Public Health England

Protecting and improving the nation's health

Public Health England

Health and Justice Annual Review 2016/17

"No health without justice, no justice without health"

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-class science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. We are an executive agency of the Department of Health, and are a distinct delivery organisation with operational autonomy to advise and support government, local authorities and the NHS in a professionally independent manner.

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Contents

Cover image: The now decommissioned HMP Reading, 2016. Photo by Maciej Czachorowski.

Cover quote: This phrase, attributed to Dr. Éamonn O'Moore, National Lead for Health & Justice, PHE, was adopted by the World Health Organization's Health in Prisons Programme and the Council of Europe at a meeting of prison health experts held in Strasbourg in 2014 which endorsed the position that health and justice organisations cannot achieve their respective aims in isolation.

Glossary

CJS	Criminal justice system
DH	Department of Health
DXR	Digital X-ray
ECDC	European Centres for Disease Prevention and Control
EMCDDA	European Monitoring Centre for Drugs and Drug Addiction
HIPP	Health in prisons programme (WHO)
HJIPs	Health and Justice Indicators of Performance
HJIS	Health and Justice Information Service
HMPPS	Her Majesty's Prison and Probation Service
HO	Home Office
HPT	Health protection team
IDTS	Integrated drug treatment system
IRC	Immigration Removal Centre
NDTMS	National Drug Treatment Monitoring System
NHS	National Health Service
NICE	National Institute for Health and Care Excellence
NOMS	National Offender Management Service, also see HMPPS
NPS	New psychoactive substances
OASys	Offender assessment system
OST	Opioid substitution therapy
PHOF	Public Health Outcomes Framework
PNC	Police National Computer
p-NOMIS	Prison National Offender Management Information System
PPDs	Prescribed places of detention
TB	Tuberculosis
UKCC	United Kingdom Collaborating Centre
UNODC	United Nations Office on Drugs and Crime
WEPHREN	WorldwidE Prison Health Research and Engagement Network
WHO	World Health Organization

Foreword

Our mission in Public Health England's national Health and Justice Team is to understand and meet the health and social care needs of people in contact with the criminal justice system, in custody and in the community, to improve health, reduce health inequalities and tackle health-related causes of offending and reoffending behaviour.

We do this within a framework of evidence-based practice and partnership work. These activities require good data, evidence and intelligence resources to inform policy, programmes and practice. But this is a real challenge: peer-reviewed literature addressing health needs of people in prison is limited, often conducted in non-European settings, frequently skewed towards particular issues (substance misuse, mental health and infectious diseases), and therefore neither comprehensive nor generalizable to the English prison setting. Also, in some instances, key studies are decades old, representing the dearth of high quality research activity in this area. Published research on health needs of people in contact with the CJS in the community is even more scant as health informatics and surveillance systems do not usually identify offenders specifically. The impact of health improvement programmes is therefore difficult to ascertain especially over longer time periods and particularly when we look beyond the prison walls.

This annual report provides some of our current data and evidence in relation to key public health concerns in our population including infectious diseases, substance use, mental health needs and a has focus on the fastest growing population in prison- older people (aged 50 and over). Of note, much of the data is derived from information assets held by different partner organisations and some is cited from original research conducted by academic units or government departments. We describe our key activities this year in developing the evidence base, improving data and supporting collaborative work across organisations to enable data sharing. In this report, we have presented more of our data in the form of infographics which we hope will improve communication and support engagement with partner organisations (including the charity & voluntary sector) as well as the wider public.

Our work this year has been particularly impacted by the first White Paper on Prison Reform[1] for over a generation, which paved the way for a new approach to co-commissioning of healthcare in prisons, introduced in a phased implementation programme since April 2017, where NHS England and empowered governors work together to meet the health needs of their population, taking account of both health services and the wider prison environment- the embodiment of a 'whole prison approach' [2].This new approach has included work between PHE, the Ministry of Justice, Her Majesty's Prison & Probation Service and NHS England to develop a set of

metrics to monitor impact of these changes, recognising that healthcare services delivered in prison are impacted by the prison regime and particularly staffing levels. We have advised policy makers in the Ministry of Justice and Department of Health that ‘time out of cell in purposeful activity’ may be a sensible ‘meta-metric’ of the health of whole prison as it reflects a functional regime, sufficient staffing levels and opportunities for prisoners to work, learn and engage, which could support improved health and wellbeing as well as rehabilitation, an area we intend to study further during the next year.

We have also provided an account of some of our international work including an exciting new research collaboration we have established in partnership with the World Health Organisation (WHO). The WorldwidE Prison Health Research & Engagement Network (WEPHREN)[3] was formally launched on 14 July 2017 to support international collaboration and promote research in the field of prison health. It aims to engage not only with academics and public health specialists but also policy makers, frontline practitioners and people in prison themselves. It is hoped this endeavour will enable the development of agreed research priorities internationally and drive research activities to address those needs. We look forward to reporting back on achievements with WEPHREN in next year’s report.

Dr. Éamonn O’Moore,

National Lead for Health & Justice, PHE
Director UK Collaborating Centre, WHO Health in Prisons Programme (European Region)

Executive summary

The recent publication of the White Paper on Prison Safety and Reform emphasised the need for evidence-based healthcare provision in the English prison estate within the context of a new co-commissioning landscape. This annual report highlights some of the sources of robust health and justice data used to inform healthcare decision making in prisons and provides details of related work programmes undertaken by the Health and Justice team consequent to the implementation of the prison reform agenda. This has included development of a ‘dashboard’ of prison health metrics to measure improvements in healthcare and health outcomes as well as the establishment of a permanent Cross-Organisational Health and Justice Data, Evidence and Intelligence Group tasked with facilitating health data analysis and interpretation at the local, regional and national levels.

The report also provides some current data and evidence in relation to key public health concerns in the prison population including the high prevalence of infectious diseases, high levels of substance misuse and prisoners’ mental health needs. Focus is also given to the health needs of the fastest growing population in prison - older people (aged 50 and over). To facilitate the presentation of this information in a succinct and accessible manner a series of infographics have been produced which feature in Section 2, followed by a summary of initiatives being undertaken to tackle each issue. More detailed information about the robust sources of health and justice data that feature throughout the report is provided in the Appendix.

Developing and maintaining a robust evidence base to inform measures that positively impact on the wellbeing and health outcomes of people in prison cannot be done in isolation. To this end, PHE Health and Justice is involved in several initiatives, such as the WHO minimum public health dataset and the recently launched WorldwidE Prison Health Research and Engagement Network (WEPHREN), which aim to foster greater collaboration from health and justice stakeholders around the globe and improve the pool of quality prison health information available.

Introduction

The national Health and Justice team (see Box 1 for team overview) assists PHE in providing the Department of Health (DH) with expert evidence and advice on the health of people in contact with the criminal justice system (CJS), and similarly supports NHS England with information and expert advice at the national and local level.

A key element of understanding and meeting the health needs of people in contact with the CJS is the ability to measure health status, including changes over time, and health service utilisation. This year's PHE Health and Justice annual review highlights some of the sources of robust health and justice data used to inform healthcare decision making specifically in the prison population (see infographic – 'Prison Population'). This follows the recent publication of the White Paper on Prison Safety and Reform[1] which emphasises the need for evidence-based healthcare provision in the English prison estate within the context of a new co-commissioning landscape where NHS England work collaboratively with empowered governors to commission and provide high quality healthcare.

The report also uses a series of infographics (graphic visual representations of information) to present large amounts of information in a succinct and visually appealing way. The infographics highlight key issues facing the prison population and showcase the work that is being done by PHE Health and Justice and its partners to address them. In keeping with the theme of 'health and justice data', the Appendix provides a more detailed summary of the principal health and justice data sources that inform our work and will likely play a role in informing healthcare implementation in prisons consequent to the reform agenda in the years ahead. The topics chosen for the infographics are not intended to describe every aspect of the national Health and Justice work programme, but rather touch on some key areas that have benefitted from, or are working towards developing, robust health data, evidence or intelligence.

Measuring 'health' in the criminal justice system (CJS)

Different parts of the CJS capture diverse data on the people they manage and their health needs with differing levels of complexity, comprehensiveness and completeness. Generally, data systems capturing information on people in contact with the CJS in the community are less comprehensive and not as developed as those covering people in prescribed places of detention, particularly prisons (Box 2).

Prisons are the richest source for the broadest range of health data in the CJS, providing comprehensive information on population changes and movements, health needs, health protection and quality of health services provided. The primary health informatics system used in all prisons (as well as Immigration Removal Centres [IRCs]) in England and Wales is SystmOne[4]. It captures detailed demographic and health information on all

prisoners/detainees and can be used across the prison estate to allow transfer of medical information. It is limited, however, by a) the inability to extract data at national level and aggregate/disaggregate according to need; b) the inconsistent use of READ codes (which are standard ways of recording particular diagnostic and therapeutic interventions) and ‘add on templates’ by providers across the estate, which means that data recorded at individual prison level may vary significantly thereby limiting the ability to ‘read across’ different settings, and c) not being linked to the NHS Spine (ie the nationwide health records network) so general practitioners cannot access information on what happened to their patients when they were in prison.

However, patient care summary records are available from SystmOne and can be used to support continuity of care including prescribing. A replacement for SystmOne, known as the Health and Justice Information Service (HJIS) is under development by NHS England with support from PHE and will address many of the issues identified above. HJIS will also cover all settings within the criminal justice system, both residential and temporary (see Appendix for more details about HJIS).

Box 1: The National Health and Justice Team and Network

The national Health & Justice team[5] is part of PHE's Health Equity and Mental Health division which forms part of the Health Improvement Directorate. The national Health & Justice Team works to deliver PHE's mission statement[6] on health and justice which aims to reduce health inequalities, reduce offending and re-offending behaviour, support people in living healthier lives, and ensure the continuity of care from custody to the community.

PHE is structured into a national centre, 4 regions (North, Midlands and East of England, South and London) and 8 centres plus London, which is an integrated region-centre. The national Health and Justice Team works with health and justice public health specialists based in PHE centres who support implementation of the national business programme as well as meeting local needs in relation to health and justice including integration of this work with wider work programmes of their centres (Figure 1).

Figure 1: PHE regions and centres

The national Health and Justice Network is composed of representatives from the devolved administrations, the national team and public health specialists in the PHE centres who work to gather intelligence, share good practice and provide opportunities for collaboration across the United Kingdom. The national team also leads international engagement on prison health through its work as the UK Collaborating Centre (UKCC) to the WHO HIPP (Europe)[7] and supports collaborative working for health across the devolved administrations and the Republic of Ireland through the Five Nations' Health & Justice Collaboration[8] (Figure 2).

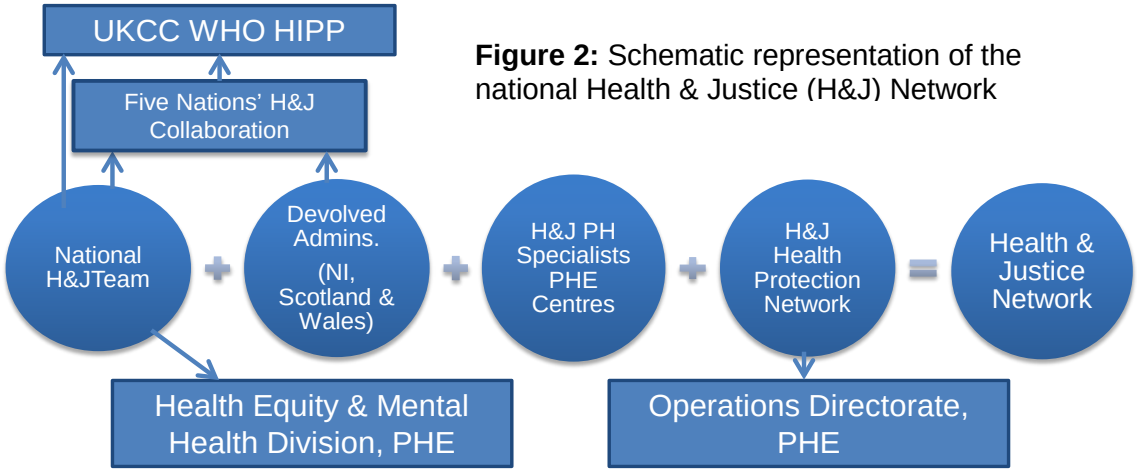


Figure 2: Schematic representation of the national Health & Justice (H&J) Network

Prison Population

The English and Welsh prison estate:

85,513

One of the largest estates in Europe; ranking behind only Russia and Turkey in terms of absolute prisoners incarcerated.[1,2]

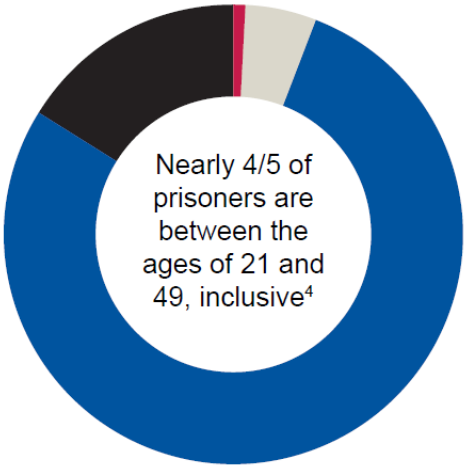
There are 118 prisons in operation across England and Wales[3]

Prisoner demographics:

Nearly 5% of prisoners are women detained in 12 female prisons[1,3]

11%

More than 1 in every 10 prisoners is a foreign national[5]



Sentencing and incarceration:

About three-fifths of prison admissions in 2016 were first receptions[6]

44%

Nearly half of adult offenders released from custody go on to reoffend[7]

16.4months

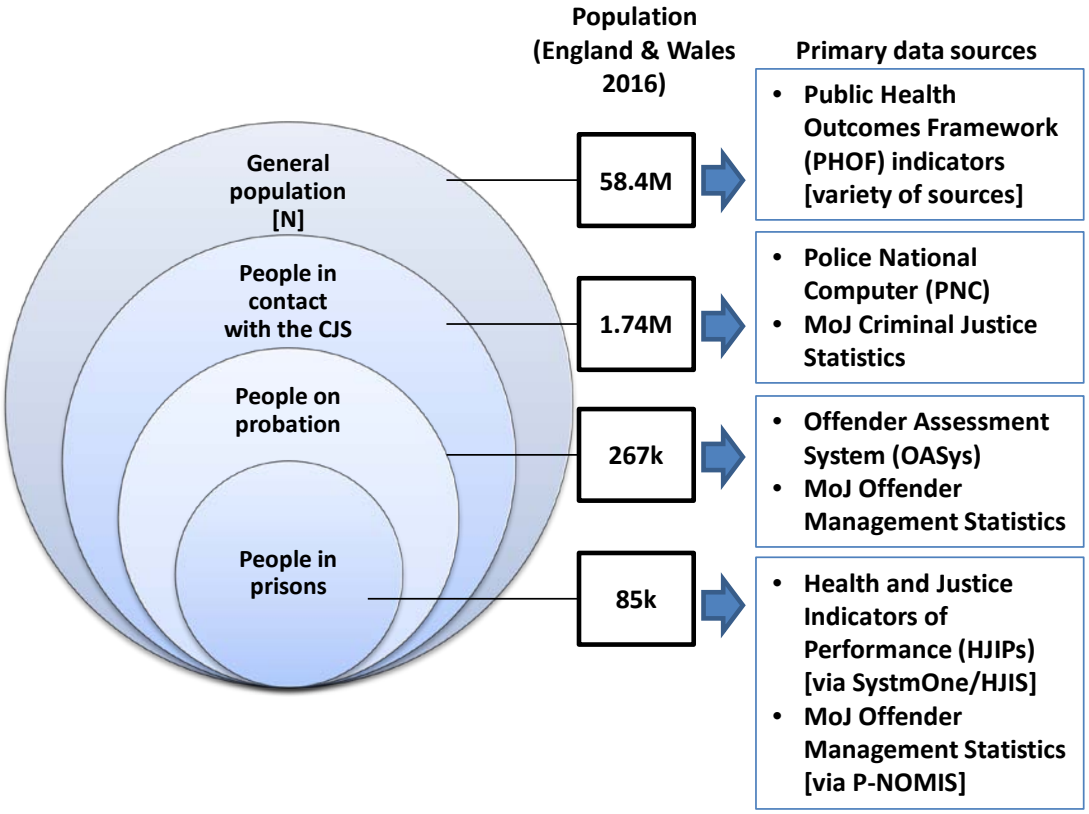
Average custodial sentence length in 2016 for all offences[8]

More than 2/3 of prisoners are sentenced to 12 months or less[9]

Data/evidence (see Appendix):
Prisoner demographics:
Ministry of Justice Offender Management Statistics
Prisoner sentencing information:
Ministry of Justice Criminal Justice System statistics
Ministry of Justice map of the English and Welsh Prison estate:
https://www.justice.gov.uk/downloads/contacts/hmps/prison-finder/prison-map.pdf

[1] MoJ Offender Management Statistics. Prison population, 31 March 2017: Table 1.1
[2] Walmsley, R. World Prison Population List - Eleventh Edition. International Centre for Prison Studies.
[3] HMPPS. Prisons and their resettlement providers. April 2017.
[4] MoJ Offender Management Statistics. Prison population, 31 March 2017: Table 1.3
[5] MoJ Offender Management Statistics. Prison population, 31 March 2017: Table 1.7
[6] MoJ Offender Management Statistics Bulletin, England and Wales. Annual reception data for 2016.
[7] MoJ Proven Reoffending Statistics Quarterly Bulletin, July 2014 to June 2015.
[8] MoJ Criminal Justice System statistics quarterly: December 2016: Table Q5.2c
[9] MoJ Criminal Justice System statistics quarterly: December 2016: Table Q5.4

Box 2: Data capture in the criminal justice system



Police National Computer (PNC)	Operational police database containing the criminal histories of all offenders in England, Wales and Scotland; also contains arrest information from other police forces such as the British Transport Police. **Health data:** some information relating to drug and alcohol misuse, sexual assault, sex offending behaviour, mental health needs etc.
Offender Assessment System (OASys):	Used by both probation and prison services in England and Wales to undertake analysis of the offences, risks and needs of individuals. **Health data:** records offending related social and individual needs, including basic personality characteristics and cognitive behaviour problems, incorporating further specialist assessments and also measures change over time. OASys data also provides information on health and wellbeing predictors.
Prison National Offender Management Information System (p-NOMIS):	Operational database used in prisons for the management of offenders. **Health data:** includes info on obesity, disability clinic/hospital attendance, and some injury details are recorded however they are not clinical quality
SystmOne/HJIS	SystmOne is the principal health informatics system used in all prisons and immigration removal centres (IRCs) in England and Wales. **Health data:** captures detailed demographic and health information on all prisoners/detainees and can be used across the estate to allow transfer of medical information. A replacement for SystmOne, the **Health and Justice Information Service (HJIS)** will come on-line in 2017/18 and will address some of the issues of the current system (see text). The new system will also cover all settings within the criminal justice system, both residential and temporary (also see 'HJIS' in Appendix).
Ministry of Justice (MoJ) statistics:	Do not offer 'read-across' to health metrics but provide comprehensive socio-demographic and offending statistics: prison population, operational capacity and age/sex breakdowns (also see 'MoJ' in Appendix).

Prison Reform Agenda and a new healthcare commissioning framework

In October 2016, PHE Health and Justice published an evidence-review[9] commissioned by the Department of Health (DH) on the impact of ten years of NHS commissioning of prison healthcare on health outcomes for people in prison. The report provided a detailed overview of the improvement in healthcare since the NHS assumed commissioning responsibility in 2006 but also of the challenges which still remain in addressing health inequalities among people with multiple complex needs.

In November 2016, shortly after the publication of the PHE evidence-review, the Lord Chancellor published the first White Paper on prison reform in a generation. The White Paper on Prison Safety and Reform[1] introduced new ways of working that would give prison governors more autonomy in key aspects of prison management and service provision and would place prisoner rehabilitation at the centre of an effective prison regime. To this end, prison governors would be handed more control over education, work, family ties, offender behaviour and resettlement programmes, as well as greater influence, in partnership with NHS England, over the provision of healthcare services in their prisons. This 'new commissioning framework' addressed one of the key concerns PHE identified in its evidence-review[9] which was the emerging 'disconnect' between the healthcare and custodial services working in prisons.

Delivery of high quality prison healthcare is absolutely dependent on the cooperation between custodial and healthcare staff and there is value in bringing healthcare expertise and prison governors together to commission services which support local circumstances. Healthcare is an integral part of the day-to-day activities of a prison and there are benefits to having better engagement in designing healthcare services alongside understanding the prison regime (staffing and security, environment and timetables) so that people can get to their medical appointments, violence and substance misuse are reduced, and care can be delivered consistently in a safe environment. As prison governors become more engaged in healthcare commissioning in their prisons, better outcomes in terms of both health and reoffending are also expected.

PHE Health and Justice provided expert advice to the MoJ and DH in drafting the White Paper which put health and public health principles at the heart of the prison reform programme. This includes the need to take a 'whole prison approach' to improving health (which is a principle of the World Health Organisation [WHO][10]) as well as the role of a robust evidence base in improving health services and achieving good health and rehabilitation outcomes.

Evidence-based healthcare commissioning in prisons

Under the new commissioning framework outlined in reform agenda, prison governors have a shared duty in partnership with NHS England to ensure health services are commissioned and provided appropriate to the needs of the prison population and according to national specifications which are evidence-based (eg NICE guidelines[11]). In this context, prison governors have a very important role and specific responsibility in supporting and enabling delivery of a 'whole prison approach' to health and wellbeing.

The 'whole prison approach' to health and wellbeing

A 'whole prison approach' for delivering effective prison health is a principle endorsed by several health agencies including the WHO[10], DH[2] and PHE[9]. We have previously summarised the approach as follows[9]:

"A whole prison approach involves all aspects of prison that touch on the wider determinants of health (such as education and life skills), plus health promotion, health education, patient education and prevention. The whole prison approach aims to address the health and wellbeing of staff, visitors, families and the local community and looks at the whole offender pathway, working with probation services, reducing re-offending partnerships and resettlement teams."

This approach emphasises that prisons are seen as an integral part of local healthcare services in the community. As such, local health services should be commissioned to understand and meet the needs of people when they transition back into the community from prison. For this to be possible, engagement of prison governors in local healthcare commissioning arrangements is crucial.

PHE Health and Justice are working with NHS England and HMPPS to help improve understanding of the 'whole prison approach' to improving health and wellbeing. Part of this work includes supporting the revision of current Prison Service Instructions[12] and Prison Service Orders[13] and replacing them with evidence-based guidance on 'what works' for prison health. We will be taking this work forward together through our ongoing partnership programme[14] in the coming year.

A robust evidence base to inform prison healthcare commissioning

The effective implementation of a whole prison approach is facilitated by the availability of robust data and evidence on various facets of the prison system. In England and Wales, prison healthcare services are commissioned by NHS England against national service specifications which are evidence-based and informed by an understanding of the health needs of prisoner populations through a rigorous process of health needs assessment using a toolkit[15] designed by PHE. Further, performance against service delivery requirements is monitored through collection of data via the Health & Justice Indicators of

Performance (HJIPs) (also see 'HJIPs' in Appendix), a set of performance metrics co-designed by PHE, NHS England and HMPPS. Information on drug and alcohol services is gathered via PHE's National Drug Treatment Monitoring Service (NDTMS)[16] (also see 'NDTMS' in Appendix) which is used by commissioners and service providers to understand health needs of drug and alcohol treatment services as well as how well health services provided meet those needs. These sources of data are complemented by comprehensive sociodemographic and offending statistics[17] routinely collected by the MoJ and covering the entire English and Welsh prison estate (also see 'MoJ prison population data' in Appendix).

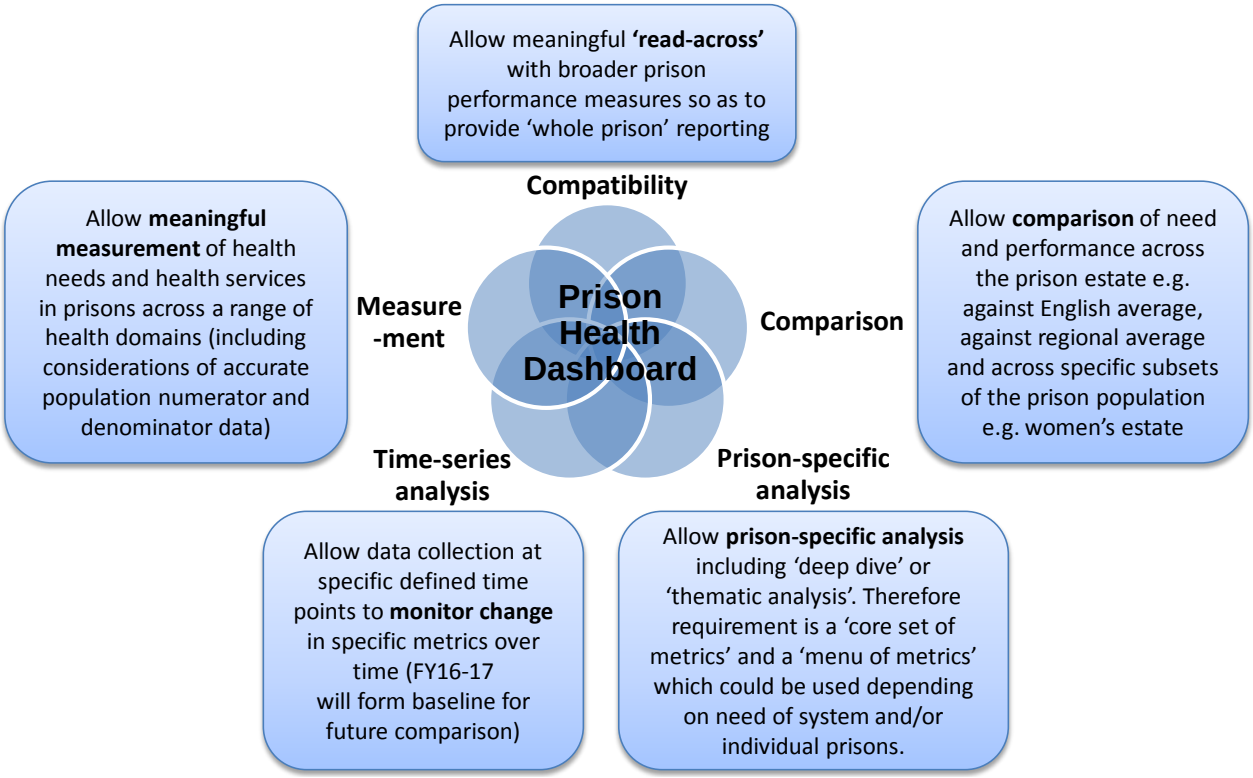
Consequent to the White Paper, these sources of prison health data, together with some of the others highlighted in this year's annual review, will help to gauge the impact of the prison reform programme on prisoner health and wellbeing. To this end, annual prison performance measures will be compiled that will be used to hold prison governors to account (currently under development by MoJ/ HMPPS). Included in the performance measures will be specific metrics related to the 'health progress' of prisoners which will initially evaluate drug positivity rates but expand to include other measures of physical and mental health improvement[1].

PHE Health and Justice prison health data, evidence and intelligence initiatives directly linked to prison reform agenda

Prison reform Health Data and Intelligence Work stream

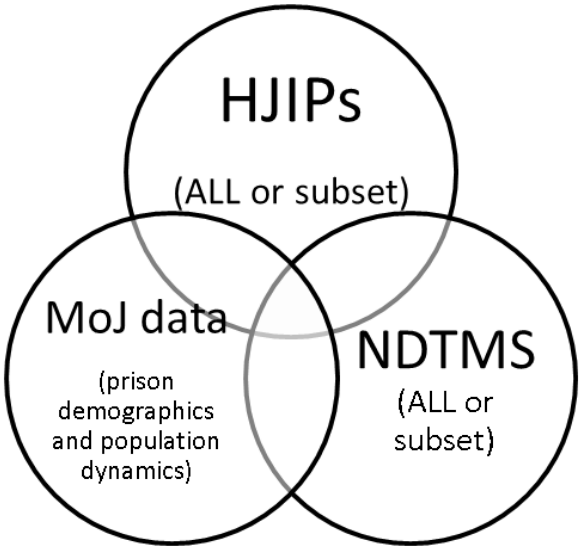
To support implementation of new ways of working in health as part of the wider prison reform agenda, PHE Health and Justice chaired a Health Data and Intelligence Work stream during the summer of 2016 which included representation from the MoJ, HMPPS, NHS England and other health and justice partners. Time was spent mapping, describing and assessing the 'state of readiness' of existing datasets and health informatics systems in order to construct a working prison health 'dashboard' which could be used to measure improvements in healthcare and health outcomes in the new commissioning model (Figure 3). The health dashboard would form just one component of the wider prison performance measures with meaningful 'read across' between the two datasets expected to provide a 'whole prison' report. This work would also help to inform wider aims led by the MoJ in improving transparency in all aspects of how prisons perform.

Figure 3: Capability requirements of new prison health 'dashboard'



The work stream identified three specific data sources (HJIPs, NDTMS and MoJ prison population data; Figure 4) currently in use which can provide detailed descriptions of prison populations; of health needs (including substance misuse and mental health) and how well health services provided meet those needs, and of changes over time. Comparisons within the datasets by prison category/location or against the 'English average' on specific metrics are currently possible and will improve over time as data quality improves.

Figure 4: Components of the prison health 'dashboard'. HJIPs= Health and Justice Indicators of Performance; NDTMS= National Drug Treatment Monitoring System; MoJ= Ministry of Justice. Also see Appendix for details of each dataset.



The datasets were chosen based on their shared functionality to extract specific data uniformly across all reporting prisons ('the dashboard') but also for supporting the possibility of 'thematic analyses' or 'deep dives' at individual prison or prison cluster level depending on needs and interests of the Prison Partnership Boards at local and regional level. Other datasets were identified (see Appendix for complete list) which are held at local level but due to variability in content, consistency and quality, they have been discounted as a source of data for use in a 'dashboard' function.

Cross-organisational Health and Justice Data, Evidence and Intelligence Group

The datasets identified by the Data and Intelligence Work stream for inclusion in the prison health 'dashboard' (see above) are all currently in use, so no new data or reporting requirements are necessary to populate the dashboard. However, in order for the dashboard to be useful, there is a need to group indicators into 'summative metrics' which will enable the visualisation of complex data in an accessible way thereby facilitating data analysis and interpretation at the local, regional and national levels.

To this end, the Health and Justice Data, Evidence and Intelligence Working Group was established in February 2017 to provide strategic leadership and oversight on cross-organisational work relating to information, intelligence and evidence needs. The working group, which is chaired by the PHE Health and Justice team, also consists of senior staff representing partner organisations such as NHS England, DH, MoJ, HMPPS, the Home Office and other PHE teams, and will work to support improvements in understanding the health needs and quality of health services delivered to people in prisons and other PPDs. At the national level, the Prison Healthcare Board for England[14] will review data prepared by the Working Group which will prepare and cascade reports to local/regional prison partnership boards.

It is envisaged that the prison health dashboard will be useful to a broad spectrum of stakeholders across health and justice for purposes that may include health needs assessment, health service evaluation, benchmarking and comparative analysis, as well as performance management. Discussions on accessibility of data will be led by the Working Group with consideration, in support of the transparency agenda inherent in the prison reform programme, for publication of the dashboard or a subset thereof as part of the prison performance measures.

'Rebalancing Act': tackling health inequalities and offending/reoffending behaviour in people in contact with the criminal justice system

Prisoner rehabilitation leading to improved health and offending outcomes lies at the heart of the White Paper on Prison Safety and Reform[1]. In many cases offenders will have healthcare needs that are linked directly or indirectly to their offending, and reducing healthcare inequalities in this population can go a long way to addressing reoffending

behaviour. Addressing health inequalities among detained populations may therefore address wider health inequalities and benefit not only those in prisons but wider society – this has been coined the 'community dividend'[18,19].

To this end, PHE Health and Justice, in partnership with the Revolving Doors Agency and the HO, coproduced a resource entitled Rebalancing Act[20], published in January 2017 in the House of Lords to help guide system leaders in improving health, reducing offending and health inequalities among people in contact with the CJS, as well as contributing to a wider community dividend through a collaborative place-based approach. Rebalancing Act builds on an earlier document, Balancing Act (2013)[21], and provides a 'call for action' to system leaders including directors of public health, police and crime commissioners and police leaders, at local, regional and national level.

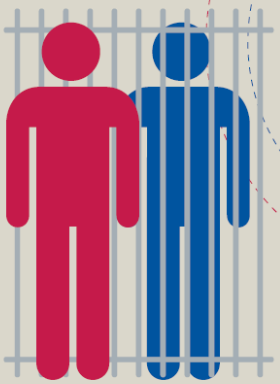
To support this action, the resource provides evidence of the health inequalities experienced by people in contact with the CJS (although much of the data is prison focused) and the association with these factors with offending, in particular the wider determinants of health – access to housing, employment as well as access to health services. It also sets out the case for investment and more effective use of existing resources, whether through joint or co-commissioning, pooled budgets, or simply more effective collaboration by building on existing local activities and utilising existing partnerships. The full report can be found here.

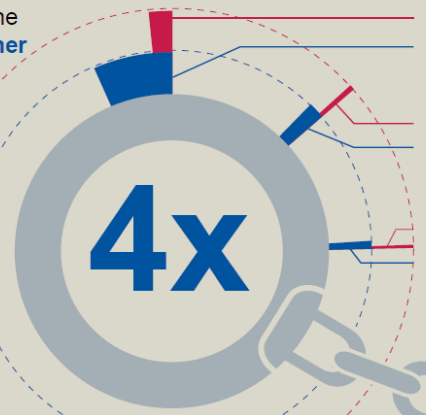
Key issues in prison health: 2016/17

Infectious Disease

People in prison live in close quarters and often come from vulnerable populations at higher risk of certain infections; this contributes to an increased risk of transmission of communicable disease in the prison setting

Infection with blood-borne viruses (BBV) is **4x higher** in prisons than in the general community





Hepatitis C antibody positivity[1]

community primary care services:	1.6%
prison health services:	6.7%

Hepatitis B prevalence[1,2]

UK general population:	0.3%
prison population:	1.3%

HIV prevalence[1,3]

UK general population:	0.16%
prison population:	0.6%

The TB incidence rate in prisoners (50 cases/100,000 population*) is **nearly five times** that for the general population in England (10.5 cases /100,000 population [4,5])

**assuming an annualised prison population of 100,000 people*

Notifiable infectious disease incidents reported to PHE Health & Justice Surveillance by Centre health protection teams from April 2016 to March 2017[5]

Infection	HMP	IRC	Other*
E. Coli 0157	1		
Food poisoning	2		
Hepatitis B (acute)	2		
Herpes zoster (shingles)	9		
Invasive group A streptococcus (iGAS)	2		
Legionnaires' disease	1		
Respiratory Syncytial Virus (RSV)	1		
Salmonellosis (Salmonella enterica)	4		
Staphylococcus aureus / PVL	6		1
TB (pulmonary / extrapulmonary)	35	15	
Varicella (chickenpox)	2	4	
Total	**65**	**19**	**1**

Outbreaks reported to PHE Health & Justice Surveillance by Centre health protection teams from April 2016 to March 2017[5]

Outbreak	HMP	IRC	Other*
D & V	13		3
Influenza	7	1	1
Measles	1		
Scabies	3		
Staphylococcus aureus / PVL	1		
Total	**25**	**1**	**4**

*Other = high security psychiatric hospital; secure training centre

[1] PHE Sentinel surveillance of blood borne testing in England: 2015.
[2] PHE Hepatitis B epidemiology in London: 2012 data. April 2014.
[3] PHE HIV in the UK: 2016 report. December 2016.
[4] PHE Tuberculosis in England 2016 report ver. 1.2 (presenting data to end of 2015). September 2016.
[5] PHE Health & Justice Surveillance: TB incidents reported between April 2016 to March 2017, inclusive

What is being done to tackle these issues?

1. Infectious disease surveillance

The Health and Justice team receive data on reportable diseases and outbreaks directly from health protection teams (HPTs) in PHE Centres. This surveillance activity is 'near to real time' and includes alerts for action co-ordinated across HMPPS (HM Prison and Probation Service), NHS England and PHE Centres (see 'PHE Health and Justice Surveillance' in Appendix).

Health and Justice also supports collaborative action across PHE and with partner organisations (NHS England) to improve monitoring of vaccine uptake in the prison estate:

57% uptake	Slightly more than half of at-risk prisoners were estimated to have received flu vaccine during the 16/17 flu season [1]

2. Provision of health protection guidance and expertise nationally

Working with the Health & Justice Health Protection Network, the team produce a broad range of detailed guidance on health protection issues including infection control manuals:

Multi-agency contingency plan for disease outbreaks in prisons (published January 2017)[2]

Tackling tuberculosis in under-served populations (published January 2017)[3]

Seasonal flu in prisons and detention centres in England: guidance for prison staff and healthcare professionals (published October 2016)[4]

Other national Health and Justice guidance for prescribed places of detention (PPDs)

3. Improving BBV testing and treatment referral

Since 2014, PHE Health and Justice has been supporting HMPPS and NHS England in the delivery of 'opt-out' testing for blood-borne viruses (BBVs) in all adult prisons in England.

The evaluation of phase two pathfinder prisons was published by PHE Health and Justice in October 2016[5] with phase three evaluation slated for completion in Q2 of the 2017/18 financial year.

Roughly **70%** of the prison estate in England was implementing BBV opt-out testing as of Q4 2016/17, with full implementation expected by the end of the 2017/18 financial year.

4. Improving proactive detection of active pulmonary TB and latent TB infection (LTBI)

PHE Health and Justice has been developing guidance to help prison healthcare teams improve active TB detection by using digital X-ray (DXR) machines or other clinical means where DXRs are not available (publication slated by end of 2017/18).

PHE Health and Justice chairs a Task & Finish Group, with representation from HMPPS and NHS England, which aims to improve active case finding for LTBI in **foreign national prisoners.** Implementation of a LTBI screening pilot is expected to get underway in a small cohort of pathfinder prisons in 2017/18.

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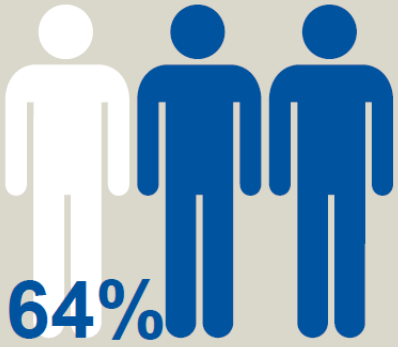
[1] PHE Health and Justice monitoring of flu-vaccine uptake in nine English prisons (January to March 2017)
[2] https://www.gov.uk/government/publications/multi-agency-contingency-plan-for-disease-outbreaks-in-prisons
[3] https://www.gov.uk/government/publications/tackling-tuberculosis-in-under-served-populations
[4] https://www.gov.uk/government/publications/seasonal-flu-in-prisons-and-detention-centres-in-england-guidance-for-prison-staff-and-healthcare-professionals
[5] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/560863/BBV_bulletin_October_2016.pdf

Substance Misuse

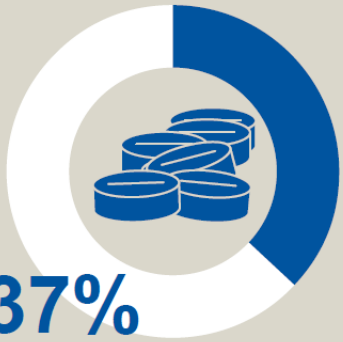
The high burden of substance misuse among prisoners necessitates innovative approaches to prevention and harm-reduction

Burden of illicit drug use among prisoners:



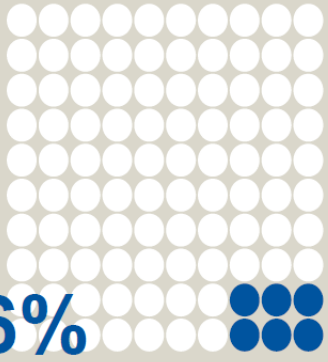
64%

Almost two-thirds of adult prisoners said they used illicit drugs within the month before entering prison[1]



37%

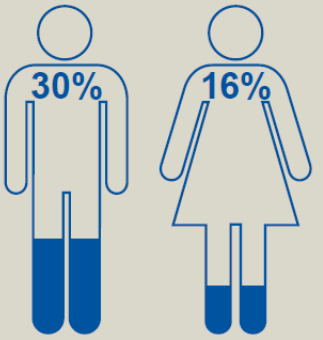
More than a third of male prisoners said drugs were easily obtainable in prison[2]



6%

Proportion of prisoners in treatment who cited New Psychoactive Substances (NPS) as one of their problem substances[6]

Burden of alcohol misuse among prisoners:

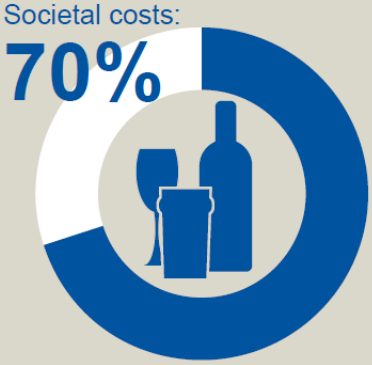


30% of men and 16% of women said they had a problem with alcohol upon arrival to prison[2]

21%

More than a fifth of male prisoners said alcohol was easily obtainable in prison[2]

Societal costs:



70%

More than two-thirds of prisoners admitted to having been drinking when committing the offence for which they were imprisoned[4]

Personal costs:

Men, and particularly women, are more likely to die of drug-related causes in the first week following release from prison than those in the general population[5]

28x **69x**

£15billion

Societal cost of illicit class A drug use in England and Wales[3]

[1] Light et al., 2013. Gender differences in substance misuse and mental health amongst prisoners: Results from the Surveying Prisoner Crime Reduction (SPCR) longitudinal cohort study of prisoners.
[2] HM Chief Inspector of Prisons for England and Wales: Annual Report 2015–16 (2016).
[3] Home Office: https://www.gov.uk/government/publications/financial-cost-of-acquisitive-crime-caused-by-class-a-drug-users-in-the-uk
[4] Alcohol & Crime Commission Report (2014). https://www.thersa.org/globalassets/pdfs/blogs/alcohol___crime_commission_report_1.pdf
[5] Farrell and Marsden, 2009. Acute risk of drug-related death among newly released prisoners in England and Wales. Addiction.
[6] Secure setting statistics from the National Drug Treatment Monitoring System (NDTMS):1 April 2015 to 31 March 2016 (2017).

What is being done to tackle this issue?

1.) Integrated Drug Treatment System (IDTS) in prisons:

- aims to increase the volume and quality of substance misuse treatment available to prisoners
- provides continuity of care in drug misuse treatment services upon transition into the community

Interventions (2015-16):

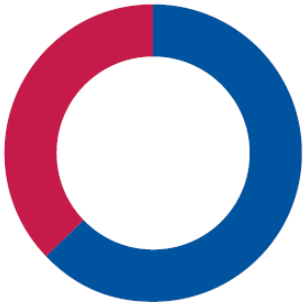
59,927

Number of adults in contact with drug and alcohol treatment services within prisons in England during 2015-16[6]

About half presented with problematic use of opiates[6]

Over a third presented with problems with other drugs (non-opiates)[6]

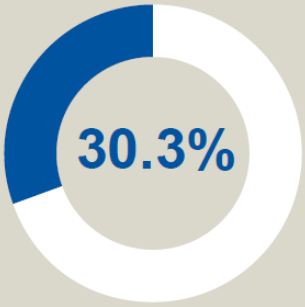
Nearly one in seven presented with alcohol as their only problem substance[6]



Almost two-thirds of treatment interventions received by adults were structured **psychosocial interventions**; one-third were **pharmacological interventions**[6]

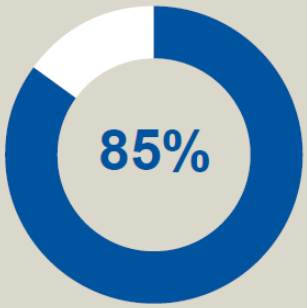
Almost a quarter of patients in prison were discharged as having completed treatment[6]

2.) Continuity of care (via IDTS):



Proportion of adult prisoners in need of treatment following release who were successfully engaged in community-based treatment within 21 days[7]

3.) Opiod Substitution Therapy (OST)



Reduction in fatal drug-related poisoning in the first month after release in people on prison-based OST[8]

4.) Guidance:

New Psychoactive Substances (NPS) in prisons: A toolkit for prison staff[9]

NICE Clinical Guidance:

- Drug misuse in over 16s: opioid detoxification (CG52)[10]
- Drug misuse in over 16s: psychosocial interventions (CG51)[11]

5.) Research:

Alcohol Reconvictions Study:

Aims to determine whether alcohol treatment interventions are effective in supporting the management of individuals whose offending is alcohol-related and reducing their propensity to reoffend.

Slated for completion in 2017/18 by PHE's Alcohol, Drugs and Tobacco team.

Data/evidence (see Appendix)

People receiving specialist treatment interventions for drugs and alcohol misuse in prisons

National Drug Treatment Monitoring Service (NDTMS)[12]

[6] Secure setting statistics from the National Drug Treatment Monitoring System (NDTMS):1 April 2015 to 31 March 2016 (2017).
[7] Public Health Outcomes Framework (PHOF), indicator 2.16 (2015-16): http://www.phoutcomes.info/
[8] Marsden et al., 2017. Does exposure to opioid substitution treatment in prison reduce the risk of death after release? A national prospective observational study in England. Addiction.
[9] http://www.nta.nhs.uk/uploads/new-psychoactive-substances-in-prisons%5b0%5d.pdf
[10] https://www.nice.org.uk/guidance/cg52
[11] https://www.nice.org.uk/guidance/cg51
[12] https://www.ndtms.net/default.aspx

Older prisoners

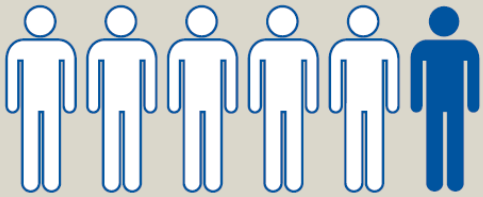
The increasing number of older people in prison along with an increase in deaths associated with natural causes highlights the challenge of detection and management of disease in a pre-morbid state in this setting.

Rapidly increasing older prisoner population:

117% 50-59 years

167% 60+ years

Older people are the fastest growing age demographic in prisons and the only group to more than double in size over the last decade.[1]



Older people now comprise more than 1/6 of the prison population in England and Wales.[1]

Increasing mortality in prisons vs. other custodial settings and the general population:

66% increase in prisons

21% decrease in all custodial settings

There has been a substantial increase in prison deaths, year-on-year, despite an overall decrease in deaths in other custodial settings over the past 15 years to 2014[2]

1.7x

The likelihood of prison mortality (from any cause) is nearly two times greater than in the general population[6]

53%

More than half of all deaths occur in older prisoners (50+ years old)[3]

55%

Over half of prisoner deaths can be attributed to natural causes[4]

Deaths per 1,000 prisoners	March 08	March 17
All causes	2.3	4.0
Natural causes	1.2	2.3

Death rate from natural causes has nearly doubled in prisons over the last decade[5]

Prevalence and morbidity of chronic physical conditions is estimated to be high in prisoners:

Most prevalent physical health conditions in prisoners worldwide[7]:

34% Cardiovascular disease

24% Musculoskeletal

15% Respiratory

CVD risk factors are also very prevalent in prisoners[7]:
hypertension | smoking | physical inactivity | obesity

1 MoJ Offender Management Statistics. Prison population, 31 March 2017: Table 1.3, and; Prison population 2015: Table A1.6.
2 Deaths in State Custody: An examination of the cases 2000 to 2014. Independent Advisory Panel on Deaths in Custody. December 2015.
3 MoJ Safety in Custody Statistics. Deaths in prison custody 1978 to 2016: Table 1.3.
4 MoJ Safety in Custody Statistics. Deaths in prison custody 1978 to 2016: Table 1.1.
5 MoJ Safety in Custody Statistics. Safety in custody summary tables to September 2016: Table 2.
6 MoJ Safety in custody statistics quarterly bulletin: September 2016.
7 Aries and Maposa. J Forensic Nurs. 2013 Jan-Mar;9(1):52-64.

What is being done to tackle these issues?

1. The Physical Health Checks in Prison programme

This programme is an extension of the community 'NHS Health Checks Programme'[6] to the prison population. Its implementation across the prison estate is being supported by PHE Health and Justice and other key partners as a means to systematically target the top seven causes of premature mortality in this 'underserved' population:

- high blood pressure, smoking, cholesterol, obesity, poor diet, physical inactivity and alcohol consumption

Eligibility criteria:

- prisoners aged between 35 years and 74 years
- prisoners likely to be incarcerated for at least two years or more
- have not received an NHS health check in the community in the previous five years
- exclusion of certain pre-existing medical conditions (coronary heart disease, chronic kidney disease, diabetes, hypertension, atrial fibrillation, transient ischaemic attack, familial hypercholesterolaemia, heart failure, peripheral arterial disease, stroke)

Coverage should be offered to 100% of the eligible population every 5 years with an uptake level of 75%.

Platform includes a 20-30 minute face to face consultation and standard risk assessment and referral to interventions to improve physical activity and diet.

2. Addressing the Health and Social Care Needs of older prisoners:

Older prisoners have more major illnesses and functional impairments than younger prisoners and people of a similar age in the community. In 2017/18, PHE Health and Justice will produce a toolkit to facilitate the process of undertaking health and social care needs assessments of older prisoners.

Further, in collaboration with partner organisations, PHE have developed national pathways[7] for delivering disease screening programmes in prison. These programmes are predominantly targeted at those aged over 50 and aim to reduce morbidity and mortality from the following diseases

- bowel cancer, breast cancer, cervical cancer, abdominal aortic aneurysms, diabetic retinopathy

2016/17 has seen a continuation of the joint working to ensure implementation of these pathways. The aim of this work is to ensure that all eligible prisoners are offered screening in a manner equivalent to that of the community peers, and thus ensure morbality and morbidity from these diseases is reduced as far as possible

[6] NHS Health Check: http://www.healthcheck.nhs.uk/
[7] https://www.gov.uk/topic/population-screening-programmes

Data/evidence: (refer to Appendix for details):

Prison population:
Ministry of Justice (MoJ) Prison Population Data

Physical health checks in Prison programme:
Health and Justice Indicators of Performance (HJIPs)

Prevalence of disease in prisoners:
To date, there is little clear evidence of the prevalence of chronic disease among people in prison in England however national guidelines on the physical health of this population are available from NICE[8].

Other publications:

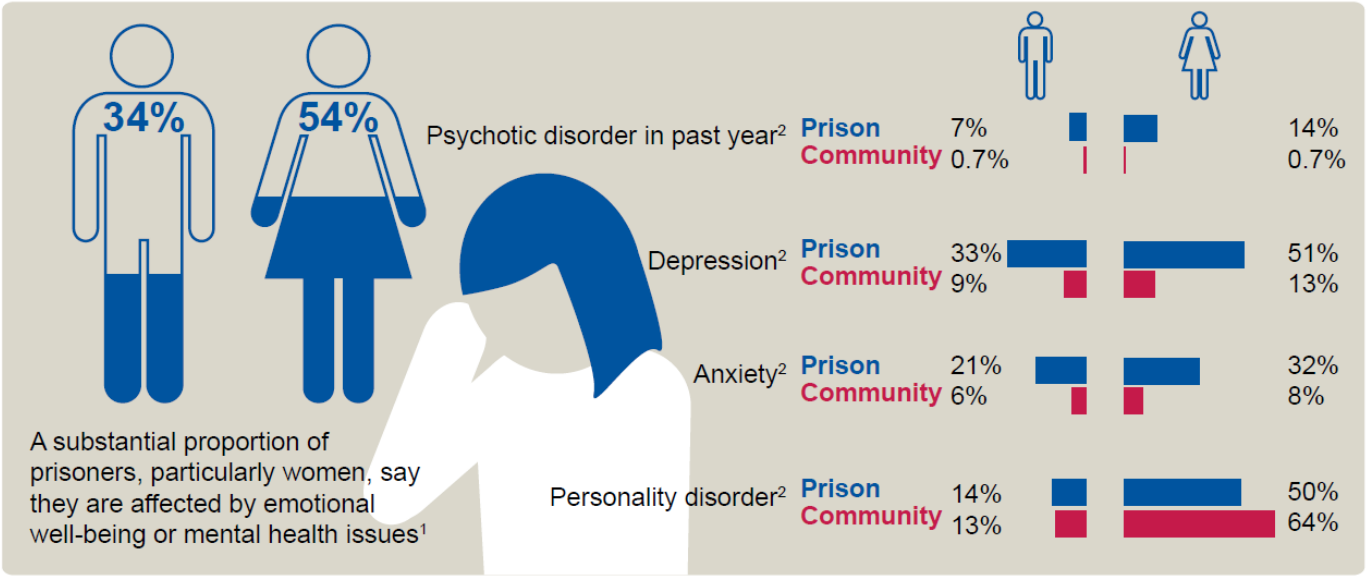
Healthcare issues of detainees in police custody in London, UK. Payne-James et al., 2010. J Forensic Leg Med.[9]

Prevalence of chronic non-cancer pain in a UK prison environment. Croft and Mayhew, 2015. Br J Pain. [10]

[8] Physical health of people in prison. NICE guideline [NG57]. Published date: November 2016.
[9] https://www.ncbi.nlm.nih.gov/pubmed/20083045
[10] https://www.ncbi.nlm.nih.gov/pubmed/20083045

Mental Health

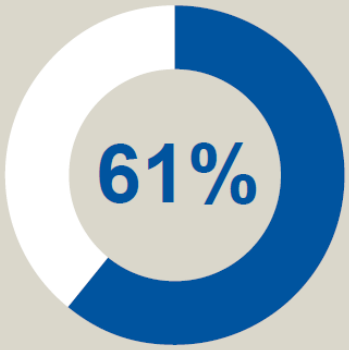
Prisoners suffer from multiple and complex mental health issues at rates in excess of those observed in the general population



Policy in brief - Mental Health Act:

Not all people who come into contact with the CJS and require support with their mental health have committed a criminal offence. Police officers can be called to a scene where there are concerns for a person's safety. Sections 135 and 136 of the Mental Health Act (1983)[3] empower the police to detain an individual in need of immediate care and control, and take them to a place of safety for an assessment under the Act.

Delay in the transfer of prisoners to secure hospitals under the Mental Health Act:

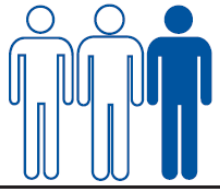


Nearly two-thirds of prisoners in England with acute mental health needs wait longer than the recommended 14 days to be transferred to a secure hospital.[4]

Personal cost of mental ill-health: in attempting to reduce self-inflicted deaths, the mental health of those in prison needs to be considered…

100% increase since 2011

Self-inflicted deaths in prison have never been higher (by absolute numbers) and have doubled since 2011.[5]



In 2016 more than a third of all prison deaths in England and Wales were self-inflicted.[4]

40,161

incidents in 2016

Annual self-harm incidents have increased by nearly two-thirds since 2011.[6]

26,022

assaults in 2016

Annual assaults in prison have increased by more than two-thirds since 2011.[7]

[1] HM Chief Inspector of Prisons for England and Wales Annual Report 2015–16. July 2016.
[2] Rebalancing Act. Revolving Doors Agency, 2016. http://www.revolving-doors.org.uk/blog/rebalancing-act
[3] http://www.legislation.gov.uk/ukpga/1983/20/contents
[4] Health and Justice Indicators of Performance (HJIPs): Mental health secure transfer days. NHS England, Q3 data; 2016/17.
[5] MoJ Safety in Custody Statistics. Deaths in prison custody 1978 to 2016: Table 1.1.
[6] MoJ Safety in Custody Statistics. Self-harm and assaults to December 2016: Table 3.
[7] MoJ Safety in Custody Statistics. Self-harm and assaults to December 2016: Table 4.

What is being done to tackle these issues?

1. The Health and Justice team supported work towards the recent National Audit Office (NAO) Report on Mental Health in Prisons[11] which called for**:**

- improving stakeholder understanding of mental health needs in prisons
- underpinning contracts for mental health services with appropriate performance management mechanisms
- ensuring effective information sharing between health, prison and probation staff
- reviewing the process for transferring prisoners to hospital
- addressing the rising rates of suicide and self-harm in prisons, as a matter of urgency

2. Embedding health and justice priorities within the scope of mainstream national work programmes on mental health, suicide and self-harm

In the 2016/17 financial year, PHE Health and Justice supported the inclusion of custodial settings within the scope of several national work programmes including:

- NICE Public Health Guidance (in development): Preventing suicide in community and custodial settings [GID-PHG95][12]. Expected publication date: September 2018
- Independent Advisory Panel on Deaths in Custody (IAPD) work into deaths of women in prison[13]
- Mental Health Joint Strategic Needs Assessment Toolkit Knowledge Guide (PHE, in progress)

3. Implementation of the Suicide and Self-Harm Programme (SASH) in custodial settings

In 2016/17, PHE Health and Justice supported the Ministry of Justice (MoJ) and HMPPS on the SASH programme, which aims to reduce levels of suicide and self-harm within prisons by:

- implementing evidence-based practice in prisons to improve identification and assessment of mental health needs among new and existing prisoners
- improving staff training on mental health issues (including custodial staff)
- considering the specific needs of vulnerable groups within prison populations (eg women, young people)
- improving the physical prison environment
- increasing activities associated with positive mental health (in prisons this relates to prisoners' 'time out of cell in purposeful activity').

4.) **Development of an Integrated Mental Health Care Pathway:**

As part of recommendations set forth by NHS England's Mental Health Taskforce in its Five Year Forward View for Mental Health[14], PHE's Health & Justice team is supporting work to develop a complete health and justice care pathway that most adequately delivers "integrated health and justice interventions" to those in the criminal justice system (also see PHE Health and Justice annual review 2015/16[15]).

[11] https://www.ncbi.nlm.nih.gov/pubmed/20083045
[12] https://www.nice.org.uk/guidance/indevelopment/gid-phg95
[13] https://www.ncbi.nlm.nih.gov/pubmed/20083045
[14] https://www.ncbi.nlm.nih.gov/pubmed/20083045
[15] https://www.ncbi.nlm.nih.gov/pubmed/20083045

Data/evidence: (see Appendix for further details)

Incidence of self-harm, suicide and assault in Prison:
Ministry of Justice (MoJ) Safety in Custody Statistics

Mental healthcare in Prison:
Health and Justice Indicators of Performance (HJIPs):

- therapy received; assessment provided; transfer into secure hospital (and waiting times)

International Engagement

PHE holds the status of being a UK Collaborating Centre for the WHO Health in Prisons Programme. The focus of the Collaborating Centre is to support the international exchange of experience, expert advice and promote innovation in addressing health and healthcare challenges facing prisoners and prisons, including the development of prison health systems and their links with public health systems and technical public health expertise on public health programmes in prisons.

As supporters of the UN Sustainable Development Goals, PHE's work on Health and Justice contributes directly to Goal 10, reducing health inequalities within and among countries; the National Health and Justice team's mission statement is to work in partnership to understand and meet the health & social care needs of people in contact with the criminal justice system in order to improve health, and reduce health inequalities. In the team's role as a UK Collaborating Centre to the WHO Health in Prisons Programme, we have been able to examine and address health inequalities for people in prison across countries, supporting and leading work on developing international prison health datasets to further understand these differences and building an international prison health research network to develop capacity and capability.

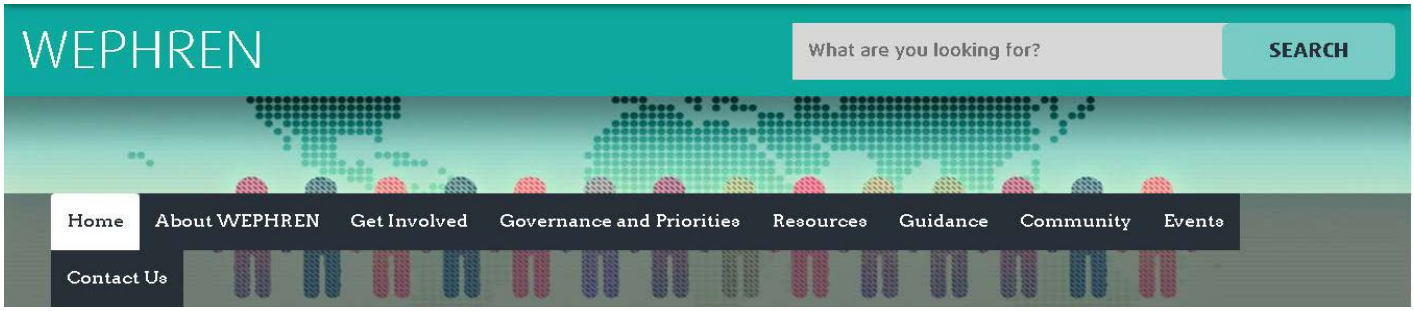
There is a lack of comprehensive, consistent and reliable public health data on prison populations and their health needs across the WHO European Region. Robust public health data could help identify gaps in healthcare provision, influence public health policy and lead to more efficient targeting of public health expenditure across Europe. The Health and Justice team has been working with partners throughout Europe and around the world to address these issues through initiatives such as the minimum public health dataset for prisons and WEPHREN.

Minimum Public Health Dataset for Prisons in the WHO Europe Region:

- will enable formal collection of data on agreed indicators and metrics at national level consistently across the WHO European Region for the first time
- database will be compiled from data reported at national level only
- more than 80 indicators included under the headings of: prison population; prison health systems (such as financing and governance); the prison environment; risk factors for diseases; and the screening, prevention, treatment and prevalence of communicable and non-communicable diseases
- country profiles will summarise relevant data for each member state
- will enable evaluation of the quality of care provided in prisons and an understanding of how this varies between member states

Partners include:

1.) Worldwide Prison Health Research Engagement Network (WEPHREN)



- network of academic institutions, policy makers, practitioners and public health organisations
- enables academic collaboration between institutions supporting prison health research programmes:

WEPHREN will provide:

- a means of disseminating important research findings across the region
- a platform for developing the skills of health professionals and researchers with
- an interest in prisoners across all countries in the region thus promoting interest
- in prison health as a professional discipline
- a vehicle to drive development of effective collaborative networks within
- member states
- global leadership in prison research

Data/evidence available: Global prison statistics:
WHO Prisons and Health Guide[16]
World Prison Brief[17]
Council of Europe Annual Penal statistics[18]

[16] https://www.ncbi.nlm.nih.gov/pubmed/20083045
[17] https://www.ncbi.nlm.nih.gov/pubmed/20083045
[18] https://www.ncbi.nlm.nih.gov/pubmed/20083045

Conclusions and looking forward

The past year has seen many challenges to delivering healthcare in prisons (summarised in Chapter 2) complicated by significant changes announced in the recent White Paper on Prison Safety and Reform. The new commissioning framework introduces new ways of working between prison governors, health service commissioners and providers and will enable a more cohesive understanding of the total requirements to deliver effective health and mental health care services, including better coordination between custodial and healthcare staff in supporting service delivery and improving patient linkage into care. PHE has also been working closely with NHS England and HMPPS to help improve understanding of the 'whole prison approach' to improving health and wellbeing.

However, the successful implementation of the reform agenda will also depend on the availability of readily accessible, robust and reliable prison health data capable of measuring improvements in healthcare and health outcomes in the new commissioning landscape. Many existing prison health indicators, as highlighted throughout this report, are already available, and work undertaken by the prison reform health data and intelligence work stream has identified a putative 'dashboard' of prison health indicators that will borrow from a subset of NDTMS data, the HJIPs data clustered into domains for ease of use, and population demographics from the MoJ statistical dataset. Local data may also be included in a 'menu of options' for local determination. Comparisons within the datasets by prison category/location or against the 'English average' on specific metrics are currently possible and will develop over time as data quality improves.

Steps towards assuring robust and accessible prison health data

Continual quality improvement will be imperative to ensure the robustness of prison health data as healthcare provision continues to evolve across the prison estate. To this end, the PHE Health and Justice team has been supporting collaborative action across the agency and with partner organisations to improve data collection, collation and analysis. Initiatives such as the multi-organisational prison health data, evidence and intelligence working group, which PHE Health and Justice chairs, will routinely map and assess the utility of new and existing data assets related to the health of people in contact with the CJS. The group will also act to disseminate this data to stakeholders at all levels of government thereby facilitating the development of system level metrics capable of tracking changes in prison health outcomes over time.

This initiative has also enabled some collaborative work across data asset owners in collaborating organisations (ie MoJ, NHS England, PHE) to improve data quality as well as support appropriate analysis and interpretation of data, including facilitating

meaningful comparisons and cohort analyses, for example, looking at the needs of women prisoners or older prisoners across the whole estate. This has progressed mutual understanding of the value and limitations of health data as well as how prison regime issues impact on health, particularly how collection of meaningful measurement of time out of cell in purposeful activity could be used as a 'meta-metric' for the health and wellbeing of the prison and its population.

PHE Health and Justice has also been very active in supporting NHS England colleagues in improving the data quality of the HJIPs - the primary resource for gathering data on performance of health services in prisons. The main challenge to date has been ensuring that robust healthcare data is returned by prison healthcare providers which consistently meets the quality standards required by NHS England. To this end, work has been undertaken in the last financial year to streamline the reporting templates used by providers for collecting healthcare data from the prison health informatics system – SystmOne. Measures have also been taken to ensure that proper READ codes are consistently used by providers so as to minimise heterogeneity in data returns across the estate.

Some of these issues will be addressed with the rollout of the next generation prison healthcare informatics platform – HJIS. The platform is expected to improve data robustness through its automated data extraction capabilities and also facilitate patient continuity of care through data sharing functionality between prison and community healthcare services. HJIS is being developed by NHS England in partnership with PHE and HMPPS and implementation of the platform is slated for 2017/18 (see 'HJIS' in Appendix).

While the UK remains a leader in prison health research and evidence dissemination in the world, there still remains a dearth of quality and accessible evidence for some prison health metrics both domestically and abroad. In its recent assessment of the state of mental health in prisons[22], for example, the National Audit Office noted that the "…Government doesn't collect enough, or good enough data…" to fully understand the scope of the problem. In light of this, and in support of the transparency agenda inherent in the prison reform programme, the prison health data, evidence and intelligence workgroup aims to regularly publish the prison health 'dashboard' or a subset thereof as part of the prison performance measures arising from the reform agenda. Moreover, PHE Health and Justice has been taking steps to foment collaborative research on health in prisons and its broad dissemination through initiatives such as the WHO minimum public health dataset and the recently launched WEPHREN [3]. Such measures will go a long way to foster greater collaboration from health and justice stakeholders around the globe and, as a corollary, improve the pool of quality prison health information available.

Appendix

Health and Justice Indicators of Performance (HJIPs) [NHS England Data Asset]		
Overview Health outcomes indicator set co-developed by NHS England, NOMS and PHE which replaces the Prison Health Performance Quality Indicators (PHPQIs) since April 2014. Key functions include: • Supporting effective commissioning of healthcare services; • Enabling national and local monitoring of the quality and performance of healthcare; • Providing data for local health needs assessments (HNAs); • Supporting public health action, informing policy makers and providing information from inspectorates e.g. Care Quality Commission (CQC) & HM Inspector of Prisons (HMIP). **Primary data source** SystmOne Offender Health informatics system and associated standard templates and READ codes	**Reporting schedule** Healthcare providers collect data on a monthly basis which is submitted quarterly via a data collection template. Where indicators are not quantifiable in nature, NHS England Health & Justice Teams audit these via the Local Delivery Groups (LDGs). **Data reported** Cancer & non-cancer screening; infectious diseases testing & treatment (incl. BBVs. TB, STIs etc.); vaccine coverage; management of long-term conditions; mental health & suicide; alcohol & drug treatment; dental health; smoking behaviour; medicines management; infection control practice, and service user involvement. **Website / output** HJIPs data is not made publically available.	**Strengths** • Regular reporting intervals allow for timely in-year assessment of health needs; • Enables comparison with other prisons locally, regionally and nationally on all or some metrics of interest. • Enables comparison with community on specific health metrics (QOF); • Enables assessment of continuity of care for some health needs. **Limitations** • Ongoing issues with data completeness and quality due to inconsistent and/or incomplete use of templates and READ codes; • Limited utility for qualitative data; • Large complex dataset with multiple metrics **Interdependencies / complementarity** • SystmOne • Complementarity with NDTMS, QOF, HNAs.

Health and Justice Information Service (HJIS) [NHS England Data System]

Overview

HJIS refers to the next generation of the SystmOne Offender Health module, a healthcare informatics system that supports healthcare provision in custodial settings. Following its full implementation, HJIS is expected to improve data robustness through automated data collection capabilities and facilitate continuity of care through the prison estate and upon release. SystmOne modules share patient data/records across different settings (e.g. Acute care, Community etc.); currently, there is only limited offender data sharing outside the prison domain:

- Real time data sharing between prisons
- With patient consent – data recorded in other healthcare settings can be seen on the prison record;

Primary data source

Patient healthcare interactions recorded via SystmOne Offender Health module

Reporting schedule

No scheduled reporting takes place from HJIS itself – although templates are used to derive data to inform HJIP data capture and other needs.

Data reported

Same as HJIP data capture dataset (see HJIP) - submission deadline is circa 20 days after the end of the financial quarter.

Website / output

More information about the various SystmOne modules can be found at the following website: http://www.tpp-uk.com/products/systmone/modules

Strengths

- Functionality of HJIS is very similar to other SystmOne modules
- Prison to prison transfer fully supported by access to the same prison record – enabling continuity of care upon transfer between prisons
- High level of interoperability with community systems, enabling higher levels of assurance regarding continuity of care upon release (Prison record sharing to be enabled [subject to IG compliance] as part of the HJIS roll out)
- Full QOF outcomes export functionality enabled

Limitations

- Current manual data extraction protocol is cumbersome and error-prone (HJIS will automate process)
- Currently no capability to capture qualitative data to support commissioning decision making or inform improvement initiatives
- Currently the system does not share data with other SystmOne modules (e.g. Community/GP) – this is to be implemented in the future

Interdependencies / complementarity

- SystmOne
- Complementarity with NDTMS, QOF, HNAs.

National Drug Treatment Monitoring Service (NDTMS) [PHE Data Asset]

Overview

National data collection system on individuals receiving structured substance misuse (SM) treatment in the community and in custodial settings. NDTMS facilitates national and local monitoring of SM treatment services, including performance, need, throughputs and outcomes.

Primary data source

- The NDTMS Data Entry Tool (DET) or local case management systems.
- Two prisons submit extracts to NDTMS through SystmOne.

Reporting schedule

- Data is submitted by providers monthly
- Reports are produced quarterly and annually

Data reported

Numbers in treatment for opiate/non-opiate drugs and alcohol, interventions delivered, treatment completions and outcomes, client demographics, continuity of care between secure settings and between secure setting and the community.

Website / output

https://www.ndtms.net/default.aspx
Community level data is available to the public but access to prison level data requires administrator authorisation.
The first set of annual national statistics on SM treatment in secure settings will be available by the end of 2016.

Strengths

- Full coverage of SM treatment services across the adult prison estate;
- 'Regional' NDTMS centres support and work closely with providers to achieve full coverage and a high level of data quality;
- Supports commissioning and performance management and informs policy makers;
- Enables comparisons between similar prisons, regions & against national figures;
- Enables an assessment to be made on the continuity of care between services based in secure settings and services in the community.

Limitations

Matching between prison NDTMS and community NDTMS data (e.g. to report on continuity of care) can be affected by inconsistent reporting in client identifiers between the two settings.

Interdependencies / complementarity

There is a history of matching NDTMS data with other databases e.g. MoJ data sets (PNC, P-NOMIS)

Ministry of Justice (MoJ) Prison Population Data [MoJ Data Asset]

Overview

A data collection managed by NOMS and used by MoJ and NOMS primarily for the following purposes:

- Publication of National Statistics on the prison population;
- Prison estate capacity management;
- Prison population projections;
- Management information;
- Further data analysis to inform policy making.

Primary data source

p-NOMIS – Prison National Offender Management Information System – online data collection system used by prisons in England and Wales for the management of offenders.

Reporting schedule

- MoJ receives daily snapshots of the overall prison population for internal reporting (total number of offenders in prison broken down by gender only).
- MoJ also receives weekly (as of each Friday) extracts from NOMS. These are used to produce management information.
- A monthly extract (as of the last day of each month) is also received from NOMS. This extract is cleaned and used in National Statistics which provide detailed information on the prison population and is published quarterly (as at 31 March, 30 June, 31 October and 31 December). Headline numbers are published for the interim months.

Data reported

Detainee custody type (i.e. remand or sentenced), sentence length, offence group, gender, age, ethnicity, religion, nationality, establishment breakdowns, social care received, type of estate (male, female, IRCs and youths) and indeterminate prisoners by tariff length.

Website / output

Publically available reports and statistics can be found at:
https://www.gov.uk/government/collections/offender-management-statistics-quarterly

Strengths

- Detailed information covering a broad range of prisoner characteristics and offence information;
- Regular reporting intervals and timely information;
- Data published at establishment level for some metrics to allow for comparisons between prisons;
- A lengthy time series is available;
- Data is of a high quality.

Limitations

- Change in data source in 2009 meaning population figures are not directly comparable;
- Large complex dataset.
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Interdependencies / complementarity

MoJ are dependent on NOMS to run and provide the data extracts.

Public Health Outcomes Framework (PHOF) [PHE Data Asset]

Overview

Collection of public health outcomes indicators, at national and local level. The indicators cover the full spectrum of public health (i.e. healthy life expectancy, determinants of health, health improvement, health protection, healthcare public health) with several indicators being of particular relevance to people in contact with the criminal justice system(CJS) (see 'Data reported').

Primary data source

The data source for each indicator is set out within the technical specifications published in the 'Public Health Outcomes Framework Part 2' document and in the definitions tab: https://www.gov.uk/government/publications/healthy-lives-healthy-people-improving-outcomes-and-supporting-transparency

Reporting schedule

Data are published as part of a quarterly update cycle in August, November, February and May.

Data reported

Indicators explicitly related to offenders:
1.04 - First time entrants to the youth justice system
1.12 - Violent crime (including sexual violence) (1.12i-iii)
1.13i-ii - Re-offending levels - percentage of offenders who re-offend
1.13iii - First time offenders
1.07 - Proportion of people in prison aged 18 or over who have a mental illness

Indicators related to people in contact with the CJS:
1.11 - Domestic abuse
2.10 - Self-harm
2.15 - Successful completion of drug treatment
2.16 - Adults with substance misuse treatment need who successfully engage in community-based structured treatment following release from prison
2.18 - Alcohol related admissions to hospital
4.9 - Excess under 75 mortality rate in adults with serious mental illness
4.10 - Suicide rate

Website / output

http://www.phoutcomes.info/

Strengths

- Good balance of public health indicators across all domains
- Trend modelling capabilities
- Enable local authorities to benchmark and compare their own outcomes with other local authorities.

Limitations

- Prison-level data for each indicator is not available – only regional profiles

Interdependencies / complementarity

Some sharing and complementarity of indicator data with:

- NHS Outcomes Framework
- Adult Social Care Outcomes Framework
- NDTMS (substance misuse)

Health Needs Assessment (HNA) [NHS England/PHE/NOMS Data Asset]

Overview

A systematic means of gathering information to meet the changing needs of the population in prescribed places of detention (PPDs). A toolkit has been produced by the Health & Justice PPDs HNA Working Group with representation from PHE, NHS England, NOMS, YJB and Public Health Wales. The Health & Justice HNA toolkit provides a consistent approach for producing a HNA, which can inform regional or national views of need across places of detention.

Primary data source

Three general approaches of data collection can be applied (Marshall et al, 2001):

- Corporate: canvas stakeholders or experts to determine their views on healthcare needs
- Comparative: comparison of local services with other providers
- Epidemiological: quantitative consideration of the incidence and prevalence of health problems

Reporting schedule

As required

Data reported

PPD population demographics (gender, age, sentence length, ethnicity,…); physical health problems (epilepsy, asthma, diabetes, infectious diseases, cardiovascular disease, oral health); mental disorders (personality disorders, psychoses, neurotic behaviour,…); substance misuse (alcohol dependency, drug misuse,…); occupational regime; social support

Website / output

Parts 1 and 2 of the Health & Justice HNA Toolkit for PPDs which describes the template for HNA for adult prisons and the second template for police custody can be found at the following link: https://www.gov.uk/government/publications/prescribed-places-of-detention-health-needs-assessment-toolkit

Templates supporting the creation of health and wellbeing needs assessments for CYPSE for ages 10 to 17 year olds are available on the Child and Maternal Health Intelligence Network (CHIMAT) website.

Strengths

- Provides the opportunity to include the 'patient voice' in planning initiatives
- Provides an assessment of the health status of the population in PPDs
- Highlights areas of unmet need

Limitations

- May be difficult to translate findings into action
- Access to relevant data may be limited

Interdependencies / complementarity

PHE Health & Justice Surveillance System [PHE Data Asset]

Overview

The surveillance system gathers evidence and intelligence to improve the health of people in prisons and other PPDs. This includes:

- data to support HNAs
- HJIPs
- MMR and seasonal flu vaccine coverage

Primary data source

The surveillance team works closely with the national Health & Justice (Health Protection) Network to receive reports of communicable diseases and develop national guidance for stakeholders within the field. The Network collects reports of infectious diseases throughout the estate.

Reporting schedule

Weekly surveillance report issued to Health & Justice Network.

Data reported

Notifications of reportable diseases/outbreaks and near-to real-time surveillance of outbreaks:

- Acute respiratory infections
- Gastrointestinal infections
- Unexplained skin rashes

Website / output

The H&J Network has published a range of materials to support stakeholders in health protection

Strengths

- Provides real-time surveillance of infectious diseases in prisons
- Allows national and regional comparisons to be made
- Supports wider national disease surveillance systems

Limitations

- As collected in real-time, data may not always be complete – data triangulation suggested
- Relies on vigilance of Health Protection Teams
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Interdependencies / complementarity

Relies on vigilance of Health Protection Teams
Complementarity with other surveillance sources including:

- HPZone
- PHE Enhanced TB Surveillance Service
- PHE Sentinel Surveillance
- HJIPs

References:

1. Prison safety and reform (Ministry of Justice). 2016 [cited 2017 July]; Available from: https://www.gov.uk/government/publications/prison-safety-and-reform.
2. Health Promoting Prisons: A Shared Approach (Department of Health). 2002 [cited 2017 July]; Available from: http://webarchive.nationalarchives.gov.uk/+/http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4006230.
3. WorldwidE Prison Health Research & Engagement Network (WEPHREN). 2017 [cited 2017 July]; Available from: https://wephren.tghn.org/.
4. What is SystmOne? (The Phoenix Partnership [TPP]). 2017 [cited 2017 July]; Available from: https://www.tpp-uk.com/products/systmone.
5. Guidance: Contact details for national and local Public Health England health and justice specialists (PHE). 2017 [cited 2017 July]; Available from: https://www.gov.uk/government/publications/public-health-in-prisons-and-other-secure-settings-contact-phe-specialist-leads/contact-details-for-national-and-local-public-health-england-health-and-justice-specialists.
6. Public Health England: Priorities. 2017 [cited 2017 July]; Available from: https://www.gov.uk/government/organisations/public-health-england/about.
7. WHO Health in Prisons Programme (HIPP) (World Health Organization). 2017 [cited 2017 July]; Available from: http://www.euro.who.int/en/health-topics/health-determinants/prisons-and-health/who-health-in-prisons-programme-hipp.
8. Five nations health and justice collaboration: terms of reference. 2015 [cited 2017 July]; Available from: https://www.gov.uk/government/publications/five-nations-health-and-justice-collaboration-terms-of-reference.
9. Rapid review of evidence of the impact on health outcomes of NHS commissioned health services for people in secure and detained settings to inform future health interventions and prioritisation in England (Public Health England). 2016 [cited 2017 July]; Available from: https://www.gov.uk/government/publications/health-outcomes-in-prisons-in-england-a-rapid-review.
10. Prisons and Health (World Health Organization). 2014 [cited 2017 July]; Available from: http://www.euro.who.int/__data/assets/pdf_file/0005/249188/Prisons-and-Health.pdf?ua=1.
11. National Institute for Health and Care Excellence: Guidance. 2017 [cited 2017 July]; Available from: https://www.nice.org.uk/guidance.
12. Prison Service Instructions (PSIs) (Ministry of Justice). 2017 [cited 2017 July]; Available from: https://www.justice.gov.uk/offenders/psis.
13. Prison Service Orders (PSOs) (Ministry of Justice). 2017 [cited 2017 July]; Available from: https://www.justice.gov.uk/offenders/psos.
14. National Partnership Agreement between: The National Offender Management Service, NHS England and Public Health England for the Co-Commissioning and Delivery of Healthcare Services in Prisons in England 2015-2016. 2015 [cited 2017 July]; Available from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/460445/national_partnership_agreement_commissioning-delivery-healthcare-prisons_2015.pdf.

15. Prescribed places of detention: health needs assessment toolkit (Public Health England). 2014 [cited 2017 July]; Available from: https://www.gov.uk/government/publications/prescribed-places-of-detention-health-needs-assessment-toolkit.
16. National Drug Treatment Monitoring System (Public Health England). 2017 [cited 2017 July]; Available from: https://www.ndtms.net/default.aspx.
17. Statistics at MoJ (Ministry of Justice). 2017 [cited 2017 July]; Available from: https://www.gov.uk/government/organisations/ministry-of-justice/about/statistics.
18. Public Health England Health and Justice annual review 2015/16 (Public Health England). 2016 [cited 2017 July]; Available from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/565232/health_and_justice_annual_review_2015_to_2016.pdf.
19. Public Health England Health & Justice annual report 2014. 2015 [cited 2017 July]; Available from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/562775/Health_and_justice_report_2014.PDF.
20. Paul Anders, R. Jolley, and J. Leaman. Rebalancing Act: A resource for Directors of Public Health, Police and Crime Commissioners, the police service and other health and justice commissioners, service providers and users (Revolving Doors Agency). 2016; Available from: http://www.revolving-doors.org.uk/file/2049/download?token=4WZPsE8I.
21. Balancing Act: Addressing health inequalities among people in contact with the criminal justice system (Revolving Doors Agency). 2013 [cited 2017 July]; Available from: http://www.revolving-doors.org.uk/health-justice/balancing-act.
22. Mental health in prisons (National Audit Office). 2017 [cited 2017 July]; Available from: https://www.nao.org.uk/report/mental-health-in-prisons/.