Public Health England

Health Protection Report
weekly report

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Infections among people who inject drugs

Updated data tables for the Unlinked Anonymous Monitoring Survey of people who inject drugs have been published on the PHE website [1,2] and a full commentary article on the data is included in the infection reports section of this issue of *HPR* [3].

The new tables present data on the prevalence of antibodies to HIV, hepatitis C and the hepatitis B core antigen, as well as on levels of risk and protective behaviour in this population, up to the end of 2013. The survey covers England, Wales and Northern Ireland, and data is presented at country level and for the English regions. Whereas previously the survey focussed on people injecting psychoactive drugs (such as heroin and crack-cocaine) this year there are new tables presenting data from a recently established sub-survey covering those who inject image and performance enhancing drugs, such as anabolic steroids and melanotan.

People who inject image and performance enhancing drugs have recently been shown to be at greater risk of HIV, hepatitis B and hepatitis C infection than previously thought [4]. Data presented in the new tables confirm that in England and Wales the prevalence of HIV infection among this group is similar to that among people who inject psychoactive drugs, such as heroin and crack-cocaine. The proportion of people who inject image and performance enhancing drugs that have ever been infected with hepatitis B and C is lower than that among people who inject psychoactive drugs.

Overall the data from the Unlinked Anonymous Monitoring Survey show that infections remain a problem among people who inject drugs. They also indicate that though the uptake of testing for HIV and hepatitis C and of the hepatitis B vaccine are all high these have not increased in recent years. The interventions which aim to prevent HIV and viral hepatitis infection through injecting drug use, including needle and syringe programmes [5] and opiate substitution therapy [6], need to be sustained.

References

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5. Needle and syringe programmes: providing people who inject drugs with injecting equipment. NICE, Public Health Guidance, PH52, April 2014. http://guidance.nice.org.uk/PH52.

6. Drug misuse and dependence – guidelines on clinical management: update 2007. London: Department of Health, 2007.

PHE and NaTHNaC publish updated advice on rabies risk

Public Health England and the National Travel Health Network and Centre have published results of a comprehensive review of rabies risk and updated their rabies vaccination recommendations for each country worldwide [1,2,3]. This review will ensure that consistent information and recommendations are available to travellers and health professionals when assessing the risk of rabies.

The risk of rabies was assigned using data from a range of sources including the World Animal Health Information Database (OIE), WHO Rabies Bulletin and country profiles, Centers for Disease Control and Prevention rabies country recommendations, and the European Commission Standing Committee on the Food Chain and Animal Health (SCFCAH). Where data was lacking for a country, other verifiable sources were sought including personal communications with the national authorities. Where no or limited data were available, a consensus opinion was formed based upon the best available evidence.

All travellers to rabies risk areas should avoid contact with wild and domestic animals, including pets. Rabies transmission may occur following contact with the saliva of an infected animal or bat (via bites, scratches or saliva contact with mucous membranes). Exposure to bats or their secretions should be considered as a potential rabies risk worldwide and local advice sought regarding necessary post exposure treatment.

Pre-exposure vaccination should be considered for adults and children travelling to risk countries particularly those who are travelling to remote areas where medical care and post-exposure prophylaxis with rabies vaccine and rabies immunoglobulin (RIG) may not be available.

Following an animal bite, scratch or lick to a wound or mucous membrane in a rabies risk area, or a bat exposure in any part of the world, the area must be thoroughly washed with running, preferably soapy water and an urgent medical assessment sought, even if the wound appears trivial. Where there is a risk of rabies, prompt post-exposure treatment is essential, even if a full course of pre-exposure vaccine has been received.

Suitable vaccines and immunoglobulin may be in short supply and difficult to obtain in many areas of the world.

Advice regarding post-exposure prophylaxis in England is available from the Public Health England rabies service at Colindale on 020 8200 4400. (Out of hours, the duty doctor at PHE Colindale should be consulted: 020 8200 6868).

Advice, including on post-exposure risk assessments, for individuals in Wales is available from Public Health Wales, Microbiology Cardiff, University Hospital of Wales (UHW) on 02920 72178. (Out of hours, via the UHW switchboard: 02920 747 747).

In Scotland, advice should be sought from the local on-call infectious diseases consultant; in Northern Ireland from the Regional Virology Service on 02890 240 503 or the Public Health Agency Duty Room on 02890 553 994(7).

References

1. PHE: Rabies risks in terrestrial animals, by country.2. NaTHNaC Clinical Update: Changes to the NaTHNaC Country Information pages, 3 July 2014.

3. NaTHNaC: Country Information Pages.

Further information for travellers

PHE: Rabies (General Information).

Further information for health professionals

NaTHNaC:Travel Health Information Sheet: Rabies

PHE: Guidelines on managing rabies post-exposure prophylaxis.

Results of second ECDC survey of chlamydia control published

The European Centre for Disease Prevention and Control (ECDC) has published a technical report presenting the results of its second survey of chlamydia control activities in Europe, carried out in 2012. The report describes chlamydia prevention and control activities in EU/EEA member states, changes in activities since 2007 (when the first, similar survey was carried out) and recommendations for improvement to chlamydia prevention and control in those countries.

There was a high response rate for the 2012 survey, with 28 of 30 (93%) EU/EEA countries responding. The survey investigated specific chlamydia prevention and control activities including case management, testing, diagnostics and surveillance.

The report found that, in 2012, 18 of the 28 responding countries had clinical guidelines recommending opportunistic chlamydia testing for asymptomatic individuals within specific groups (eg pregnant women; young people; high risk groups such as men who have sex with men, commercial sex workers and migrants).

England, however, was the only country with an organised screening programme, although France, Luxembourg and Malta reported plans to introduce them. Following a trial of register-based screening in the Netherlands (where all 16-29 year olds were invited to participate by mail), a pilot register-based screening programme was stopped in 2012 as the approach was found to be neither clinically nor cost-effective. Surveillance systems to report and manage chlamydia cases were reported in 26/28 countries, 22/28 countries have at least one national guideline covering diagnosis and treatment and 19/28 cover partner notification in their guidelines.

The ECDC report presents recommendations for chlamydia prevention and control activities, including:

- that clinical guidelines for case management can be considered as the minimum level of activity in EU/EEA Member States (a level which was met by 24% of respondents);
- that existing case management guidelines could be utilised to develop local guidelines; and
- that clinical audits can be used to assess the implementation of case management guidelines.

PHE remains committed to educating the public on how to reduce the risk of getting or transmitting chlamydia – through opportunistic screening of young adults annually and between partners, condom use with new or casual partners, avoiding overlapping sexual relationships and reducing the number of sexual partners.

Reference

1. *Chlamydia control in Europe – a survey of Member States [2012]*, ECDC Technical Report [3 MB PDF], June 2014.

Travel health

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PHE advises on risk and precautions related to EBV in west Africa

The outbreak of Ebola virus disease (EVD) in West Africa was first reported in March 2014 in Guinea and since late May has involved three countries: Guinea, Liberia and Sierra Leone [1]. This is the first documented EVD outbreak in these countries, and is already the largest known outbreak of this disease.

There had been earlier expectations that the outbreak would be brought under control. However, at the end of May 2014, there was an unexpected large increase in the number of new cases, and the outbreak spread to previously unaffected areas in Guinea and Sierra Leone as well as showing a resurgence in other areas [2]. WHO has credited three factors as being responsible for the continuous propagation of the outbreak:

- Certain negative cultural practices and traditional beliefs, which have resulted in mistrust of humanitarian aid workers, and apprehension and resistance to adopt recommended public health preventive measures.
- The free and frequent movement of people within and across borders which facilitated rapid spread of the infection across and within the three affected countries.
- The lack of comprehensive and effective coverage of outbreak containment measures across all affected regions [3].

As of 2 July 2014, the cumulative number of cases (confirmed, probable and suspected) attributed to EVD in the three countries stands at 779, including 481 deaths [3]. The increase in confirmed cases and expansion into new areas are cause for concern as this indicates that the outbreak is not yet under control. The latest WHO risk assessment (24 June 2014) states that the capital cities of all three countries have been affected: Conakry (Guinea), Monrovia (Liberia) and Freetown (Sierra Leone) [4]. However, WHO still does not recommend any travel or trade restrictions be applied to Guinea, Liberia, or Sierra Leone based on currently available information [3]. No other country has yet to report confirmed cases.

Increasing case numbers and extended geographical spread may increase the risk for UK citizens engaged in humanitarian aid and healthcare delivery. This is because most human infections result from direct contact with the bodily fluids or secretions of infected patients, particularly in hospitals (nosocomial transmission) and as a result of unsafe procedures, use of contaminated medical devices (including needles and syringes) and unprotected exposure to contaminated bodily fluids. Interim guidance for humanitarian aid workers in affected countries outlining recommended precautions and advice on what to do if infection is suspected has been produced [5].

The risk for tourists, visitors or expatriate residents in affected areas, is still considered very low if elementary precautions are followed [6].

It remains unlikely, but not impossible, that travellers infected in Guinea or Liberia could arrive in the UK while incubating the disease and develop symptoms after their return. Anyone returning from affected areas who has a sudden onset of symptoms such as fever, headache, sore throat and general malaise within three weeks of their return should seek rapid medical attention and mention their recent travel. Clinicians and other medical staff have been alerted via the Central Alerting System about the ongoing situation in West Africa and informed of the available guidance and assistance for diagnosing and managing cases [7].

In the event of a symptomatic person with a relevant travel history presenting to health care, the PHE Imported Fever Service (0844 7788990) should be contacted by infectious disease clinicians or microbiologists in order to discuss testing.

Further information regarding EVD and this particular outbreak is available on the Ebola pages of the HPA legacy website [8].

References

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2. https://www.gov.uk/government/news/ebola-cases-in-west-africa-continue-to-rise
3. http://www.afro.who.int/en/clusters-a-programmes/dpc/epidemic-a-pandemic-alert-and-response/outbreak-news/4216-ebola-virus-disease-west-africa-3-july-2014.html
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Infection Reports

Respiratory

- **Laboratory reports of respiratory infections made to CIDSC from PHE and NHS laboratories in England and Wales: weeks 23-26/2014**

HIV / STIs

- **Unlinked anonymous HIV and viral hepatitis monitoring among PWID: 2014**

Respiratory

Laboratory reports of respiratory infections made to the CIDSC from PHE and NHS laboratories in England and Wales: weeks 23-26/2014

Data are recorded by week of report, but include only specimens taken in the last eight weeks (i.e. recent specimens)

Table 1. Reports of influenza infection made to PHE Colindale, by week of report

Week	Week 23	Week 24	Week 25	Week 26	Total
Week ending	**8/6/14**	**15/6/14**	**22/6/14**	**29/6/14**	
Influenza A	**18**	**12**	**6**	**8**	**44**
Isolation	–	–	–	–	**–**
DIF *	1	–	–	1	**2**
PCR	9	5	1	5	**20**
Other †	8	7	5	2	**22**
Influenza B	**4**	**3**	**2**	**3**	**12**
Isolation	–	–	–	–	**–**
DIF *	1	–	–	–	**1**
PCR	2	2	2	2	**8**
Other †	1	1	–	1	**3**

* DIF = Direct Immunofluorescence. † Other = "Antibody detection - single high titre" or "Method not specified".

Table 2. Respiratory viral detections by any method, by week of report

Week	Week 23	Week 24	Week 25	Week 26	Total
Week ending	**8/6/14**	**15/6/14**	**22/6/14**	**29/6/14**	
Adenovirus*	36	33	43	28	**140**
Coronavirus	1	2	6	–	**9**
Parainfluenza†	69	84	81	56	**290**
Rhinovirus	159	144	170	124	**597**
RSV	13	13	8	10	**44**

* Respiratory samples only.
† Includes parainfluenza types 1, 2, 3, 4 and untyped.

Table 3. Respiratory viral detections by age group: weeks 18-22/2014

Age group (years)	<1 year	1-4 years	5-14 years	15-44 years	45-64 years	≥65 years	Un-known	Total
Adenovirus *	35	50	12	21	12	10	–	**140**
Coronavirus	4	–	–	2	1	2	–	**9**
Influenza A	3	1	1	15	9	15	–	**44**
Influenza B	1	–	–	5	4	2	–	**12**
Parainfluenza †	95	52	11	42	56	33	1	**290**
Rhinovirus	217	110	50	89	76	54	1	**597**
Respiratory syncytial virus	23	5	3	4	7	2	–	**44**

* Respiratory samples only.
† Includes parainfluenza types 1, 2, 3, 4 and untyped.

Table 4 Laboratory reports of infections associated with atypical pneumonia, by week of report

Week	Week 23	Week 24	Week 25	Week 26	Total
Week ending	**8/6/14**	**15/6/14**	**22/6/14**	**29/6/14**	
Coxiella burnettii	–	1	1	1	**3**
Respiratory *Chlamydia* sp.*	–	3	1	2	**6**
Mycoplasma pneumoniae	8	5	5	6	**24**
Legionella sp.	5	5	9	6	**25**

*Includes *Chlamydia psittaci*, *Chlamydia pneumoniae*, and *Chlamydia* sp detected from blood, serum, and respiratory specimens.

Table 5 Reports of Legionnaires Disease cases in England and Wales, by week of report

Week	Week 23	Week 24	Week 25	Week 26	Total
Week ending	**8/6/14**	**15/6/14**	**22/6/14**	**29/6/14**	
Nosocomial	1	–	1	–	**2**
Community	1	2	4	3	**10**
Travel Abroad	3	3	3	3	**12**
Travel UK	–	–	1	–	**1**
Total	**5**	**5**	**9**	**6**	**25**
Male	3	4	5	3	**15**
Female	2	1	4	3	**10**

Twenty-five cases were reported with pneumonia. Fifteen males aged 23 to 74 years and 10 females aged four days to 88 years. Ten cases had community-acquired infection and one case was reported to be associated with hospital infection.

Thirteen cases were reported with travel association: Bahrain (1), China (1), Greece (1), Italy (1), Portugal (1), Spain (4), United Arab Emirates (1), United Arab Emirates/United Kingdom (1), United Kingdom (1) and United States of America (1).

Table 6. Reports of Legionnaires Disease cases cases in England and Wales, by PHE Centre: weeks 23-26/2014

Region/Country	Noso-comial	Community	Travel Abroad	Travel UK	Total
North of England					
North East	–	1	–	–	**1**
Cheshire & Merseyside	–	1	1	–	**2**
Greater Manchester	–	–	1	–	**1**
Cumbria & Lancashire	–	1	–	–	**1**
Yorkshire & the Humber	–	–	3	–	**3**
South of England					
Devon, Cornwall & Somerset	–	–	–	–	**–**
Avon, Gloucestershire & Wiltshire	–	–	1	–	**1**
Wessex	–	–	1	–	**1**
Thames Valley	–	–	–	–	**–**
Sussex, Surrey & Kent	–	–	1	1	**2**
Midlands & East of England					
East Midlands	–	1	1	–	**2**
South Midlands & Hertfordshire	–	2	2	–	**4**
Anglia & Essex	–	2	–	–	**2**
West Midlands	–	–	–	–	**–**
London Integrated Region					
London	1	2	–	–	**3**
Public Health Wales					
Mid & West Wales	–	–	–	–	**–**
North Wales	–	–	1	–	**1**
South East Wales	1	–	–	–	**1**
Miscellaneous					
Other	–	–	–	–	**–**
Not known	–	–	–	–	**–**
Total	**2**	**10**	**12**	**1**	**25**

Infection reports

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HIV-STIs

Unlinked anonymous HIV and viral hepatitis monitoring among PWID: 2014 report

New data from the ongoing Unlinked Anonymous Monitoring Survey of HIV and Viral Hepatitis among People Who Inject Drugs (PWID) have been published on the PHE website; the updated set of tables present data from the survey for the period 2003 to 2013 inclusive [1]. Data from 1990 to 2002 inclusive can be found in previous years' data tables [2]. In addition to data for the whole of England, Wales and Northern Ireland (the areas covered by this survey), the tables include data for each country and the regions of England. This year data tables for the recently established biennial (two-yearly) sub-survey of people who inject image and performance enhancing drugs are being published for the first time.

This article presents an overview of the trends between 2003 and 2013 for HIV, hepatitis B, hepatitis C and risk behaviours from the main Unlinked Anonymous Monitoring Survey which is targeted at people who inject psychoactive drugs, such as, heroin, crack cocaine and amphetamines. Further data from this survey related to hepatitis C will be reported in the Hepatitis C in the UK: 2014 report [3] later this month. The initial findings from the first routine sub-survey of people who inject image and performance enhancing drugs are also summarised.

HIV transmission in PWID

The prevalence of HIV among the 3,144 PWID who took part in the main Unlinked Anonymous Monitoring Survey across England, Wales and Northern Ireland in 2013 was 1.1% (95% CI, 0.77%-1.5%). Between 2002 and 2012, prevalence varied between 1.1% and 1.6% (see figure 1; and table 1 of the dataset). The HIV prevalence in Wales was 0.50% (95% CI, 0.01%-3.1%) and in Northern Ireland 0.62% (95% CI, 0.01%-3.8%) during 2013. In England, the HIV prevalence was 1.2% (95% CI, 0.81%-1.6%) in 2013 and this was not significantly different from that found in 2003 when the prevalence was also 1.2% (95% CI, 0.86%-1.7%; see table 11 of the data set; and statistical note a).

The HIV prevalence among “recent initiates” to injecting drug use (those who first injected during the preceding three years) is an indicator of recent transmission. The prevalence of HIV among the recent initiates taking part in the survey across England, Wales and Northern Ireland varied over time and ranged from 0.37% to 1.3% between 2003 and 2013. In 2013, the prevalence in this group was 1.0% (95% CI, 0.20%-3.0%; see figure 1; table 26 of the dataset; and statistical note b) and is similar to that found in previous years. This finding indicates that HIV transmission is continuing to occur among PWID at a low level.

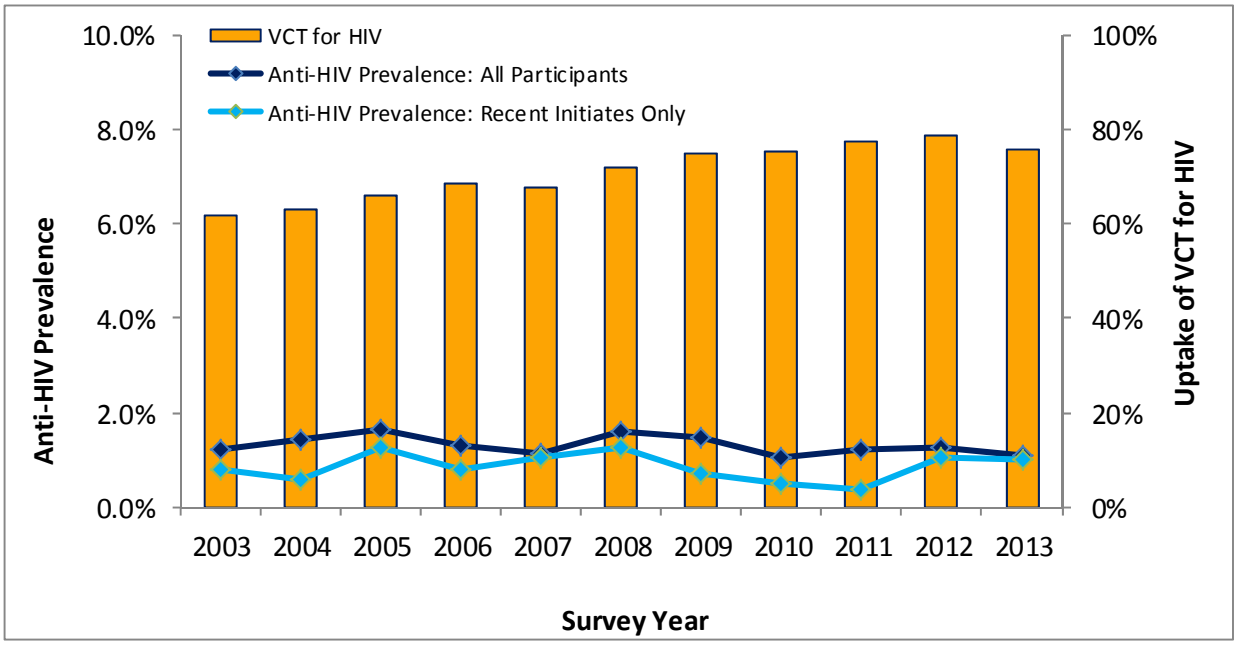
The self-reported uptake of voluntary confidential testing (VCT) for HIV among the survey participants across England, Wales and Northern Ireland has increased significantly since 2003; rising from 62% (95% CI, 60%-64%) in 2003 to 76% (95% CI, 74%-78%) in 2013 (see figure 1; table 7 of the dataset; and statistical note c). The proportion of the participants with antibodies to HIV, who answered the questions on the uptake of VCT for HIV, reporting that they were aware of their HIV infection was 96% (95% CI, 81%-99%) in 2013 (see table 7 of the dataset).

Hepatitis B transmission among PWID

The prevalence of antibodies to the hepatitis B core antigen (anti-HBc, a marker of past or current infection with hepatitis B) among the survey participants across England, Wales and Northern Ireland has declined since 2006. During the period 2003 to 2006 the anti-HBc prevalence fluctuated between 26% and 30%, before declining to 16% (95% CI, 15%-18%) in 2013 (figure 2; table 2 of the dataset; and statistical note d). By country, anti-HBc prevalence in 2013 was as follows: Northern Ireland, 6.8% (95% CI, 3.7%-12%, table 25); Wales, 13% (95% CI, 8.9%-18%; table 24 of the dataset); and England, 17% (95% CI, 16%-19%; table 11 of the dataset).

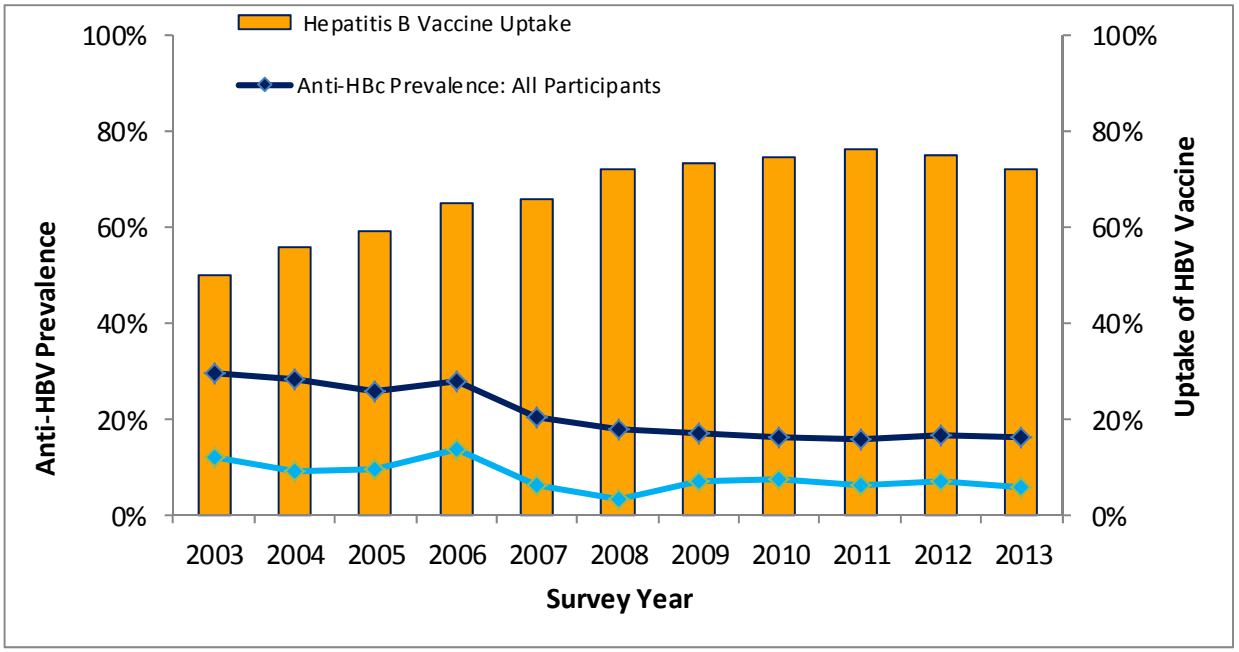
The prevalence of anti-HBc among the recent initiates to injecting drug use taking part in the survey across England, Wales and Northern Ireland was 5.9% (95% CI, 3.7%-9.2%) in 2013. Prevalence in this group had fluctuated between 3.1% and 14% between 2003 and 2013, with the prevalence in 2013 significantly lower than that in 2003 (12%, 95% CI, 6.6%-12%; see figure 2; table 26 of the dataset; and statistical note e).

Figure 1. Prevalence of anti-HIV and uptake of voluntary confidential testing (VCT) for HIV among participants in the Unlinked Anonymous Monitoring Survey of PWID: England, Wales and Northern Ireland: 2003-2013



Note: A recent initiate is someone who first injected during the preceding three years.

Figure 2. Prevalence of anti-HBc and uptake of the vaccine against hepatitis B among participants in the Unlinked Anonymous Monitoring Survey of PWID: England, Wales and Northern Ireland: 2003-2013



Note: A recent initiate is someone who first injected during the preceding three years.

The samples that had anti-HBc detected were also tested for hepatitis B surface antigen (HBsAg), a marker of current infection. In 2013, 3.4% (18/518, 95% CI, 2.2%-5.5%) of samples with anti-HBc had HBsAg detected. This represents 0.57% (18/3,144, 95% CI, 0.36%-0.91%) of all the PWID surveyed in England, Wales and Northern Ireland in 2013.

The survey also monitors, through self-reports, the uptake of hepatitis B vaccine. Vaccine uptake among the survey participants increased from 50% (95% CI, 48%-52%) in 2003 to 76% (95% CI, 75%-78%) in 2011, it was 72% (95% CI, 70%-73%) in 2013 (table 6 of the dataset; and statistical note f).

Hepatitis C transmission among PWID

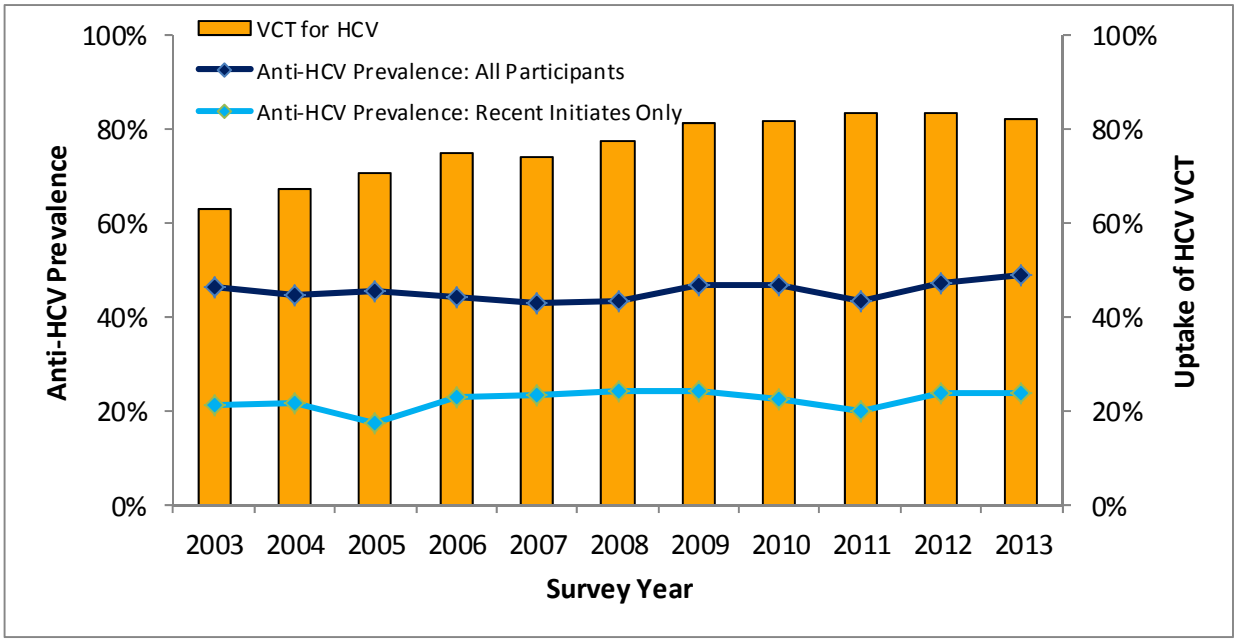
The prevalence of antibodies to the hepatitis C virus (anti-HCV) among the survey participants across England, Wales and Northern Ireland was 49% (95% CI, 47%-51%) in 2013. This is similar to the anti-HCV prevalence of 46% (95% CI, 44%-48%) seen in 2003 (see figure 3; table 3 of the dataset; and statistical note g). However, the level seen during the last decade, though a little higher than at the end of the 1990s, is much lower than those found in the early 1990s when prevalence was over 60% [4]. By country, anti-HCV prevalence in 2013 was as follows: Northern Ireland, 32% (95% CI, 25%-39%; see table 25 of the dataset); Wales, 47% (95% CI, 40%-54%; see table 24 of the dataset); and England, 50% (95% CI, 48%-52%; see table 11 of the dataset). The anti-HCV prevalence in Northern Ireland has not changed significantly over the last decade (see tables 11 and 25 of the dataset; and statistical note i). In England and Wales, although the anti-HCV prevalence in 2013 was significantly higher than it was a decade ago, it had not changed greatly in recent years (see table 24 of the dataset; and statistical notes notes h and j).

The prevalence of anti-HCV among the recent initiates taking part in the survey across England, Wales and Northern Ireland has been relatively stable in recent years. The prevalence in this group was 24% (95% CI, 20%-29%) in 2013, and was similar to that seen in recent years; the prevalence was 21% (95% CI, 16%-24%) in 2003 (see figure 3; table 26 of the dataset; and statistical note k).

There has been a significant increase over the past decade in the self-reported uptake of VCT for hepatitis C among the survey participants, with the proportion of survey participants ever tested rising from 63% (95% CI, 61%-65%) in 2003 to 82% (95% CI, 80%-83%) in 2010, the level has been stable since then and was also 82% (95% CI, 81%-84%) in 2013 (see figure 3; table 8 of the dataset; and statistical note l). The proportion of the participants with anti-HCV, who answered the questions on the uptake of VCT for hepatitis C, reporting that they were aware of their hepatitis C infection was 47% (95% CI, 44%-49%) in 2013 (see table 8 of the

dataset). This indicates that around half of the hepatitis C infections in this population remain undiagnosed.

Figure 3. Prevalence of anti-HCV and uptake of voluntary confidential testing (VCT) for hepatitis C among participants in the Unlinked Anonymous Monitoring Survey of PWID: England, Wales and Northern Ireland: 2003-2013



Note: A recent initiates is someone who first injected during the preceding three years.

Symptoms of an infection at an injection site

Symptoms of a possible injecting-site infection are common among PWID across England, Wales and Northern Ireland. In 2013, 28% (95% CI, 26%-30%) of PWID who had injected during the preceding year reported that they had experienced an abscess, sore or open wound at an injection site – all possible symptoms of an injecting-site infection - during the preceding year (see table 9 of the dataset). This compares to 35% (95% CI, 33%-37%) in 2006, the first year this question was included in the survey.

Behavioural factors

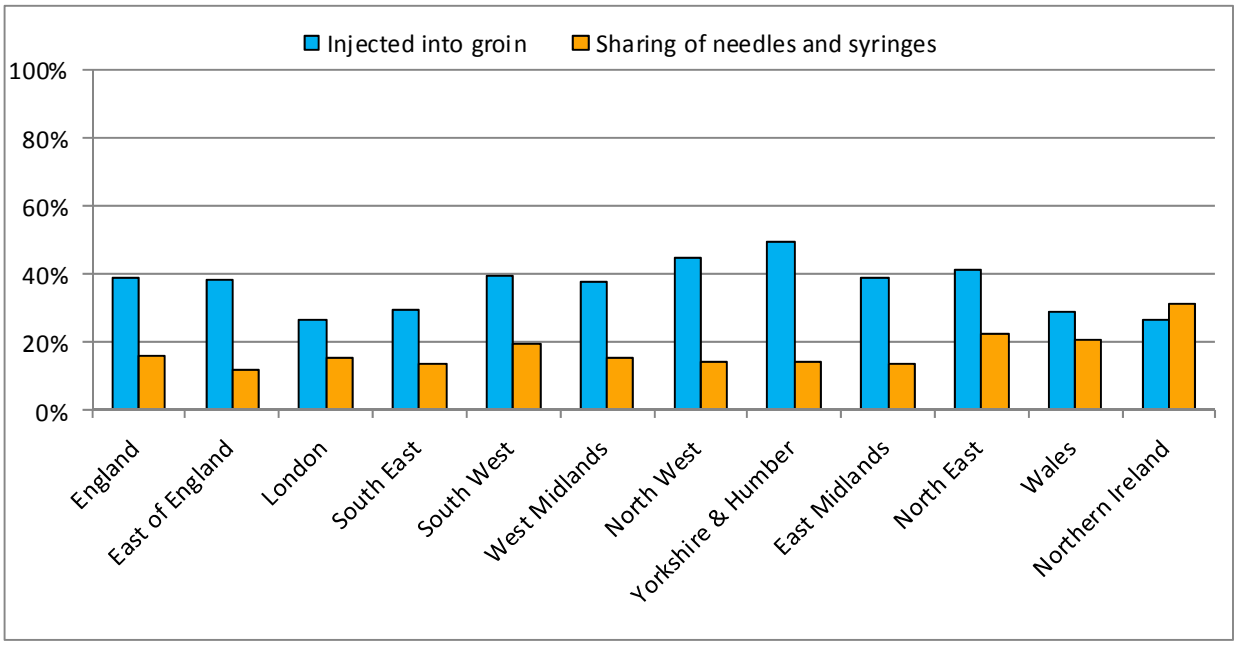
The level of needle and syringe (direct) sharing reported by participants in the survey from across England, Wales and Northern Ireland who had injected during the preceding four weeks has declined, with sharing falling from 29% (95% CI, 27%-32%) in 2003 to 16% (95% CI, 15%-18%) in 2013 (see table 4 of the dataset; and statistical note m). Direct sharing was found to vary across England, Wales and Northern Ireland, ranging in 2013 from 12% (95% CI, 6.6%-20%) in the East of England to 31% (95% CI, 18%-48%) in Northern Ireland (figure 4; and see tables 11 to 25 of the dataset). Throughout the period 2003 to 2013 direct sharing levels were consistently higher among those aged under 25 years than among older participants; in 2013,

31% (95% CI, 24%-40%) of those aged under 25 years reported direct sharing compared with 17% (95% CI, 14%-20%) of those aged 25 to 34 years and 13% (95% CI, 11%-16%) of those aged 35 years and over (see table 4 of the dataset).

The proportion of current PWID who reported injecting into their groin during the preceding four weeks varied across England, Wales and Northern Ireland (figure 4; and see tables 11 to 25 of the dataset). By country, the proportion injecting in to the groin in 2013 was as follows: England 39% (95% CI, 36%-41%); Wales, 29% (95% CI, 22%-37%); and Northern Ireland 26% (95% CI, 15%-42%). Across England, there are differences in the proportion reporting injecting into their groin, ranging from 27% (95% CI, 20%-34%) in London to 49% in Yorkshire & Humber (95% CI, 42%-56%).

In 2013, over two-thirds (70%, 95% CI, 68%-72%) of the participants reported having anal or vaginal sex during the preceding year, and this level has changed little over time (see table 10 of the dataset). Of those who had sex in the preceding year, 41% (95% CI, 39%-44%) reported in 2013 having had two or more sexual partners during that time and, of these, only 18% (95% CI, 15%-21%) reported always using condoms for anal or vaginal sex (see table 10 of the dataset).

Figure 4. Levels of needle and syringe sharing and injection into the groin among the participants in the Unlinked Anonymous Monitoring Survey of PWID who had injected during the preceding four weeks: England, Wales and Northern Ireland: 2013



Infections and risks among people who inject image and performance enhancing drugs

In 2012, following a pilot study during 2010-11 [4], a biennial sub-survey of people who inject image and performance enhancing drugs was established. This sub-survey has an 18 month recruitment period and uses a modified questionnaire focused on the use and injection of image and performance enhancing drugs, the questionnaire used in the main Unlinked Anonymous Monitoring Survey of PWID is focused on psychoactive drug use.

There were 249 participations in the sub-survey during 2012-13 from across England and Wales, of these 2.0% (95% CI, 0.74%-4.9%) had HIV, 2.8% (95% CI, 1.2%-5.9%) anti-HBc and 3.6% (95% CI, 1.8%-7.9%) anti-HCV (see tables IPED-1, IPED-2, & IPED-3 of the dataset). Though the prevalence of antibodies to both hepatitis B and C were lower than among those found among the participants in the main survey targeted at people who inject psychoactive drugs, the prevalence of HIV is similar in both of the surveys.

Among the participants in the 2012-13 sub-survey of people who inject image and performance enhancing drugs, 40% (95% CI, 34%-47%) reported uptake of the hepatitis B vaccine, 41% (95% CI, 35%-47%) reported ever having a VCT for HIV, and only 32% (95% CI, 26%-38%) reported a VCT for hepatitis C (see tables IPED-5, IPED-6, & IPED-7 of the dataset). The reported levels of the uptake of these three interventions are much lower than those reported among the participants in the main survey of people who inject psychoactive drugs.

The reported sharing of injecting equipment is low, with only 13% (95% CI, 9.3%-18%) reporting that they had ever shared a needle, syringe or vial (see table IPED-4 of the dataset). This population is sexually active, with over nine-tenths (92%, 95% CI, 87%-95%) of the participants reported having had anal or vaginal sex during the preceding year. Of those who had sex during the preceding year, 54% (95% CI, 47%-60%) reported having had two or more sexual partners during that time and, of these, only 13% (95% CI, 7.6%-21%) reported always using condoms for anal or vaginal sex (see table IPED-9 of the dataset).

Conclusion

In conclusion, data from the main Unlinked Anonymous Monitoring Survey of PWID, which is targeted at people who inject psychoactive drugs, indicate that the prevalence of anti-HBc has declined and that the prevalence of HIV and hepatitis C among this group is currently stable; although the prevalence of hepatitis C in England and Wales is higher than a decade ago. The levels of these infections among the recent initiates to injecting participating in this survey suggest that the extent of their transmission has probably changed little in recent years. Overall, reported needle and syringe sharing has declined over the last decade, however, sharing remains high among younger PWID, with almost one-third of those aged under 25 years reporting sharing in 2013. Three-quarters of the survey participants reported uptake of the hepatitis B vaccine, and the vast majority of those with HIV were aware of their status. However, half of PWID with antibodies to hepatitis C remain unaware of their infection, even though four-fifths reported having been tested for hepatitis C infection. After increasing during the previous decade, the uptake of testing for hepatitis C infection and of the hepatitis B vaccine have both changed little over the last few years.

Data from the sub-survey of people who inject image and performance enhancing drugs indicate that while hepatitis B and C are less common in this group, the HIV prevalence is similar to that among those participating in the main Unlinked Anonymous Monitoring Survey of people who inject psychoactive drugs. The uptake of interventions, such as hepatitis B vaccination and HIV testing, among people who inject image and performance enhancing drugs is poor.

Together, these findings indicate that unsafe injecting continues to be a problem and that there is a need to maintain and strengthen public health interventions that aim to reduce injection related risk behaviours. The impact of public health interventions which aim to prevent HIV and hepatitis C infection through injecting drug use by reducing these risks, such as needle and syringe programmes [5] and opiate substitution therapy [6], have been shown to be dependent on their coverage [7-10]. The provision of interventions that aim to reduce infections among PWID should be regularly reviewed to ensure that the coverage of these is appropriate to local need.

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Statistical notes

a) After adjusting for age, gender and London vs. elsewhere in a multi-variable analysis, the odds ratio for 2013 was 1.3 [95% CI, 0.76-2.1] compared to 1.0 in 2003; indicating no significant change in the HIV prevalence in England over time. However, compared to 2003 prevalence was significantly higher in 2008.

b) After adjusting for age, gender, and London vs. elsewhere in a multi-variable analysis the HIV prevalence among the recent initiates did not vary between 2003 and 2013, with an odds ratio of 1.2 [95% CI, 0.23-5.9] in 2013 compared to 1.0 in 2003; indicating no significant change in prevalence overtime. If 2012 is taken as the baseline year instead of 2002, then the prevalence was not significantly higher or lower than in 2013 in any year.

c) After adjusting for age, gender and region of recruitment in a multi-variable analysis, the odds ratio for 2013 was 2.1 [95% CI, 1.9-2.4] compared to 1.0 in 2003; indicating a significant increase in the uptake of VCT for HIV over time.

d) After adjusting for age, gender, and region of recruitment in a multi-variable analysis the anti-HBc prevalence in 2013 was significantly different from that in 2003; the odds ratio in 2013 was 0.46 [95% CI, 0.39-0.53] compared to 1.0 in 2003; indicating a significant decrease over time. Prevalence was also significantly lower than in 2003 in 2005 and from 2007 onwards.

e) After adjusting for age, gender and region of recruitment in a multi-variable analysis, the anti-HBc prevalence among recent initiates has varied over time. The odds ratio for 2013 was 0.51 [95% CI, 0.27-0.96] lower than odds ratio of 1.0 in 2003. Prevalence was also significantly lower than in 2007, 2008 and 2011.

f) After adjusting for age, gender and region of recruitment in a multi-variable analysis, the odds ratio for 2013 was 2.9 [95% CI, 2.6-3.3] compared to 1.0 in 2003; indicating a significant increase in hepatitis B vaccine uptake over time.

g) After adjusting for age, gender and region of recruitment in a multi-variable analysis, the odds ratio in 2013 of 1.1 [95% CI, 0.98-1.24] was not significantly different from the odds ratio of 1.0 in 2012; indicating a significant change in hepatitis C prevalence between these two years. Prevalence was however significantly higher in 2009.

h) After adjusting for age, gender and region of recruitment in England in a multi-variable analysis, the odds ratio in 2013 of 1.2 [95% CI, 1.0-1.3] was significantly different from the odds ratio of 1.0 in 2003; indicating significant difference in the hepatitis C prevalence in England between these years. The prevalence in 2009 was also significantly higher than in 2003.

i). After adjusting for age, gender and area of recruitment in Northern Ireland in a multi-variable analysis, the odds ratio in 2013 of 1.5 [95% CI, 0.66-3.4] was not significantly different from the odds ratio of 1.0 in 2003; indicating no significant change in hepatitis C prevalence in Northern Ireland.

j) After adjusting for age, gender and area of recruitment in Wales in a multi-variable analysis, the odds ratio in 2013 of 2.3 [95% CI, 1.4-3.8] was significantly different from the odds ratio of 1.0 in 2003-2005; indicating a significant change in hepatitis C prevalence in Wales over time. When 2013 was taken as the base-line year the prevalence in 2013 was not different from that seen in previous years.

k) After adjusting for age, gender, and region of recruitment in a multi-variable analysis the odds ratio for 2013 was 1.1 [95% CI, 0.76-1.7] which was not significantly different from the odds ratio of 1.0 in 2003; indicating no significant change in the hepatitis C prevalence among the recent initiates between these years.

l) After adjusting for age, gender and region of recruitment in a multi-variable analysis, the odds ratio for 2013 was 2.9 [95% CI, 2.6-3.3] compared to 1.0 in 2003 indicating a significant increase in uptake of VCT for hepatitis C over time.

m) After adjusting for age, gender, and region of recruitment in a multi-variable analysis the level of direct sharing in 2013 was significantly different from 2003; the odds ratio in 2013 was 0.56 [95% CI, 0.47-0.67] compared to 1.0 in 2003 indicating a significant decrease over time.