with around 90% of infections in England thought to have been acquired through injecting drug use (Data Table 1a) (15).

Data from bio-behavioural surveys estimate that around half of those who inject psychoactive drugs in the UK have antibodies to HCV, indicating they have ever been infected (14). In 2019, 55% of UAM Survey participants in England, 58% in Wales and 29% in Northern Ireland had antibodies to HCV (6, 7). Although the prevalence of antibodies to HCV has stayed relatively stable in England and Northern Ireland over the last decade, prevalence in Wales has increased significantly from 26% in 2010 to 58% in 2019 (6, 7). This is consistent with continued reports of high-risk and high-frequency injecting behaviour in Wales, including more recently, increases in the proportion of crack injecting. HCV prevalence in Scotland has not changed substantially in recent years and was 55% in the 2019 to 2020 NESI survey (Data Table 1b) (14).

People are considered to be chronically infected with HCV when they test positive for HCV antibodies and HCV ribonucleic acid (RNA). The UAM Survey data from England, Wales and Northern Ireland indicate that in 2019, 23% of PWID had a chronic HCV infection. This is a modest decrease from 29% in 2016, when the level of chronic infection was at its highest (Figure 3a; Data Table 1b) (6, 7). Between the 2015 to 2016 and 2019 to 2020 NESI survey rounds, there was an 20% reduction in the prevalence of chronic HCV in Scotland among PWID who had injected in the last year, from 39% to 19% (Figure 3b; Data Table 1b) (14). These early indications of a decline in chronic prevalence could be attributable to the increase in uptake of HCV therapy, which has been seen across all areas in the UK (14, 15).

Figure 3. Trends in chronic and cleared HCV prevalence among PWID: UK, 2011 to 2019 a) England, Wales and Northern Ireland



20

b) Scotland†



Footnotes for Figure 3

Data are shown for those years where there are HCV RNA testing data are available.

Estimates for chronic and cleared HCV infection have been adjusted to take into account antibody-positive samples with missing HCV RNA status. The ratio of chronic to cleared infection was applied to the antibody-positive samples with missing HCV RNA status by year and by geography (English regions, Wales, Northern Ireland, Scottish health board (Greater Glasgow and Clyde/Tayside/rest of Scotland).

† As the 2019 to 2020 NESI survey was suspended before completion due to the COVID-19 pandemic, data presented are provisional.

Data sources for Figure 3: Unlinked Anonymous Monitoring Survey of People Who Inject Drugs (England, Wales and Northern Ireland) and Needle Exchange Surveillance Initiative (Scotland).

Surveillance data on diagnostic testing can also be used to inform estimates of HCV prevalence (Data Table 1a). Sentinel surveillance of BBV testing in England reported an HCV antibody prevalence of 21% among tests performed in drug services in 2019; 40% were found to be chronically infected with HCV, among those with an RNA test performed. In Wales, HCV antibody prevalence in 2019 was 34% among those who have ever injected drugs tested in specialist drug services and included in the HRD; 36% were found to be currently infected with HCV (RNA positive) (Data Table 1b) (16). This is much lower than HCV antibody prevalence in Wales measured as part of the UAM Survey, likely due to sampling and regional variation. Among people who have ever injected drugs presenting for drug treatment in England in the 2018 to 2019 tax year who had been tested for HCV and were aware of their result, 33% reported they were antibody positive, and 25% reported they were currently infected with HCV (RNA positive) (Data Table 1b).

HCV incidence

The early evidence of a modest reduction in chronic HCV prevalence among PWID in the UK is likely to be mainly a result of increased uptake of direct acting antiviral (DAA) treatment rather than a reduction in incidence of new infection. Recent transmission of HCV within the past 3 months can be assessed by describing HCV RNA positivity among those negative for HCV antibodies. These individuals have markers of current infection (RNA) but are yet to mount an antibody response. HCV RNA testing of HCV antibody negative samples has been carried out in Scotland since the 2008 to 2009 NESI survey, and in England, Wales and Northern Ireland within the UAM since late 2016. These data suggest that incidence of infection in the UK remained relatively stable in the range of 10 to 16 per 100 person-years over the last 5 years (14).

The overall level of HCV transmission among PWID in the UK appears to have changed little in recent years (14). However, it is important to acknowledge that reductions in chronic prevalence have only been observed over the last couple of years. Therefore, evidence of a reduction in incidence in this population may take further time to emerge.

HCV testing

UK clinical guidelines recommend that all PWID accessing treatment services are tested for HCV and HIV at first assessment, and that annual or bi-annual repeat testing should be considered when the risk of exposure and reinfection continues (13). The proportion of PWID who reported being tested for HCV has increased across the UK in the last decade. In England, Wales and Northern Ireland, self-reported uptake of testing for HCV has increased 5% to a high of 87% in 2019, with 46% reporting testing in the current or previous year (Figure 4a; Data Table 3b) (6, 7). In Scotland, the proportion of PWID reporting to have ever been tested increased from 76% in NESI 2010 to 91% in NESI 2019 to 2020 (Figure 4b; Data Table 3b). The proportion testing in the last 12 months also increased from 40% in NESI 2010 to 60% in NESI 2019 to 2020 (Figure 4b; Data Table 3b).

Shooting Up: infections among people who inject drugs in the UK, 2019

Figure 4. Uptake of HCV testing for PWID: UK, 2010 to 2019

a) England, Wales and Northern Ireland



b) Scotland†



Footnotes for Figure 4

In England, Wales and Northern Ireland, a recent HCV test is defined as a test in the current or previous year. For Scotland, a recent test is defined as reporting testing in the last month.

† As the 2019 to 2020 NESI survey was suspended before completion due to the COVID-19 pandemic, data presented are provisional.

Data sources for Figure 4: Unlinked Anonymous Monitoring Survey of People Who Inject Drugs (England, Wales and Northern Ireland) and Needle Exchange Surveillance Initiative (Scotland).

In 2019, only 30% of UAM Survey participants in England, Wales and Northern Ireland were aware of their chronic HCV infection, which is a drop in the level of awareness from the previous year (47% aware in 2018). However, this should be interpreted with caution due to variable sampling methods and geographical distribution of participants in 2019 (Data Table 3b) (6, 7). Trends should continue to be monitored in future sample years. In Scotland, 72% of participants in the 2017 to 2018 NESI survey with chronic infection had ever been diagnosed, an increase from 56% in 2010 (Data Table 3b). NESI data on awareness of chronic HCV infection from the 2019 to 2020 survey were not available at the time of this publication.

In England, NDTMS data show that among those in treatment for their drug use who have ever injected drugs, the proportion who had been offered and accepted a HCV test has increased to 62% in the 2018 to 2019 tax year from 53% in the 2009 to 2010 tax year, when data were first collected (Data Table 3b).

HCV care and treatment

In the UK, the scale up of DAA drug availability has transformed the HCV treatment landscape. The first indication that this scale-up of treatment is reaching PWID can be observed in the data from the 2 bio-behavioural surveys in the UK (6, 7, 14). In the 2019 UAM Survey (England, Northern Ireland and Wales), among those participants testing positive for HCV antibodies who were aware of their infection, 39% had seen a specialist nurse or hepatologist for their HCV infection and been offered and accepted treatment. This is an increase from 20% in 2011 (7). In the 2019 to 2020 NESI survey (Scotland), 70% of those who self-reported as being of having been eligible for treatment, that is, those that answered they have HCV or had cleared HCV through treatment, reported ever having received therapy for their HCV infection. This is a marked increase from 28% reported in the 2015 to 2016 NESI survey and 50% in the 2017 to 2018 survey. Of those who had ever received therapy, 49% had received it in the last year in NESI 2019 to 2020. These early indications are promising, and it will be important to monitor the impact of ongoing initiatives aiming to ensure equitable access to treatment for all PWID living with HCV.

Preventable bacterial infections remain a problem

Serious bacterial infections in PWID have, for the large part, been increasing in the UK since 2013 (Data Table 2). The cause of the rise is not clear and there are likely to be several factors involved. Barriers associated with homelessness such as lack of access to safe and hygienic injecting environments and resources to support general hygiene, may be risk factors for injecting site infections. The proportion of PWID reporting homelessness in the last year has increased in England, Wales and Northern Ireland since 2010, from 28% to 42% in 2019 (6, 7). In Scotland, the proportion of PWID reporting recent experience of homelessness has been largely unchanged since the 2008 to 2009 NESI survey (27%) and was 24% in the 2019 to 2020 survey.

Injecting into the groin, and other higher risk sites, can combine risks from higher bacterial carriage at these parts of the body with poorly or non-healing injection sites, increasing the risk of infection (17). More than a third (36%) of PWID who had injected in the preceding 4 weeks in England, Wales and Northern Ireland reported injecting into their groin in 2019 (6, 7) and in Scotland 45% reported mainly injecting into this site in the 2019 to 2020 NESI survey.

Group A streptococci

Invasive Group A streptococcal infection (iGAS) has been notifiable since 2010. Reports of iGAS in England indicating drug injection as a risk factor have been increasing since 2013 (Figure 5). In 2019, there were 234 isolates of iGAS for which injecting drug use was indicated. This represents 10% of all invasive isolates reported from England and Wales (Data Table 2). In Scotland, 31 iGAS reports were received through Public Health Scotland's national iGAS enhanced surveillance system in 2019 for which a risk factor of injecting drugs was reported. This represents 13% of all cases, a proportion which has been increasing in recent years (Data Table 2).





Footnotes for Figure 5

*Enhanced case finding occurred for 2018 in response to the increase in reports from prisons, PWID and homeless populations.

Data labels refer to the number of isolates with injecting drug use as a risk factor (bars).

Data on infection exposure are often incomplete or missing. Proportions are calculated for those where risk is known.

Data source for Figure 5: PHE Respiratory and Vaccine Preventable Bacteria Reference Unit.

As a result of the increase in iGAS cases in prisons in early 2019, specific guidance has been published to support stakeholders to manage and prevent cases and outbreaks (18). The high number of cases, particularly in 2018 and 2019, is concerning, and it will be important to monitor trends in iGAS infections among PWID in coming years.

Meticillin-sensitive and -resistant *Staphylococcus aureus*

Data from the mandatory enhanced surveillance of MSSA and MRSA bacteraemias in England indicate that in 2019, there were 50 MRSA and 459 MSSA bacteraemias reported associated with injecting drug use, where risk information was available (Figure 6a; Figure 6b; Data Table 2). There has been an increase in the proportion of MRSA cases for which injecting drug use was indicated over the last 9 years (Figure 6a). However, the numbers of cases associated with injecting drug use for both MRSA and MSSA are likely an underestimation, as a large proportion of cases are missing risk information (66% of MRSA and 73% of MSSA isolates). In Scotland, there were no MRSA and 153 MSSA bacteraemia cases associated with injecting drug use reported in 2019. This represents 11% of all MSSA bacteraemia cases reported (Data Table 2).

Figure 6. Reported MRSA and MSSA bacteraemias with an injecting drug use risk factor by year: England, 2010 to 2019





b) MSSA



Footnote for Figure 6

Data labels refer to the number of isolates with injecting drug use as a risk factor (bars).

Data on infection exposure are often incomplete or missing. Proportions are calculated for those where risk is known.

Data are shown for those years where MSSA data are available.

Data source for Figure 6: PHE mandatory enhanced surveillance of MSSA and MRSA.

Toxin-producing bacteria (botulism, tetanus, anthrax)

The potential for cases and outbreaks of illnesses among PWID caused by the toxins produced by spore-forming bacteria, such as botulism, continues to be a concern. Spores produced by these bacteria are found in the environment and can contaminate drugs at any point in the supply chain. Although these infections are usually rare, they can be life-threatening, and unfortunately outbreaks have occurred. During 2019, there was one case of wound botulism in PWID in England, with a further 6 cases identified in Scotland (Data Table 2). There were no cases of clinically confirmed tetanus in 2019 in the UK with a history of recent drug injection (Data Table 2). There were no cases of clinically confirmed anthrax reported among PWID in the UK during 2019 (Data Table 2).

Symptoms of an injecting site infection

In 2019, 38% of those injecting psychoactive drugs in England, Wales and Northern Ireland reported having a sore, open wound or abscess at an injection site (all possible symptoms of a bacterial infection) during the past year, a decrease from 54% in 2018 (Data Table 2) (6, 7). In Scotland, among those surveyed between 2019 and 2020 at NSPs, 22% reported having an abscess or open wound at an injection site during the past year, down from 27% among those surveyed between 2018 (Data Table 2). PHE has recently released wound care guidance for drug services and commissioners, described in Box 1 (19).

Box 1. Guidance on wound awareness for commissioners and providers of drug services in England

PHE's wound care guidance outlines how drug services can be 'wound aware' by helping PWID prevent injection-related wounds, and by identifying wounds and other problems early and getting them treated (19). Services can help PWID access wound care and harm reduction support by promoting wound awareness. This briefing includes information that can be shared with PWID, and details on how to carry out general health assessments, including checking wound status, and how to obtain referrals to relevant services, including tissue viability nurses or inpatient hospital care. The briefing also includes information on barriers to treatment experienced by PWID and how the risk of harm can be reduced. It contains case studies and practice notes, including safer injecting advice. Further information can be found here:

https://www.gov.uk/government/publications/wound-aware-a-resource-for-drug-services/wound-aware-a-resource-for-commissioners-and-providers-of-drug-services

There has been no reduction in risk behaviours

Sharing and re-use of injecting equipment

Sharing of equipment used for injecting drugs is an important contributor to BBV transmission (20-22). Sharing levels reported in England, Wales and Northern Ireland have not improved in recent years (6, 7). The level of needle and syringe sharing (known as 'direct' sharing) reported by UAM Survey participants who had injected during the preceding 4 weeks was 20% in 2019, similar to levels seen in 2010 (21%) and an increase from 14% in 2012 when reported sharing levels were lowest (Data Table 3a) (6, 7). Sharing of needles, syringes and other injecting paraphernalia such as filters and spoons (known as 'direct and indirect' sharing) was reported by 37% of PWID in 2019, a proportion which has remained relatively stable since 2010 (Data Table 3a) (6, 7).

In Wales, self-reported risk behaviours have increased according to data recorded on the HRD, with 26% of individuals injecting psychoactive substances reporting ever 'direct' sharing in 2019, as compared to 20% in 2014, and 32% reporting ever 'indirect' sharing in 2019 as compared to 24% in 2014 (Data Table 3a) (16).

In Scotland, reported sharing of needles and syringes in the previous month was 19% among individuals attending drug treatment services in the 2018 to 2019 tax year as reported through the SDMD (Data Table 3a). In the 2019 to 2020 NESI survey, 11% of respondents who had injected in the last 6 months reported 'direct' sharing, and 19% reported sharing any injecting equipment, including needles, syringes, filters, spoons or water.

Re-use of one's own injecting equipment can also put an individual at risk of infections, particularly from bacterial infections from contamination when handling equipment, but also from BBVs due to accidental sharing in situations where people store injecting equipment together (23). Data from the NESI survey show the proportion reporting re-use of their own equipment in the last 6 months in Scotland has declined in recent years, from 58% in the 2017 to 2018 survey to 44% in the 2019 to 2020 survey (Data Table 3a). In Wales, 49% of people injecting psychoactive substances reported ever reusing injecting equipment through the HRD, a proportion which has remained stable since 2014, when data were first collected (Data Table 3a) (16). No data on reuse of equipment are available from the 2019 UAM Survey, but will be available for the 2020 cohort.

Provision of injecting equipment

Adequate provision of new, sterile injecting equipment is vital to reduce sharing and re-use and the associated risks (23). Needle and syringe provision is considered 'adequate' when the

reported number of needles and syringes received met or exceeded the number of times the individual injected. Equitable access to adequate injecting supplies for all PWID is key to preventing the transmission of BBVs and bacterial infections. In 2019, the proportion of PWID in the UK reporting adequate needle and syringe provision was sub-optimal. Around two-thirds (65%) of PWID who had injected during the preceding 4 weeks reported adequate needle and syringe provision in England, Wales and Northern Ireland. In Scotland, the proportion of PWID who had injected in the past 6 months who reported adequate needle and syringe provision was 66% in the 2019 to 2020 NESI survey.

Adequate needle and syringe provision may be even lower than reported above as these data do not account for the fact that an individual may take multiple attempts to insert a needle before accessing a vein, also known as achieving a 'hit' (24). Missed hits resulting in subcutaneous injecting are known to be associated with injection site infections. In 2019, more than half (59%) of PWID in England, Wales and Northern Ireland who injected in the last year reported that they needed to insert the needle more than once before getting a 'hit', and 23% reported that it took 4 or more attempts before achieving a 'hit'.

Sexual behaviour

PWID are also at risk of acquiring and transmitting BBVs through sexual transmission. Among PWID surveyed across England, Wales and Northern Ireland in 2019, 60% reported anal or vaginal sex during the preceding year and of these, 40% reported 2 or more sexual partners (6, 7). Of those with 2 or more partners during the preceding year, only 23% reported always using condoms (6, 7). In 2019, 14% of PWID participating in the UAM Survey reported ever having traded sex for money, goods or drugs.

The proportion of men participating in the UAM Survey who reported sex with men during the preceding year has remained constant over the decade and was 3.9% in 2019. Prevalence of HIV in this group is higher than among men who do not report having sex with men (5.8% vs. 0.79%). This reflects the greater use of drug services in recent years by men who have sex with men, a group with a relatively high HIV prevalence.

Changing patterns of psychoactive drug use remains a concern

Patterns of psychoactive drug use

Heroin remains the most commonly injected drug in the UK. In 2019, 93% of those who injected drugs in the previous month in England, Wales and Northern Ireland reported injecting heroin (7), and in Scotland, 89% of those who reported drugs in the past 6 months reported injecting heroin.

Cocaine injection

Crack injection is associated with increased injecting risk behaviours such as sharing injecting equipment, increasing risks for BBV transmission or skin and soft tissue infections (25). Data from the UAM Survey indicate that injection of crack has remained high in 2019 in England and Wales, with 57% of those who had injected in the preceding 4 weeks reporting crack injection (Figure 7a) (6, 7). In England, Wales and Northern Ireland, injection of cocaine (other than crack cocaine) has increased in recent years, with 17% of those who had injected in the preceding 4 weeks reporting cocaine injection in 2019, compared to 6.6% in 2010 (6, 7).

In Scotland, injection of crack was reported by only 5.0% of those who injected in the last 6 months participating in NESI 2019 to 2020. Injection of powder cocaine is more common in Scotland and has increased in recent years to 37% in the 2019 to 2020 NESI survey from just 9.0% in 2010 (Figure 7b).

Figure 7. Crack injection in the last 4 weeks in England, Wales and Northern Ireland and powder cocaine injection in the last 6 months in Scotland, 2010 to 2019

a) England, Wales and Northern Ireland



b) Scotland†



Footnotes for Figure 7

Recent initiates: people who first started injecting in the 3 years previous

† As the 2019 to 2020 NESI survey was suspended before completion due to the COVID-19 pandemic, data presented are provisional.

Data sources for Figure 7: Unlinked Anonymous Monitoring Survey of People Who Inject Drugs (England, Wales and Northern Ireland) and Needle Exchange Surveillance Initiative (Scotland)

Stimulant injection

The injection of amphetamine ('speed') or amphetamine-type drugs by those who injected drugs in the previous month continued to decrease from 24% in 2014 to 11% in 2019 in England, Wales and Northern Ireland (6, 7). Also, injection of mephedrone continued to decrease; 1.9% of those surveyed in the UAM Survey in 2019 reported that they had injected mephedrone at some point during the preceding year, which is a year-on-year decrease from 8.9% in 2014, when reported use was highest. In Scotland, injection of amphetamines was reported by 2.5% of those who injected in the last 6 months participating in NESI 2019 to 2020. Injection of mephedrone is not collected separately in the NESI survey but included in the 'legal highs' category; just 0.30% of 2019 to 2020 NESI participants reported injecting drugs in this category.

Preliminary data suggest the COVID-19 pandemic has had an impact on PWID and service provision

The impacts of the COVID-19 pandemic are known to replicate existing health inequalities (26). As PWID are a marginalised group disproportionately affected by infectious diseases and poor service access, it is crucial to monitor the burden of COVID-19 itself and the concurrent impact of pandemic restrictions on access to services for this population.

In June 2020, the UAM Survey of PWID in England, Wales and Northern Ireland introduced an enhanced survey questionnaire on COVID-19 to understand the impact of the pandemic on people who had ever injected drugs. There were 288 UAM Survey participants who had completed the COVID-19 questionnaire by the end of October 2020:

- 117 from the North East
- 51 from London
- 47 from Yorkshire and Humber
- 41 from the South West
- 14 from the East Midlands
- 9 from Northern Ireland
- 9 from the East of England

This section of Shooting Up presents preliminary results from the enhanced survey, which are published elsewhere (27). Further analyses will be released in 2021. Given the limited number of survey responses, proportions should be interpreted with caution.

The 288 people completing the enhanced survey in 2020 had a similar demographic profile to people who participated in the UAM Survey in 2019, in terms of gender, age and region of birth. However, participants in 2020 reported much higher levels of homelessness in the previous year (61% vs. 42%) (27). Of those homeless in 2020, 51% reported being provided with accommodation as part of the pandemic response, either at a hotel, hostel or council or housing association property. For PWID, including people who are homeless, changing social mixing patterns and the development of new networks in temporary accommodation during this period of social distancing may influence drug use and practice as well as other risk behaviours and BBV transmission, and will be important to monitor.

COVID-19 infection and symptoms

Twenty-two per cent of UAM Survey respondents completing the enhanced questionnaire reported being tested for COVID-19 between June and October 2020. Self-reported test

positivity was 1.9%; 94% reported testing negative 3.9% were awaiting their test result at the time of questionnaire completion (27).

There were 29 people (11%) that reported developing common symptoms of COVID-19, including a high temperature or a new continuous cough, at any point in 2020 up to the end of October (27). A third (32%) of this group attended hospital for these symptoms. Of those attending hospital, 88% went to accident and emergency and 58% were subsequently admitted. Of those admitted, half (50%) reported being placed in intensive care (27).

These preliminary data give us an early indication of the impact of the pandemic on PWID. It will be crucial to continue monitoring trends in COVID-19 infections and health outcomes among PWID through the UAM Survey and other data sources, to understand whether this population are disproportionately affected by the disease, and to assess the impact of the government's 'Everybody In' policy (28), to house people experiencing homelessness and rough sleeping, on COVID-19 transmission (Box 2).

Box 2. Diagnosis of COVID-19 in homeless populations in England

As of 13 May 2020, there were 67 diagnoses of COVID-19 among people assigned a 'no fixed abode' code reported to PHE through SGSS, of whom 54 (81%) were men (26). Taking into account the estimated number of people sleeping rough in England in the autumn of 2019, this is estimated to represent 2.1% and 1.5% of women and men, respectively. Data are of poor quality, but this suggests a much higher diagnosis rate of COVID-19 compared to the general population. SGSS does not collect data on risk behaviours, so the total number of COVID-19 cases among PWID could not be established from this data source alone.

Risk behaviours

A subset of PWID completing the UAM Survey COVID-19 questionnaire reported an increase in drug use in 2020 compared to 2019; 15% reported injecting drugs more frequently and 27% reported smoking drugs more frequently (27). Almost a quarter (23%) of participants reported their primary drug or drug combination had changed in 2020. People participating in 2020 completing the COVID-19 questionnaire reported higher levels of cocaine (25% vs. 17%) and amphetamine (17% vs. 11%) injection in the last month and higher levels of non-injecting use of cocaine (30% vs. 21%) and amphetamines (14% vs. 7.0%) compared to UAM Survey respondents in 2019 (27). This shift in drug use is supported by intelligence on drug supplies in England (Box 3). 'Direct' sharing of needles and syringes among participants who had injected during the preceding 4 weeks may seem to have increased slightly across the 2 years (28% vs. 20%). However, this was not significant when comparing across those participating in 2020 with those participating in 2019 from the same regions (27). One in 4 respondents (25%) reported drinking alcohol more frequently in 2020 (27).

Box 3. Drug supply and drug use in England during the COVID-19 pandemic

PHE's monitoring of drug markets and drug harm during the COVID-19 pandemic shows that, overall, drug supply in England has been maintained. There have been local fluctuations in price, purity and availability in 2020, especially of heroin and cocaine (both powder and crack) and reports of increased use of, and harm linked to, benzodiazepines and pregabalin. In the early stages of the pandemic, there were reports of increased cocaine injecting and amphetamine use in some areas. However, these reports may just reflect a continuation of a trend towards greater, and more problematic, use of these drugs that has been reported for some time.

Access to services

Preliminary data from the UAM Survey COVID-19 questionnaire indicate access to essential services for PWID in England and Northern Ireland have been affected. Thirty-five per cent of PWID participants reported that in 2020 drug and alcohol services were more difficult to access than in the year before, with 19% reporting difficulties accessing HIV and/or hepatitis testing (27). There were also difficulties reported in accessing equipment for safely using and/or injecting drugs (26%), accessing substitute drug treatment (22%) and accessing other medicines and healthcare (34%) (27). The impact of COVID-19 on access to NSP in Cheshire and Merseyside, taken from a regional data source, is described in Box 4. Overall, 9.4% of participating PWID reported some form of HCV treatment disruption between June and October 2020, either missed doses or treatment not being available (27).

Box 4. Access to NSP in Cheshire and Merseyside

The response to COVID-19 has presented many challenges for PWID, including impacting on access to clean sterile injecting equipment through NSPs. NSPs are an effective way to reduce the harms from injecting drug use. Their effectiveness, however, is coverage dependent. Lockdowns, restrictions and social distancing measures implemented to control COVID-19 may have negatively impacted access and availability of services, such as NSPs.

Cheshire and Merseyside have a well-established system for monitoring the provision of low threshold interventions, including NSP, the Integrated Monitoring System (IMS). IMS collects data on NSP activity by all providers across the 9 local authorities in Cheshire and Merseyside. In March, in response to the introduction of the COVID-19 restrictions, the IMS data collection for NSP was enhanced to inform local actions to mitigate impacts from the restrictions on access to clean injection equipment (29). Firstly, additional data collection was established to monitor the accessibility of services, capturing whether sites were still open and offering NSP, and if so, their opening hours and if there were any access restrictions in place.

The existing data collection on NSP activity was also enhanced to collate and report these data on a weekly basis where possible, with data obtained directly from specialist services, and through the 2 software systems used by pharmacies. These data were fed back to service providers and commissioners weekly to inform local actions.

Of the 115 sites providing NSP that were contacted following the introduction of the first restrictions in late March 2020, the vast majority (91%) remained open with social distancing measures in place. However, 45% reduced their service hours or had access restrictions in place, such as queuing systems. New approaches to providing NSP were also reported, including targeted provision to people who had been provided accommodation through the measures introduced to house those living on the streets.

During the first month of the restrictions the number of NSP clients decreasing by 36%, visits by 36% and needles distributed by 29% overall. For those who reported injecting psychoactive drugs, NSP coverage halved and then remained at that level throughout the period that the first wave of restrictions was in place. As services largely remained open, this decline possibly reflects people following the stay at home messages, a reluctance to travel and that people who use and inject drugs are potentially at high risk of poor outcomes from COVID-19 due to underlying health conditions, such as chronic obstructive pulmonary disease. Local actions included efforts to ensure NSP were available in all areas, to raise awareness of continued NSP operation and to explore and implement NSP provision by post.

Data on the impact of COVID-19 on PWID from the UAM is further corroborated by qualitative findings from the Living Under Coronavirus and Injecting Drugs in Bristol (LUCID-B) study, found in Box 5.

Box 5. Experiences of PWID during the COVID-19 pandemic: LUCID-B study

The LUCID-B study was conducted at the University of Bristol, with support from the Elizabeth Blackwell Institute, National Institute of Health Research (NIHR) Applied Research Collaboration West and NIHR Health Protection Research Unit in Behavioural Science and Evaluation (30-33). This study explored the experiences of PWID during the COVID-19 pandemic.

Twenty-eight telephone interviews were conducted between June and August with PWID in Bristol. Participants were aged 25 to 54, 32% were women, most were receiving opioid substitution therapy (OST) and over half were living in emergency accommodation.

Interview accounts suggest individuals' income, housing, mental and physical health and drug use were affected by the pandemic and public health measures in diverse ways.

Rapid service delivery adaptation in response to public health restrictions was appreciated by participants. For some, the pandemic resulted in unexpected positive experiences, primarily through enhanced support from services, including housing and drug services. For example, less frequent OST collection and relaxation of requirements for supervised consumption in pharmacies were viewed favourably. Furthermore, for some participants, the pandemic was seen as an opportunity to reduce or stop drug use.

In contrast, others described using drugs in greater quantities and/or more frequently. The most salient reason for increased drug use was boredom caused by the lockdown restrictions.

Indeed, for many the pandemic and the public health measures worsened already unsettled and isolated lives leading to a sense of loss: loss of connection with family and friends and service providers through increased remote contact via phone or online, loss of routine and a sense of increased visibility of activities such as collecting OST. Reports suggest the pandemic variably affected the ability to buy drugs and some changes in quality and purity were expressed. Initial problems accessing NSP services (some pharmacies reportedly stopped offering NSP) resulted in some reports of greater equipment re-use and sharing. Once these issues were resolved through an NSP home delivery there was a sense that more people had access to clean sterile equipment.

Service provision

In September 2020, a short online questionnaire was sent out to the primary staff contacts of the specialist centres participating in the UAM Survey to better understand how COVID-19 had impacted service provision and recruitment of PWID clients; 42 individuals responded, representing 38 unique centres, with representation across England (all 9 geographical regions), Wales and Northern Ireland.

Responding centres reported offering a wide variety of services to people who use drugs (N=38) (Figure 8). Overall, most services offered pre-COVID-19, before the first UK lockdown began in late March 2020, were still being offered 'currently' (at the time of survey completion in September or October 2020). However, a number of services offered pre-COVID-19, had yet to be resumed; 53% of centres that responded reported 'current' service disruption to drop-in and unstructured advice and counselling services, 39% to HBV vaccination, 32% to HIV testing, 26% to HBV testing and 24% to HCV testing. There were a minority of centres that reported providing services 'currently' that were not available pre-COVID-19, for example outreach services (7.9%) and BBV testing (7.9%) (Figure 8).

Respondents reported several changes to their ways of working (N=38). Most centres indicated that since the beginning of the COVID-19 pandemic, social distancing measures had been implemented (87%) and access restrictions put in place, such as queuing systems (61%). The ability to attend drug and alcohol services in person had been reduced, with 79% of centres holding routine client appointments remotely (for example by telephone or email), 26% providing no face-to-face appointments, 68% holding pre-booked appointments only and 66% holding face-to-face appointments for emergencies or for clients experiencing chaotic lifestyles only. Of concern, BBV testing had been stopped or temporarily paused in 45% of centres, with 71% of respondents reporting a reduction in the size or frequency of BBV testing events. Overall, 68% of centres reported a reduction in client numbers due to individual factors, such as shielding due to clients being extremely clinically vulnerable or clients reporting obtaining supplies from elsewhere.

Figure 8. Changes to the provision of services for PWID: England, Wales and Northern Ireland, 2020 vs. 2019

	Service never provided		Service provision continued			New service provided			Serv	Service provision interrupted				
			Proportion of centres (N=38)											
(0%	10%	20%	30%	40%	50%	60%	70%	80%	90	%	100%	
	Advice and counselling	*	18% 29%		26%		3%		53	%				
Nee	dle and syringe programme	; -						61%			3	<mark>}%</mark>	8%	
Services A	Outreach	n]	39%				26%	/ 0	8%		26%			
	Prescribing	1	1%				76%				8	%	5%	
	Outpatient detox	(]	24%				53%			8%		16%		
	Inpatient unit	t]				82%					16%	6	3%	
	Psychosocial interventions†	-	18%			63%				5%			13%	
	Health checks	5	3	2%		39%			59	%	24%			
	HBV vaccination	ו ב	13%		39%			8%		39%				
	HAV vaccination	n			61%				24%	, 0		16%		
	HIV testing**	ł	16%			45%		89	%	÷	32%			
	HCV testing**	5%	5%			63%			8%)	24%			
	HBV testing**	*	21%			45%			8%		26%			
	HAV testing**	*			7	4%				169	6	11	%	
	Other††	-				79%				e e e e e e e e e e e e e e e e e e e	1%	11	%	

Footnotes for Figure 8

HAV = hepatitis A virus *Drop-in and unstructured †In structured treatment **On-site

++Other services: HCV clinics, group-based recovery sessions, trauma stabilisation, campaign awareness events

Data source for Figure 8: Questionnaire to centres participating in the Unlinked Anonymous Monitoring Survey of People Who Inject Drugs

Novel service delivery models were implemented by many centres as a result of the COVID-19 pandemic. Two-thirds (67%) of the 33 responding centres reported employing novel approaches to NSP provision, including home delivery, provision by post and/or peer supported distribution. Over half (52%) reported new ways of offering BBV testing, such as self-testing or home delivery of testing kits, and 42% reported carrying out new or enhanced community outreach, such as engagement with people re-housed in hostels and hotels. A third (36%) of centres also reported strengthening relationships with local partner organisations, such as the HCV Trust, through referrals or collaboration. Examples of novel interventions for service delivery implemented during the COVID-19 pandemic can be seen in Box 6.

Box 6. Examples of novel service provision for PWID during the pandemic

Spittal Street harm reduction team - rapid access to OST in Edinburgh

In response to concerns about increased marginalisation and risk of harm to PWID and to the drop-in referrals during the COVID-19 pandemic, the harm reduction team at Spittal Street in Edinburgh set out to provide a same day, rapid access OST clinic, to let patients know access to treatment was still available and that doors were open. This was an alternative pathway to treatment during the pandemic for those not engaging with their GP and at risk of homelessness.

The clinic was multidisciplinary, comprising of a prescribing pharmacist and a harm reduction specialist nurse. It ran for one afternoon a week for 3 hours, with an open door for patients to drop in for treatment if needed. Alongside this, the clinic also had support available for patients from the Salvation Army, Streetwork and Bethany.

The centre was made COVID-19 safe. Patients were assessed fully on the first day of presentation and if appropriate, initiated on OST the same day without delay, alongside a full suite of BBV testing, naloxone supply and training, injecting equipment provision and harm reduction advice. The clinic had support from the community pharmacies, who continued to provide dispensing services for these new OST prescriptions.

Overall, 35 people were seen at the rapid access clinic. These individuals had struggled to engage with treatment during the pandemic through traditional pathways. A diagnosis of opioid use disorder was able to be confirmed in 95% of patients. OST was initiated safely on first day of contact in 93% of these. Of the 33 patients initiated on OST, 31 remain in treatment with various additional support and referrals. All patients who accessed the clinic were followed up and reviewed at least once a week. Outreach home visits were also undertaken for those shielding, or for those appropriate to do so. Telephone consultations and NHS 'Near Me' consultations were also used where possible.

This clinic proved a valuable asset to patients during the COVID-19 pandemic when many regular services had reduced or had limited ability to provide drug treatment.

It enabled rapid access to OST for those most vulnerable. Working together in a multidisciplinary team brought the different skill sets of the GP, pharmacist, specialist nurse and community pharmacy together, which enabled patients to access OST treatment without barriers or delays.

'We Are with You' (WAWY) - click and collect service for injecting equipment

At the beginning of the COVID-19 pandemic during the first lockdown, the number of people visiting pharmacies or WAWY services for clean needle and syringe packs decreased by 50%. There was concern that this would result in a rise in BBVs among vulnerable people, both during and beyond the coronavirus crisis. To ensure harm reduction services were easily accessible to the people who needed them in England and Scotland, WAWY developed an online injecting equipment ordering service, alongside new specific harm reduction content and a needle and syringe finder. Users of the online click and collect NSP service specify which injecting supplies are required and a member of staff contacts them to arrange the time and place for collection. The system relies on having access to an email address, computer and phone to place an order. Access to each service is available through the WAWY and details shared in pharmacies, local directories and other specified services. Current work focusses on ways of improving access and availability.

NHS Greater Glasgow and Clyde - The 'WAND' initiative

The 'WAND' initiative was designed to address some of the biggest problems PWID within Glasgow City Centre face, including drug related death, injecting related complications and BBVs. With this in mind, WAND encourages clients to participate in 4 key harm reduction interventions: Wound care, Assessment of injecting risk, Naloxone and DBS testing. Clients are given a 'Starbucks' style reward card which staff tick off once each intervention has been completed. However, this is little more than a gimmick as the interventions are recorded and date stamped on a database. Clients can access this incentive every 3 months. The idea is to encourage clients to present for frequent testing and an in-depth discussion focussing on injecting behaviour.

When all interventions are completed, the client is provided with a 'Pay Point' voucher which can be taken to a shop to exchange for cash. This has been seamless with the 400 vouchers issued also redeemed.

The preliminary results of the WAND campaign have been very encouraging. In the month of September, there were 403 wounds checked, 403 assessments of injecting risk, 467 naloxone kits supplied and 380 DBS BBV tests completed.

Overall, while the COVID-19 pandemic may drive innovative models of service delivery, if services are not adequately re-instated, systematic under-diagnosis of BBVs, interruption of hepatitis A (HAV) and HBV vaccination and structured and unstructured counselling and psychosocial interventions could lead to increased adverse health outcomes and disparities. Due to a number of structural and personal barriers, PWID may find it more challenging to access healthcare. If models of access to services change, there is a risk of widening health inequalities. It is important that novel delivery methods are evaluated in the coming months to assess the impact on outcomes and health inequalities.

Implications for bio-behavioural surveys of PWID

Changes to the delivery and availability of services for people who use drugs due to the COVID-19 pandemic have had an impact on recruitment to the UAM Survey of PWID in England, Wales and Northern Ireland in 2020, with recruitment numbers severely reduced compared to previous years. This is likely to continue into 2021. Centres responding to the UAM provider questionnaire reported that the changes to service provision described above have presented challenges to recruiting clients, due to restrictions to in-person attendance, service interruption and centres being temporarily closed. Even though a number of new service delivery models are being implemented, only a few centres reported recruiting through these initiatives, most likely as UAM Survey ethics only allows for in-person, rather than remote, recruitment of PWID. Work is planned for 2021 to support recruiting sites to sample for the UAM Survey, so that robust estimates of BBV prevalence and behaviours among PWID can continue to be presented. This will be particularly crucial in the coming years, given the reported concerning impact of the pandemic on access to services and risk behaviours.

The 2019 to 2020 NESI survey was suspended before completion due to the COVID-19 pandemic. As a result, data are only available for from 8 of the 11 mainland NHS Boards originally included in the sampling framework. The 3 missing NHS Boards in the 2019 to 2020 survey round account for just 10% of the total NESI sampling framework. Initial planning is underway to commence the next NESI sweep in late 2020 or 2021, provided the COVID-19 restrictions are lifted enough to permit bio-behavioural research.

References

1. European Monitoring Centre for Drugs and Drug Addiction. European Drug Report 2019: Trends and developments. Luxembourg: Publications Office of the European Union; 2019.

2. Home Office. Drug Misuse: Findings from the 2019/20 Crime Survey for England and Wales. London: Home Office; 2020.

3. Scottish Government. Scottish Crime and Justice Survey 2017/18: Main Findings. Edinburgh: Scottish Government; 2019.

4. Hay G, Rael dos Santos A, Worsley J. Estimates of the prevalence of opiate use and/or crack cocaine use, 2011/12: Sweep 8 report. Liverpool: Liverpool John Moores University; 2014.

5. Public Health England, Public Health Scotland, Public Health Wales, Public Health Agency Northern Ireland. Accompanying data tables. December 2020. London PHE. Accompanying data tables for Shooting Up: Infections among people who inject drugs in the UK. London: PHE; 2020.

6. Public Health England. Data tables of the Unlinked Anonymous Monitoring Survey of HIV and Hepatitis in People Who Inject Drugs. London: PHE; 2020 [cited 18/12/2020]. Available from: https://www.gov.uk/government/statistics/people-who-inject-drugs-hiv-and-viral-hepatitis-monitoring.

7. Public Health England. Unlinked Anonymous Monitoring (UAM) Survey of HIV and viral hepatitis among PWID: 2020 report. London: PHE; 2020.

8. European Monitoring Centre for Drugs and Drug Addiction. Statistical Bulletin 2020 — drug-related infectious diseases. Lisbon: EMCDDA; 2020.

9. McAuley A, Palmateer NE, Goldberg DJ, Trayner KMA, Shepherd SJ, Gunson RN, et al. Reemergence of HIV related to injecting drug use despite a comprehensive harm reduction environment: a cross-sectional analysis. Lancet HIV. 2019;6(5):e315-e24.

10. Public Health England. Trends in HIV testing, new diagnoses and people receiving HIV-related care in the United Kingdom: data to the end of December 2019. London: PHE; 2020.

11. Public Health England. National HIV surveillance data tables. PHE: London; 2020.

12. Palmateer NE, Goldberg DJ, Munro A, Taylor A, Yeung A, Wallace LA, et al. Association between universal hepatitis B prison vaccination, vaccine uptake and hepatitis B infection among people who inject drugs. Addiction. 2018;113(1):80-90.

13. Clinical Guidelines on Drug Misuse and Dependence Update 2017 Independent Expert Working Group. Drug misuse and dependence: UK guidelines on clinical management. London: Department of Health and Social Care; 2017.

14. Public Health England. Hepatitis C in the UK: 2020 report. London: PHE; 2020.

15. Public Health England. Hepatitis C in England 2020: Working to eliminate hepatitis C as a major public health threat. London: PHE; 2020.

16. Public Health Wales. Harm Reduction Database Wales: Prevention and detection of infectious disease amongst people accessing substance misuse services - Annual Report 2019-20. Cardiff: PHW; 2020.

17. Hope V, Kimber J, Vickerman P, Hickman M, Ncube F. Frequency, factors and costs associated with injection site infections: findings from a national multi-site survey of injecting drug users in England. BMC Infect Dis. 2008;8:120.

18. Public Health England. Management and prevention of bacterial wound infections in prescribed places of detention - Guidelines for healthcare, custodial staff and responding health protection services. London: PHE; 2019.

19. Public Health England. Wound aware: a resource for commissioners and providers of drug services. London: PHE; 2021.

20. Baggaley RF, Boily MC, White RG, Alary M. Risk of HIV-1 transmission for parenteral exposure and blood transfusion: a systematic review and meta-analysis. Aids. 2006;20(6):805-12.

21. Degenhardt L, Peacock A, Colledge S, Leung J, Grebely J, Vickerman P, et al. Global prevalence of injecting drug use and sociodemographic characteristics and prevalence of HIV, HBV, and HCV in people who inject drugs: a multistage systematic review. Lancet Glob Health. 2017;5(12):e1192-e207.

22. Hagan H. Agent, host, and environment: hepatitis C virus in people who inject drugs. J Infect Dis. 2011;204(12):1819-21.

23. Taylor A, Fleming A, Rutherford J, Goldberg D. Examining the injecting practices of injecting drug users in Scotland. Edinburgh: Scottish Executive Effective Interventions Unit; 2004.

24. Hope VD, Parry JV, Ncube F, Hickman M. Not in the vein: 'missed hits', subcutaneous and intramuscular injections and associated harms among people who inject psychoactive drugs in Bristol, United Kingdom. Int J Drug Policy. 2016;28:83-90.

25. Hickman M, Hope V, Brady T, Madden P, Jones S, Honor S, et al. Hepatitis C virus (HCV) prevalence, and injecting risk behaviour in multiple sites in England in 2004. J Viral Hepat. 2007;14(9):645-52.

26. Public Health England. Disparities in the risk and outcomes of COVID-19. London: PHE; 2020.

27. Croxford S, Emanuel E, Ibitoye A, Njoroge J, Edmundson C, Bardsley M, et al. Preliminary indications of the burden of COVID-19 among people who inject drugs in England and Northern Ireland and the impact on access to health and harm reduction services Public Health. 2021(In press).

28. Local Government Association. COVID-19: housing, planning and homelessness. LGA; 2020 [cited 12/18/2020]. Available from: https://www.local.gov.uk/our-support/coronavirus-information-councils/covid-19-service-information/covid-19-housing-planning.

29. Whitfield M, Reed H, Webster J, Hope V. The impact of COVID-19 restrictions on needle and syringe programme provision and coverage in England. Int J Drug Policy. 2020;83:102851.

30. Hines LA, Kesten J, Holland A, Family H, Scott J, Linton M, et al. LUCID-B Study: Interim Report 1. Bristol: University of Bristol; 2020.

31. Hines LA, Kesten J, Holland A, Family H, Scott J, Linton M, et al. LUCID-B Study: Interim Report 2. Bristol: University of Bristol; 2020.

32. Hines LA, Kesten J, Holland A, Family H, Scott J, Linton M, et al. LUCID-B Study: Interim Report 3. Bristol: University of Bristol; 2020.

33. Hines LA, Kesten J, Holland A, Family H, Scott J, Linton M, et al. LUCID-B Study: Interim Report 4. Bristol: University of Bristol; 2020.

About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. We do this through world-leading science, research, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. We are an executive agency of the Department of Health and Social Care, and a distinct delivery organisation with operational autonomy. We provide government, local government, the NHS, Parliament, industry and the public with evidence-based professional, scientific and delivery expertise and support.

Public Health England Wellington House 133-155 Waterloo Road London SE1 8UG Tel: 020 7654 8000

www.gov.uk/phe Twitter: @PHE_uk www.facebook.com/PublicHealthEngland

© Crown copyright 2021

Prepared by: Sara Croxford, Eva Emanuel and Emily Phipps For queries relating to this document, please contact: UAMPWIDSurvey@phe.gov.uk

OGL

You may re-use this information (excluding logos) free of charge in any format or medium, under the terms of the Open Government Licence v3.0. To view this licence, visit OGL. Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

Published January 2021 PHE gateway number: GW-1876



PHE supports the UN Sustainable Development Goals

