Public Health England

Health and Justice Health Needs Assessment Template: Adult Prisons

Part 2 of the Health and Justice Health Needs Assessment Toolkit for Prescribed Places of Detention

NB: This is a live document and will be regularly updated and refined. **We therefore advise using the on-line version**. It is a quasi "wiki" document (q-wiki) and we welcome updated content from readers, particularly if you are aware of more recent or more relevant data sources.

If you would like to add content or data sources please send any suggestions to health&justice@phe.gov.uk. The Health and Justice writing group will quality assure all additions prior to updating the on-line version.

National Offender Management Service

Youth Justice Board Bwrdd Cyflawnder Ieuenctid

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Template introduction

This template provides a description of a standard report for an adult (18 years and over) prison health needs assessment (HNA). It is not meant to be a rigid template or a cookbook but it provides ideas of what might be included within a holistic prison HNA. It gives sources of information, provides benchmarks from the general population and from the literature on health in prisons for behaviours and diseases that might be covered in a prison HNA. Please read in conjunction with Part 1 which provides background information about the purposes of a needs assessment, the policy context of HNAs in prisons and some ideas about how to get started.

With the implementation of the Care Act from 2015, local authorities will be commissioning care and support services for prisoners, and there may be the opportunity to work with local authorities to broaden the scope of a health needs assessment to include social care needs. This approach has the advantage of supporting integration of health and care provision, and increasing the relevance of the product to Health & Wellbeing Boards.

We advise using the on-line version as this template which will be updated quarterly. If you want to contribute to updating the template please send content to the Health and Justice email box health&justice@phe.gov.uk. This will be quality assured by a writing group prior to adding to the on-line version. The more contributions we have the better the template and our approach to using health needs assessment to drive improvements in health care in prisons will be strengthened.

1. Executive summary to a prison health needs assessment

The executive summary for the HNA provides an opportunity to summarise the main findings and provide high level themes about the findings and recommendations. As the part of the HNA that is most likely to be read it is important to ensure that this is aimed at developing a strategic response to the findings, provide an overview of the main findings and summary of the recommendations.

2. Introduction to a prison health needs assessment

The introduction to the HNA would normally include the following topics:

- aims and objectives of the HNA;
- why the HNA is needed and the strategic context nationally and locally;
- oversight - description of how the HNA was undertaken, roles and responsibilities, timescales, review and oversight group / membership;
- methods and information and data sources[1] used eg **prison-level data** (such as SystmOne, MoJ data, NDTMS etc.), **national data** (such as MoJ offender demographics, OASysc) and **qualitative information** such as prisoner and prison officer interviews, focus groups

Guidance on how to present the use of different methods are detailed below

[1] Note: When analysing small numbers, care must be taken when publishing data to ensure that a breach of confidentiality does not occur. Data which could allow an individual to be identified should not be published. In general numbers under 5 should be suppressed. Care needs to be taken to avoid “deductive disclosure” whereby it might be possible to deduce who the data might be referring to by combining more than one table of information.

3. Description of the prison population

In order to describe the prison population it is essential to obtain information on:

The demographics of the prison population in particular numbers of prisoners by age in ten year age groups by gender. These will vary widely depending on the prison and will impact greatly on assessing the health needs of the people there. The ethnic profile of the prison population is also very relevant for the HNA. Around 13%[i] of the total prison population in England and Wales are foreign nationals. If the HNA is for a prison which has a substantial proportion of prisoners from countries of high prevalence for certain infection diseases, for example South East Asia and Africa this needs to be addressed when looking at the specific health needs of your population. In terms of age range, in England and Wales, the Ministry of Justice report that the majority of prisoners (28%) are in the 30-39 age range, however as many as 12% are aged 50 years or above[ii].

The turnover of the prison population. According to data from the Ministry of Justice (MoJ)[iii], at any one time in England around 13% of people in prison are on remand. This group of people are likely to have more immediate health needs that need addressing compared to people in prison who have been serving a sentence for several years. Health needs in a prison that has a turnover of two or three will have a higher volume need than would be apparent from a snapshot of the prison population

The category of prison is also very important when doing a HNA, the majority of prisoners in a high security prison are serving sentences of over four years and there is less of a turnover whereas in a local prison the turnover is greater and prisoners are there for shorter periods.

The reoffending rate. The MoJ report that during 2012 around 10% of males returned to prison within a 12 month period whereas no women had returned to prison in England during the same period. Category B and C Trainer prisons and Cluster prisons had the largest percentage of males returning to prison with 12% returning to Category B within a one year period and 15% returning to Category C and Cluster prisons during the same period.

Table 1 below provides suggestions on the useful data sources you can access to enable you to describe the demographics of your population. Furthermore, it also describes how you can best use the different data. For further details on national annual prison population data, access: https://www.gov.uk/government/publications/offender-management-statistics-quarterly-october-december-2013-and-annual

Table 1: Useful data sources for prison demographic information

Data	What it tells you	Where to access it
Security category and function of prison	Indicates the function and category of prisoner held, gives limited information of length of sentence	Planning and Analysis Group (NOMS) HMPS SLAs https://www.gov.uk/government/publications/prison-

		service-level-agreements-2014-to-2015
Operational capacity	This is the number of places at any one point in time	Planning and Analysis Group (NOMS) HMPS SLAs https://www.gov.uk/government/publications/prison-service-level-agreements-2014-to-2015
First receptions	The number of new sentenced and remand prisoners each year	Ministry of Justice
Turnover (churn)	The number of times each place is used per year- the ratio of first receptions to operational capacity	Ministry of Justice
Receptions	The number of people entering the prison each year – will be higher than the number of first receptions as it will include prisoners returning from elsewhere such as hospital	Planning and Analysis Group (NOMS)
% and number of the prison population released to community each year	The release rate into the community.	Planning and Analysis Group (NOMS)
Transfers	Usually to other prisons IRCs and Secure Hospitals	Planning and Analysis Group (NOMS) and System One
Average length of stay: • Less than 12 months • 12 months <=4 years • 4 years[HG3] +	Average length of stay in a prison population can often determine the types of health interventions provided, for example those serving a sentence of less than 12 months are less likely to be access the full range of services those serving a sentence of over 4 years can	Planning and Analysis Group (NOMS)
Sentence profile	This will let you know what proportion of prisoners are on remand or are sentenced	Planning and Analysis Group (NOMS)
Age and sex profile (minimum 10 year age bands) 18-24 yrs 25-34 35-44 45-54 55-64 65-74	This allows you to apply national or other prison rates to the population to find a predicted rate for the population. It is better to have data by each year as that will allow for more flexibility when applying rates from other sources. If actual rates are much higher or lower this should raise	Planning and Analysis Group (NOMS)

75-84 85 +	questions	
Age categories 18-24 yrs 25-34 35-44 65 + (older adult)	These broad age categories allow you to aggregate data on need in order to pull out a bigger picture or to apply epidemiological data that is only available in broad categories	Planning and Analysis Group (NOMS)
Gender	Rates of disorder vary by male and female and this will allow you to see the differences and apply the appropriate rate	Planning and Analysis Group (NOMS) HMPS SLAs https://www.gov.uk/government/publications/prison-service-level-agreements-2014-to-2015
Local Authorities of residence	This will provide information about where after care should take place following release.	Offender Location Tool - Planning and Analysis Group (NOMS)
Ethnic profile Use census categories	The ethnic profile of people in prison can determine the cultural and social needs of the population which often impact on health needs	P-Nomis - Planning and Analysis Group (NOMS)
Disability	A HNA will need to address issues around disability within a prison population	NHS England – System One. Local prison data bases may be kept. Some prisons have disability liaison officers. Some disability can be self-reporting by prisoners.
Sexuality	The sexuality of prisoners not only has an impact on the social issues within the prison but also if you have a considerable population of men who have sex with men, targeted health promotion work can be done	Not readily available or collected systematically unless local prison databases are kept. Can be self-reporting.
Ex Service Personnel	A key cohort for NHS England are ex-service personnel.	Not readily available or collected systematically unless local prison databases are kept. Can be self-reporting.
Number transferred from CYP secure estate	Those being transferred from the CYP estate have specific needs which must be addressed during the transition process, further information about this is detailed	P-Nomis - Planning and Analysis Group (NOMS) from transfer/reception data or data from the Youth Justice Board.

	in section 7.1	
Number and % of people for whom NHS number is known	NHS numbers are an important identifier from a public health perspective, but also for the individual who will need this to access healthcare in the community. Identifying the proportion of prisoners with an NHS number will inform the work needing to be done around this within the prison.	NHS England – System One

4. Health performance and outcomes

Outline the various prison performance indicators / measures that are available.

4.1 Prison Health Performance Quality Indicators (PHPQIs)/Health and Justice Indicators of Performance (HJIPs)

PHPQIs were introduced in 2009, however, they have recently been updated and are now called HJIPs and will be used by commissioners and partners to monitor the quality and performance of healthcare in all prescribed places of detention.

Currently, prison performance based on the HJIPs are available from the NHS England Areas teams, there are plans in the future to make these available electronically.

4.2 Public Health and NHS Outcomes Frameworks

When developing a prison HNA it is important to be aware of relevant NHS and public health outcomes, especially those that are a priority for people in prison such as drug treatment outcomes. **Table 2** below has been adapted from (from Balancing Act)[iv] contains the key indicators. This section also provides links for the NHS outcome frameworks.

Table 2: Relevant Public Health Outcomes Framework Indicators relating to the adult population in contact with the criminal justice system

2.10	Self-harm
2.14	Smoking prevalence – adults (over 18s)
2.15	Successful completion of drug treatment
2.16	People entering prison with substance dependence issues who are not previously known to community treatment
2.18	Alcohol relation admissions to hospital
2.23	Self-reported wellbeing
3.4	People presenting with diagnosis at a late stage of infection
3.5	Treatment completion for tuberculosis (TB)
4.3	Mortality rate from causes considered preventable
4.6	Under 75 mortality rate from liver disease
4.7	Under 75 mortality rate from respiratory diseases
4.8	Mortality rate from infectious and parasitic diseases
4.9	Excess under 75 mortality rate in adults with serious mental illness
4.10	Suicide rate
In addition, access to screening programmes in the community is also likely to be limited among people in contact with the criminal justice system, due to periods of imprisonment and poor engagement with mainstream primary healthcare services. This can also impact upon engagement with vaccination programmes among the children of people in contact with the criminal justice system.	

The specific frameworks are available at the link below:

Public Health Outcomes Framework 2013-2016:
https://www.gov.uk/government/publications/healthy-lives-healthy-people-improving-outcomes-and-supporting-transparency

NHS Outcomes Framework 2014 to 2015:
https://www.gov.uk/government/publications/nhs-outcomes-framework-2014-to-2015

http://www.england.nhs.uk/wp-content/uploads/2014/03/ph-comms-intent.pdf

5. Health – met and unmet need

This section of the report is very important and gathering the data for it should be given equal weight to other sections of the report. Finding data about current levels of need within the local prison and validating this data might take some time. It will depend on how well data are recorded on SystmOne and the prison pharmacy data (see table below for information about data sources). It may be that a local health survey is required to fully understand disease burden, though these surveys are time consuming and should be used as a second stage after reviewing all available data. Looking at met and unmet health needs provides the opportunity to understand how the prison compares to other prisons and the general population in order to understand health inequalities and the level and types of services needed. Need is divided into i) met needs: prisoners are accessing services for their needs and having their needs met or ii) unmet needs: prisoners are accessing services and not having their needs met or: they are not accessing services. For example a recent Audit office report shows that just 7% of short sentence prisoners accessed help from mental health services[v] whilst nearly 60% of remand prisoners have a common mental disorder and 10% a psychotic disorder (see Appendix A).

This section provides an overview of the main mental and physical health needs of prisoners which are divided into:

i) Minor self-limiting illnesses
ii) Burden of disease morbidity and mortality – including mental and physical ill-health
iii) Communicable disease
iv) Sexual health
v) Dental health
vi) Pregnancy, maternal health and post-natal

Appendices B-D provide templates to support the local prison health needs assessment. These provide data where available from published surveys of prison health and wellbeing; data, where available on rates in the general population, and the excess need in prisoners (ratio of prevalence in prison to prevalence in the general population). Space is provided to fill in local prison rates to determine excess need and compare against published data and national prevalence.

Table 3: Data sources for information about morbidity and mortality in prisons

Data	What it tells you	Where to access it
SystmOne (READ coded) & healthcare provider systems clinical activity data	Disease prevalence Long-term conditions register Population clinical activity. The completeness of the data depends on how well clinical encounters are recorded and how well these are coded. It is important to understand what levels of ill-health might be expected for the local prison profile using epidemiological sources such as Marshall et al below. If actual numbers are lower or higher consider data recording as one possible explanation; also consider unmet need.	NHS England Area Teams.
Pharmacy data	Provides information about use of drugs. 44% of the prison population reported in 2013 to be taking medication (HoC Justice Committee);73% in women prisoners (Plugge E. Health of women prisoners 2006)	
Prisoners on "clinical hold"	"Clinical hold" is the mechanism by which clinicians request that prisoners are not moved from their current prison on health grounds.	
Deaths in prison	Prison and probation ombudsman investigate all deaths in custody and provide an anonymised report of all deaths by prison on its website	http://www.ppo.gov.uk/prison-investigations.html
National Male Prison Prevalence Diabetes, CVD, COPD, Asthma, Epilepsy and Blood Borne Viruses	Marshall, Simpson & Stevens article provides an explanation of the epidemiological approach to HNAs in prisons and provides data on epilepsy asthma and diabetes.	http://jpubhealth.oxfordjournals.org/content/23/3/198.long
Physical health problems of newly sentenced prisoners	Stewart D, 2008. Results of a survey of a random sample of nearly 1,500 newly sentenced prisoners which includes information about their physical health problems as well as drug, alcohol and other problems.	http://webarchive.nationalarchives.gov.uk/20100505212400/http:/www.justice.gov.uk/publications/docs/research-problems-needs-prisoners.pdf
Prison National Offender Management Information System (**p-NOMIS**)	Prison population and trends	http://data.gov.uk/dataset/prison-national-offender-management-information-system-p-nomis-and-inmate-information-system-ii

Quality and Outcomes Framework (QOF Disease Prevalence (Epilepsy, Asthma, COPD, Diabetes, CVD, Cancer, Learning Disabilities, Mental Health Problems	Levels of need in the general population	http://www.qof.ic.nhs.uk http://www.apho.org.uk/default.aspx?QN=HP_MOREPROFILES2012
National disease prevalence	Levels of need in the general population	http://www.apho.org.uk/diseaseprevalencemodels

5.1 Burden of disease in prisons – global burden of disease and deaths in custody

Global Burden of Disease (GBD)

The majority of prisoners are under 50 years of age (though the number and proportion of older prisoners are increasing – see section on needs of older prisoners below). The UK Global Burden of disease study provides important information about the years of life lost to disability (YLDs) and the years of life lost to premature mortality (YLL)[vi] for all ages and for those aged 20-54 years. The main causes of death in the 20-54 age group are: cancers (breast; cardio-vascular; self-harm and falls. There have been increases in deaths from cirrhosis, drug use and alcohol disorders. The main causes of YLD in the 20-54 age group are: Musculoskeletal; Mental and behavioural causes; Communicable diseases; Neurological disorders; Chronic respiratory; diabetes; transport injuries (not explored in this report); cardio-vascular; unintentional and violent injuries; digestive disorders and cancers. The following sections combine exploring the burden of disease in prisons in each of these categories combining morbidity and mortality.

There is a view that due to the multiple risk factors and complex and chaotic lives of many prisoners that their physiologic age is ten years younger than the general population though this is not view shared by all[vii]. It is however advisable to generate epidemiological estimates from prison specific studies or from the general population using the data from the lowest quintile of deprivation to generate estimates of need.

Deaths in custody

It is important to record the number of deaths in custody, the age and their causes.
The number of natural cause deaths in prison has generally increased each year between 2000 and 2012 and then fell slightly in 2013[viii]. They are now the commonest cause of all types of death in prison and have overtaken self-harm and violent causes. In 2010 there were 124 (118 in 2013) natural cause deaths in prison, compared to 61 in 2000; a 103% increase at a time when the prison population has increased risen by only 31%. This rise is not solely due to a rise prison population or because of an increase in older prisoners. 35% of deaths are due to cardiovascular disease and 25% are due to cancer. There is an overrepresentation of coronary artery disease deaths in those aged less than 45 years of age.

Between 2000 and 2009 319 deaths occurred in those aged between 21-50 years. Such deaths are both premature and possibly preventable. Common features of these deaths were that there was limited evidence of health promotion support or chronic disease management in their health care treatment in prison. Even when such risk factors or symptoms were recorded at reception further care planning and clinical management was often minimal. In Learning from Prison Probation Ombudsman (PPO) Reports Deaths from Circulatory Disease[ix] only 35% of diseases were diagnosed prior to death, only 23% received medication for high blood pressure and/or high cholesterol, 54% were found collapsed in the cell and 30% were aged less than 45 years.

5.1.1 Minor and self-limiting illnesses

Migraine, headaches, colds, skin problems etc. as the most common ailments in prison as in the general population and self-management should be supported. In the health of women's prisoners study (Plugge 2006) half of women (52%) reported they
had problems with their periods; 34% had migraine and headaches; 29% a skin problem.

The main problems were that their periods had stopped (50%) or that they were irregular 50%. Women who had used drugs before coming into prison were significantly more likely to have problems with their periods than those who did not (57.2% v 32.5%, p=0.000).

The importance of applying data from similar samples is highlighted by the finding that Plugge (2006) looking at a cross section of women found 29% with a skin problem; whilst Stewart (2010) who researched the needs of all those who were newly sentenced and found 2% of men and 5% of women had skin complaints. He found that between 1-2% had diabetes and 2% of men had epilepsy and 5% of women.

SystmOne records primary care appointments for minor and self-limiting illnesses. Pharmacy data will show levels of prescriptions for analgesics and skin creams. Whilst these problems are minor in that they are not life threatening and are self-limiting provision of relief is as important as for the more serious disorders.

5.1.2 Mental health and self-harm

Mental health needs among those in contact with the criminal justice system are often complex, with comorbidity the norm among this group. In a study of prisoners, **72%** of male, and **71%** of female prisoners were found to suffer from two or more mental disorders (including personality disorder, psychosis, neurosis, alcohol misuse and drug dependence), **20%** suffered from four[x]. Presence of concurrent mental health and substance misuse problems can lead to difficulties in accessing support from either service.[xi]

The 2007 adult psychiatric morbidity survey shows that male remand prisoners are 20 times more likely to suffer psychosis and 20 times more likely to entertain suicidal thoughts than the general population[xii] (see appendix A1). Data from Surveying Prisoner Crime Reduction (SPCR), a longitudinal cohort study of 1,435 adult prisoners sentenced to between one month and four years in prison in 2005 and 2006 indicates a greater proportion of female prisoners (55%) were considered disabled than male prisoners (34%), as a result of being

overrepresented in the anxiety and depression group[xiii].

Many people in contact with the criminal justice system have experience of interpersonal trauma, particularly women offenders. This has been linked to the onset of a range of mental health problems including post-traumatic stress disorder, depression, anxiety disorders and substance misuse[xiv]. **29%** of prisoners report having experienced emotional, physical or sexual abuse as a child, with the percentage much higher among women prisoners[xv]. Limited availability of trauma informed mental health services can lead to poor responses to this client group[xvi].

Table 4: Useful data sources for mental health and self-harm

Data source	What it tells you	Where to access it
SystmOne	Very limited, however, will provide numbers of people seen for mental health problems but not formal diagnoses.	Accessible only at prison level at the moment.
Psychiatric morbidity among prisoners	This is old information from 1997 and published in 2003 and not all ages.	http://data.gov.uk/dataset/psychiatric_morbidity_among_prisoners
Psychiatric morbidity among women prisoners	This is old from 1997, but is the latest we have Psychiatric Morbidity among Women Prisoners in England and Wales. Provides a range of data on prevalence of disorders, self-harm and use of medication.	http://www.ons.gov.uk/ons/rel/psychiatric-morbidity/psychiatric-morbidity-among-women-prisoners/index.html
Psychiatric morbidity among young offenders	This is also old from Psychiatric Morbidity among Young Offenders in England and Wales, but is the latest available. Provides information on prevalence of disorders, self-harm, alcohol misuse, use of medication and risk factors.	http://www.ons.gov.uk/ons/rel/psychiatric-morbidity/psychiatric-morbidity-among-young-offenders/index.html
National Mental Health levels in Prisons Psychiatric Morbidity among Young Offenders in England and Wales; Deborah Lader, Nicola Singleton and Howard Meltzer London: Office for National Statistics www.ons.gov.uk The Community Mental	The Community Mental Health Profiles (CMHP) present a range of mental health information for local authorities in England. The CMHP are designed to give an overview of mental health risks, prevalence and services at a local, regional and national level using an	http://www.nepho.org.uk/cmhp/

Health Profiles (CMHP) 2013	interactive mapping tool. The data should be used to inform commissioners of health and social care services in their decision making, leading to the improvement of mental health, and mental health services	

See **Appendix 1 and 2** for rates of mental health problems in the general population, remand and sentenced prison populations. These provide benchmarks so that it is possible to compare how similar the needs are within the local prison population compared to other published data on needs of prisoners and needs in the general population.

5.1.3 CVD (cardiovascular disease – ischaemic heart disease (IHD) and stroke

One third of deaths in custody (35%) are due to cardio-vascular causes and the 2012-13 report from the Prison and Probation Ombudsman highlights the problems caused when heart attacks are confused with epileptic fits and the delays occur in contacting staff who are trained in CPR when prisoners are found unconscious.

People with existing CVD should be identified at reception screening and require annual comprehensive [NICE guidelines].

5.1.4. Diabetes

The Prison and Probation ombudsman in his 2012-13 Annual report highlighted poor, assessment and care planning of diabetes as contributory causes of a number of deaths. This included not measuring blood sugar (via HbA1c measurements) every 3-6 months for those with insulin nondependent diabetes; not actively following up when organ damage was identified such as diabetic retinopathy or renal disease. Diabetes UK has identified nine key care processes http://www.diabetes.org.uk/documents/reports/state-of-the-nation-2012.pdf. The prison HNA needs to identify levels of compliance with these regular care processes:

i. Blood glucose level measurement
ii. Blood pressure measurement
iii. Cholesterol level measurement
iv. Retinal screening
v. Foot and leg check
vi. Kidney function testing (urine)
vii. Kidney function testing (blood)
viii. Weight check
ix. Smoking status check

5.1.5 Cancers – lung, breast and bowel

5.1.6 Chronic Respiratory Disease

5.1.7 Cirrhosis

5.1.8 Digestive disorders

5.1.9 Musculoskeletal

5.1.10 Neurological including epilepsy

5.1.11 Unintentional and violent injuries

In women's prisons 21% of prisoners had problems at reception due to an injury or an accident (Plugge 2006).

5.2 Communicable diseases[2]

Prisons pose particular risks for the causes and transmission of infection and challenges for control of communicable diseases due to:

- **the nature of the environment:** prisons vary in their age, design, construction and healthcare facilities. Cell-sharing is common. Staff levels and skill mix vary and access to healthcare services differ
- **the nature of the population:** about 85,000 people are confined in prisons in England and Wales at any one time. Throughput and turnover are very high
- **the prevalence of disease:** people in prison and detention often come from populations or groups at higher risk of certain infectious diseases eg BBVs, HIV and sexually transmitted infections and TB

The most commonly reported single infections reported to the Prison Health Information in Prisons (PHiPs) team are hepatitis B and C and TB, however there are other reportable diseases which may not be as common within the prison population but still require careful management. Some of these are discussed under section 5.2.3 below.

Table 5: Useful data sources for communicable disease

Available data sources: **Data source**	**What it tells you**	**Where to access it**
Public Health in Prisons (PHiPs) Team, Health & Justice	Infectious disease reports at prison-level and national level (single cases and outbreaks)	PHE, Health & Justice Team, Health&justice@phe.gov.uk
PHE Sentinel Surveillance of BBV Testing	Reports on trends in BBV testing across England in the 24 participating laboratories, covering about 30 prisons and It provides useful information on tests, results as well as information on possible route of transmission. This can be used as a comparable source for likely prevalence across the prison estate.	http://www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/HepatitisSentinelTesting/
HJIPs	Provide performance data on:	NHS England Area Team

[2] There is a list of reportable communicable diseases which prisons should notify their local health protection team about, the most common ones are discussed in this section but when carrying out the HNA consider the full list of diseases: http://www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/PublicHealthInPrisonsTeam/PrisonInfectiousDiseaseReportingAndSurveillance/

	-new receptions assessed for their TB risk by symptom screening - prisoners referred to specialist care - new arrivals being tested for HBsAg -the number of prisoners testing positive for hepatitis B referred for specialist assessment - new receptions tested for HCV Ab, HCV PCR and referred for specialist assessment -new receptions tested for HIV and being referred for specialist assessment -the % of those testing HCV PCR positive being initially assessed by a specialist and have a treatment plan developed, within 18 weeks. - Hepatitis B vaccine coverage for completed course (3 doses) for all eligible prisoners/detainees received into the establishment within 4 weeks of reception.	
SystmOne	Prison-level reports of infectious diseases	Internal prison data sources.

5.2.1 Blood Borne Viruses (BBVs) – Hepatitis B and C

Blood-borne viruses (BBVs) often affect a larger proportion of people in prison and other detention centres than the wider population and it has been evidenced that rates of illegal drug use amongst prisoners are higher than that of the general population (Surveying Prisoner Crime Reduction longitudinal cohort study of prisoners, Ministry of Justice, 2013[xvii]). Injecting drug use is the main risk factor in the transmission of BBVs for hepatitis C infection in the UK (over 90% of new infections are acquired through this [PHE, 2013[xviii]]).

There are a number of data sources which measure BBV infection in the prison and detention centre population. These include PHE surveillance systems such as the Public Health in Prisons (PHiPs) monitoring system based with the national Health and Justice Team, the Survey of Prevalent HIV Infections Diagnosed (SOPHID), the Genitourinary Medicine Clinic Activity Dataset (GUMCAD), Sentinel Surveillance of BBV testing and also other external systems such as the Health and Justice Indicators of Performance (HJIPs) which have replaced the previous Prison Health Performance Quality Indicators (PHPQIs) commissioned by NHS England. All surveillance systems monitor different elements of BBVs but together help provide us with an understanding of BBV infection amongst this population.

The Sentinel Surveillance of BBV testing provides useful information on the proportion of people testing positive for a BBV in different settings.

5.2.2 Tuberculosis

The prison population has long been recognised as being at risk of TB, due to the over-representation of risk factors among people passing through the prison estate. Prisons were identified as a key setting for TB control in the Chief Medical Officer's (CMO) action plan for England, published in 2004[xix].

5.2.3 Other

There are a number of communicable diseases discussed in the document "List of reportable diseases to reported to the PHE Public health in Prisons Team (Health & Justice) by PHE Health Protection Teams, 2013". Many of the diseases on the list are relatively rare; however it is important that any HNA takes into account any diseases that have been reported by the prison. More common diseases include varicella (chickenpox) as well as gastrointestinal infection. The communicable disease section should also details any outbreaks that have happened within the prison and compare the frequency of these to national incidence.

5.3 Sexual health[3]

Higher rates of STIs (sexually transmitted infections) have been reported among prisoners compared to the general population[xxxxi] and collection of routine data on sexual health of prisoners was introduced in 2011, through the Genitourinary Medicine Clinic Activity Dataset (GUMCAD). GUMCAD Captures all STI diagnoses & sexual health service use in GUM clinics, more information is available at:

http://www.hpa.org.uk/web/HPAweb&HPAwebStandard/HPAweb_C/1201265888302

By using the data from GUMCAD it is possible to compare incidences of STIs in a local prison/cluster of prisons compared to the prison population at large. It should however be noted that the GUMCAD data is likely to underreport the actual incidence of STIs in prisons due to the complexities around data completeness. (See appendix C).

5.4 Dental health

Oral health is integral to general health, is essential for wellbeing, and is a determinant of quality of life. Good oral health allows us to speak, smile, kiss, touch, taste, chew, swallow and cry'[xxii].

5.4.1 Oral health

There are inequalities in oral health between prisoners and the non-prisoner population with the prison population experiencing increased decay experience, fewer natural teeth, fewer restored teeth (holes that have not been filled) and a higher prevalence of periodontal disease[xxiii,xxiv,xxv,xxvi,xxvii,xxviii].

[3] BBVs can be included under the sexual health section as they can be transmitted sexually. For the purposes of the HNA prison template they have been included under the infectious diseases heading.

Many within the prison population have lifestyles which are not conducive to maintaining good oral health, including risk factors such as increased smoking prevalence, increased substance use[xxix] and frequent and high consumption of sugar[xxx] Although prisons promote healthy food options at mealtimes, most prisoners report high sugar intake between meals.[xxxi]

Evidence supports the view that high levels of oral disease impacts on a prisoner's quality of life.[xxxii]

Findings from recent surveys and needs assessments from Wales[xxxiii] and Scotland[xxxiv] would echo the findings in the literature concerning increased oral health needs of the prison population. Only about a quarter (26%) of respondents participating in Welsh oral health surveys felt their dental health was very good/ quite good (compared to 73% of Welsh respondents in the Adult Dental Health survey).

Commissioning should recognise the increased oral health needs and demands of the prison population compared with the non-prison population ensuring oral health promotion is integral to service provision and oral health is included in induction health triage systems.

5.4.2 Dental services

There is an increased use of emergency dental services[xxxv] and irregular dental attendance[xxxvi], [xxxvii] reported by prisoners at reception, and a significant amount of unmet treatment need.

In recent surveys in Wales, 88% of applications for care were due to pain and other problems. Around a quarter (26%) surveyed reported they attended the dentist for regular check-ups compared to 64% in the ADHS 2009 and 17% of prisoners had never been to the dentist before prison (compared to 1 % in the wider population).

In recent Scottish surveys of prisoners, 59% of the participants had attended due to pain or discomfort with their teeth or gums, and similar to the Welsh survey, only 22% attended for 'routine' examination prior to their sentence.

Barriers to accessing dental care include dental anxiety and illiteracy and lower levels of educational attainment can impede the adherence to oral health improvement advice.[xxxviii, xxxix]

Oral health has been shown to improve the longer a prisoner is in prison with convicted prisoners having better oral health than short stay remand prisoners. Prisoners who are incarcerated for longer may have on-going assessment and treatment they would not access outside the prison environment. A survey of remand prisoners showed that they use services more in prison than they do outside and over half (54%) reported that their last dental treatment was during a previous conviction.

In Scotland survey participants had 'surprisingly good' oral hygiene of their teeth and dentures relating to the frequency of tooth brushing/ care of dentures and current imprisonment. This may suggest that the routine of prison life provided a supportive environment for the adoption and maintenance of oral hygiene habits.[xl]

Despite this, there is evidence that pain relief and oral hygiene aids (such as dental floss) are restricted in prison environments.[xli] Transfer and release of patients can impact on continuity of

care for those patient who need to return to have laboratory work fitted (e.g. crowns and dentures)or who are in the middle of a course of treatment.

A recent survey of dental services in England and Wales reports findings and issues with dental services which will be of interest to those commissioning dental services.

Table 6: Useful data sources for dental health

Data source	What it tells you	Where to access it
2011 Adult Dental Health Survey	Comparative data for the non- prison population.	HSCIC (2011) Adult Dental Health Survey 2009 - Summary report and thematic series [NS] http://www.hscic.gov.uk/catalogue/PUB01086
A survey of dental service in adult prisons in England and wales	Findings of a national survey of dental services in prisons in England and Wales. The survey explored the variations in commissioning arrangements and generated a national picture of issues in the prison dental service. Informs future commissioning to ensure consistency, quality and permit appropriate benchmarking of dental services.	https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/328177/A_survey_of_prison_dental_services_in_England_and_Wales_2014.pdf
The oral health and psychosocial needs of Scottish Prisoners and young offenders, 2014	Detailed comparative data of the dental and psychosocial needs of the prison population in Scotland with recommendations for commissioning.	http://www.sps.gov.uk/Publications/Publication-5355.aspx
Oral health needs assessment of the Prison Population in Wales: 2014	Reports on the findings of an oral health needs assessment conducted in 2013 involving all the Welsh prison estate to make recommendations to improve prisoners oral health and dental services	http://www2.nphs.wales.nhs.uk:8080/dentalpublichtdocs.nsf/7c21215d6d0c613e80256f490030c05a/f0224b0a1f675db280257cbc0038b483/$FILE/Oral%20Health%20Needs%20Assessment-%20Prison%20Population%20of%20Wales%202013%20Technical%20Document%2016.04.14.pdf
Securing excellence in	Advice to commissioners of	http://www.england.nhs.uk/wp-

Commissioning NHS dental services (2013 NHS Commissioning Board)	dental services	content/uploads/2013/02/commissioning-dental.pdf
Oral Healthcare in Prisons and Secure settings in England	Recommendations from the British Dental Association to improve dental services	http://www.bda.org/Images/oral_health_in_prisons_eng.pdf
Business Services Authority – Information on dental service activity	Prison dentists holding a PDS contract complete FP17 forms containing patient details and clinical information such as type of treatment undertaken. They are performance managed on the returns from these forms so the information is relatively robust. Bespoke information can be obtained by contract from BSA	http://www.nhsbsa.nhs.uk/DentalServices.aspx

Prison dentists holding a PDS (personal dental services) contract complete FP17 forms containing patient details and clinical information such as type of treatment undertaken. They are performance managed on the returns from these forms. Bespoke information can be obtained by contract from BSA http://www.nhsbsa.nhs.uk/DentalServices.aspx

5.5 Pregnancy, maternal health and post-natal

According to the Royal College of Midwives, around 600 pregnant prisoners receive antenatal care each year in England and Wales while in prison with recorded births of just over 125. A small number of penal institutions in England have Mother and Baby units (MBUs).[xlii]

Women who are pregnant in prison must receive access to needs based health services equivalent to those available in the community, including services for those dependant on substances of misuse. This is especially important during pregnancy when maintenance doses of medication need to be titrated according to the stage of pregnancy. Close supervision of the infant post-partum is vital to manage for any physiological dependency that may be present in the child.

There are various guidance documents containing useful information about the needs of pregnant women in prison:

- the Royal College of Midwives and The Royal College of Obstetricians and Gynaecologists, Pregnancy and complex social factors: A model for service provision for pregnant women with complex social factors, http://www.nice.org.uk/nicemedia/live/13167/50861/50861.pdf

- the Maternity Alliance, Getting it right? Services for pregnant women, new Mothers and babies in prison, http://www.maternityaction.org.uk/wp/wp-content/uploads/2013/09/prisonsreport.pdf

- for further details about women's prisons and the provision of Mother and baby units: http://www.justice.gov.uk/offenders/types-of-offender/women

Table 7: Useful data sources for pregnancy, maternal and post-natal

Data source	What it tells you	Where to access it
SystmOne	Prison level details about pregnancy, maternal health and post-natal needs of women	NHS England – System One

6. Preventing ill health and promoting wellbeing

NHS England, in partnership with NOMS and Youth Justice Board (YJB), have a responsibility to ensure that prisoners have access to health services that are equivalent to those the public receives from the comprehensive health service. Primary health services in prison should work alongside other prison departments and include programmes that specifically address:

- mental health promotion and wellbeing
- smoking cessation/reduction
- healthy eating and nutrition, to include BMI assessment
- oral health promotion
- healthy lifestyles, including relationships and access to physical exercise programmes appropriate to age and needs
- sex and relationship education and parenting classes
- the training of people in prison and other accommodation of a prescribed description such as peer educators / health trainers, parenting classes and access to advocacy / mentoring services

A HNA should describe the current provision and gaps in these services.

NICE guidance makes recommendations on individual-level behaviour change interventions aimed at changing the behaviours that can damage people's health. It includes a range of approaches for people aged 16 and over, from single interventions delivered as the opportunity arises to planned, high intensity interventions that may take place over a number of sessions.

Recent NICE guidance describes how to help tackle the range of behaviours that include alcohol misuse, poor eating patterns, and lack of physical activity, unsafe sexual behaviour and smoking. This can be accessed at:

http://publications.nice.org.uk/behaviour-change-individual-approaches-ph49/recommendations

Such behaviours are linked to health problems and chronic diseases (such as cardiovascular disease, type 2 diabetes and cancer). Interventions that help people change have considerable potential for improving health and wellbeing and helping people to:

- improve their diet and become more physically active
- lose weight if they are overweight or obese
- stop smoking
- reduce their alcohol intake
- practice safe sex to prevent unwanted pregnancies and a range of sexually transmitted infections.

Table 8: Useful data sources for preventing ill-health and promoting wellbeing

Data source	What it tells you	Where to access it
Smoking prevalence, General Lifestyle Survey 2011		http://nww.indicators.ic.nhs.uk/webview/
National Male Prison Prevalence of smoking, Marshall T, Simpson S, Stevens A. Department of Public Health and Epidemiology. University of Birmingham, 2000	The report provides useful information about the demographics and health and social issues involved in people who smoke, it also details data on smoking in prisons	http://www.nice.org.uk/aboutnice/whoweare/aboutthehda/hdapublications/smoking_and_health_inequalities_joint_publication_by_ash_and_the_hda.jsp
National Prison Learning Disabilities Prison Reform Trust Bromley Briefings Prison Fact files, 2013	Data and general information about the social and health needs of people in prison	http://www.prisonreformtrust.org.uk/Portals/0/Documents/Factfile%20autumn%202013.pdf
SystmOne	Prison level details about the health and wellbeing needs of the prison population	Internal prison data sources

6.1 Leading risk factors for ill-health and mortality in prisons

6.1.1 Mental health and wellbeing

6.1.2 Smoking

Approximately 80% of all prisoners smoke compared with 24% of the general population. The prevalence is even higher amongst those who are dependent on drugs and or alcohol and or who have mental illness. Quitter rates for prisoners and staff are consistent with those of the community, with some individual prisons out-performing local community settings.

6.1.2 Substance misuse

Alcohol and drugs misuse is a complex issue. In the community the number of people with a serious drugs dependency is relatively small, with larger numbers dependent on alcohol or drinking at risky levels. However, prevalence rates in the prison population are much higher because both are strongly associated with crime and reoffending. The most recent figures on drug and alcohol prevalence amongst the adult prison population is documented in the Surveying Prisoner Crime Reduction (SPCR) longitudinal cohort study of prisoners conducted by NOMS. This can be found here: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/304464/prisoners-experience-of-prison-and-outcomes-on-release-waves-2-and-3-spcr.pdf

Table 9: Useful data sources for substance misuse

Data source	What it tells you	Where to access it
Adult Prison Quarterly Treatment Report (National Drug Treatment Monitoring System)	For each establishment, quarterly and YTD figures on: • numbers beginning structured drug and alcohol treatment (opiate users,	PHE https://www.ndtms.net

	non-opiate users and alcohol clients) and similarly for the total treatment population • interventions received • injecting status • intervention outcomes (planned / unplanned) and average length of time of interventions • treatment exits (discharges) • referrals to community treatment • prison treatment population demographics and profiling of drug and alcohol use	
Alcohol services in prisons: an unmet need. HM Chief Inspector of Prisons for England and Wales (2010).		http://www.justice.gov.uk/downloads/publications/inspectorate-reports/hmipris/thematic-reports-and-research-publications/Alcohol_2010_rps.pdf
Reducing drug use, reducing reoffending, London: UK Drug Policy Commission (2008)		http://www.ukdpc.org.uk/publication/reducing-drug-use-reducing-reoffending/

6.1.3 Physical in-activity

Physical in-activity is an important contributor to health and well-being. Almost by definition, prescribed places of detention restrict access to physical activity but can mitigate this to some extent, through appropriate facilities and scheduling.

The Prisons Act 1952 sets out the legal minimum provision of one hour per week of 'physical education (PE)' for adults and two hours per week for young offenders. PSI2011-058 Physical Education for Prisoners, Prison Rule 029 Physical Education, YOI Rule 041 Physical education all support "the requirement to deliver a safe, decent and legal PE programme that helps ensure that prisoners are physically fit to engage with prison work and activity opportunities whilst maintaining physical health and mental fitness in custody and also on release."

Prison Rule 030 Time in the Open Air adds "If the weather permits and subject to the need to maintain good order and discipline, a prisoner shall be given the opportunity to spend time in the open air at least once every day, for such period as may be reasonable in the circumstances."

(Prison Service Instructions and Prison Rule information from **inside information**[xliii]**)**

No systematic analysis had been done to assess the prevalence of poor diet, inadequate physical activity, and overweight and obesity in prisoners but a 2012 Oxford study 'aimed to

synthesise current (international) evidence and to highlight areas for action and further research'[xliv]. This showed that female prisoners in the UK were less likely to take part in sufficient physical activity compared with the female population of similar age. Male prisoners in the UK were less likely than the general male population to do adequate physical activity. Both female and male prisoners in Australia, however, were more likely to complete adequate physical activity than non-incarcerated Australian women and men.

Serving Time: Prisoner Diet and Exercise – published by the National Audit Office in 2006 found that 'most prisoners have the opportunity to exercise regularly but participation in organised physical education at some prisons is low. While 43 % of prisoners participated in some form of organised physical education activities, there was a wide range in participation between prisons (11-87%). Recommendations included:

- increasing participation in physical education activities to the highest proportion of prisoners as is practicable given the prison's facilities
- consulting prisoners over which activities they would like to take part in and then offering them if suitable
- promoting activities which involve greater participation
- targeting specific groups who would otherwise be reluctant to participate such as the over 50's and foreign nationals
- providing exercise opportunities in the evenings and at weekends to increase participation of prisoners who work or attend educational classes full time during the week
- ensuring equality of opportunity to access physical education activities in each prison, including vulnerable prisoners, as far as is commensurate with maintaining good order and the privileges system in place in each prison[xlv]

Data on physical activity is not routinely collected within prisons. It is feasible however to describe the facilities and schedules of activity available to prisoners. Prisoner engagement / survey initiatives could also include assessing perception of access to physical activities.

6.1.4 Poor Nutrition

- access to food and drink is controlled in prescribed places of detention. The nutritional choices which prisoners can make are prescribed by those made available by the prison

- Prison Rule 024 Food and YOI Rule 020 Food state that 'food (including drink) provided shall be wholesome, nutritious, well prepared and served, reasonably varied and sufficient in quantity.' Prison Governors bear the ultimate responsibility for prisoners' diets. They are required to approve food as fit for service to prisoners and agree local food budgets. Within this freedom to meet local needs Governors are required to follow the minimum requirements for Prison Service Catering as set out in the Prison Service Instruction (PSI) 44/2010 which was introduced in October 2010[xlvi].

- in addition, Prison Rule 078 BOV - Particular Duties and YOI Rule 082 IMB - Particular Duties give the board of visitors for a prison and independent monitoring board for a young offender institution the responsibility to:

    - hear any complaint or request which an inmate wishes to make to them

  - arrange for the food of the inmates to be inspected by a member of the board at frequent intervals
  - inquire into any report made to them that an inmate's health, mental or physical, is likely to be injuriously affected by any conditions of his detention.

(Prison Rule information from **inside information**[xlvii])

- further useful background and detail, including on healthy eating within prisons, is contained within a Freedom of Information request Ministry of Justice response from November 2011[xlviii].
- Serving Time: Prisoner Diet and Exercise – published by the National Audit Office in 2006[xlix] found that 'on the whole the Prison Service provides a well-managed and professional catering service. Much of the food offered to prisoners meets government healthy eating recommendations. However, there is scope for improvement: some catering standards are not being met and food contains high levels of salt. Recommendations included:

  - prison caterers should improve the diet of prisoners, especially those aspects of diet which could adversely affect health, by, for example, reducing the high energy content of some meals, taking into account the different requirements of prisoners being catered for (according to age and gender)
  - setting specifications for suppliers to offer healthier products; not offering fried foods too frequently; offering plenty of fruit and vegetables, including more wholegrain products; serving fish regularly including oily fish at least once a week; and increasing dietary fibre
  - the Prison Service should provide practical guidance and training to all prison caterers on healthy catering practices and nutrition, including standard healthy option recipes, and the correct labelling of healthy food
  - the Prison Service should raise the level of awareness of healthy eating among the prison population through educating prisoners on the importance of healthy eating, posters, and by actively promoting it on a regular basis

- the 2012 Oxford analysis[l] found that the energy intake of female prisoners exceeded the recommended daily allowances (RDAs). This contrasts with male diets. With the exception of one of the studies, diets exceeded the recommended proportion of energy intake as fat (35%) in those in which it was assessed; it varied from 39% in the UK study to 47% in Australia. Sodium intake was about two to three times the recommended intake value in all nine studies in which it was reported

- data on nutrition or nutritional state is not routinely collected within prisons. It is feasible however to describe the food choices available to prisoners. Prisoner engagement / survey initiatives could also include assessing perception of access to food and drink

6.1.5 Obesity (epidemiology from http://guidance.nice.org.uk/PH53/Guidance/pdf/English)

In 2012, around a quarter of adults in England (24% of men and 25% of women aged 16 or older) were classified as obese (body mass index [BMI] 30 kg/m2 or more). A further 42% of men and 32% of women were overweight (BMI 25 to 30 kg/m2).

Although there are people in all population groups who are overweight or obese, obesity is related to social disadvantage.

Prevalence varies by population characteristics. For women, obesity prevalence increases with greater levels of deprivation, regardless of the measure used. For men, only occupation-based and qualification-based measures show differences in obesity rates by levels of deprivation.

For both men and women, obesity prevalence decreases with increasing levels of educational attainment. Around 30% of men and 33% of women with no qualifications are obese compared to 21% of men and 17% of women with a degree or equivalent.

Obesity is also linked to ethnicity: it is most prevalent among black African women (38%) and least prevalent among Chinese and Bangladeshi men (6%).

Being overweight or obese can lead to both chronic and severe medical conditions. It is estimated that life expectancy is reduced by an average of two to four years for those with a BMI of 30 to 35 kg/m2, and eight to ten years for those with a BMI of 40 to 50 kg/m2.

Women who are obese are estimated to be around 13 times more likely to develop type 2 diabetes and four times more likely to develop hypertension than women who are not obese. Men who are obese are estimated to be around 5 times more likely to develop type 2 diabetes and 2.5 times more likely to develop hypertension than men who are not obese. People who are obese may also experience mental health problems as a result of stigma and bullying or discrimination in the workplace.

The 2012 Oxford study[13] found that male prisoners were less likely to be overweight or obese compared with the male population of similar age in that country. This was true for all countries including the UK (except in one study undertaken in the USA). Female prisoners in the UK were less likely to be overweight or obese than the female general population of similar age. This was in contrast to the USA and Australia where female prisoners were equally or more likely to be overweight or obese than the female general population of similar age.

See **Sections 6.1.4 and 6.1.5** above for further information on physical activity and nutrition.

Data on prisoner overweight or obesity may be collected within the prison healthcare system or not. Prisoner engagement / survey initiatives could also explore perception of physical activity and nutrition (as above) and also of overweight and obesity.

6.1.7. Hypertension

6.2 Screening programmes

Offenders are drawn from a population with significantly raised risk of developing a range of chronic conditions for which national screening programmes are currently available. Social exclusion and disadvantage is common in the offender population and access to health care and screening services while living in the community tends to be poor. Therefore, prison, and other detained settings provides a valuable opportunity to offer screening to a population with significant unmet need.

All eligible people in prison and other places of prescribed detention should have access to all cancer and non-cancer screening programmes for which they are eligible.

Useful guidance documents on screening programmes include:
http://www.screening.nhs.uk/england

Cancer screening programmes:

- breast cancer: screening every three years for women aged 50 to 70; those over 70 are encouraged to make their own appointments
- cervical cancer: screening every three years for women aged 25 to 50 and every five years for those aged 50 to 64
- bowel cancer: screening every two years for all men and women aged 60 to 69; the programme is being expanded to include people up to the aged of 75 years

Non-cancer screening programmes:

- diabetic eye screening: screening offered to all people aged 12 and over with diabetes
- abdominal aortic aneurysm (AAA): screening offered to all men in their 65th year
- children and young people should receive developmental checks and immunisations, as appropriate

The NHS Health Check is not technically a screening programme as its primary aim is to jointly plan with each individual aged 40-74 years every five years how to improve their cardio-vascular health.

Table 10: Useful data sources for cancer and non-cancer screening programmes

Data source	What it tells you	Where to access it
Cancer and non- cancer screening uptake in prisons		
Cancer and non-cancer screening rates		http://datagateway.phe.org.uk/ - 'Screening' links to non-cancer screening sites which have info and stats. Cancer screening from the 'Cancer' link (although mostly part of broader profiles for each cancer). Or better via http://www.cancerscreening.nhs.uk/index.html
	Can be difficult to negotiate	HSCIC, ONS, PHE and the indicator portal

6.3 Immunisation and vaccinations

Key questions that need to be address in this section include:

- what is the coverage for vaccinations at the prison?
- how does this compare to other prisons nationally?

- are all vaccinations being provided according to the national schedule and national policy?

Table 11: Useful data sources for immunisations

Data source	What it tells you	Where to access it
Public Health in Prisons (PHiPs) Team, Health & Justice PHiPs Team data on imms & vacs: MMR, influenza HJIPs: hepatitis B	Number and proportion of new receptions receiving vaccinations	MMR and influenza – health&justice@phe.gov.uk HJIPs - Area Team

6.4 NHS Health Checks

NHS Health Checks are included in the public health specification for people in prison[li] and other places of detention which forms part of the 7a agreement to be delivered by NHS England as a pace of change issue by the end of 2014/15. The risk factors and mortality from the "Big Killers" are substantially higher for people in prison and make a disproportionate contribution to premature mortality in the wider population. Prisons provide a unique opportunity to engage a high risk group of the population in behaviour change for themselves and families and the prevention of some premature deaths.

Vascular disease risk factors

- 80% of people in prison smoke
- 100% of substance misusers smoke
- the majority of people in prison come from the most deprived communities in England and if not are often the most deprived people within their communities
- there are now a greater number of natural deaths occurring amongst people in prison than self-inflicted deaths

Benefits of Implementation of Health checks in prisons

Implementation of NHS Health Checks amongst eligible people in custody provides an opportunity to:

- improve identification of risky health behaviour and established disease which may in many currently be unrecognised
- influence and change health behaviour influenced in people who are in high risk groups and possibly their family and friends
- lives saved both in prison and the community
- improve management of health risk and disease, including clear evidence based guidelines
- improve the quality of prison primary care chronic disease management
- permit earlier diagnosis and improve the care of those with cancer
- improve the health and wellbeing of individuals & their families

The minimum information that should be recorded on NHS Health Checks in
Further information on health checks can be found at:
http://www.healthcheck.nhs.uk/news/nhs_health_check_programme_best_practice_guidance/

7. Needs of specific population groups

7.1 Young prisoners (18-25 years)

In September 2011, there were 8,317 18-20 year olds in custody – almost 10% of the prison population. Police National Computer data suggests that more than 60% of 18 year-olds arrested each year will have previously had contact with the youth justice system and therefore a great number of 17 year-olds under the supervision of Youth Offending Teams (YOTs) or in youth custody each year may need some form of transitions related work as they turn 18.

Transition to adulthood
A number of transitions, beyond those in the youth and criminal justice systems, occur when a young person reaches 18. These can include: transferring from Child and Adolescent Mental Health Services (CAMHS) to adult mental health services, children's to adult substance misuse services, children's to adult alcohol misuse services.
Key findings from an inspection of transition arrangements from youth to adult justice services (October 2012) highlighted:

- effective transition process did not always receive sufficient attention
- insufficient preparation of a young person approaching 18 to make the transition
- insufficient timely sharing of information to enable sentence planning and delivery of interventions for those transferred; and
- insufficient sharing of information for education, training and employment and health purposes

Maturity
Young people mature at different rates, with new research showing that cognitive development continues until the early to mid-twenties[lii]. Maturity can be understood as a developmental concept, including the categories of physical, intellectual, emotional and social development. Processes of physical and intellectual development are usually completed during adolescence; it is the categories of emotional and social development that are of most relevance in considering the maturity of young adults.

Services therefore need to operate in line with an individual's rate of maturity and social development to ensure they are effective in addressing their individual needs.

Looked After Children
Less than 1% of all children in England are in care[liii], but looked after children make up 33% of boys and 61% of girls in custody[liv].

It should be borne in mind that among those aged 18–21 (24 if in full-time education and/or have a disability) there will be a number of people who were previously Looked After and who will be entitled to 'leaving care services' under the Children Act 1989 and Leaving Care Act 2000. They may be subject to increased risks and will be entitled to further support from children's services.

Young people receiving leaving care services will have a pathway plan outlining the level of continued engagement which the local authority will have with them, as well as aspirational plans, mapping educational pathways, for example, which the young person hopes to achieve. These young people should be identified so that adult services are aware and can cater for those with 'Former Relevant' status[lv]. Services must actively establish contact with leaving care workers and the young adult's personal advisor where appropriate.

** For more information on effective transition of young people from CAMHS to adult services, including adult mental health services (AMHS) see: http://www.chimat.org.uk/default.aspx?QN=CAMHS_TRANSITION
** For more information on transitions from the youth to criminal justice systems, including the YJB Youth to Adult Transitions Framework see http://www.justice.gov.uk/youth-justice/youth-to-adult-transitions

Risky behaviours
Research carried out for the Youth Justice Board among children and young people in the secure estate (age 12 to 18) found that their rates of smoking, drinking and use of illegal drugs before entering custody were substantially higher than among young people who do not offend. Over 83 per cent were regular smokers; over 60 per cent drank alcohol daily or weekly, with 66 per cent reporting binge drinking once a week; over 25 per cent considered their drinking to have been out of control before entering custody; and over 80 per cent had used an illegal drug once a month[lvi].

7.2 Older prisoners (aged 50+)

The recent report from the House of Commons Justice committee into the needs of older prisoners[lvii] found that older prisoners are the fastest growing group within the prison population; the number of those aged over 60 grew by 120% and those aged 50–59 by 100% between 2002 and 2013. At the end of March 2013 there were 6,639 prisoners in England and Wales who were aged between 50 and 59 and there were 3,381 over the age of 60. This accounts for around 8% and 4% of the total prison population respectively[lviii]. The reasons are partly due to prisoners serving longer sentences, more being convicted at an older age including convictions for historic offences such as sexual offences (which themselves carry long sentences).

The main problems identified by the House of Commons Justice Committee 2013–14 report are:

- disability and mobility
- a lack of communication between prison staff and healthcare contributing to delays in older prisoners accessing healthcare, and a failure to connect IT systems between prisons themselves and the community
- lack of a basic social care model or what exists is adhoc
- there can be problems with end of life care and where compassionate release is not an option the provision of dignity at the end of life in prison (see section above on end of life care)
- Professor Jenny Shaw, from the Offender Health Research Network, and others in 2011 found high rates of chronic illness; 80% of those aged 60–64 had at

least one moderate or severe disorder; so did 91% of those aged 65–69; and 92% of those over the age of 70.
- the most common illnesses were: cardiovascular (35-55%); musculoskeletal (24-66%); respiratory (15-36%)
- 70% of older prisoners reported to HMIP that they are taking medication compared with 44% of the prison population as a whole
- dementia is fairly rare 1-5% in those over 50 years

Table 12: Useful data sources on older prisoners

Data	What it tells you	Where to access it
SystmOne (READ coded) & healthcare provider systems clinical activity data	Disease prevalence Long-term conditions registers Population clinical activity.	NHS England Area Teams.
Pharmacy data	Provides information about use of drugs. This data should be available by age group with the new information systems from 2015[4].	Prison pharmacy lead
Working with older prisoners	Training pack from Nacro that includes a useful set of data on health and social care needs.	Nacro 2009. Working with older prisoners workshop

7.3 Women

Women represent only 5% of the prison population[lix]. In March 2013. There were 3,869 women in 13 prisons[25].

In addition to high levels of risky health behaviours including smoking, drugs and alcohol women prisoners have additional health needs relating specifically to:

i) Mental health
ii) Social needs
iii) Female specific screening
iv) Sexual health
v) Maternity

i) Mental health

Nearly two thirds of young women in custody have been in care[23] (61 times more likely than the general population) and this group of people have higher mental health needs. We do not have data on what proportion of adult women in prisons have been in care but it is likely to be extremely high. Appendix A2 contains data about mental health needs and shows that suicidal thoughts in the last week are 23 times more likely than in the general population. A

[4] Note: Not all prisons have their own pharmacy as some provide to more than one prison and this may cause difficulties in disaggregating between different prisons. The most useful data is usually found by searching via drug categories / BNF group. This can then be triangulated with data from SystmOne to look at numbers of prisoners with certain health conditions vs. drugs prescribed.

survey of women's health in prisons in 2006 showed that 78% of women had mental health problems at reception as measured by the GHQ12 questionnaire compared to 15% in the general population[lx].

ii) Social needs
70% of female prisoners are mothers and around a quarter of their children are cared for by multiple people or placements (Plugge 2006). Many women prisoners (as well as men) will need support rebuilding fragmented family relationships whilst in prison and through the gate.

iii) Female specific screening
68% of female prisoners had had a cervical cancer screen in the previous five years compared to 80% in the general population.
In 2004 when the Women's health in prisons survey[Plugge 2006] took place less than 5% of **women prisoners are aged over 50 years and hence eligible for breast cancer screening. Of these less than 50% (47%) had ever had a mammogram to detect breast cancer.**

iv) Sexual health
In the 2006 study of women's health in prisons 27% of women prisoners reported that they had been paid money, goods or sex at some time and a similar proportion had been treated for a sexually transmitted infection[(Plugge 2006)]. Nearly half (48%) of women prisoners having sex with men never used a condom.

v) Maternity
Mother and Baby Units (MBUs) cater for mothers with babies up to either nine or 18 months. Timescales are a guideline only and separations should be influenced by the best interests of the child concerned. Mothers may be on remand or sentenced prisoners and may be British or Foreign Nationals. A mother is only admitted to an MBU following an admission board chaired by an Independent Chair who is a certified Social Worker. There should be links to the local Safeguarding Board where the prison is located and the decision to admit a mother and her child takes into account:

a) Whether it is in the best interests of their child;
b) The necessity to maintain good order and discipline within the MBU;
c) The health and safety of other babies and mothers within the unit.

7.4 Learning disabilities

The prison reform trust review of learning disability in prisons highlights the "vast hidden problem of high numbers of men, women and children with learning difficulties and learning disabilities trapped within the criminal justice system"[lxi]. Estimates of prevalence differ depending on the assessment methodology, when it is assessed and how assessments are undertaken, the skill of assessors and variations in policies for diversion. Average estimates of prevalence of learning disability amongst offenders in the UK range from 1–10%[lxii]. However, Loucks suggests that "20–30% of offenders have learning difficulties or learning disabilities that interfere with their ability to cope within the criminal justice system". A prison HNA needs assessment should be sensitive to the under-estimating of learning disability and efforts should be made to counteract this.

7.5 People with physical disability (including hearing and eyesight)

Stewart (2010) found that 3% of men and 3% of women when first sentenced had hearing or sight problems. Their sample consisted of a random sample of prisoners at first sentencing across England. 95% were under 50 years of age.

8. Effective and innovative interventions and services

An on-line resource containing best practice case studies is being developed.

9. Current healthcare service provision

9.1 Overview of prison health services

Briefly describe the infrastructure of healthcare services, physical environment and visiting health professionals. Taking into account the levels of need identified in previous chapters does the service provision meet need and unmet need? Also describe key policies/systems within the prison for managing communicable disease control, palliative care, and continuity of care arrangements for release and transfer.

Table 13: Template for description of what healthcare services are in place and what the pathways are for access

Health service	Is this prison based / in-reach / provided externally	Provider	Capacity	Pathway for access
Self-management	Prison – describe access to over the counter medication and creams			
Reception medical screening				
Primary medical care				
Outpatients				
Inpatients prison based	Prison based			
Inpatients external	External			
Medicines management				
Optometry				
Podiatry				
Substance misuse				
Mental health				
Communicable diseases				
Health improvement				
Palliative care suite				
Other				

9.2 Communicable disease control

Describe the systems in place to demonstrate effective communicable control, for example does the prison have an outbreak plan and pandemic flu plan developed in partnership with the local PHE health protection team and signed off by the prison governing governor, Director of Public Health of the local authority and the Deputy Director for Health Protection (DDHP) of the relevant PHE Centre which has been tested in the last 12 months, and a pandemic flu plan tested in line with NOMS business continuity requirements.

9.3 Palliative care and end of life care

The House of Commons Justice Committee 2013-14 report on older prisoners found between 2007 and 2011 that a similar number of prisoners died in hospital (54%) and in a hospice (15%) as would be expected of people dying from cancer in the community. About a third (30%) died in prison of which 73% were in the healthcare centre. 17 prisoners died in their own cell.
The Prison and Probation Ombudsman found that in 19% of cases of natural death in prisoners that there was inappropriate use of restraint.

Further information about palliative care can be found:
http://www.mariecurie.org.uk/Global/Research/Andrew_Fletcher.pdf
http://www.macmillan.org.uk/Aboutus/Healthandsocialcareprofessionals/Newsandupdates/MacVoice/Prisonerhealthcare.aspx
http://www.lancaster.ac.uk/shm/research/ioelc/groups/media/mturner_150410.pdf

9.4 Continuity of care arrangements for release and transfer

The document Balancing Act[lxiii] notes that "The transitional period from the relatively stable environment of the prison setting back to often chaotic lifestyles in the community, is a period that has been linked to dramatically increased risks to health and death."

What are the arrangements in place for continuity of care and transfer? Are there any gaps in service?

Useful guidance on information about health and public health services for people in prison can be found at:

- http://www.england.nhs.uk/wp-content/uploads/2013/03/offender-commissioning.pdf
- https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/256509/29_public_health_services_for_people_in_prison.pdf

For more information about what agencies to involve in ensuring a cohesive and integrated response to reduce health risks arising from transition from the prison to the community see Balancing Act pages 10 and 11.

10.Consultation – views of key stakeholders

Describe the activity that you have undertaken – questionnaires, interviews, focus groups; the people you have consulted with; the independent scrutiny reports you have reviewed; how you analysed the data and the level of participation and the key findings.

10.1 Views of prisoners

Service user and prison staff and healthcare feedback

Prisons will be expected to support and facilitate service user, staff and healthcare engagement exercises into HNAs. (A service user questionnaire and topics for discussion in prisoner focus groups are in development and will be included on the website.

10.2 Views of healthcare providers

10.3 Independent scrutiny

There are a number of ways you can receive qualitative feedback from a range of stakeholders. Firstly there are a number of bodies that provide independent scrutiny and have a role in reporting on different elements of health in prisons. The links below may provide a useful insight into specific needs within the prison.

HM Chief Inspector of Prisons
HM Chief Inspector of Prisons reports directly to the government on the treatment and conditions for people in prison in England and Wales and other matters. Prison establishments holding adults and young adults are inspected once every five years. Establishments holding juveniles are inspected every three years. Further details can be found at:
http://www.justice.gov.uk/about/hmi-prisons

Prisons and Probation Ombudsman
The Prison Probation Ombudsman (PPO) investigates all deaths that occur in prison or young offender institutions, probation approved premises, and immigration removal centres, whatever the cause of death. After each investigation the PPO produces an anonymised fatal incident report, which may provide information on current health services in prisons. Further details can be found at:
http://www.ppo.gov.uk/fatal-incident-reports.html

Independent Monitoring Boards
Independent Monitoring Boards (IMB) are statutory bodies established by the Prison Act 1952 to monitor the welfare of prisoners in the UK to ensure that they are properly cared for within prison and immigration centre rules, whilst in custody and detention. Each Independent Monitoring Board produces an annual report which often makes comments about the state of health services in the prison. Further details can be found at:
http://www.justice.gov.uk/publications/corporate-reports/imb/annual-reports-2013

Local Healthwatch
Healthwatch plays a role at both national and local level and is responsible for ensuring that the views of the public and people who use services are taken into account. At a local level they represent the views of people who use services, carers and the public on the H+WB and provide a complaints advocacy service to support people who make a complaint about services. This includes reporting concerns about the quality of healthcare to Healthwatch England, which can then recommend that the CQC take action. Further details are available at: http://www.healthwatch.co.uk/

Care Quality Commission
Currently Her Majesty's Inspectorate of Prisons works in conjunction with the Care Quality Commission (CQC) to review the health and social care of people in prison to promote improvement in health and social care services in custodial settings and in people's experience of them, and to improve outcomes. The joint Memorandum of Understanding[lxiv] makes clear that the health care provider is accountable to the CQC. Such reports published on HMCIP website are useful source of information for HNAs.

10.4 Complaints

If a complaint has concerns relating to prison health services directly commissioned by NHS England and where local resolution has failed to achieve a satisfactory outcome, the complainant then has the right to raise a formal complaint with either the service provider or the commissioner of the service. As a consequence information about complaints may inform HNAs and such information may be available from service providers or ATs.

10.5 Compliments

In addition to any complaints raised, it is also important that the HNA takes into account any positive feedback about prison health services. This information may also be available from service providers or ATs.

There is also qualitative feedback you can receive from staff working in the prison and prisoners themselves. The CHIMAT website provides guidance on way to carry out consultation and whilst this is focussed on children and young people the advice is also relevant to adults too: http://www.chimat.org.uk/yj/na/consultation

There are also a number of questionnaire templates included as an appendix to provide you with ideas around what questions to ask. You should make sure that the sample you use is largely representative of the group of individuals you are targeting, for example you should try and survey at least 10% of your total population and include individuals with differing demographics with a minimum of 60 responses.

11. Gap analysis and summary findings

The following questions should be considered when looking at a gap analysis and summary findings:

- what does the information and data show?
- what are current gaps in the health services and treatment interventions?
- how can these situations be improved?
- what are the commissioning opportunities /solutions?
- what health inequalities exist and how can these be addressed?
- what are the major priorities for health and public health services in this prison?
- how does this compare with previous HNAs?

12. Conclusions and recommendations

The final chapter on conclusions and recommendation should consider the following:

- list recommendations
- what needs to be delivered and by whom
- setting priorities
- reviewing progress
- feeding into other local activity
- charting recommendations and plans for implementation

Appendix A1. The prevalence of mental health problems in male prisoners[lxv]

Mental health disorder	England	Remand prisoners	Sentenced prisoners	How many times more likely is this in the prison population (ratio of prison to national)	Local prison prevalence	Ratio local prison to national	Comments
Severe mental							
Functional psychoses[lxvi] (prison populations) psychotic disorders (general	0.3%	10%	7%	20 times more likely in remand prisoners 14 times more likely in			
Personality disorders		78%	64%				
Prevalence of Common Mental Disorder in Past Week	**12.5**	**59%**	**40%**	**3.2 times (sentenced)** **4.7 times (remand)**			
Mixed anxiety and depression	6.9%	26%	19%	3.7 times (remand) 2.7 times (sentenced)			
Generalised anxiety disorder	3.4	11%	8%	2.4 times (sentenced) 3.2 times (remand)			
Depressive episode	1.9	17%	8%	4.2 times (sentenced) 8.9 times (remand)			
Phobias	0.8	10%	6%	7.5 times (sentenced) 12.5 times (remand)			
Obsessive compulsive disorder	0.9	10%	7%	7.8 times (sentenced) 11.1 times (remand)			
Panic disorder	1.0	6%	3%	3 times (sentenced) 6 times (remand)			

Self-harm and suicide							
Suicide attempts (past week)	0.0	2%	0%	2 times (remand)			
Suicidal thoughts (past week)	0.6	12%	4%	6.7 times (sentenced) 20 times (remand)			
Non suicidal self-harm	3.4	5%	7%	2 times (sentenced) 1.5 times (remand)			

Appendix A2 The prevalence of mental health problems in female prisoners[lxvii]

Mental health disorder	England	Remand prisoners	Sentenced prisoners	How many times more likely is this in the prison population (ratio of prison to national)	Local prison prevalence	Ratio local prison to national	Comments
Severe mental disorders							
Functional psychoses[lxviii]	0.5	14%	14%	2.8 times (sentenced) 2.8 times (remand)			Probably more in remand prisoners
Personality disorders		50%	50%				Probably more in remand
Prevalence of Common Mental Disorder in Past Week	**19.7**	**76%**	**63%**	**3.2 times (sentenced)** **3.8 times (remand)**			
Mixed anxiety and depression	11.0	36%	31%	2.8 times (sentenced) 3.2 times (remand)			
Generalised anxiety disorder	5.3	11%	11%	2.1 times (sentenced and remand)			
Depressive episode	2.8	21%	15%	5.3 times (sentenced) 7.5 times (remand)			
Phobias	2.0	18%	11%	5.5 times (sentenced) 9 times (remand)			
Obsessive compulsive disorder	1.3	12%	7%	5.4 times (sentenced) 9.2 times (remand)			

Panic disorder	1.2	5%	4%	3.3 times (sentenced) 4.1 times (remand)			
Self-harm and suicide							
Suicide attempts (past	-	2%	0%				
Suicidal thoughts (past week)	1.0	23%	8%	8 times (sentenced) 23 times (remand)			
Non suicidal self-harm	3.8	9%	10%	2.6 times (sentenced) 2.3 times (remand)			

Appendix B1 The prevalence of physical health problems in male prisoners

Physical health condition	**Prevalence % Prisons (bold)** General population (not bold)					**Prevalence on sentencing** **Ref 3**	**Overall ratio prison to national**	**Overall Local prison prevalence**	**Ratio local prison to national**
	16-24	**25-34**	**35-44**	**45-64**	**65+**				
CVD & diabetes (references)									
Coronary heart disease (1. Marshall 2000;2. HoCJC 2013)	**0.0**	**0.3**	**0.5**	**7 (35% > 60 yrs)**	35-55	4			
Stroke									
Diabetes insulin dependent	**0.3**	**0.5**	**0.6**	**0.75**	**1.1**				
Diabetes non- insulin dependent	**0.0**	**0.1**	**0.3**	**1.9**	**4.2**				
Cancers									
Lung									
Bowel									
Prostate									
Chronic respiratory disease (refs 1&2)				**15%**	27-36%	8			
COPD									
Asthma	19	12	11	8					
Gastro-enterology									
Cirrhosis									
Digestive disorders						**5**			

Physical health condition	**Prevalence %** **Prisons (bold)** General population (not bold)						**Overall ratio prison to national**	**Overall Local prison prevalence**	**Ratio local prison to national**
Age group	**16-24**	**25-34**	**35-44**	**45-64**	**65+**				
Musculoskeletal (any)				**25-51%**	**66%**	**11**			

Appendix B2 The prevalence of physical health problems in female prisoners

Physical health condition	**Prevalence %** **Prisons (bold)** General population (not bold)					**Prevalence on sentencing** **Ref 3**	**Overall ratio prison to national**	**Overall Local prison prevalence**	**Ratio local prison to national**
	16-24	**25-34**	**35-44**	**45-64**	**65 +**				
CVD & diabetes									
Coronary heart disease	**0.2**	**0.1**	**0.3**	**2.3 (45-54 yrs)** **5.9 (55-64 yrs)**		5			
Stroke									
Diabetes insulin dependent	**0.3**	**0.4**	**0.5**	**0.5 (45-54 yrs)** **0.8 (55-64 yrs)**	**0.9**				
Diabetes non- insulin dependent 2) 5%	**0.0**	**0.1**	**0.2**	**0.7(45-54 yrs)** **2.1(55-64 yrs)**	**4.2**				

Physical health condition	**Prevalence %** **Prisons (bold)** General population (not bold)					**Prevalence on sentencing** **Ref 3**	**Overall ratio prison to national**	**Overall Local prison prevalence**	**Ratio local prison to national**
Lung									
Bowel									
Breast									
Chronic respiratory disease						11			
COPD									
Diagnosed Asthma (1) overall 14%; 2) overall 28%	17	14	12	11					
Gastro-enterology									
Cirrhosis									
Digestive disorders-problems with bowels 2) 16%						**6 (digestive unspecified) (3)**			
Digestive disorders-indigestion 2)14%						**6 (digestive unspecified (3)**			

Physical health condition	**Prevalence %** **Prisons (bold)** General population (not bold)					**Prevalence on sentencing** **Ref 3 (%)**	**Overall ratio prison to national**	**Overall Local prison prevalence**	**Ratio local prison to national**
Years	**16-24**	**25-34**	**35-44**	**45-64**	**65+**				
Musculoskeletal						12			
Back pain 2) overall 38%									
Neurological									
Epilepsy 2) self-reported 12.2% but only 3% on medication	1.1	0.7	0.6	0.8		5	10x (source 2) 5x (source 3)		

Appendix C. The prevalence of communicable and sexual health disease in male and female prisoners

Communicable disease[5]	Prevalence in England	Prevalence in prisons	Ratio published prison to national	Local prison prevalence	Ratio local prison to national	Comments
Hepatitis B[lxix]	1.6%	1.4%	0.875			
Hepatitis C[lxx]	3%	14%	4.67			
TB[lxxi]	15.2/100,000	44.5/100,000[lxxii]	2.93			
HIV[lxxiii]	1%	0.7%	0.7			
Chlamydia[lxxiv]						
Gonorrhoea						
Herpes						
Syphilis						
Warts						
All new STIs**						

[5] Data shows a higher incidence of hepatitis C amongst the prison population compared to the community at large due to the proportion of injecting drug users amongst this population. Injecting drug use now plays a more marginal role in the transmission of HIV and hepatitis B infection. Unlike other countries, in England HIV amongst drug users has never been common due to the successful introduction of needle exchange during the 1980s, but injecting drug use was previously a much higher risk for hepatitis B infection. However this has changed over recent years, with sexual transmission being now the most common risk for acute hepatitis B infection. It should be noted that hepatitis B infection amongst people who inject drugs has decreased significantly within the prison population over the past ten years, largely due to the introduction of the hepatitis B vaccination programme in English prisons in 2003.

Appendix D1. The prevalence of risk factors for non-communicable diseases in male prisoners

Risk factor	Prevalence in England	Prevalence in prisons	Ratio published prison to national	Local prison prevalence	Ratio local prison to national	Comments
Smoking						
Physical inactivity						
Poor nutrition						
Alcohol excess						
Obesity						
Hypertension						

Appendix D2 The prevalence of risk factors for non-communicable diseases in female prisoners[lxxv]

Risk factor	Prevalence in England	Prevalence in prisons	Ratio published prison to national	Local prison prevalence	Ratio local prison to national	Comments
Smoking		85% at reception				
Physical inactivity		87% did not meeting government guidelines				
Alcohol excess		45% at reception				
Illegal drugs		75% 6 weeks prior to imprisonment				
Poor nutrition		87% did not meet government guidelines				
Weight		27% BMI <25 29% BMI >30				
Hypertension		15% (mean 122/68)				
Cervical screening		68% at reception				
Breast cancer screening		48% at reception (few women in over 50 yrs in prison)				

Appendix E. The prevalence of special senses and physical disability in male and female prisoners

Physical health condition	**Prevalence %** **Prisons (bold)** General population (not bold)					**Overall ratio prison to national**	**Overall Local prison prevalence**	**Ratio local prison to national**	**Comments**
	16-24	**25-34**	**35-44**	**45-64**	**65+**				

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