



World Hepatitis Day – July 28

The World Health Organisation (WHO) estimates that nearly 325 million people globally are infected with hepatitis B or C virus (HBV and HCV, respectively). Chronic infection directly contributes to the development of liver cancer which is responsible for 1.34 million deaths worldwide¹. Despite the high global burden of hepatitis infection, oral treatments, are

currently available that can lead to viral suppression in up to 80% of HBV patients and a cure in over 90% of HCV patients. The high burden of hepatitis and the availability of effective treatment have prompted the WHO to put forward the goal of eliminating both hepatitis B and C by the year 2030 through the attainment of several prevention and treatment service coverage targets². Combatting hepatitis also features within the UN Sustainable Development Goals (Target 3.3)³.

Many people with chronic hepatitis are unaware of their infection and increasing testing and treatment coverage will be a key driver to successfully meeting these elimination objectives. To this end, the focus of the WHO's campaign for World Hepatitis Day on July 28 is improving testing coverage and linking more patients into treatment and care – which is embodied by the campaign motto “Test. Treat. Hepatitis”⁴.

In England, it is estimated that 160,000 people are infected with HCV and momentum has been mounting over the past few years to test and treat as many people as possible and eliminate HCV in England five years before the WHO elimination target of 2030⁵. NHS England has been working closely with pharmaceutical companies to identify people infected with HCV while increasing procurement of directly acting antivirals (DAAs). Furthermore, 22 Operational Delivery Networks (ODNs) have been established across the country to drive improvements in treatment while “maximis[ing] appropriate uptake and completion of HCV treatment”⁶ and a National Hepatitis C patient registry has been established to record and monitor treatment uptake and outcomes⁷.

¹ <http://www.who.int/who-campaigns/world-hepatitis-day/2018>

² <http://www.who.int/hepatitis/publications/hep-elimination-by-2030-brief/en/>

³ <http://www.undp.org/content/undp/en/home/sustainable-development-goals.html>

⁴ <http://www.who.int/who-campaigns/world-hepatitis-day/2018>

⁵ <https://www.england.nhs.uk/2018/01/hepatitis-c-2/>

⁶ <https://www.england.nhs.uk/commissioning/wp-content/uploads/sites/12/2015/10/hep-c-netwrks-spec.pdf>

⁷ <https://www.england.nhs.uk/blog/hepatitis-c-programme-is-making-huge-progress/>



BBV opt-out testing in prisons

The improved hepatitis testing and treatment initiatives being driven in the community will make substantial inroads to meeting the WHO's hepatitis elimination targets in England. However, success will be highly dependent on how well the needs of vulnerable populations are identified and met. As incarceration and injecting drug use are overlapping risk factors for infection

with blood-borne viruses (BBVs) such as hepatitis B/C and HIV, people in prison in England are four times more likely to test positive for a BBV than their peers in the community⁸. However, despite a heightened need, this population has traditionally been under-tested for BBVs when compared to people living in the community.

To help meet this need, PHE in partnership with NHS England and HM Prison and Probation Service (HMPPS) have overseen the rollout of BBV testing in adult prisons across the nation on an 'opt-out' basis. A significant milestone was reached in April 2018, when after more than four years of implementation, the programme was successfully rolled out across the *entire* adult prison estate in England. In the run-up to programme completion, an engagement event was organised in November 2018 in London to share the lessons learnt from the early phases of BBV opt-out testing in prisons and promote good practice in the final stages of implementation. A summary report was published by PHE that captures the key issues discussed at the event and can be found at the following link:

<https://www.gov.uk/government/publications/blood-borne-virus-opt-out-testing-in-prisons-summary-report-2017>⁹.



Testing performance measures and uptake

Performance in relation to the BBV opt-out testing programme is measured at the prison level by NHS England through the collection of data via the Health and Justice Indicators of Performance (HJIPs). These metrics include specific reports on the number of BBV tests offered within 72 hours of reception, the number of tests

⁸ PHE Health and Justice Annual Review 2017/18:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/725776/Health_and_Justice_Annual_Review_2017-2018.pdf

⁹ <https://www.gov.uk/government/publications/blood-borne-virus-opt-out-testing-in-prisons-summary-report-2017>

undertaken, the number of people newly diagnosed (for hepatitis C this includes those positive for both antibodies and virus as determined by PCR), the number of patients referred for specialist treatment following diagnosis and the number who received treatment. The data are used by NHS England commissioners to performance manage healthcare providers in prisons and will be vital to identifying potential attrition points in the testing pathway in the future. Over the past year, the HJIPs dataset has undergone improvements to the way that prison health service information is collected through the introduction of more streamlined templates incorporating conditional logic and revisions to how some metrics are defined. The HJIPs BBV testing data for the 2017/18 financial year is included in Table 1 below:

Table 1: BBV testing cascade in the English prison estate, N=112 prisons (Source: NHS England - HJIPs, April 1 2017 – March 31 2018).

	Hepatitis C		Hepatitis B		HIV	
	number	% of those eligible	number	% of those eligible	number	% of those eligible
New receptions & transfers*	184,367	100%	154,400	100%	179,254	100%
Tests offered	138,763	75%	113,691	74%	126,882	71%
Tests done	35,679	26%	31,312	28%	41,455	33%
Positive tests	3,881	11%	559	2%	469	1%
Hep C PCR tests done	1,766	46%				
Hep C PCR positive tests	1,710	97%		N/A		N/A
Specialist referrals**	687	40%	193	35%	190	41%

* excluding previously confirmed cases

** for HIV only, this refers to the number of patients *seen* by a specialist

Since the introduction of the programme, there has been a reported seven fold increase in collective (HBV, HCV and HIV) testing uptake compared to the traditional prison testing baseline before BBV opt-out programme implementation (increase from 4% to 29%). While this increase in testing is welcomed, current levels are still well below even the lower BBV testing threshold proposed by NHS England (50-74%), and well below the target threshold of at least 75% uptake¹⁰. The challenge moving forward will be to get testing levels to within the upper performance standard ie more than 75% testing uptake. To this end, the focus for PHE and NHS England in the current financial year and beyond will move from BBV testing programme implementation to improving the quality and uptake of testing within prisons.

¹⁰ <https://www.gov.uk/government/publications/blood-borne-virus-opt-out-testing-in-prisons-summary-report-2017>

Looking ahead

Improving the quality of BBV testing offered in prisons will see the continued development of a number of commissioned interventions and key pieces of work by NHS England, PHE, HMPSS and other private and third sector partners in the 2018/19 financial year and beyond, as outlined below:

	In partnership with the Hepatitis C Trust, hepatitis C peer networks will be expanded across the English prison estate over the next three years as a means of improving testing rates and reducing attrition along the prison testing cascade. These initiatives will be modelled on already successful programmes, such as the peer-to-peer (P2P) initiative rolled out at HMP Wandsworth in which patients provide mentorship to their colleagues within the prison walls (see previous issue of Infection Inside International, vol. 14, issue 1 ¹¹ , for more details about this initiative at HMP Wandsworth).
	Working with commissioners and providers to identify BBV lead nurses in prisons to provide specialised healthcare provision and support BBV 'in-reach' clinics/services in the prison.
	Working with prison healthcare teams to help frontline staff better understand what 'opt-out' testing should look like and standardising the offer for testing across the prison estate: <i>"We screen everybody entering this prison for hepatitis B, hepatitis C, and HIV. Screening is free, confidential and the sample will not be used for anything other than this test. You can be infected and still feel healthy, so it is important to test even if you feel fit and well. If you have hepatitis C, we can treat you with new medication that works in almost all cases, usually with no side effects. Are you happy to proceed?"</i> ¹²
	Performance management: working more closely with Commissioners in low performing prisons/regions, as based on quarterly HJIPs returns, to review testing data and processes while offering as much support as possible to resolve attrition points in the testing and treatment cascade.
	Organisation of annual multi-stakeholder forums to look back and review progress while identifying new opportunities for action that would increase testing and treatment rates in prisons.

¹¹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/709168/Infection_Inside_Vol_14_Issue_1_FINAL_28032018.pdf

¹² <https://www.gov.uk/government/publications/blood-borne-virus-opt-out-testing-in-prisons-summary-report-2017>



Retrospective hepatitis C case-finding initiative in England

In the wake of the development of effective DAAs for hepatitis C, an opportunity exists to eliminate the infection in England and abroad. However, the comparatively reduced effectiveness and higher increased side-effects observed with earlier interferon-based hepatitis C treatments had contributed to traditionally low levels of treatment uptake by patients. To ensure that as many people as possible are treated with the new effective therapies, PHE is working closely with NHS England to retrospectively identify patients registered with a doctor who have been diagnosed with hepatitis C in the past so that they may be re-assessed and offered the more effective treatment.

To this end, in the last quarter of the 2017/18 financial year, PHE colleagues from the National Infection Service undertook a retrospective review of laboratory records for adults and children over one year of age who tested positive for either HCV antibody or HCV RNA between the years 1996 and 2017. Using NHS numbers or other unique patient identifiers, patients were mapped to regional ODNs which in turn could notify local GPs advising that follow-up was recommended. Patients already known to have been treated with DAA drugs, to be deceased or unable to be traced using this process were excluded. This process pertains only to historical diagnoses and does not replace existing processes in place for the reporting of clinical laboratory diagnoses of HCV infection as part of routine clinical care.

Given the high-risk of infection with hepatitis C for prisoners, liaison between ODNs and local prison healthcare providers will be tantamount to ensuring that people diagnosed while in prison within the historical timeframe considered (ie 1996-2017) are offered equivalent access to DAAs as their peers in the community.

International engagement

UNODC Expert Group Meeting on Development of the Technical Guide on Prevention of Mother-to-Child Transmission (PMTCT) of HIV in prisons, 3-4 July 2018, Vienna

The United Nations Office on Drugs and Crime (UNODC) as the convening agency of the Joint United Nations Programme on HIV/AIDS for prisons, was requested by the UN Commission on Crime Prevention and Criminal Justice to support member states in their efforts to prevent mother-to-child transmission of HIV in prisons. Dr Éamonn O'Moore, National Lead for Health & Justice Team at PHE, was invited to participate along with other international experts, representatives from other UN bodies, WHO and

representatives of civic society globally in an Expert Group Meeting to develop technical guidance on PMTCT of HIV in prisons. As part of the programme he presented on PHE's Gender-specific standards to improve health and well-being for women in prison, which were published on International Women's Day 2018¹³. Dr O'Moore has been asked to support the writing group in delivering the final guidance by Monica Beg, Chief of the HIV/AIDS Section, UNODC who was very grateful for PHE's support to the work.

WHO Health in Prisons Programme (HIPP) updates

PHE in its role as the UK Collaborating Centre (UKCC) to the WHO Health in Prisons Programme (HIPP) co-produced a very successful meeting of the programme's Steering Group at the WHO Regional Office for Europe in Copenhagen in May 2018. PHE presented an update on activity as a WHO UKCC, as well as developing work on resources to raise the profile of the impact of non-communicable diseases (NCDs) in prisons to align with WHO's plans to pilot primary care training on NCDs in prisons and to support the consideration of prison health in programmes aiming to address NCDs and reduce health inequalities.

The WHO had also requested that the UKCC lead on developing a case study of prison health governance focussing on the work of the UK jurisdictions. This is in recognition of PHE's work with partners in England and across the Five Nations (UK and Republic of Ireland) in influencing a public health approach to partnership working in the field and some of the unique mechanisms that are now in place to support health improvements for people in contact with the justice system (eg the **National Partnership Agreement for Prison Healthcare in England (2018-2021)**¹⁴ which is co-signed by five government departments/agencies).

The UKCC has been working with WHO Europe on the Health In Prisons European Database (**HIPED**¹⁵) which is now live and hosted on the Global Health Observatory. The UKCC led a beta-testing of the survey tool across the UK and has also informed the development of the database and the subsequent planned outputs, including country profile reports and a WHO Europe "state of prison health report". Country profiles were launched on International Prisoners Day, 18 July.

Publications

PHE's latest **Hepatitis C in England report** confirms that the first fall in deaths in more than a decade has been sustained for another year. This is extremely encouraging

¹³ <https://www.gov.uk/government/publications/women-in-prison-standards-to-improve-health-and-wellbeing>

¹⁴ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/697130/moj-national-health-partnership-2018-2021.pdf

¹⁵ <http://apps.who.int/gho/data/node.prisons>

against the background of rising mortality that was predicted to continue into the future.
<https://www.gov.uk/government/publications/hepatitis-c-in-the-uk>

Public health guidance on prevention and control of blood-borne viruses in prison settings. Published on July 23, the guidance includes evidence-based scientific advice on available options, when planning and implementing prevention and control interventions for blood-borne viruses in prison settings.
<https://ecdc.europa.eu/en/publications-data/public-health-guidance-prevention-and-control-blood-borne-viruses-prison-settings>

On International Prisoners' Day, July 18 2018, PHE's Health and Justice Team published the latest edition of its **annual review**, covering work undertaken in the 2017-18 financial year, with a specific focus on three cross-cutting themes of work:

- prisons: with review of the new National Partnership Agreement on Prison Healthcare in England (2018-21) and work undertaken to support the Prison Estate Transformation Programme (PETP)
- people in prison with specific needs: with focus on older people and women in prison
- protecting Health: an overview of the challenges seen last winter in response to seasonal flu and other health protection incidents

All PHE Health and Justice annual reviews, including the latest edition, can be found at the following web-link: <https://www.gov.uk/government/publications/prison-health-health-and-justice-annual-report>.

News

The PHE-funded **World Prison Health Research and Engagement Network (www.wephren.org) celebrated its first birthday** with an international seminar on 16th July in London. The event was hosted by PHE, introduced by Duncan Selbie and Professor Sir Muir Gray, with Professor Brie Williams from the University of San Francisco delivering the keynote presentation on health as a central tenet of prison reform. A 3-year development plan that was written by the international steering committee for WEPHREN at a meeting in Copenhagen in May 2018 was presented to showcase future developments for this global capacity building initiative.

Events (upcoming)

- **11 and 12 September:** PHE annual conference, Warwick University, Coventry.
<https://www.gov.uk/government/news/phe-annual-conference-2018-bookings-open>. PHE's Health and Justice Team will be chairing a session at the

conference entitled: “The challenge of communicable disease control in prisons and other places of detention: national and international collaboration”.

Editorial group

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