Directorate - General
for Health and Consumers

Drug policy and harm reduction

SANCO/2006/C4/02

Final Report on Prevention, Treatment, and Harm Reduction Services in Prison, on Reintegration Services on Release from Prison and Methods to Monitor/Analyse Drug use among Prisoners

April 2008

Universität Bremen

WIAD

Wissenschaftliches Institut der
Ärzte Deutschlands gem. e.V.

ZIS

Centre for Interdisciplinary
Addiction Research (CIAR)

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Executive Summary

1. Status-quo of prevention, treatment and harm reduction services for people in prisons, reintegration services for persons on release from prisons

The main objective of this work package was to analyse the status-quo of prevention, treatment and harm reduction services for people in prisons and in reintegration services for persons on release from prisons. The report is based on data on health interventions targeting imprisoned drug users as well as on relevant information included in the national action plans on social inclusion prepared by the Member States within the context of the open method of coordination on social protection and social inclusion.

A key result of this work package is that there is a need for more systematic research on the effectiveness of treatment for drug users in prison, as there is hardly any high-quality research in this field, especially in the EU. Although there exist a range of interventions for drug using inmates, the implementation is often sporadic and not sufficient to meet the needs.

To promote and secure health in prison, testing for infectious diseases and vaccination is a major opportunity, and does have an impact on the health of the incarcerated, the correctional employees and the communities to which the inmates return. Vaccination for Hepatitis B and A is highly recommended for prisoners. Drug testing on the other hand, in particular mandatory drug testing in prison can have adverse effects, e.g. encourage people to switch from smoking drugs like Cannabis to injecting drugs like heroin, in order to avoid detection. It has been observed that mandatory drug testing is rather expensive and can be counterproductive, due to an increasing tension in the prison. Treatment for prisoners involves the treatment for drug dependency and infectious diseases. Upon entering the prison, prisoners with AIDS should be offered treatment with highly active anti-retroviral therapy (HAART), which is an effective treatment. Hence existing HAART should not be discontinued and prisoners not yet receiving HAART should be encouraged to start HAART. Similar to AIDS, treatment for HCV is safe and feasible.

Although the establishment of prison-based substitution treatment proved to be as effective in reducing mortality, crime and re-incarceration rates and HCV as in the community, the implementation of prison-based substitution treatment is still not equally well accepted and realized. Concerning harm reduction measures in prison the implementation is fragmentary and often problematic, despite existing research on the topic. Evidence for the effectiveness of prison needle exchange programmes (PNEP) has been gathered in a number of very different prison settings: PNEP reduces needle sharing very effectively, can increase uptake of drug treatment as well as the safety in the prison, and can reduce abscesses and fatal overdoses. It does not increase injecting drug use, nor has it shown any other negative effects. No research was found explicitly evaluating the distribution of sterile tattooing equipment. Still this measure should be recommended to reduce the risk of transmitting diseases, as tattooing often occurs in prison. Condoms are likely to be the most effective method for preventing sexually transmitted diseases (STDs). No serious negative effects of condom distribution in prisons have been found, and the free availability of condoms seems feasible in a wide range of prison settings.

The full report is attached (*Annex 1:* Final report [WP 4]. The status-quo of prevention, treatment and harm reduction services for people in prisons and in reintegration services for persons on release from prisons).

2. Report on current approaches to monitor/analyse drug use among prisoners

The main objective of this work package was directed to report on current approaches to monitor/analyse drug use among prisoners, based on data and methods available from the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), the World Health Organization (WHO) and the European Network on Drugs and Infections Prevention in Prison (ENDIPP) and current literature, assessing the data quality and analysing ways to improve availability and reliability of such information.

Many countries are reporting an increase in the use of illicit drugs in prisons, but national routine data on drug use in prison is rare. Prison related data collected by the EMCDDA come from a range of sources, which are often not comparable in terms of the methods used. Variations across countries and across surveys make comparisons between and within countries difficult and are related to issues such as sampling strategy, sample size, geographical coverage, population selection, and methods of measurement of drug use (self-report, medical assessment). Moreover, studies in different countries use different measures of prevalence (lifetime or last year or month prevalence), and frequency of drug use.

Compared to the data on the prevalence and dynamics of drug use inside prisons, the data on the availability of harm reduction services and facilities collected by EMCDDA are more comprehensive and of a higher quality. However, information on the accessibility, coverage rates, quality and the utilisation of such facilities, with a particular focus on at-risk populations, need to be improved in order to obtain an overview of the situation in the different countries with clear indications on coverage as a core-element in policy evaluation.

In 2006, the Health in Prison Project (HIPP) of the World Health Organization Regional Office for Europe (WHO) has launched a Prison Health Database, which has been developed in collaboration with the EMCDDA and the Scientific Institute of the German Medical association (WIAD). The development and implementation of this database has been cofunded by the European Commission under the framework of the Public Health Programme 2003-2008. This prison health database was developed in order to increase the knowledge of drug related problems inside prisons, trends in prison health and their importance for public health. The indicators of this database cover four subjects: Penal Statistics, General Population Epidemiology, Interventions Monitoring and Penal Epidemiology. However up to now the data reported from Member States to the WHO Health in prison database is quite limited.

Overall, there is an obvious lack of systematic monitoring and research on drugs and health issues in European prisons. There are some valuable starting points in gathering information, which could support health planning and policy making, but these systems have to be improved and need strong support from national authorities. It is a future challenge to develop and implement an EU standard protocol to collect data on drug use, infectious diseases and risk behaviours in prison population that could then be used by countries to assess these issues in prison. Such a protocol would have to include a standard questionnaire but also methodological and ethical recommendations about how to implement a prison survey on health and drug-related issues.

The full report is attached (*Annex 2*: Final report [WP 5]. Current approaches to monitor/analyse drug use among prisoners).

Annex 1

Health and Consumer Protection
Directorate - General

Drug policy and harm reduction

SANCO/2006/C4/02

Final report (WP 4)

The status-quo of prevention, treatment and harm reduction services for people in prisons and in reintegration services for persons on release from prisons

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Contents

Index of Tables

Index of Figures

Abbreviation	Word
AE	Adverse Event
AIDS	Acquired immune deficiency syndrome
ART	Anti-retroviral therapy
BBV	Blood borne virus
CPT	European committee for the prevention of torture
DOT	Directly observed therapy
EMCDDA	European Monitoring Center for Drugs and Drugs Addiction
EU	European Union
HAART	Highly Active Anti-Retroviral Therapy
HAT	Heroin-assisted treatment
HAV	Hepatitis-A virus
HBV	Hepatitis-B virus
HCV	Hepatitis-C virus
HIV	Human immunodeficiency virus
HR	Harm reduction
IDU	Intravenous Drug User
ILO	International labour Office
KOP	Keep on person
MDT	Mandatory drug testing
MSM	Men having sex with men
MMT	Methadone maintenance treatment
MT	Maintenance treatment
PDU	Problematic Drug User
PMMT	Prison-based methadone maintenance treatment
PNEP	Prison needle exchange program
SAT	Self-administered therapy
ST	Substitution treatment
STD	Sexually transmitted diseases
SVR	Sustained viral load
TB	Tuberculosis
UNADIS	The Joint United Nations Programme on HIV/AIDS
UNDOC	United Nations Office on Drugs and Crime
WHO	World Health Organization

Executive Summary

Within the scope of this project an extensive literature research was performed gathering the evidence for prevention, treatment and harm reduction programs for prisoners. This study offers insight into the status quo of scientific research for the three headlines. Besides the evidence, it allows a deep insight into the prison population by providing ample penal statistics.

The literature research revealed that testing for infectious diseases and vaccination is a major opportunity to promote and secure health in prison. Tremendous opportunities exist that have an impact on the health of the incarcerated, the correctional employees and the communities to which the inmates return. Vaccination for Hepatitis B and A is highly recommended for prisoners. Similar to testing for infectious diseases, drug testing plays an important part in prison. It can have very different aims and methods. Mandatory drug testing in prison can encourage people to switch from smoking "soft" drugs (i.e. Cannabis) to injecting "hard" drugs (i.e. heroin) for the latter is not as long detectable. It has been observed that mandatory drug testing is rather expensive and can be counterproductive, due to an increasing tension in the prison.

Testing for infectious diseases, vaccination and drug testing play a decisive role in prevention of communicable diseases and illegal drug consumption.

Treatment for prisoners involves the treatment for drug dependency and infectious diseases, e.g. AIDS and Hepatitis. The provision of healthcare for prisoners suffering from AIDS and Hepatitis is not only a human right, but also an effective and safe intervention. Upon entering the prison, prisoners with AIDS should be offered treatment with highly active anti-retroviral therapy (HAART). Existing HAART should not be discontinued and prisoners not yet receiving HAART should be encouraged to start HAART. Similar to AIDS, treatment for HCV is safe and feasible. This has been proven for problematic drug users (PDUs) in the general population, and recently there have been promising results from trials inside the prison.

Regarding treatment for drug dependency, detoxification with adequate medication is rarely available throughout Europe. There is a lack of evidence for detoxification programs in prisons, with only two studies published. Substitution therapy has been widely recognized as an effective treatment for opioid dependence in the general population. The establishment of prison-based substitution treatment proved to be as effective in reducing mortality, crime and re-incarceration rates and HCV. But still the implementation of prison-based substitution treatment is not equally well accepted and realized.

A harm reduction approach in prison recognises that a valid aim of drug interventions is to reduce the relative risks associated with drug use. In this work we assessed the impact of prison-based needle exchanges programs (PNEP), provision of disinfectants, distribution of sterile tattoo equipment and provision of condoms. Evidence for the

effectiveness of PNEP has been gathered in a number of very different prison settings. PNEP reduces needle sharing very effectively, can increase uptake of drug treatment as well as the safety in the prison, and can reduce abscesses and fatal overdoses. It does not increase injecting drug use, nor has it shown any other negative effects. Regarding disinfecting injecting equipment with bleach is rather too complicated to be effective; it should be used as a "second" measure only, where PNEP is not provided yet.

No research was found explicitly evaluating the distribution of sterile tattooing equipment. Still this measure should be recommended to reduce the risk of transmitting diseases, as tattooing often occurs in prison.

Condoms are likely to be the most effective method for preventing STDs. No serious negative effects of condom provision in prisons have been found, and the provision of condoms seems feasible in a wide range of prison settings.

Although there exist a range of interventions for drug using inmates, the implementation is often sporadic and not sufficient to meet the needs. Furthermore, structured and more high-ranking research, which at present is conducted almost exclusively outside Europe, is required to assess the effectiveness of different treatment approaches.

1. Introduction

The negative health effects arising from imprisonment include the impact on mental health, the risk of suicide and self-harm, the risk of drug overdose on release, the risk of acquiring blood-borne-infections and the harm resulting from inappropriate imprisonment of people requiring facilities unavailable in prison or in overcrowded prisons.

Guidelines developed by the Worls health Organization (WHO) Health in Prisons Project[1] and the Pompidou Group of the Council of Europe principles for the provision of healthcare services in prisons (2001) state that:

'There should be health services in prisons which are broadly equivalent to health services in the wider community.' (WHO Europe 2001)

They also recommend that services are based on clearly assessed needs of prisoners, who are often from socially deprived groups and present additional problems. This will include identifying problematic drug users and those with communicable diseases such as HIV and hepatitis who need additional support as well as healthcare. A key element of this process should be to consult with prisoners themselves and allow them to take some responsibility in planning their treatment. These guidelines are not only in place to assist prisoners but also the prison and healthcare services on a wider scale by preventing the spread of communicable diseases, promoting healthy lifestyles and reducing the personal and environmental harm resulting from high-risk behaviours. However a study into healthcare services in prison systems in the EU revealed that due to staff shortages and limited budgets, this was often difficult to achieve, despite the implications for the human rights of prisoners (MacDonald 2005; Hayton and Boyington 2006). In addition, further guidelines have emphasised the need for healthcare in prison to be at least equivalent to community provisions, and in recognition of the additional needs often presented by prisoners and also of the lack of provision available for some groups in the community, to in fact be better than community healthcare.

Due to the increased risk behaviours associated with drug use in prison (as explored in chapter 5.2.), and the fact that custodial settings form a risk of their own (overcrowding, often poor sanitary and hygiene conditions, limited space for every prisoner) there are many arguments against the systematic use of imprisonment for those who are involved in crime and drug use. Prison generally does not have a rehabilitative effect on those it contains. There are many harmful consequences of drug use in prisons described in the literature, and learning to be drug-free in prison does little to prepare drug-using

[1] http://www.euro.who.int/prisons

offenders for being drug-free on their return to the community. The spatial and methodical range of action for implementing remedial measures in prisons is very limited. Prisons may exacerbate harms caused by drug use, and this harm may then be translated to the community outside of prisons (Turnbull and Webster 1998). In view of the increase in drug consumption in many prison systems, it is imperative to provide adequate and equivalent helping services that meet the needs of drug users and are based on their abilities and resources. The prevention, care, treatment and support measures taken must be balanced with the requirements for security and good order, and be consistent with human rights norms and standards. The goals pursued should also be pragmatic, not only with respect to the prison system but also with respect to the prisoners. Therefore, the reduction of harmful drug use and risk behaviours should be the guiding philosophy behind the measures. However, the implementation of harm reduction programmes in European prisons is still quite heterogeneous. In a report of the implementation of the Council Recommendation (of 18 June 2003[2]) on the prevention and reduction of health-related harm associated with drug dependence[3] it is said that a policy to provide drug users in prisons with services that are similar to those available to drug users outside prisons exists in 20 Member States and is about to be introduced in four countries. However, the coverage, availability and accessibility of harm reduction services is varying significantly in European countries and even within the countries from region to region (see chapter 6.8).

[2] http://europa.eu.int/eur-lex/pri/en/oj/dat/2003/l_165/l_16520030703en00310033.pdf

[3] http://eur-lex.europa.eu/LexUriServ/site/en/com/2007/com2007_0199en01.pdf

2. Methodology and definitions

2.1. Methodology

A systematic review of international literature on evidence of effectiveness of interventions such as prevention, treatment, and harm reduction measures in prisons has been carried out in order to set the foundation for an evidence-based approach. The decision for undertaking a systematic review rather than a traditional review was based on the development that not only for clinical decision a systematic approach is needed. Basic data have been collected to describe the profile of drug using population (drugs used before, while and after imprisonment, drug using patterns, risk behaviour, drug related death after release etc.), living conditions of drug users in European prisons (data on demographic, sex, age, institutions etc.), and of prevention, treatment and harm reduction services in prisons. Special emphasis will be put on the evidence of the prevalence of infectious diseases (HIV, HBV, HCV, and TB etc.) and risk behaviours in prisons.

Published studies concerning the topics mentioned above were identified through manual and computerised searches of relevant databases. As it is known that the sensitivity of Medline search is, even with excellent search strategies, not perfect (Wilczynski et al. 2004), the search was extended to other relevant clinical and sociological databases (see below). To isolate the research question in advance of the systematic review the focus was settled on existing literature and data from well-known and established institutes.

This review has some limitations: Only publications in English and German were included, as well as some in French and Spanish, other languages were not included; and not all papers (mostly 'grey literature') could be obtained within the time limit.

Regarding the search in detail the following workflows were made:

1. Manual and electronic search for the existing data
   - in databases, publications, expertises, monographs, standards and guidelines of the EMCDDA
   - in the national reports of the National focal points of the REITOX-Network
   - in activities and information of the WHO Europe, Pompidou-Group and other international bodies working in the field (e.g. UNAIDS, UNODC)
   - through contacts to national and international experts in the field.
2. A database search was conducted using a systematic search strategy (see below) for published literature and primary research studies in specific and general electronic databases (Cochrane, Dare, Medline, Embase, Psycinfo, Social Science).

Additionally reference lists of publications in relevant scientific journals as well as in the retrieved publications have been hand searched.

3. Compilation of electronic reference lists using EndnoteX.
4. Analysis of the retrieved literature.
5. Identification of possible lacks of information.

Table 1: Database search strategy

1	Substance-related disorder/ or exp opioid-related disorder/ or amphetamine-related disorder/ or cocaine-related disorder.mp. or cannabis-related disorder.mp.*
2	(abuse$ or depend$ or addict$ or substance abuse or withdrawal).mp.
3	(heroin$ or opiate$ or opioid$ or morphium or morphin$).mp. or exp morphinans/ or methadone.mp. or inhalant$.mp. or cocaine.mp. or crack.mp. or amphetamine$.mp. or exp amphetamine/ or cannabis.mp. or marijuana.mp.
4	1 or 2
5	3 and 4
6	drug therapy.fs. or drug treatment.mp. or drug therapy.mp. or minnesota.mp. or 12-step.mp. or drug intervention.mp. or drug services.mp. or drug awareness.mp. or drug training.mp. or drug-related problem$.mp. or drug demand programmes.mp. or drug demand reduction.mp. or detoxification.mp. or therapeutic communit$.mp. or TC.mp. or cognitive treatment.mp.
7	(harm reduction or syringe exchange or needle exchange or condom$ or lubricant$ or disinfect$ or NEP or PNESP).mp.
8	(substitution$ or methadone or subutex or buprenorphine or heroin$ or codeine$ or heroin-assisted maintenance or substitution treatment).mp.
9	(drug-related infectious diseases or HIV or HCV or HBC or hepatitis or TB or tuberculosis).mp. or exp HIV infections/ or hepacivirus.mp.
10	(pre-release programme or aftercare programme or throughcare programme or drug release programme or aftercare or release).mp.
11	(prison health or health care service or drug education).mp.
12	or/6-11
13	(prison$ or detainee$ or correctional facilit$ or correctional institution$ or remand$ or carceral$ or jail$ or inmate$ or convict$ or gaol$ or penitent$ or custod$).mp.
14	5 and 13
15	12 and 14

* mp=title, original title, abstract, name of substance word, subject heading word

The included literature was graded according to the following table (adapted from (Kleber et al. 2006):

Table 2: Literature grading

A	Randomized clinical trial. A study of an intervention in which subjects are prospectively followed over time; there are treatment and control groups; subjects are randomly assigned to the two groups
B	Clinical trial. A prospective study in which an intervention is made and the results of that intervention are tracked longitudinally; study does not meet standards for a randomized clinical trial.
C	Cohort or longitudinal study. A study in which subjects are prospectively followed over time without any specific intervention.
D	Case-control study. A study in which a group of patients is identified in the present and information about them is pursued retrospectively or backward in time.
E	Review with secondary data analysis. A structured analytic review of existing data, e.g., a meta-analysis or a decision analysis.
F	Review. A qualitative review and discussion of previously published literature without a quantitative synthesis of the data.
G	Other. Textbooks, expert opinion, case reports, and other reports not included above.

2.2. Definitions

2.2.1. Prison

In this report, the term "prison" is used for all places of detention, no matter if the person is in police detention, pre-trial/remand prisons, or is already sentenced.

2.2.2. Drugs

This report is focusing on illicit drug use and especially "problematic drug use use" (see next chapter) in prisons.

2.2.3. Problematic Drug Use

Problematic drug use (PDU) is defined as "injecting drug use or long duration/regular use of heroin/cocaine and/or amphetamines" (EMCDDA 2006a). This definition can also include other opioids such as methadone. Furthermore, drug consumption is deemed to be problematic, if this behaviour is joined with other risk behaviour, causes damage to other persons or produces negative socials consequences (EMCDDA 2005). The latter is not clearly defined. Although no clear definition of negative consequences can be found in the literature, it can be said, that negative social consequences are frequently linked to offending, be it a direct cause such as theft to found drugs or a contributory factor such as violent crime fuelled by excessive alcohol use. In most countries PDU is understood as distinct from recreational or experimental use, in that it

often led to harmful consequences. Polydrug use needs to be distinguished from PDU, because it describes the "…frequent use of more than one substance over a minimum of specified time period…" (EMCDDA 2006a, p. 92). Recently there has been a debate about this topic, due to the spread of polydrug users and the therewith involved problems within the monitoring system. (EMCDDA 2006a).

2.2.4. Drug free interventions

The importance of drug problems in prisons has been widely recognised internationally. In the 'Declaration on the guiding principles of drug demand reduction', which accompanied the UN General Assembly Special Session on Drugs (UNGASS) in 1998, prisoners were explicitly identified as an important group for demand-reduction activities (see United Nations 1998).

Turnbull states that:

> *"One of the main reasons why this approach has been adopted within prisons is the perception that prison culture often works against other types of treatment and education programmes." (Turnbull and McSweeney 2000, p. 47F))*

Another reason is that abstinence is compatible with, and reinforces, the aim of custody in general, and is seen to enable prisoners to lead a life without committing criminal offences after release. Within prisons, the use of illegal drugs is a criminal offence, and therefore abstinence-based interventions are generally viewed as compatible with the goal of many prison systems to seek to eradicate drug us inside prison.

2.2.5. Harm Reduction

In their broadest sense, harm reduction policies, programmes, services and actions work to reduce the health, social and economic harms to individuals, communities and society that are associated with the use of drugs[4]. A "harm reduction approach" recognises that a valid aim of drug interventions is to reduce the relative risks associated with drug misuse, from reducing the sharing of injecting equipment, through to stopping injecting, substitution on opioid drugs for heroin users and abstinence from illegal drugs. Most harm reduction interventions specifically aim to prevent blood-borne diseases (most particularly HIV and hepatitis infections) and other drug-related harm, including overdose and drug related death. All drug treatment services, residential or community-based, should provide a distinct harm reduction element to reduce the spread of blood borne viruses and risk of drug-related deaths in the treatment they provide. Specific harm reduction interventions to reduce the spread of blood-borne viruses and reduce overdose include:

[4] UK Harm Reduction Alliance website at http://www.ukhra.org

- Needle exchange services i.e. the provision and disposal of needles and syringes and other clean injecting equipment (e.g. spoons, filters, citric acid) in a variety of settings
- Advice and support on safer injection and reducing injecting and reducing initiation of others into injecting
- Advice and information to prevent transmission of BBVs (particularly hepatitis A, B and C and HIV) and other drug misuse-related infections
- Hepatitis B vaccination
- Access to testing and treatment for hepatitis B, C and HIV infection
- Counselling relating to HIV testing (pre and post test)
- Advice and support on preventing risk of overdose
- Risk assessment and referral to other treatment services.

Harm reduction interventions such as needle exchange, advice and information on safer injecting, reducing injecting and preventing overdose should also be available as open-access services in each local area. Needle exchange services often have contact with problematic drug users who are not in touch with structured drug treatment services. Harm reduction interventions should be integrated into all drug treatment service specifications via contracts or service level agreements. Harm reduction interventions should also be integrated into structured drug treatment according to an individual client's needs and should be incorporated into a care plan agreed with the client (National Treatment Agency for Substance Misuse 2005, p. 41).

A Status paper on prisons, drugs and harm reduction (WHO 2005b) defined harm reduction measures in prisons:

"In public health relating to prisons, harm reduction describes a concept aiming to prevent or reduce negative health effects associated with certain types of behaviour (such as drug injecting) and with imprisonment and overcrowding as well as adverse effects on mental health" (WHO Europe 2005b).

Harm reduction acknowledges that many drug users cannot totally abstain from using drugs in the short term and aims to help them reduce the potential harm from drug use, including by assisting them in stopping or reducing the sharing of injecting equipment in order to prevent HIV transmission that, in many ways, is an even greater harm than drug use. In addition, the definition WHO adopted acknowledges the negative health effects imprisonment can have. These include the impact on mental health, the risk of suicide and self-harm, the need to reduce the risk of drug overdose on release and the harm resulting from inappropriate imprisonment of people requiring facilities unavailable in prison or in overcrowded prisons.

3. Background Information on prison systems in the EU

The source of data used for this chapter is the Council of Europe Annual Penal Statistics: SPACE I. For most of the countries, we could refer to the recent surveys (2004), with prison population figures (stock) relating to the situation at 1st September 2004, and flow of entries, total number of days spent in penal institutions, and incidents (escapes, deaths and suicides) relating to the year 2003.

However, seven member states of the European Union (Austria, Belgium, Czech Republic, Greece, Ireland, Malta and Portugal) did not answer to the SPACE I 2004 Survey. In these cases, we used the 2003 and 2002 surveys.

In all charts of this chapter the following own calculations were included:

- Totals for Spain and the United Kingdom, whenever possible. In the SPACE tables, data for these countries were never presented as a whole, but according to the different national structures. In order to calculate the measures of central tendency, as well as the "EU average" mentioned below, we only used totals.
- Total for all 25 EU Member States or for all the data supplied for these countries (without Bulgaria and Romania): "EU total". Regarding the items where percentages or rates had to be calculated for the total, we only used the absolute numbers available for the same countries in all concerned items. We named this total rate: "EU average", as it takes into account the demographical weighting of the countries involved (i.e. is strongly determined by Germany, France, the United Kingdom, Italy, Spain and Poland, which have the highest (prison) population numbers).
- Additionally, an "EU-mainstream" is described, which is defined as a (relative) majority of the data-providing EU-member states around the "EU-average".
- Measures of central tendency (mean, median, minimum, maximum) to describe the distribution of data supplied by the EU member states (without Bulgaria and Romania). For Spain and the United Kingdom, only the totals were used. These measures do not take into account the demographical weighting of the countries involved (other than the "EU average").

The answers to the partly revised SPACE I survey 2004 suggested that "cross-national comparisons of prison population rates must be conducted cautiously as the categories included in the total number of prisoners vary from country to country. The same is true for cross-national comparisons of deaths and suicides in penal institutions as well as of staff working in penal institutions." The sometimes significant differences between the member states indicate different forms of social control regarding crime or the social definition of crime, respectively. These differences must result in differently composed prison populations and consequently have an impact on epidemiological structures and

the distribution of risk groups and behaviour. The policy on drug consumption and its penalisation, for example, will influence the structure of a country´s prison population as well as the social control of prostitution (which female IDU can use to finance their drug consumption) might affect the prevalence of STD in prison.

The following chapter covers general prison population statistics, demographical aspects of the prison population (i.e. gender, nationality, age), capacity of prisons, legal aspects of the prison population (i.e. legal status, length of sentences), movements in prison population (i.e. flow of entries, length of imprisonment, suicides, deaths), occupation and education in prison and, at last, statistics on prison staff.

3.1. General

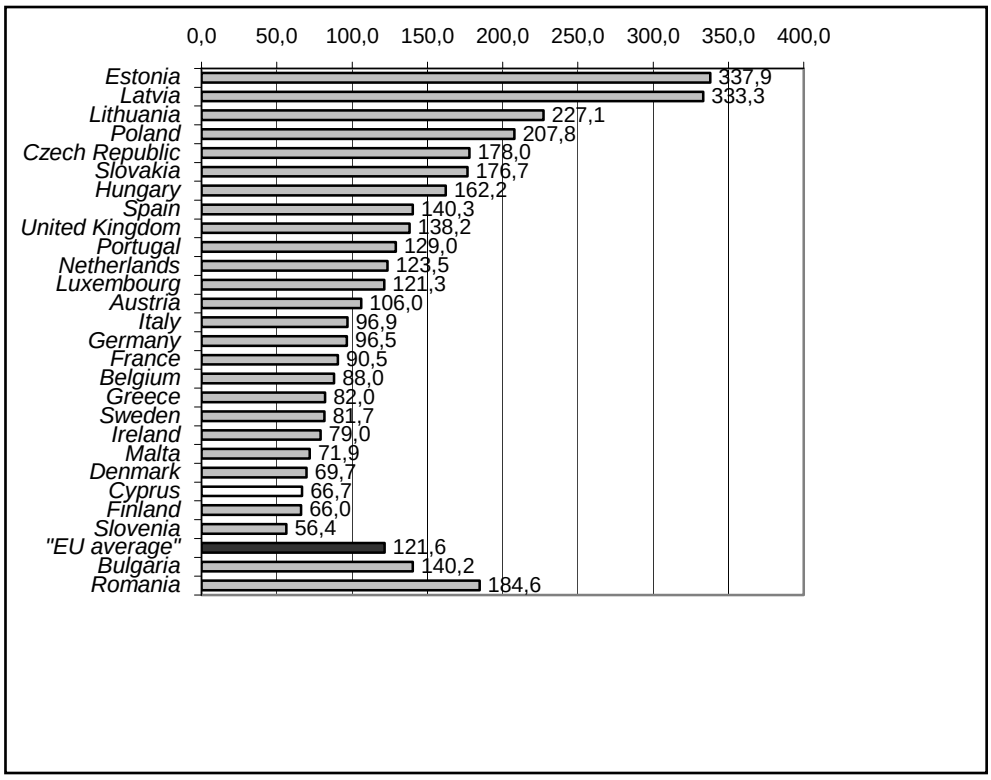
The *absolute numbers* of prisoners in Europe at a given day can give an impression of the quantitative dimension of prison issues. The prison population in the member states of the European Union comprises 558 025 prisoners (including pre-trial prisoners) on 1st September 2004, while 40 085 persons in Romania and 10 935 persons in Bulgaria, the two future member states, are in prison at that time. Therefore, issues of prison and health in prison in particular affect directly more than half a million people at an appointed date and even more during a period of time because of the constant changes in the prison population. In each of the six biggest countries of the European Union more than 50 000 persons are in prison at the appointed date: 82 668 in the United Kingdom, 79 676 in Germany, 79 344 in Poland, 59 224 in Spain, 56 271 in France and 56 090 in Italy, i.e. almost three of four prisoners (413 273) in the European Community are to be found in a prison of one of the six biggest member states.

These figures might help to assess the weight and importance of the following data, which are in general rates per country in order to make it possible to compare the states despite their very different population size. Moreover, the "EU average" used in almost all descriptions has always been calculated on the basis of the absolute numbers in all member states of the European Union (*without* Bulgaria and Romania) for which data were available (i.e. not always the 25 member states), and consequently takes into account the demographical weighting of the countries involved. Therefore, the "EU average" is strongly determined by the United Kingdom, Germany, Poland, Spain, France and Italy, which have the biggest prison population numbers. But it is also necessary to keep in mind the quite different ways how different countries define and construct their prison population in general. Additionally, all following comparisons can only be regarded as approximations because of various differences and irregularities in the national statistics explained in notes.

Within these limits of comparability, there is a significant variation of the prison population rate per 100 000 inhabitants between Slovenia – with a very low rate of 56,4 – and Finland, Denmark and Malta (66,0 to 71,9) on the one hand, and Estonia and Latvia – with extreme values of 337,9 and 333,3 respectively – on the other hand. Lithuania (227,1) as the third Baltic State and Poland (207,8) show a very high level as

well compared to the "EU average" of 121,6 (Figure 1). 14 countries plus Bulgaria show figures between approx. 160 and 80. In comparison with the other EU members, almost all eastern states (with the exception of Slovenia) and Romania show higher prison population rates of more than 160. Additionally, Bulgaria has a rate comparable to the highest western rate shown by Spain, which is visibly higher than the "EU average" as well as the figure for the United Kingdom.

Figure 1: Prison population rate per 100 000 inhabitants



Source: Council of Europe 2004

Concerning changes of the prison population rates between 2003 and 2004, an increase of more than 5% took place in the Netherlands, Bulgaria, Luxembourg, Sweden and the Slovak Republic (9,6 to 7,6%). It cannot be determined, whether the extreme value of 51,0% for Cyprus is caused by changes in statistical methodology or by real developments. A remarkable decrease took place in Lithuania (-21,0%) and in Romania as well (-11,3%).

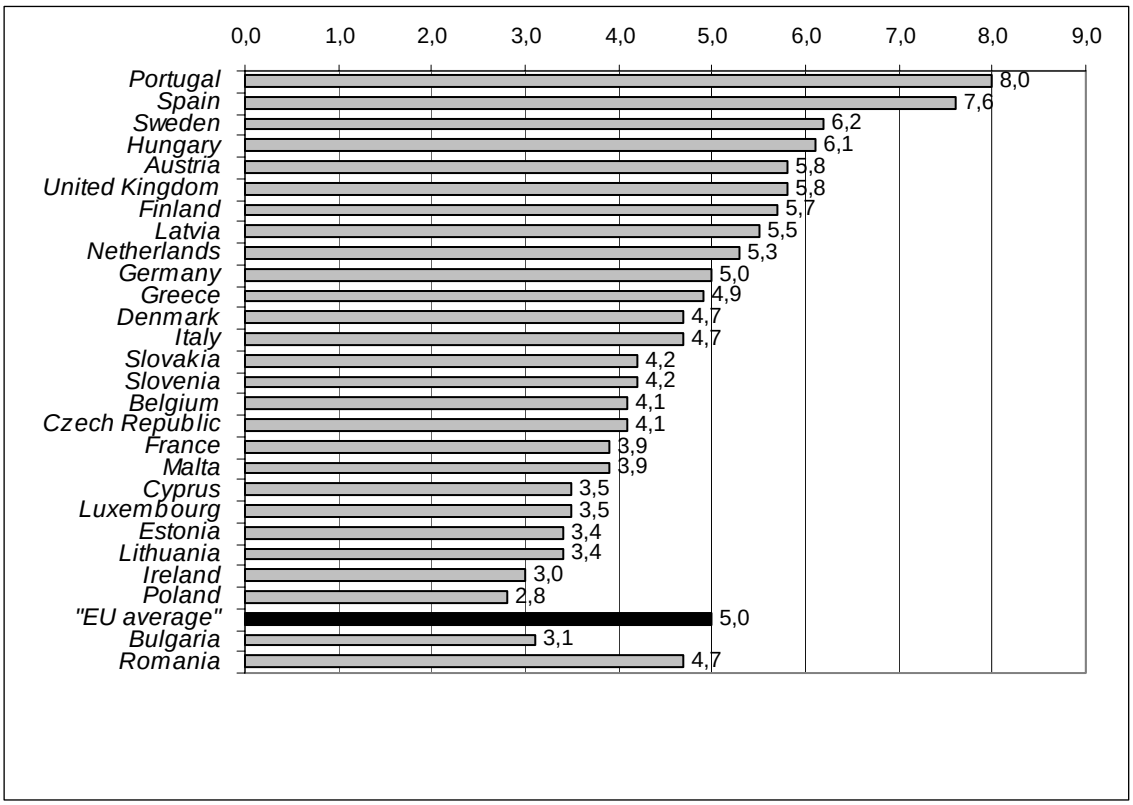
3.2. Demographics

According to a recent survey among the Ministries of Justice of the European Member States eight countries reported that 10-30 % of the female prisoners have a drug problem (Zurhold and Haasen 2005). The same number of countries specified 40-60% of the female prisoners as drug users.

These findings are in line with other research results. A review of studies on the prevalence of drug dependence in prisoners reveals a substantial heterogeneity in the history of drug use but underlines as well the higher proportion of drug problems among female inmates (Fazel et al. 2006). The review of 13 studies with a total of 7563 prisoners shows a drug dependence that varied from 10 to 48 % in male prisoners and 30 to 60 % in female prisoners.

As Figure 2 shows, there is only little variation of the percentage of female prisoners between Poland, Ireland and Bulgaria (2,8 to 3,1%), but also Lithuania, Estonia, Luxembourg and Cyprus, on the one hand, and Spain and Portugal (7,6 and 8,0% respectively) on the other hand. While the "EU average" is 5%, a majority of 17 countries and Romania are situated between approx 4 and 6%.

Figure 2: Female prisoners in percent

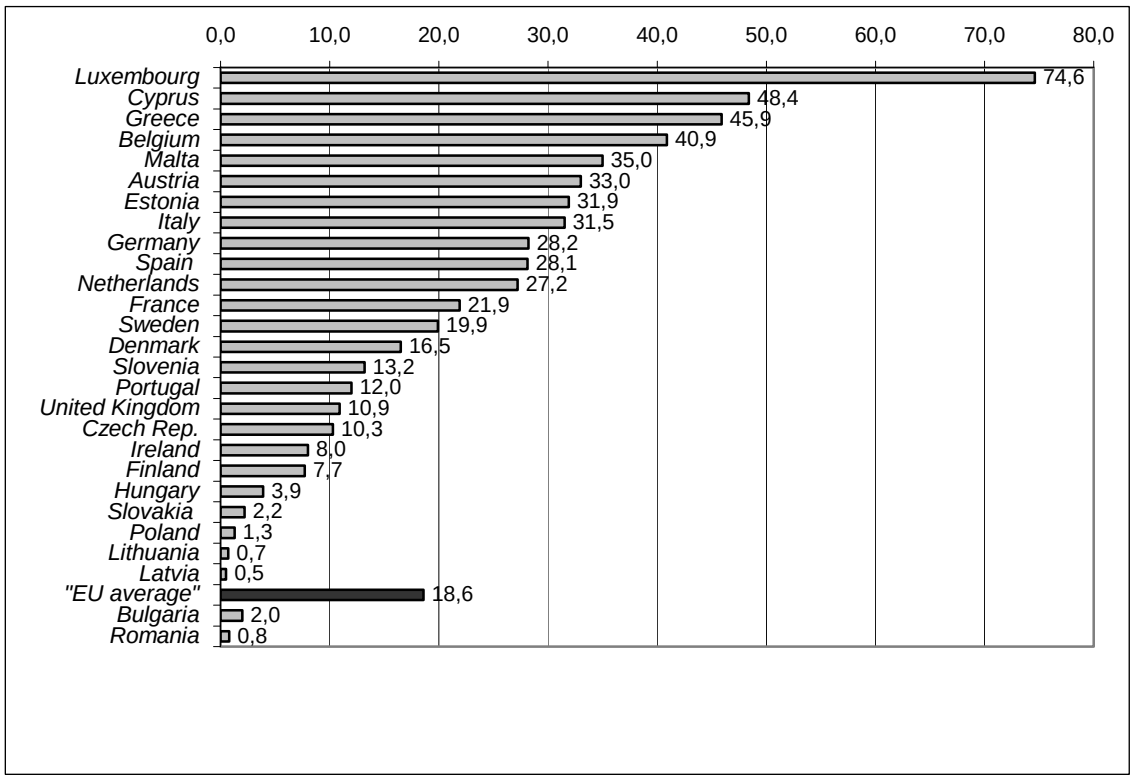


Source: Council of Europe 2004

At the same time there is a wide range of percentages of foreign prisoners (Figure 3), which is first of all indicated by a difference of almost 8 to 35% in a large middle group of 16 EU Member States. Furthermore, the discrepancies in European prisons are expressed by an extreme rate in Luxembourg (74,6%) and very high values in Cyprus, Greece and Belgium (48,4 to 40,9%), while in Latvia, Lithuania, Romania, Poland, Bulgaria, the Slovak Republic and Hungary (0,5 to 3,9 %), detainees from foreign origin are only a small group, compared to the "EU average" of 18,6%. Moreover, with

the exception of Estonia[5], all eastern countries are below this value, which indicate that strong structural differences between European eastern and western societies still exist.

Figure 3: Foreign prisoners in percent

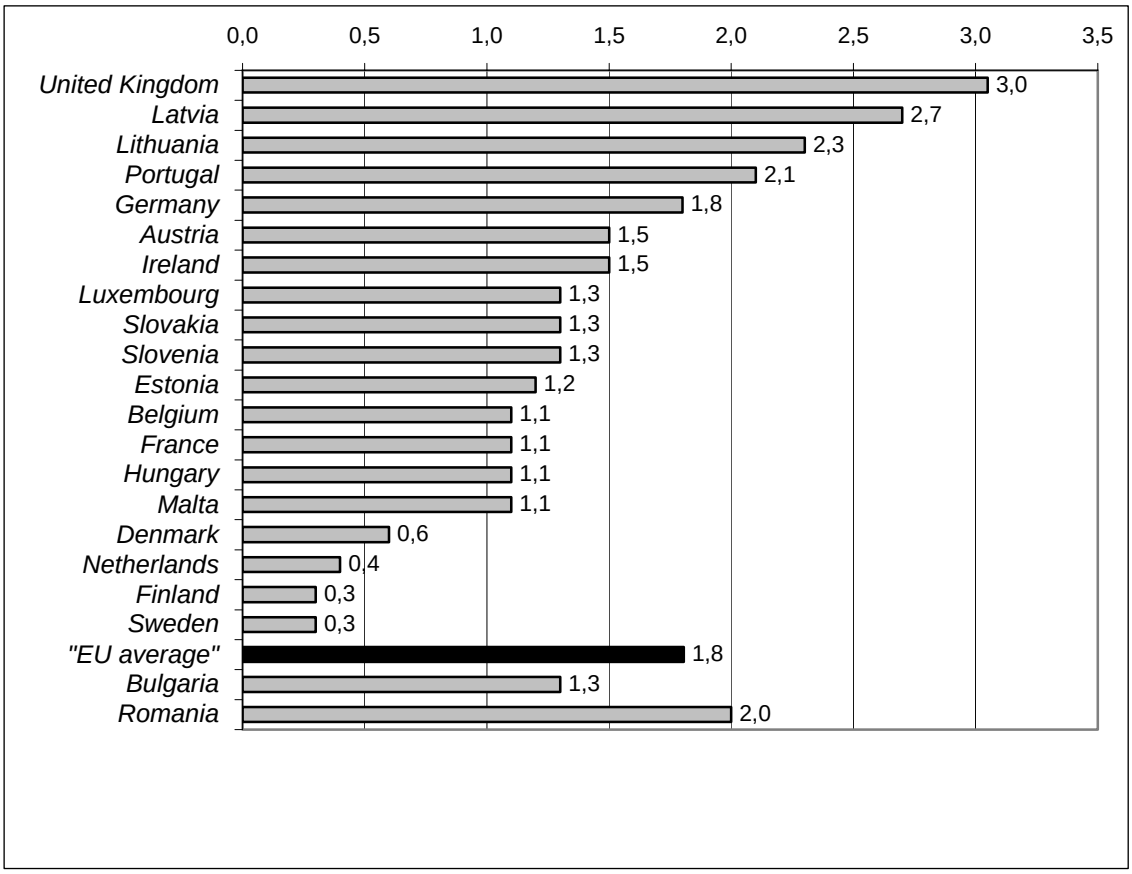


Source: Council of Europe 2004

Concerning the age structure of the prison population, data are not available for all countries. Considering rates of prisoners under 18 years of age (Figure 4) there are no great, but visible differences between the Scandinavian countries Finland, Sweden and Denmark and also the Netherlands with low percentages (0,3 to 0,6%) on the one hand, which might indicate a more liberal attitude to young offenders, and Latvia (2,7%) and the UK (3,0%) on the other hand. Bulgaria and Romania and a majority of 13 from 19 member states range between 1,1 and 2,3%, while the „EU average“ is 1,8%.

[5] It is not possible to determine, if the high value for Estonia is caused by the large Russian minority in this country as a result of the Soviet era, a group which can hardly be compared to the ethnic minorities and migrants in western countries. In this case, all eastern states would differ from the western member states.

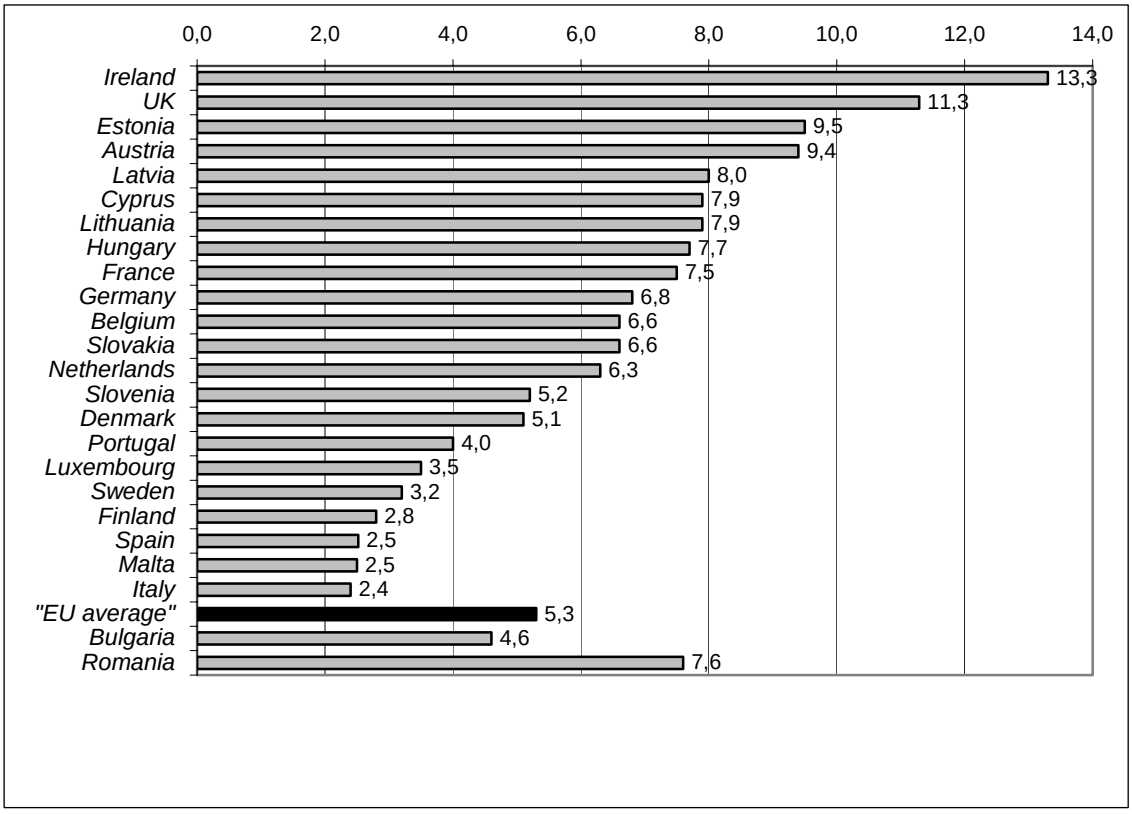
Figure 4: Prisoners under 18 years of age in percent



Source: Council of Europe 2004

The percentages of prisoners from 18 to less than 21 years vary more distinctively (Figure 5): low rates can be found in Italy, Malta and Spain as well as in Finland (2,4 to 2,8%) compared to very high figures for Ireland (13,3%) and the UK (11,3%), which could express a tougher Anglo-Saxon handling of juvenile delinquency. But also Estonia and Austria (9,5 and 9,4% respectively) show relatively high values compared to the „EU average“ of 5,3 %, while Bulgaria and Romania are situated in the European mainstream together with a majority of 14 of 22 member states which are situated between more than 3 and 8%.

Figure 5: Prisoners from 18 to less than 21 years in percent

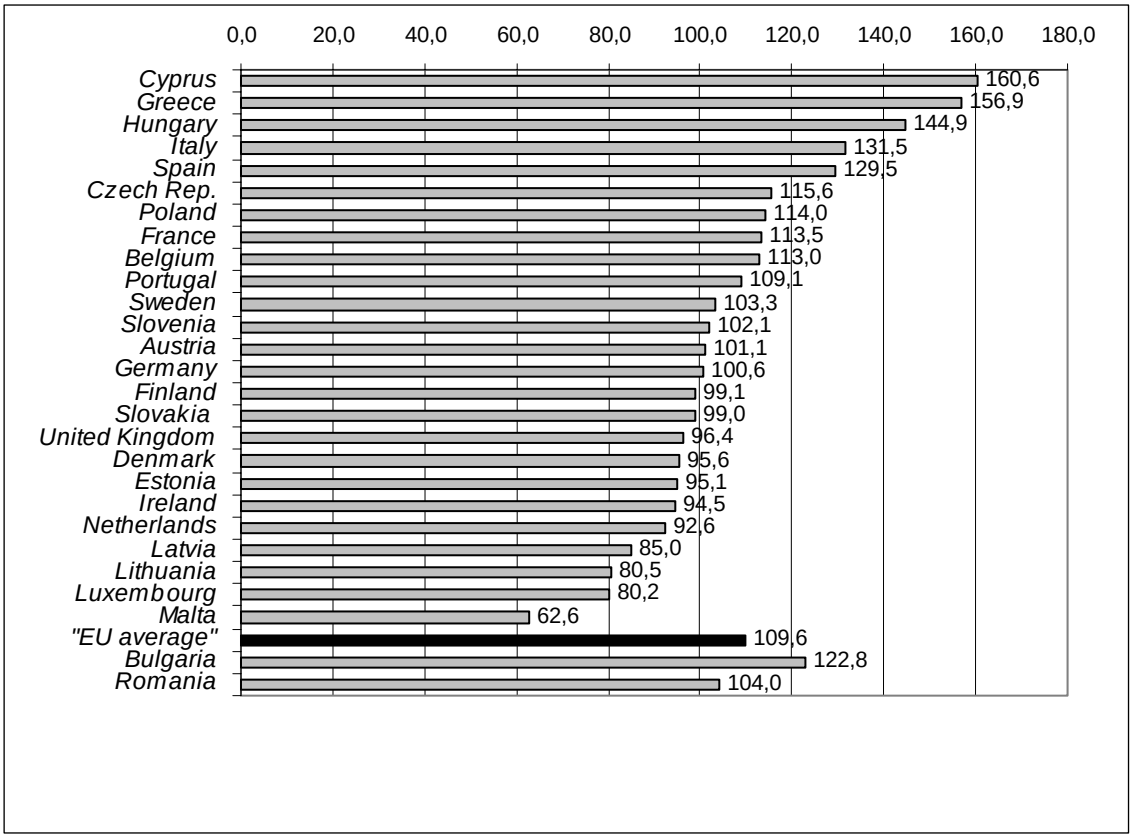


Source: Council of Europe 2004

3.3. Capacity

A majority of 16 countries plus Bulgaria and Romania show a prison density per 100 places between around 90 and about 120. The highest rates can be found in Cyprus, Greece and Hungary (160,6 to 144,9) and the lowest in Malta (62,6) (Figure 6). The "EU average" is 109,6, indicating a general tendency of overcrowding in the prisons throughout the European Community.

Figure 6: Prison density per 100 places

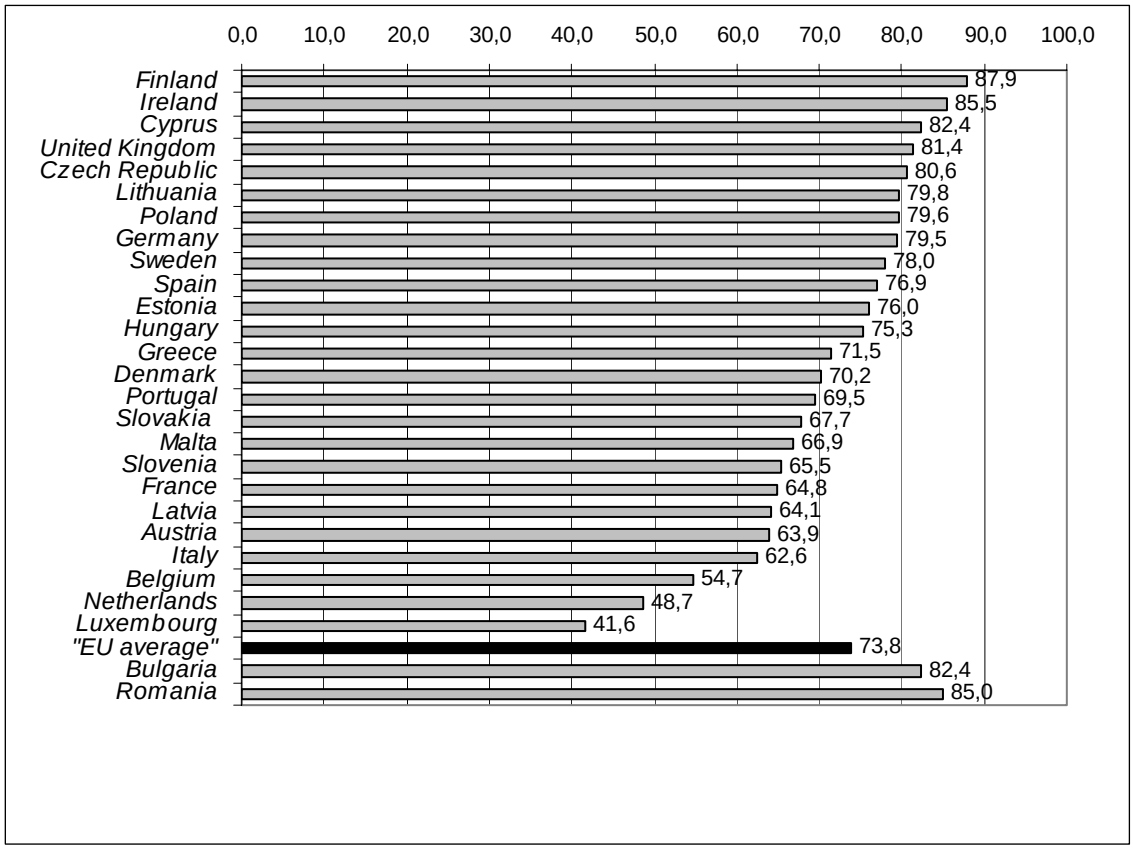


Source: Council of Europe 2004

3.4. Legal aspects, degree of penalty

Regarding the legal status of the prison population, in the category "percentage of sentenced prisoners" (Figure 7), Belgium, the Netherlands and Luxembourg are showing the lowest percentages (54,7% to 41,6%), i.e. the proportion of untried prisoners is relatively high in these countries. The EU member states Finland and Ireland and Romania (87,9% to 85,0%) show high values compared to the "EU average" of 73,8%, while 20 member states and Bulgaria range between about 60 and approx. 80%.

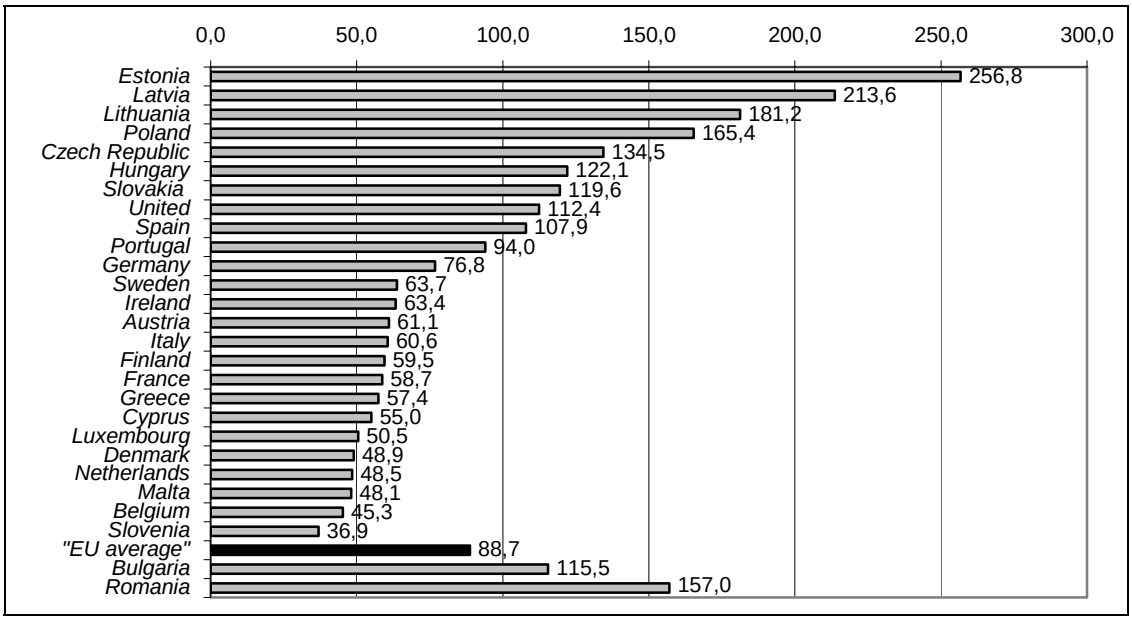
Figure 7: Sentenced prisoners in percent



Source: Council of Europe 2004

The eastern EU member states Estonia, Latvia, Lithuania and Poland show remarkably high rates of sentenced prisoners per 100 000 inhabitants (Figure 8): from 256,8 to 165,4. The figures for the eastern countries Czech Republic, Hungary, Slovak Republic, Romania and Bulgaria are also higher in comparison to the western EU member states. On the other hand, the new member state Slovenia shows the lowest value with 36,9. While the "EU average" is 88,7, 14 member states and Bulgaria are situated in a wide range from 55 to about 120.

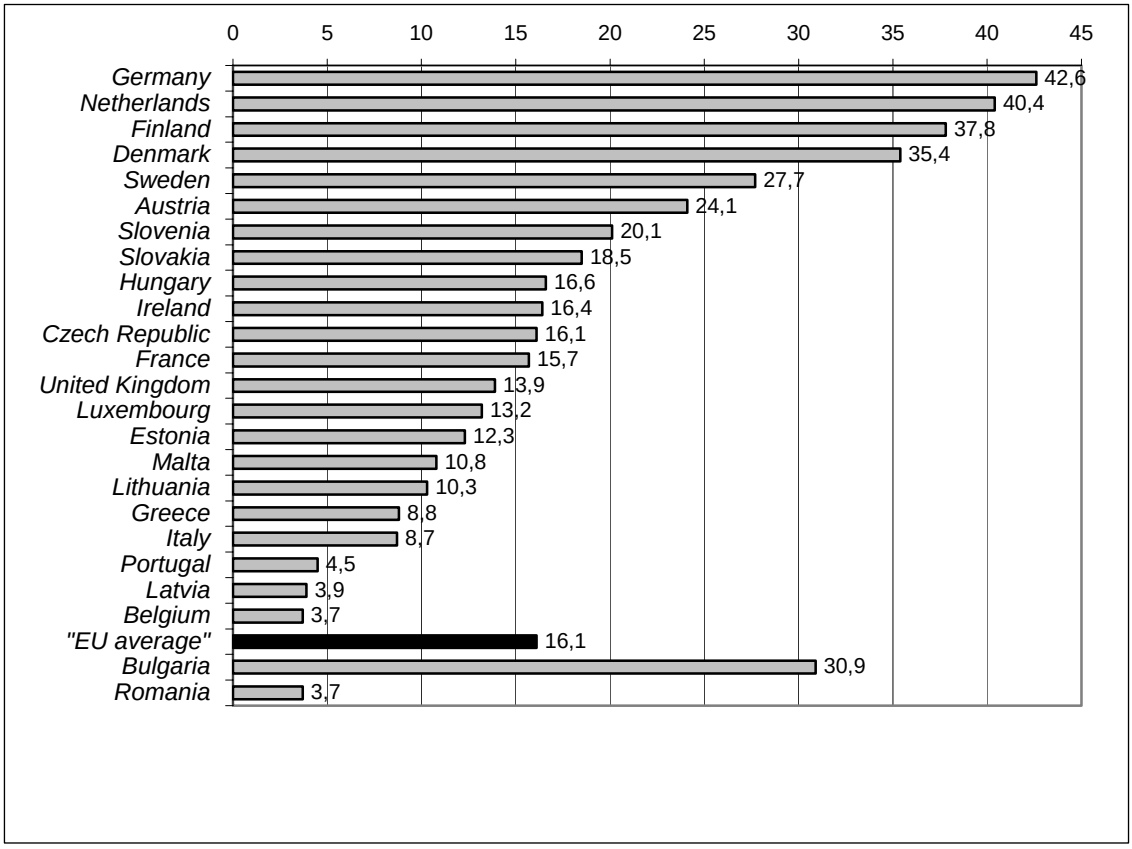
Figure 8: Sentenced prisoners rate per 100 000 inhabitants



Source: Council of Europe 2004

There are also great differences in the length of sentences. While Germany, the Netherlands, Finland, Denmark (42,6% to 35,4%) belong to the countries which can be characterised by sentences predominantly shorter than 1 year, Portugal, Latvia, Belgium (4,5% to 3,7%) and Romania (3,7%) on the other hand show the lowest proportions for short sentences. The "EU average" in this category "rates of sentences shorter than one year" (Figure 9) is of 16,1%, while 13 of 22 countries range between approx. 9% and 20%. Bulgaria shows quite a high percentage (30,9%) of sentenced prisoners with sentences shorter than on year. For Cyprus, Poland and Spain, there are no data available.

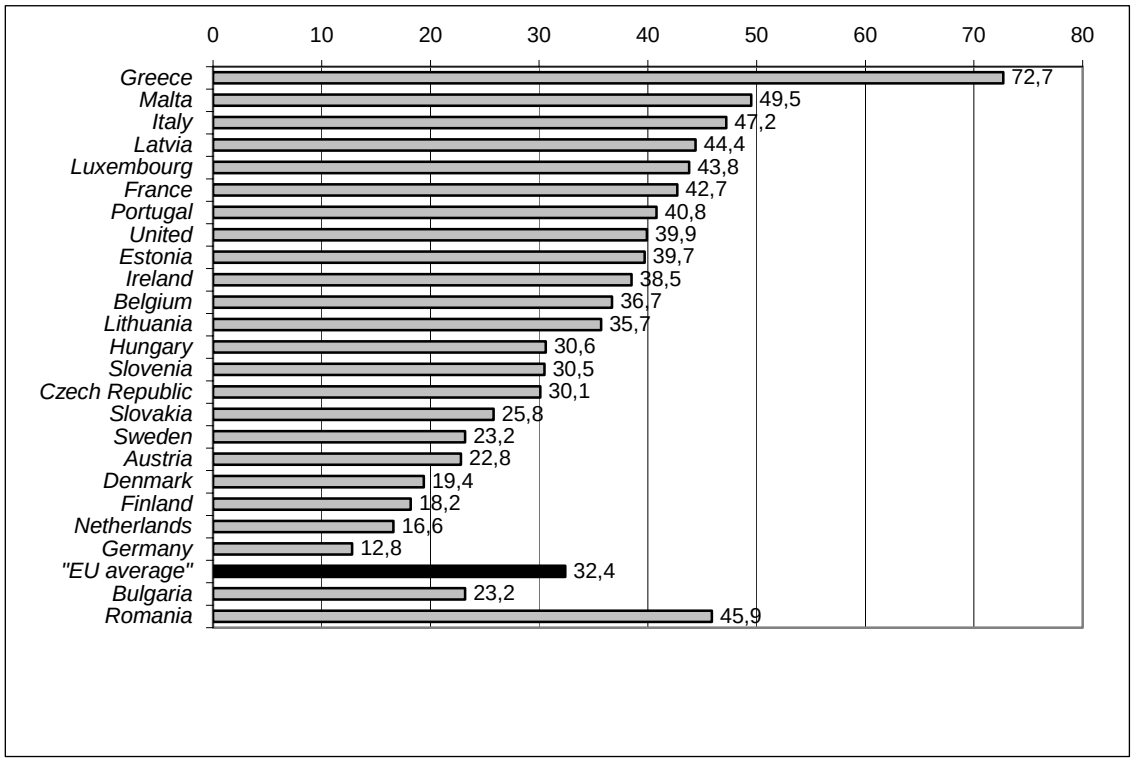
Figure 9: Sentenced prisoners by length of sentence: Less than 1 year in percent



Source: Council of Europe 2004

In the category “rates of sentences of 5 years and over” and respectively “life imprisonment” (Figure 10), Greece achieves with 72,7% the maximum, more than twice as much as the “EU average” of 32,4%. High shares are to be found in Malta, Italy, Latvia, Luxembourg, France (49,5% to 42,7%) and Romania (45,9%) as well. As expected, Denmark, Finland, the Netherlands and Germany (19,4% to 12,8%), which have the most prisoners sentenced to less than 1 year, are bottom in this category. The mainstream (12 of 23 countries and Bulgaria) ranges between approx. 23% and 41%. Regarding this issue, there are no information on Cyprus, Poland and Spain.

Figure 10: Sentenced prisoners by length of sentence: 5 years and over and life imprisonment in percent

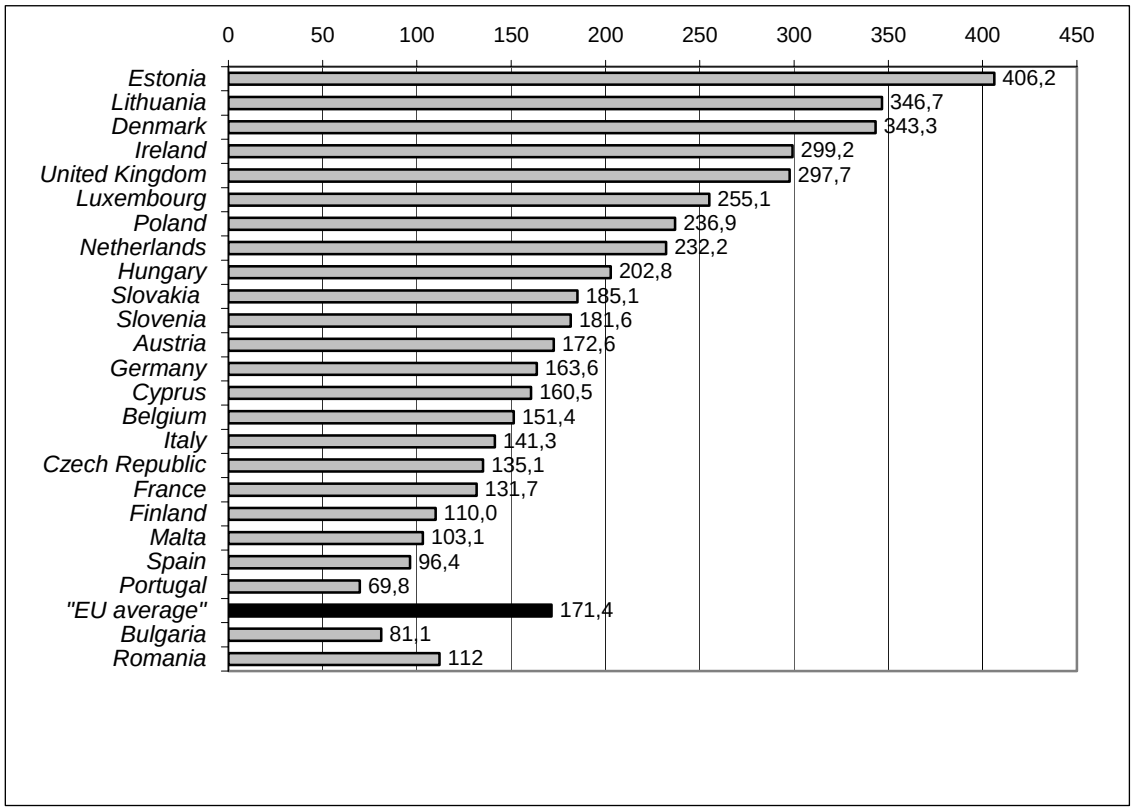


Source: Council of Europe 2004

3.5. Flow of entries, length of imprisonment, suicides and deaths

There is a remarkable variation in the rate of entries to penal institutions per 100 000 inhabitants between the single EU member states (Figure 11). While Estonia achieved the maximum rate (406,2), Lithuania and Denmark (346,7 and 343,3) show high figures as well. On the opposite, Portugal (69,8) has the lowest rate, followed by Bulgaria (81,1). Around the "EU average" (171,4), a mainstream of 16 (out of 22) countries and Romania can be identified, ranging between approx. 95 and 255 entries per 100 000 inhabitants. Data are missing for Greece, Latvia and Sweden.

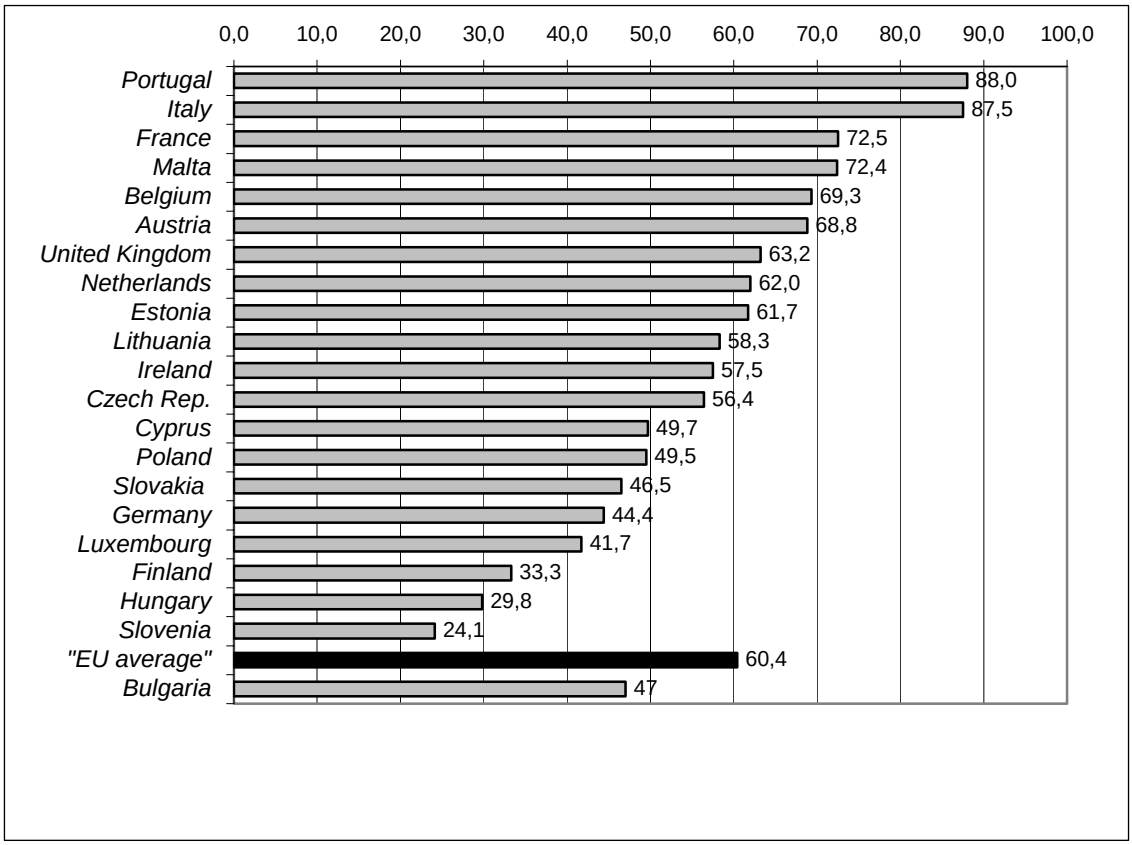
Figure 11: Entries to penal institutions rate per 100 000 inhabitants



Source: Council of Europe 2004

As Figure 12 shows, Portugal and Italy (88% to 87,5%) achieve high shares of entries before final sentence. Slovenia, Hungary and Finland (24,1% to 33,3%) show the lowest figures in this context. Around the "EU average" (60,4%), a mainstream of 10 (out of 20) countries can be identified, ranging between approx. 50% and 70%. Bulgaria with 47% remains below the „EU average". For Denmark, Greece, Latvia, Spain, Sweden and Romania, there are no data provided.

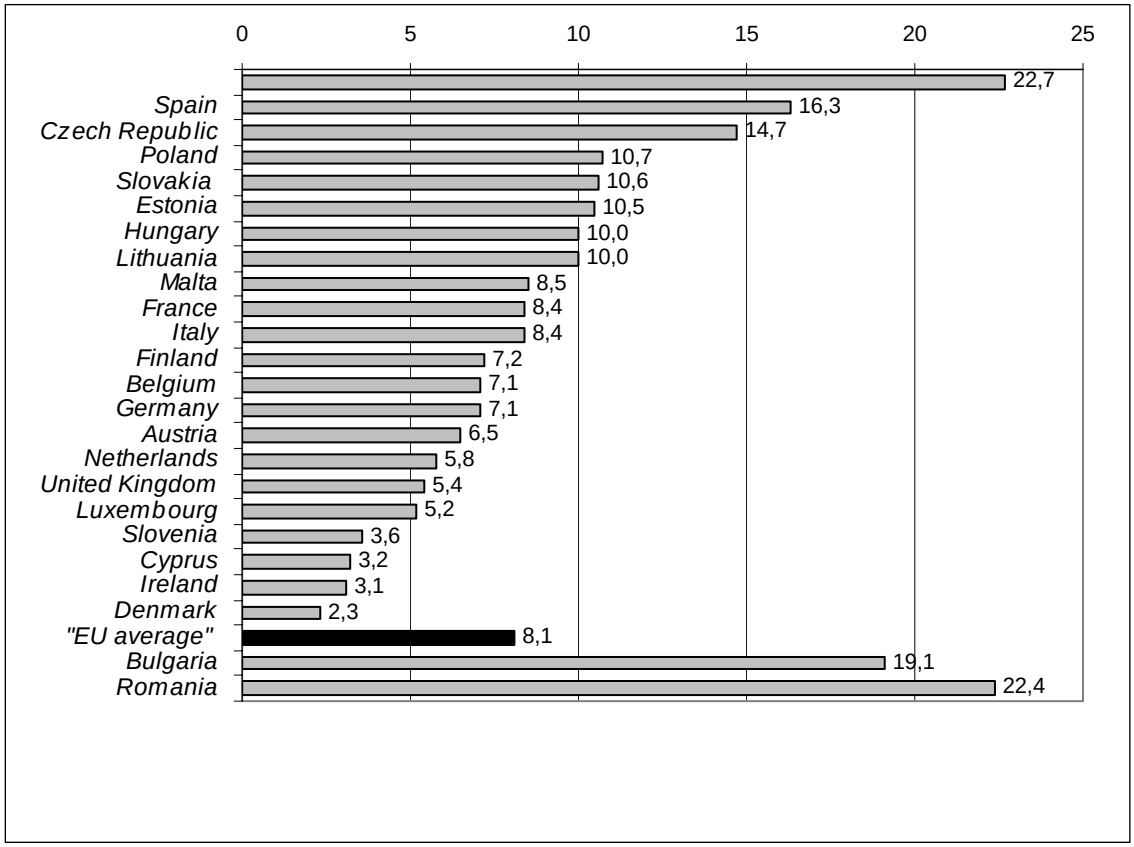
Figure 12: Entries before final sentence in percent



Source: Council of Europe 2004

The indicator of average length of imprisonment (in month) – based on the total number of prisoners on 1st Sept. 2003 - differs significantly among the member states (Figure 13). This indicator is at the highest in Portugal (22,7 months), closely followed by Romania (22,4 months) and Bulgaria (19,1 months), and at the lowest in Denmark, Ireland, Cyprus and Slovenia (from 2,3 to 3,6 months). Around the "EU average" of 8,1 months, a mainstream of 15 countries (out of 22) ranges from approx. 5 to 11 months, as an average length of imprisonment. Data are missing here for Greece, Latvia and for Sweden.

Figure 13: Average length of imprisonment in months

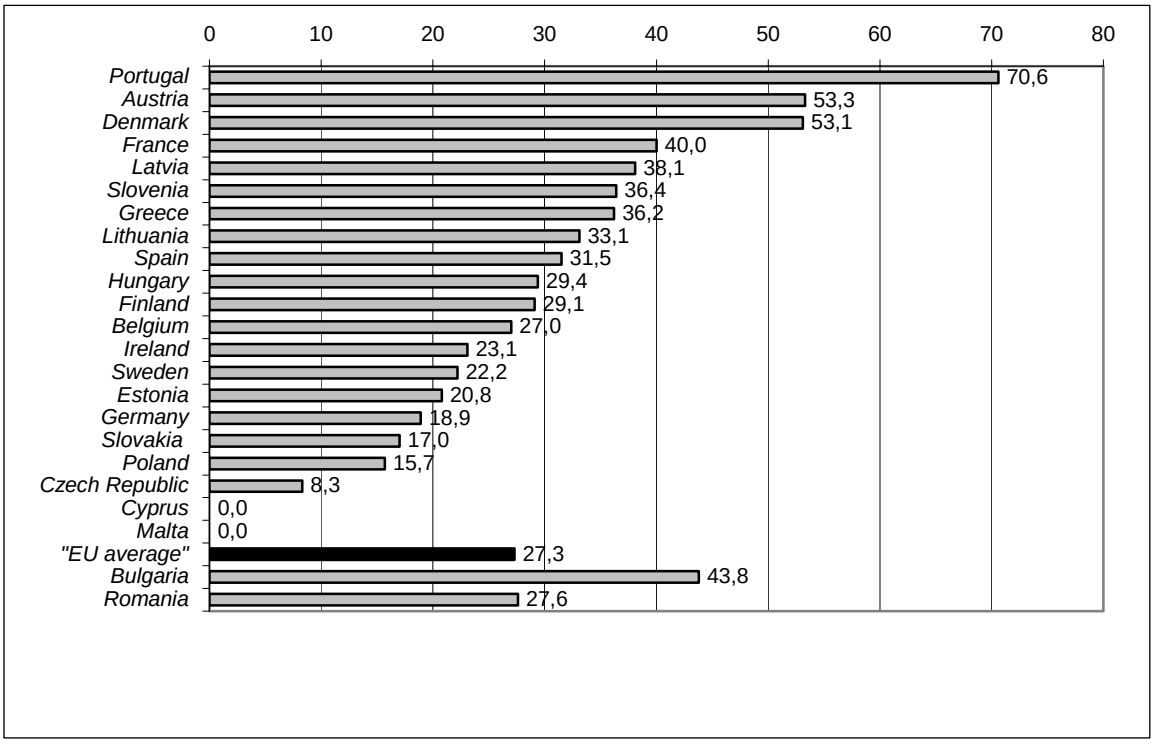


Source: Council of Europe 2004

Regarding the total number of deaths in penal institutions, the highest values are achieved by the big European member states France, Germany, Italy, Poland and Spain. United Kingdom would likely belong to this cluster, if data were available. Besides Romania which is close to these countries, Portugal shows a large number of deaths in penal institution, too. This high absolute figure is reflected in the following mortality rate.

As Figure 14 shows, the maximum in the category mortality rate per 10 000 prisoners in penal institutions (suicides included) is achieved by Portugal with 70,6. The lowest rates are to be found in Cyprus and Malta (both 0,0) and the Czech Republic (8,3). A large group of countries (16 out of 22) as well as Romania are ranging around the "EU average" of 27,3 (from approx. 16 to 40). Bulgaria shows quite a high rate (43,8). Data are missing for Luxemburg, the Netherlands and the United Kingdom.

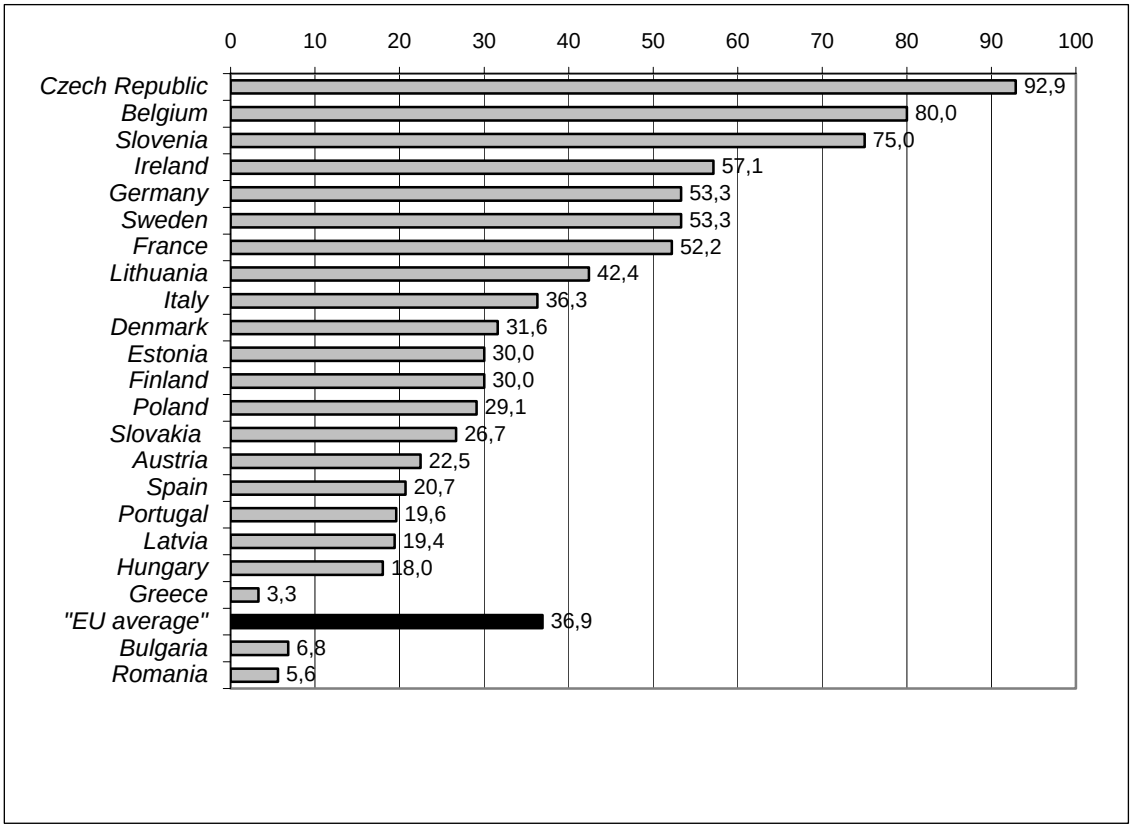
Figure 14: Mortality rate per 10000 prisoners



Source: Council of Europe 2004

Another picture can be drawn from the suicides as a percentage of total deaths (Figure 15): the Czech Republic (92,9%) is at the top, closely followed by Belgium and Slovenia (80% to 75%). In this case, it is difficult to identify a real mainstream around the "EU average" of 36,9, since the variations are very important: 16 of 20 countries range from a quite low 18,0% to a quite high 57,1%.The lowest rates can be found in Greece with 3,3% as well as in Romania and Bulgaria (5,6% and 6,8%). Data are based on small numbers only, and need to be dealt with carefully. Data for Cyprus, Luxemburg, Malta, the Netherlands and the United Kingdom are missing.

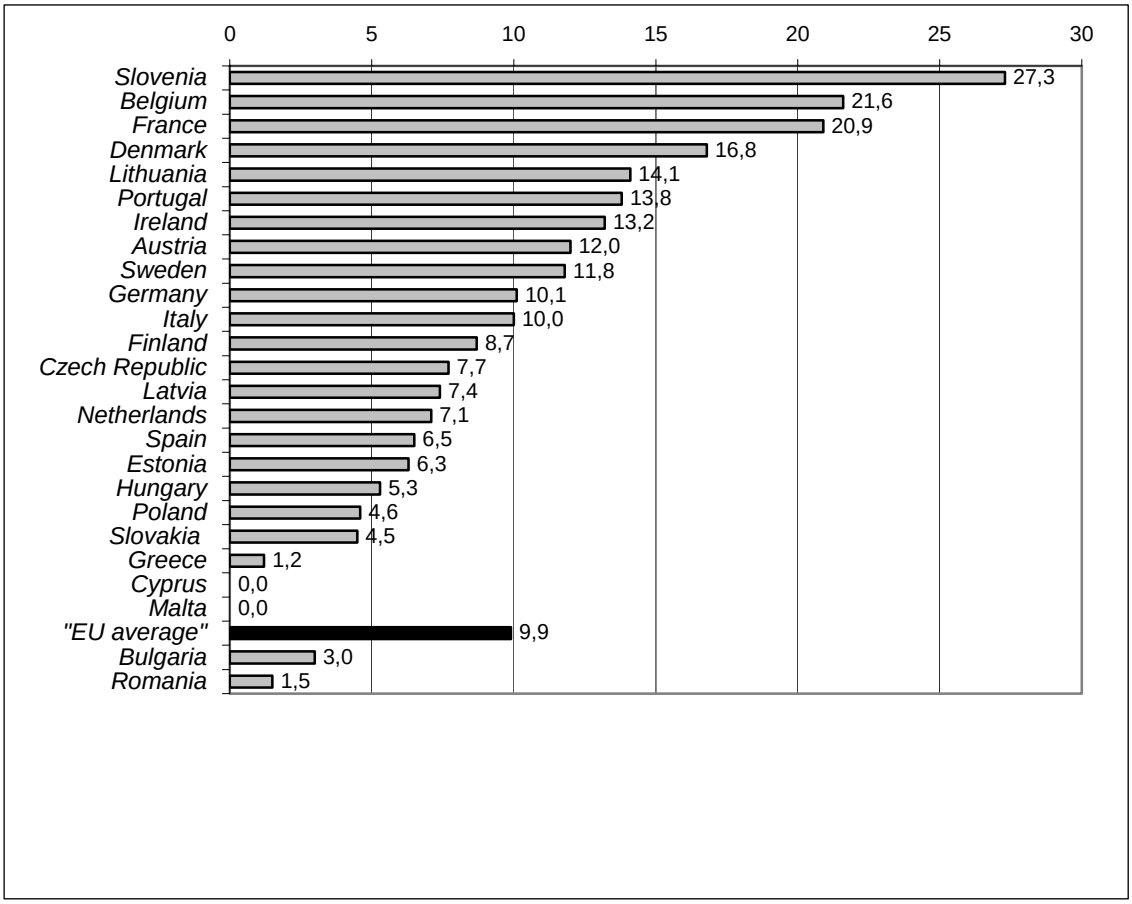
Figure 15: Suicides as a percentage of total deaths



Source: Council of Europe 2004

Slovenia (27,3), followed by Belgium and France (21,6 and 20,9) are at the top as regards the suicide rate per 10 000 prisoners in penal institutions (Figure 16). On the opposite, there are Cyprus and Malta (both 0,0), closely followed by Greece (1,2), as well as Romania and Bulgaria (1,5 and 3,0). While the "EU average" is 9,9, there are 13 out of 23 member states which range from approx. 6 to 14. Data are missing for Luxemburg and the United Kingdom.

Figure 16: Suicide rate per 10000 prisoners



Source: Council of Europe 2004

3.6. Occupation, education and professional training in prison

Data on occupation, education and professional training in prison were to be found in the WHO Prison Health Database (see Country Profiles and Data Analyser), but correspond to the data collected in 2005 during the WIAD survey in the 10 new member states, which were already very incomplete at that time. Only 3 to 8 countries answered the corresponding questions, more or less completely: in some cases, the subgroups of prisoners did not sum up to the total number of sentenced prisoners in the respective countries, so that the calculation of percentage rates presented in the HIP Data Analyser is to be interpreted very cautiously.

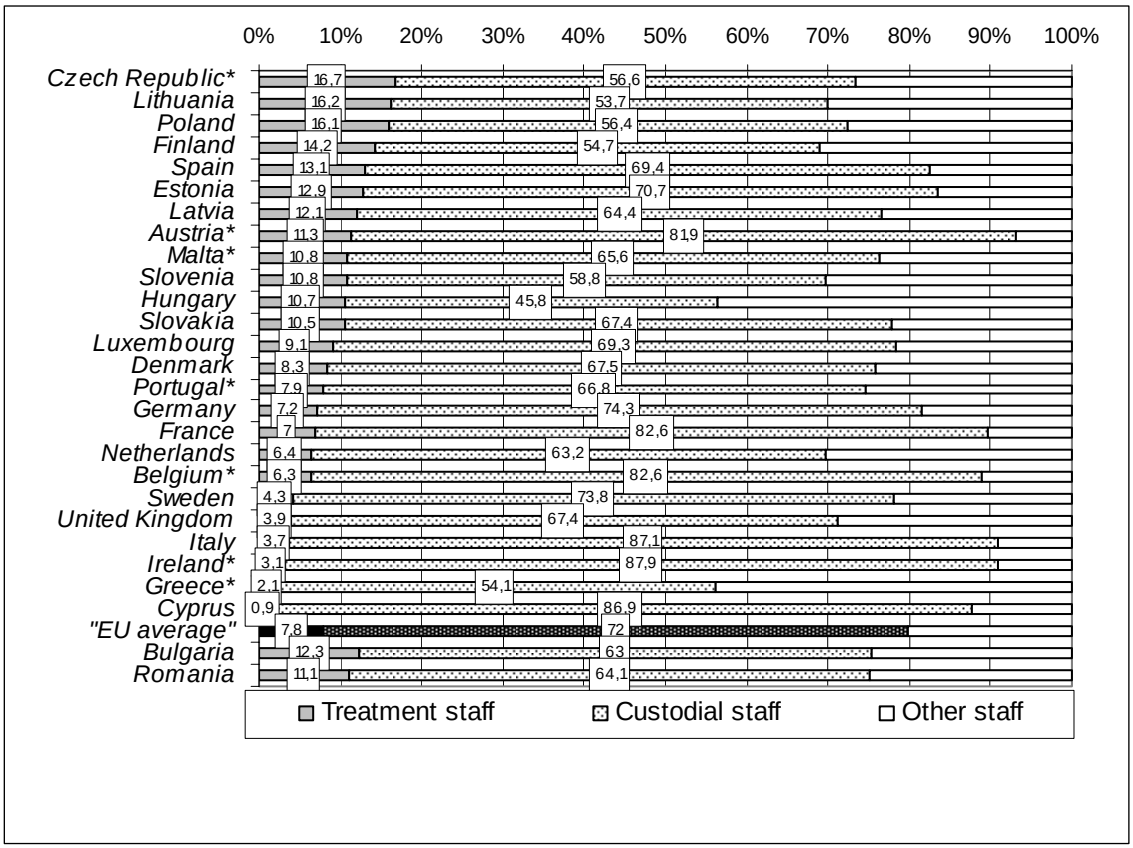
As far as data are provided by the countries, it seems that a majority of sentenced prisoners was not working, with the exceptions of Hungary, Malta and Slovakia: here, more than 50% of the sentenced prisoners were working, whereas only approx. one third did so in the other responding countries. Within the very limited data provided, most of the sentenced prisoners did not attend any basic education courses. The data on sentenced prisoners attending vocational professional training might have not been understood and show significant variations between the respondents: in the Czech Republic, Estonia, Hungary, Slovakia and Romania, there seem to be high proportions of sentenced prisoners attending such training, whereas in other responding countries, these rates seem to be very low.

3.7. Prison Staff

The SPACE statistics classify the staff employed by the prison authorities in six categories: Management, Custodial, Treatment, Workshops, Administrative and Other Staff.

For our study on health issues, we concentrated on the following categories: Treatment staff (including medical staff, psychologists, social workers, teachers/educators, etc.) and Custodial staff. However, respondents to SPACE were asked to exclude staff working in penal institutions but not employed by the prison authorities (in some countries – i.e. France and Italy, this applies to doctors, teachers, etc.). As a consequence, the data on treatment staff is not always complete. Within these limits of comparability, the following information can be highlighted in Figure 17 on the distribution (in percentage) of staff employed by the prison authorities according to the professional categories “Treatment, Custodial and Other staff”: The share of treatment staff is at highest in the Czech Republic, Lithuania and Poland (16,7 to 16,1%) and at lowest in Cyprus and Greece (0,9 and 2,1%). Around the “EU average” of 7,8%, 17 countries plus Bulgaria and Romania are ranging between approx. 3 and 12%. As for the share of custodial staff, it is at highest in Ireland, Italy and Cyprus (87,9 to 86,9%) and at lowest in Hungary (45,8%). Around the “EU average” (72%), 15 countries plus Bulgaria and Romania are ranging from 63 to 82,6%.

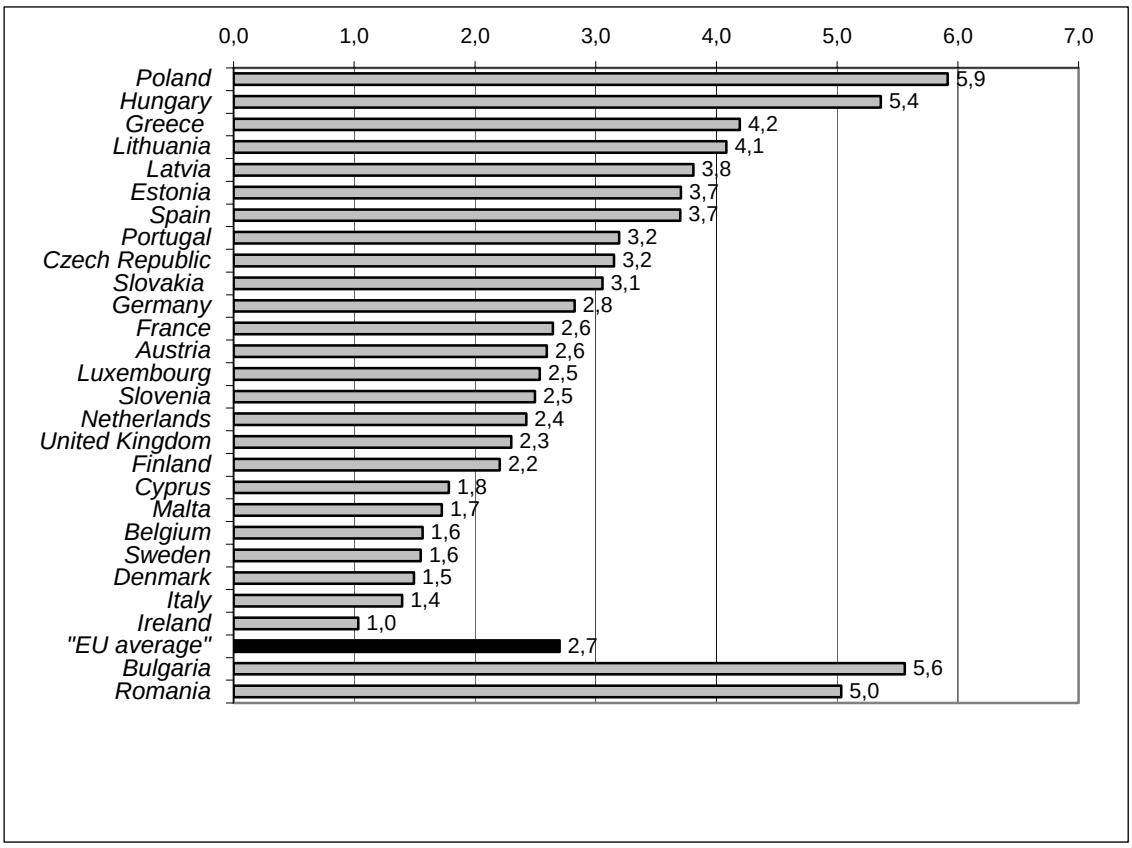
Figure 17: Staff employed by the prison authorities according to professional categories in percent



Source: Council of Europe 2004

There are significant differences of the rate of supervision of prisoners by custodial staff (number of prisoners per custodian) in Figure 18: In Poland, Hungary, Bulgaria and Romania (5,9 to 5), the custodial staff has to supervise five to six times more prisoners than in Ireland (1). 11 countries are ranging from 2,2 to 3,2, around the "EU average" of 2,7 prisoners per custodian.

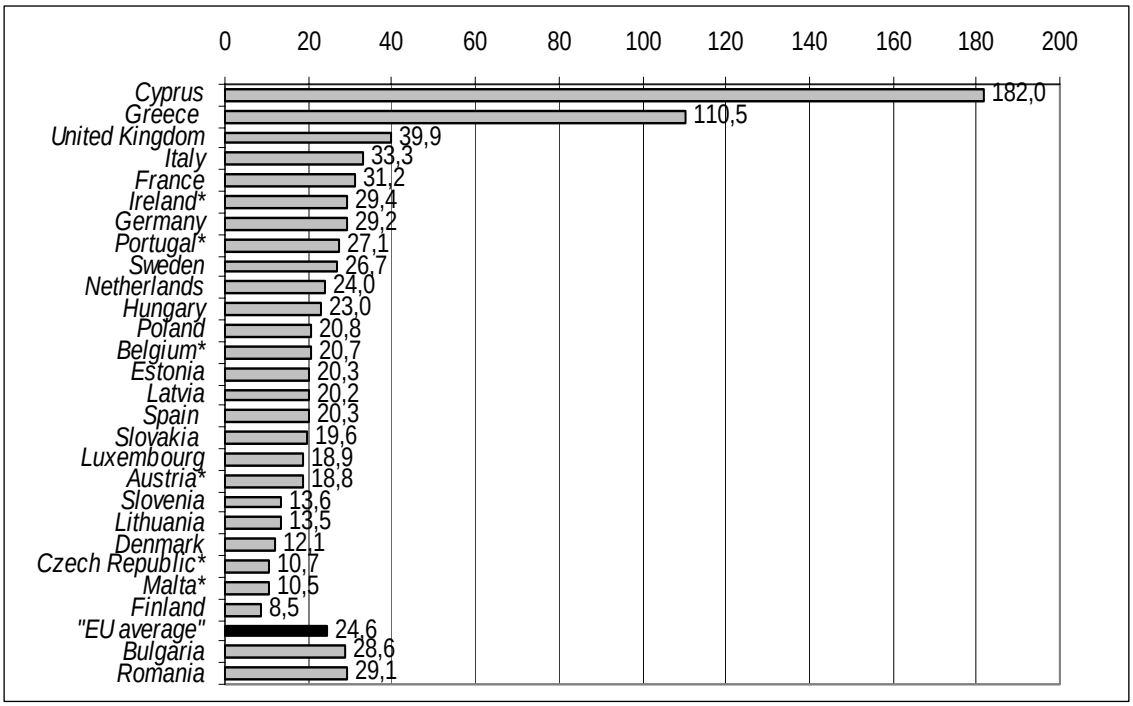
Figure 18: Supervision rate of prisoners by custodial staff



Source: Council of Europe 2004

The rate of supervision of prisoners by treatment staff (number of prisoners per treatment staff) (Figure 19) shows strong variations as well: one “treatment person” in Cyprian prisons has to care for the most prisoners (182), followed by Greece with 110,5 prisoners per treatment staff. At the other end, one treatment person in Finish prisons only has to care for 8,5 prisoners. 16 countries, as well as Bulgaria and Romania, are ranging from 19 to 33, around the “EU average” of 24,6 prisoners per treatment person.

Figure 19: Supervision rate of prisoners by treatment staff



Source: Council of Europe 2004

4. Epidemiological aspects of drugs and infectious diseases in prison

The use of illicit drugs is a century old phenomenon and it is widespread throughout the world. It is a major public health problem, which is also common in prisons.

To obtain reliable data of the magnitude of drug users is a complicated undertaking. Before 1998 no overall pictures of the EU could be drawn, due to missing data of Member States. The estimates of the extent of drug users are usually drawn from multiple data sources, e.g. cohort or case studies, demographic models, extrapolation from treatment data (Kraus et al. 2003).The prevalence of PDUs range from 1 to 8 per 1000 persons aged 15 to 64 in Europe. Among high-prevalence (5 to 8 cases per 1000 persons) countries Italy, Luxembourg, Ireland, Malta and Austria are ranked. As low-prevalence countries the Czech Republic, Greek, Germany, Lativa and the Netherlands can be regarded.

Epidemiological data on injecting drug users (IDU) are provided by only a few countries. Data on IDUs can similar to data on PDUs is derived from different data sources, e.g. fatal overdoses or treatment demand. It is estimated that 60% of PDUs use drugs intravenously.

Despite the fact that heroin is still the most prominent drug illicitly used, cocaine use has been rising in most European countries, with the highest prevalence in the Italy (4.6%), United Kingdom (6.1%) and Spain (5.9%). Use of cocaine alone is seldom, while co-use of cocaine and heroin is common among PDUs. Other important subgroups of cocaine users are the group of opiate dependent persons in MMT. Patterns of cocaine use differ between subgroups, with PDUs showing a high rate of cocaine injecting (Haasen et al. 2004).

Drawing a detailed picture of the extent and nature of drug use in prisons in a country is often difficult because it is an activity that occurs in extreme secrecy. Therefore one has to get a hold of surrogate data. These can be the discovery of needles, positive drug tests among prisoners and/or official statistics of known and sentenced drugs user. But these factors are only indicators reflecting only a part of the actual situation.

Scientifically acquired data such as prevalence studies, while useful, may reflect the situation in no more than one single prison. Due to the changing nature of the population from one prison to another and from region to region within a country, these isolated cross-sectional studies cannot be taken as representative of the situation as a whole.

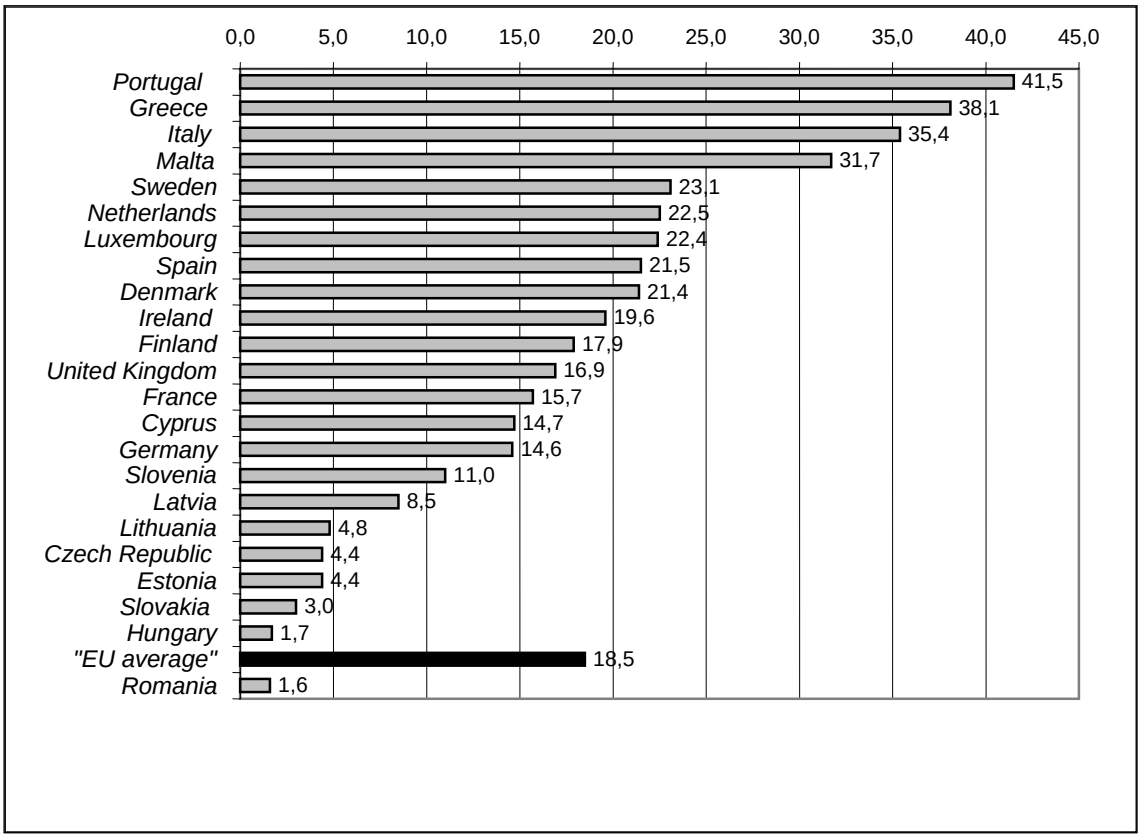
However, despite the challenges in collecting data, it is generally accepted that drug use is a common activity in prisons around the world. According to UNAIDS;

"Whether the authorities admit it or not – and however much they try to repress it – drugs are introduced and consumed by inmates in many countries…Denying or

ignoring these facts will not help solve the problem of the continuing spread of HIV (UNAIDS 1997, p. 3)."

EMCDDA estimates that at least half of the EU's prison population has a history of drug use, many with problematic and/or injecting drug use (EMCDDA 2003b). This is demonstrated in figure 20.

Figure 20: Sentenced prisoners by main offence: drug offence in %



Source: Council of Europe 2004

This figure shows great differences in the composition of the prison population with regard to drug offences: In Portugal (41,5%) and Greece (38,1%), but also in Italy and Malta, drug offenders are an important group, while in Hungary (1,7%) and Romania (1,6%), but also in the Slovak Republic, the Czech Republic, Estonia and Lithuania, these crimes are of little importance. Data on the percentage of drug offences among main offences are not available for Austria, Belgium, Poland and Bulgaria. While the "EU average" is 18,5%, 11 from 22 member states range between about 15 and 23%. At the same time, all New EU Member States including Romania show figures clearly below 10% (plus Slovenia with 11%). Of course, figure 4 can also only serve as a surrogate, because drug-using inmates cannot be solely found within the prison population of drug-related offences.

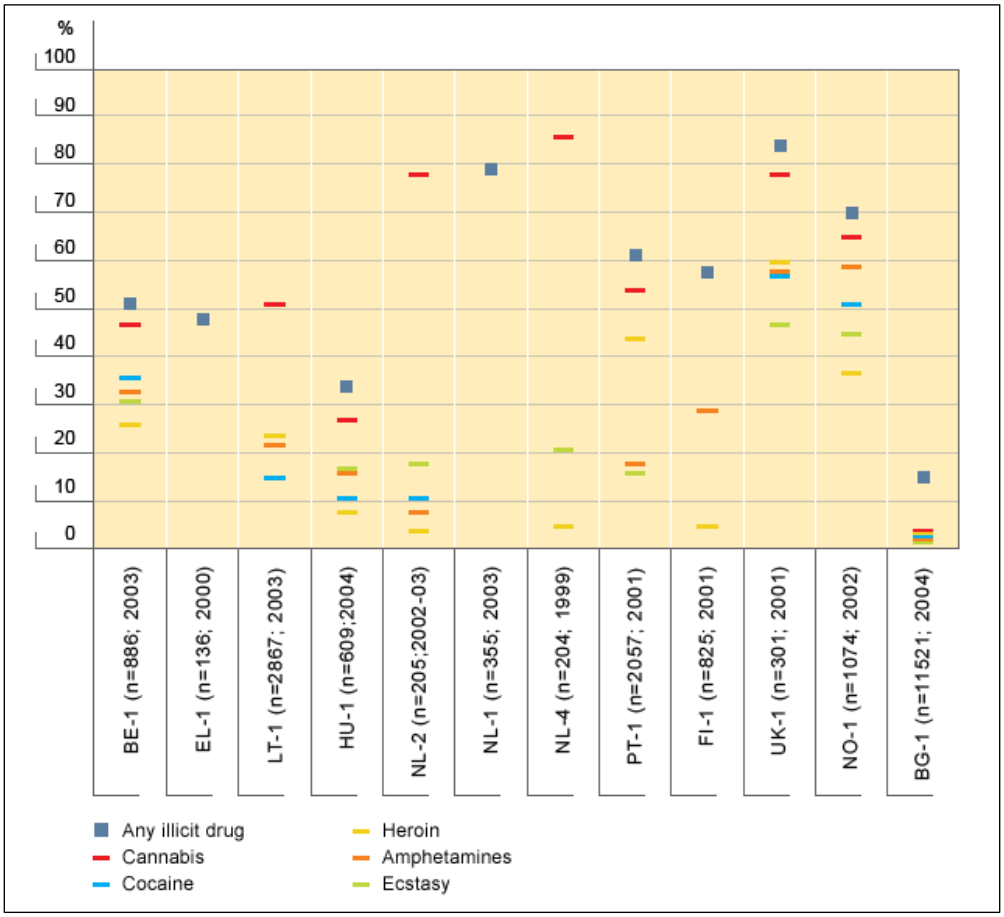
National routine information on drug use and patterns of use among prisoners is rare. Most of the data available in the EU come from ad hoc studies among prisoners carried out at local level with samples that vary considerably in size and they are often not representative of the whole prison system. This makes extrapolation to a national figure for the prison system very difficult. Furthermore, the lack of repeated surveys impedes trend analysis in most of the EU countries (EMCDDA 2003b; EMCDDA 2006a).

The data reported to the EMCDDA come from a range of sources, which are often not comparable in terms of the methods used. Variations across countries and across surveys make comparisons between and within countries difficult and are related to issues such as: sampling strategy; sample size; geographical coverage; population selection (for example convicted/remanded, male/female); method of measurement of drug use (self-report, medical assessment). Moreover, studies in different countries use different measures of prevalence (lifetime or last year or month prevalence), and frequency of drug use.

The EMCDDA states in the annual report of 2006 that drug users are overrepresented in prisons. Data derived from national data sources reveal that one third or less of the prisoners in Hungary and Bulgaria reported ever using an illicit drug, in The Netherlands, the United Kingdom and Norway two thirds or more of the prisoners reported ever using an illicit drug, whereas in the remaining countries the statement of prevalence remains vague, with estimates of 50% lifetime prevalence of illicit drug use (EMCDDA 2006a).

Drug consumption in prison also has major implications for the penal system: drugs become the central medium and currency in prison subcultures. Many routine activities for inmates focus on the acquisition, smuggling, consumption, sale and financing of drugs. If the acquisition and use of drugs dominate the life of prison inmates, prison directors and staff have to make increased efforts to safeguard a regular course of prison sentences accomplishment. This is the primary goal to be achieved. Solving the problem of drug addiction in detention is secondary.

Figure 21: Studies of lifetime prevalence of use of various drugs among prisoners, 1999 to 2004 in some EU countries



Source: EMCDDA 2006b

Only limited data are available about the exact percentage of injecting drug users in European prisons (see figure 21). As already informed, the EMCDDA estimated in 2006 that the life time prevalence of injecting drug use among prisoners in Europe is between 7 % and 38 %, which shows that the spread of problematic drug use is varying widely throughout the countries, as well as the prevalence of intravenous drug use in prison between 1-15% and differs even within the country from one prison to the other. Drug use is seen as one of the main problems of the current prison system that threatens security measures, is dominating the relationships between prisoners and staff and leads to violence and bullying for both prisoners and often their spouses and friends in the community (Restellini 2007).

4.1. Excursus I: Consequences of drug use for the prison system

Prison management is faced with increased public pressure to keep prisons drug-free. This affects all forms of detention for men and women: punitive detention, pre-trial detention, detention of juveniles. Only a small number of prison managers talk frankly

about the issue in public, establish adequate drug services and develop new drug strategies. Frequently, however, confessing that drug use also appears in prison is to be mistaken for failing to maintain security in prisons: the prison system which is supposed to be impenetrable for drug trafficking, has turned out to be penetrable. The number of prison managers who deny or ignore drug use in prison for political reasons is still great. Additionally, many prison doctors believe that they cure the inmates drug problem, when an inmate is temporarily obliged to stop using drugs. Against this background, it becomes obvious why dealing with addicts in detention is difficult: on the one hand the goal to achieve the inmates rehabilitation must be pursued; on the other hand prison management in many countries faces rising drug consumption among inmates and with political and economic restrictions that make it even more difficult to solve the drug problem.

In prison the drug use patterns change. On one hand drug use can become more risky in terms of injecting and needle sharing, on the other hand the frequency and prevalence of drug use decrease during imprisonment. A Survey from England reveal that the rates of drug use in prison were significantly lower than in the previous year (Ramsay 2003a); 45 % of the female prisoners had used a drug while in prison, compared with 72% in the year before prison. Once in prison there is also a tendency to use depressants rather than stimulants. In the survey of Ramsay (2003) 27 % had used heroin and 21 % had used cannabis. Similar results are presented by the Home Office (2003). The main drugs which women reported using in prison were heroin (27 %), followed by cannabis (21 %) and tranquillisers (17 %). However, 30 % of the women said they were no longer using drugs at all in prison. These findings are supported by a European study on 185 female drug users in prison (Zurhold et al. 2005). While all women used drugs prior to their imprisonment this number declines gradually to 60 % and to down to 30 to 50 % the longer the time they spend in prison.

In most countries, a differentiated system of sanctions and incentives has been developed in prisons in order to punish drug-using behaviour or to reward those who remain abstinent within a unit or a treatment programme. Sanctions can include:

- additional days of imprisonment for positive urine tests
- forfeitures of privileges
- stoppage of earnings
- no home leaves
- no visits

Incentives are designed to encourage good behaviour of prisoners and may include:

- transfer to a drug-free wing
- single cell
- home leave

- holiday
- in-cell television

Evaluations of such programmes have also yielded some promising results with respect to high-risk behaviour among drug-dependent prisoners (WHO et al. 2004).

4.2. Infectious diseases in the community and in prisons

It is estimated that approximately 180 million people, accounting for 3% of the world´s population are currently infected with HCV. Of those 180 million infected people 130 million are chronic carriers of HCV and are therefore at an elevated risk of liver cirrhosis and cancer. The HCV epidemic is described by the WHO as a "viral time bomb" (WHO et al. 2007b). Estimated 250.000 people die annually of HCV-related causes. Present and past injecting drug use account for 90% of those individuals with chronic HCV infection.

HCV infection is still extremely prevalent in IDUs across the EU. The infection spreads rapidly among IDUs due to the high infectivity of virus. Besides of the transmission of HCV via needle/syringe sharing, also other injecting equipment (e.g. water, cotton, etc), can carry infected blood particles and therefore account for HVC infections.

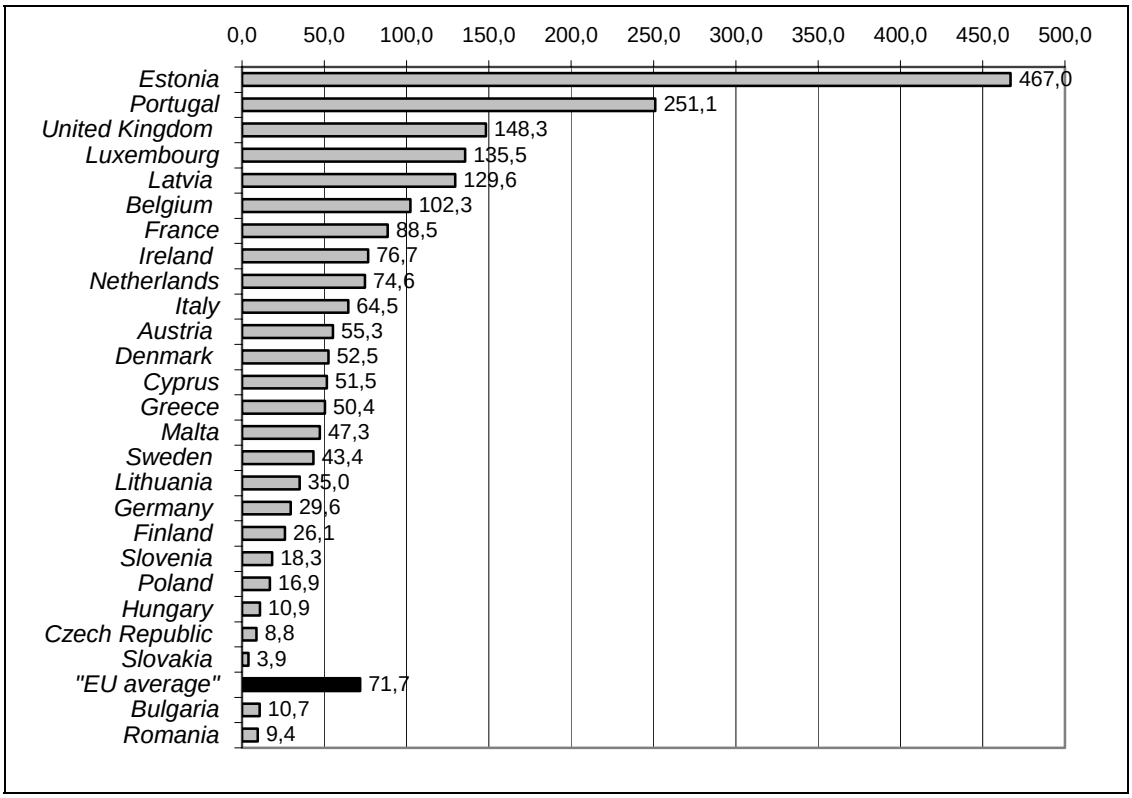
Antibody levels of over 60% among IDU samples tested in 2003–2004 are reported from Belgium, Denmark, Germany, Greece, Spain, Ireland, Italy, Poland, Portugal, the United Kingdom, Romania and Norway. The highest prevalence (over 40%) among IDUs under age 25 was found during 2003–2004 in samples from Belgium, Greece, Austria, Poland, Portugal, Slovakia and the United Kingdom. The highest prevalence among new IDUs (over 40%) was found in samples from Greece, Poland, the United Kingdom and Turkey (EMCDDA 2006a). In Eastern Europe (Estonia, Lithunia, Russia and Ukraine) very high rates of HCV infections are reported, with rates ranges from 70% to over 90% (CEEHRN 2007).

The prevalence of HBV infection markers varies even more than for HCV, which may be due to differences in vaccination levels. The most complete data are for the antibody to the hepatitis core antigen (anti-HBC), which indicates a history of infection. In 2003–2004, prevalence rates of over 60% among IDU samples were reported only from Italy and Poland, suggesting low levels of vaccination coverage in earlier years.

Figure 22 shows a shows in a decreasing order the newly diagnosed HIV infection rates per million population in the EU member states in 2005. Acutally in all New EU Member States low rates are to be found with the exception of two Baltic States with a very high rate (129.6) for Lativa and an extremely high rate (467) for Estonia. The "EU average" seems quite low: 71.7. This can be explained by the fact that data for Spain and parts of Italy are missing. A further explanation is that some other countries with a strong demographical weight (i.e. Germany, Poland) have relatively low rates. 14 of 24

member states are ranging from approx. 26 to 102 newly diagnosed infections per million population around the “EU average”.

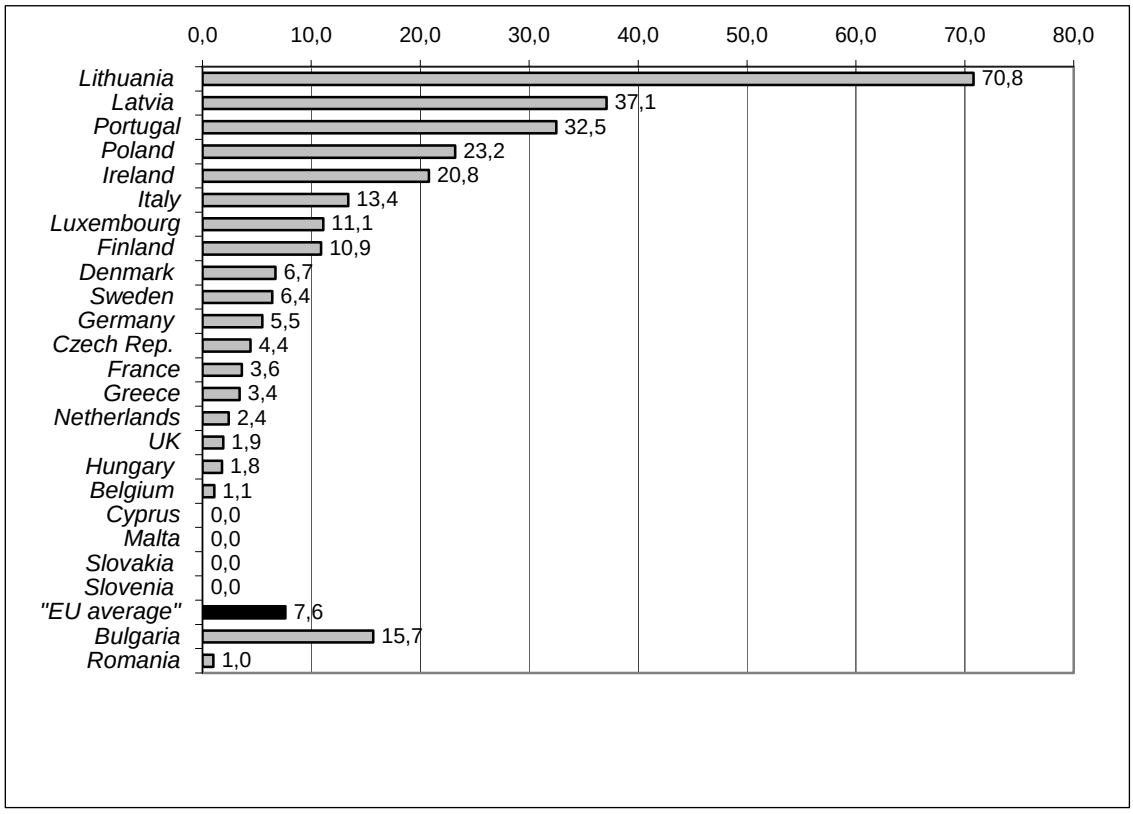
Figure 22: Newly diagnosed HIV infection rate per million population in 2005



Source: Council of Europe 2004

The *proportion of intravenous drug users (IDUs) among newly diagnosed HIV infections in 2005* (Figure 23) is at highest in Lithuania (70,8%), followed by Latvia (37,1%) and Portugal (32,5%). The lowest shares are to be found in Cyprus, Malta, Slovakia and Slovenia (0%), followed by Romania (1%) and Belgium (1,1%). Again, the "EU average" seems quite low: 7,6%. This time, the relatively low shares in the United Kingdom, France and Germany – and the missing data for Italy and Spain-, all countries with a strong demographical weight, are driving down the "EU average". 12 of 22 countries (data are missing for Austria, Estonia, Spain and parts of Italy) are ranging from approx. 2% to 13%, around the "EU average" (7,6%). Bulgaria has a share of IDUs among newly diagnosed HIV infections (15,7%) above this mainstream.

Figure 23: IDUs among newly diagnosed HIV infections in 2005 in percent

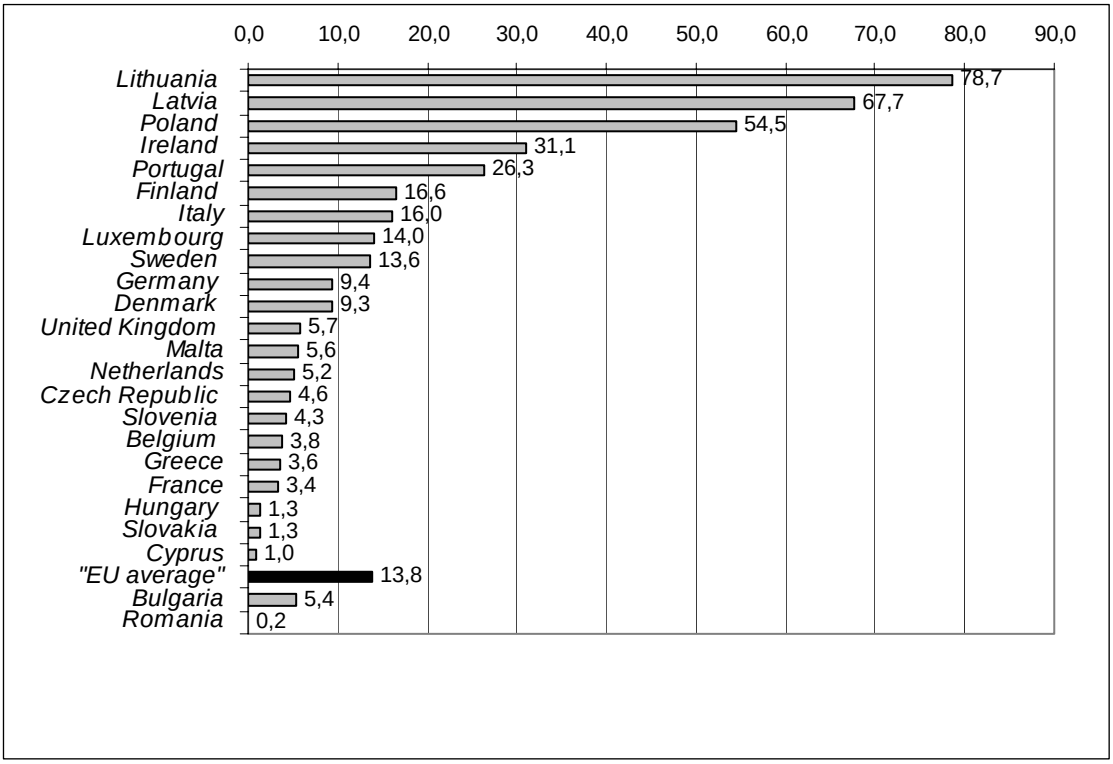


Source: EuroHIV 2005

The *cumulative totals of newly diagnosed HIV infections since the start of reporting* in the EU member states are difficult to compare because several countries started a new HIV reporting system just a few years ago (i.e. France in 2003, the Netherlands in 2002). However, this restraint disappears when building a rate, as in Figure 24 on the *proportion of IDUs among newly diagnosed HIV infections*. As expected, Figure 24 follows a similar course than in Figure 23, but at a higher level for most countries, indicating that the share of IDUs among newly diagnosed HIV infections has been reduced during the last years in the majority of states (the "EU average share" is divided by two in 2005, compared to the whole time period since the start of reporting), with the exception of Portugal and first of all Bulgaria who have a higher share in 2005 than during the time period since the start of reporting, and, on a lower absolute level, Romania, Hungary and France.

As in Figure 23, the higher shares in Figure 24 are to be found in Lithuania (78,7%) and Latvia (67,7%), followed this time by Poland (54,5%). At the other end, Romania (0,2%) as well as Cyprus (1,0%), Slovakia and Hungary (both 1,3%) have the lower shares of IDUs among newly diagnosed HIV infections. The "EU average share" is almost twice as high as in 2005 (13,8% to 7,6%), and 14 of 22 countries plus Bulgaria are ranging from approx. 3% to 17% around this average. As in Figure 22, data are missing for Austria, Estonia, Spain and parts of Italy.

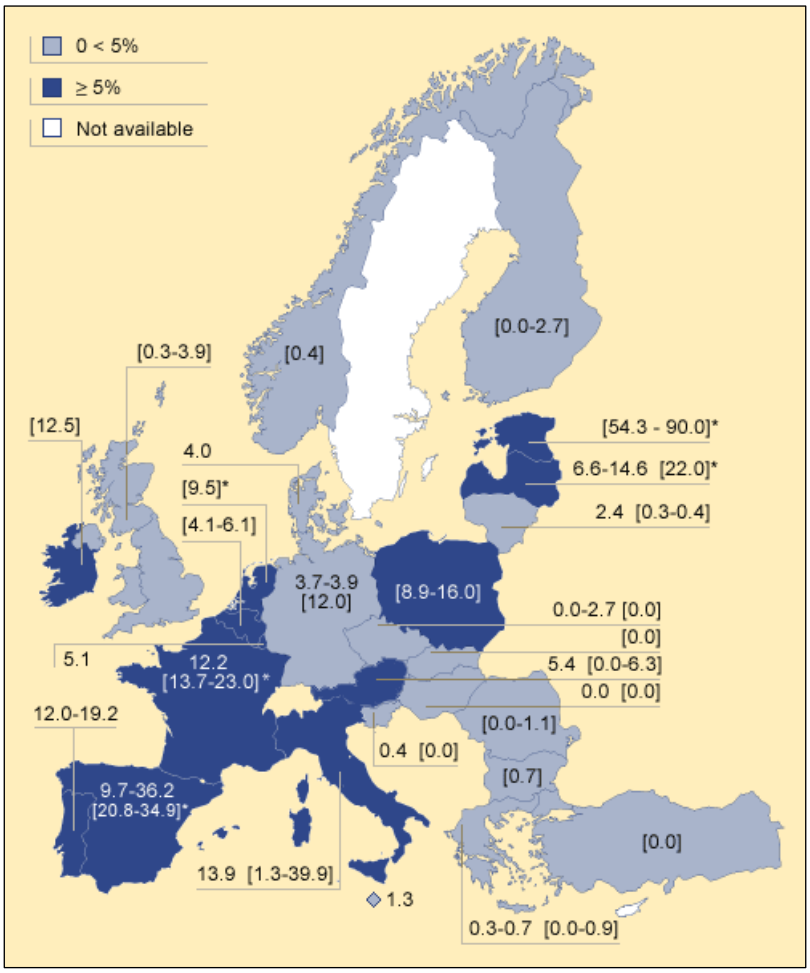
Figure 24: IDUs among *cumulative* totals of newly diagnosed HIV infections in percent



Source: EuroHIV 2005

According to the most recent national/regional HIV prevalence studies (see figure 25) and diagnostic testing among injecting drug users in the 27 EU member states, there are very high shares of HIV cases among IDU tested in Spain (Catalonia: 33%), followed by France (regional: 23%). Studies in Portugal (16% HIV+ among IDU tested), Italy (14,7%) and the Netherlands (Rotterdam: 10,2%) also show rates above 10%. Studies in Poland, Latvia and Estonia found shares ranging around 6,5%. Shares of HIV cases among IDU tested below 1% were found in Hungary, Slovakia, Slovenia, the Czech Republic, Greece, Finland and the United Kingdom.

Figure 25: HIV prevalence (percentage infected) among injecting drug users; studies with national and subnational coverage, 2003-2004[6]



Source: EMCDDA 2006a

[6] Notes: Figures represent the (range in) percentage infected among national and [subnational] samples of IDUs. Colour indicates the midpoint of national data, or if unavailable, of subnational data. Data for Italy and Portugal include non-IDUs and are likely to underestimate prevalence in IDUs.

* Data in part or totally before 2003 (Spain 2002-03; France 2002-03; Latvia 2002-03; Netherlands 2002) and from 2005 in case of Estonia.

4.3. Excursus II: Social and health problems of female drug using offenders

In the international literature there is a congruent finding that most of the women offenders suffer from multiple problems and experienced stressful events. For this reason the Anti-Discrimination Commission in Queensland, Australia (2006) came to the conclusion:

"Females entering prison commonly have combined disadvantages. These include low levels of education, limited employment skills and opportunities, poor housing, inadequate income and often backgrounds of childhood trauma and abuse."

The Commission found 43 % of the women prisoners who reported being the victim of non-consensual sexual activity before the age of 16. Other reports found even higher rates of child and/or adult sexual and physical abuse with the majority of the women being victims of multiple forms of abuse. An Australian study on 470 women prisoners (Johnson 2004a) showed that

- 87 % were victims of sexual, physical or emotional abuse in either childhood (63 %) or adulthood (78 %),
- 60 % had mental health problems while growing up, and 62 % of these women said these problems significantly interfered with their lives,
- 44 % grew up in families with alcohol problems, and 26 % in families with drug problems.

Similar the report of the Home Office (2003) in London revealed that among 301 female prisoners 71°% reported to have been physically assaulted and 54 % said that family members or friends violated them.

According to Johnson (2004b) sexual and physical abuse, poor mental health conditions and a history of family problems are common risk factors which influence both the drug use and the criminal career among women. But even the prison environment itself is often not a safe place for survivors of assaults. In a European study 75 % of the female study participants reported becoming victims of assaults during their imprisonment (Dünkel et al. 2005). Against this background it is no surprise that women prisoners experience prison as particularly brutal and traumatising.

Several studies indicate that the vast majority of women is sentenced to prison for non-violent offences (Commission on Women and the Criminal Justice System 2004; Johnson 2004b; Walsh 2004; Anti-Discrimination Commission Queensland 2006). Most of the women prisoners have been incarcerated for regular drug offences such as buying or selling drug and for property offences such as burglary, stealing without break-in, and trading in stolen goods (Walsh 2004). Due to their regular offending up to 75 % of the women had been previously in prison (Zurhold et al. 2005).

The imprisonment itself often has a damaging effect on social relationships and the mental and physical well-being of women prisoners. According to estimations more

than half and up to 70 % of the women prisoners have children which are separated from their mother by imprisonment (Johnson 2004a; Anti-Discrimination Commission Queensland 2006).

In addition research findings agree that mental health problems are higher among prisoners compared with the general population and that female prisoners have a much higher incidence of mental health problems than male prisoners (Andersen 2004; Butler et al. 2005; Anti-Discrimination Commission Queensland 2006). Most of the recent literature on mental health disorders derives from Australia and New Zealand. A study in New South Wales shows that 61 % of the female prisoners were diagnosed to suffer from psychiatric morbidity compared to 39 % of the male prisoners (Butler et al. 2005). In Queensland 57 % of the female prisoners have been diagnosed with a specific mental illness, the most common being depression (Anti-Discrimination Commission Queensland 2006). The study from Tye & Mullen (2006) screened women in two Victoria prisons for the 12-month prevalence rates of ICD-10 mental disorders. Among the screened female prisoners the most prevalent mental health disorders were drug dependence (57 %), major depression (44 %) and posttraumatic stress disorder (36 %).

In general, the prevalence of reported mental health problems is lower in European than Australian prisons. According to a European study between 11 % (Denmark) and 44 % (Greece) of the female prisoners are found to suffer from a severe depression (Dünkel et al. 2005). The report on the situation of female prisoners in England and Wales (Home Office 2003) document that almost half the women (45 %) had received medication in the 12 months before entering prison, usually for depression. Furthermore a number of women felt more anxious when in prison than outside. The anxiety levels appear higher for drug-dependent women and those with harmful levels of drinking.

The research results are unique in their findings that the most frequent mental health problems of women prisoners consist in drug dependence, depression and anxiety. However, it can be assumed that there is a significant population of mentally ill prisoners being both insufficiently detected and treated. Given the high prevalence of mental illness identified in several studies, it is essential that prison mental health services be adequately resourced to meet the needs of this population and to ensure that mental health does not deteriorate during incarceration. In fact, the prison administration has a particular responsibility for health as the loss of liberty disempowers individuals to take care for their health themselves.

Mental health disorders are closely associated with self-harm outside and in prison. The Home Office report (2003) stresses that about half of the female prisoners act out self-harm at some time in their lives and 47 % said that they had made a suicide attempt in their lifetime. Another report found 40 % of the women who perform self-harm in prison (Commission on Women and the Criminal Justice System 2004). Finally the European study identified every 9th to 10th female prisoner being at high risk of self-harm in prison (Dünkel et al. 2005).

Several studies indicate that the prevalence of HCV and as well of HIV is particularly high among female prisoners in specific countries (see table 1). These findings emphasize the need for effective harm reduction programs that provide an appropriate response to the problem of drug related heath risks among women prisoners.

Table 3: Prevalence of hepatitis C und HIV among female prisoners

	Hepatitis C	**HIV**	**Source**
Ireland	56%	10%	Donoghoe 2006
Nine European countries	44%	12%	Dünkel et al. 2005 (N=159 women with drug problems)
Barcelona	74%	62%	Zurhold et al. 2005 (N=185 female drug users)
Glasgow	11%	3%	
Hamburg	65%	5%	
Vienna	78%	6%	
Warsaw	35%	30%	
Queensland (AUS)	40%	n.s.	Anti-Discrimination Commission Queensland March 2006

5. Analysis of the actual situation

The following chapter reflects the actual situation of drug users and non-drug users in the prison setting. After the individual risks which derive from drug consumption and "way of life" in prison, we also focus on the institutional risks. Firstly we describe the specific nature of drug use in prison, secondly the prevalence of risk behaviour related to transmission of BBV, followed by drug-related diseases and other drug-related problems. Finally, issues of staff, knowledge and attitudes are presented and various institutional risks of the prison setting.

5.1. Nature of drug use and related risks in prison

With the entrance into prison, prisoners are faced with a severe change in their life and for many of them this is accompanied with a change in drug use patterns, frequency of use and the kind of drug used.

There are numerous studies which demonstrate that prisons and secure settings are facing increasing problems with drug use and other high risk behaviours which can have serious health consequences (Polonsky et al. 1994; Pallas et al. 1999; Stöver 2002a; Lines et al. 2004a; MacDonald 2005). In addition, PDUs are among the most vulnerable prisoners, and are over-represented within the prison population, often due to a growing trend towards the criminalization of drug use and possession and the use of custodial sentences for drug-related crime throughout the EU (EMCDDA 2003a).

Drawing a detailed picture of drug use in prisons is difficult in a particular country, and even more so in all European countries. Drug use in prison takes place in extreme secrecy, and drug seizure statistics, the confiscation of needles and syringes and positive urine test rates only indicate some of the full story of drug use behind bars. The patterns of drug use vary considerably between different groups in the prison population. For instance, drug use among women differs significantly from that among men, with different levels and types of misuse and different motivations and behavioural consequences.

The following list summarizes some key information about drug use in European prisons (see overview for the following data: Stöver 2002b):

- The use of illegal drugs in prisons seems to be a longstanding phenomenon dating back to the late 1970s. Needle-sharing at that time was extremely widespread;
- Substances available outside prison can also be found inside prisons, with the same regional variation in patterns of use. The quality of these drugs is often poor compared with that of drugs in the community;

- The prevalence of drug use varies depending on the institution. Some studies have shown that drug use is more prevalent in large institutions, short-stay prisons, women's prisons and prisons close to a large urban centre. There is less drug use in remand prisons because of the lack of organized trafficking networks;
- In many prisons, the most commonly used drug besides nicotine is cannabis, which is used for relaxation purposes. Some studies have shown that more than 50% of the prisoners use cannabis while in prison. A much smaller percentage reports injecting drugs in prison;
- Several empirical studies indicate that the frequency of use usually declines after imprisonment. This may be due to the reduced supply of drugs or it may reflect the ability of drug-using inmates to reduce or stop drug use while in prison. A minority of prisoners uses drugs daily;
- Imprisonment per se does not seem to motivate individuals to reduce or stop drug use. Reduced drug use appears to be a consequence of the reduced availability of drugs, lack of resources to procure drugs or the fear of detection;
- Some prisoners use drugs in prison to fight boredom and to help them deal with the hardships of prison life or to overcome a crisis situation, such as bad news, conviction and sentencing or violence. Imprisonment thus sometimes seems to provide reasons for taking drugs or continuing the habit or causes relapse after a period of withdrawal;
- In some countries, alcohol and tobacco are the most commonly used drugs among people admitted to prison or already in prison. In France, one third of new admissions say that they have harmful drinking patterns;
- Many countries report changes in the patterns of drug use (volume and type of drug) when the preferred drugs are scarce. Studies and observations of prison officers indicate that switching to alternative drugs (such as from opiates to cannabis) or to any substitute drugs with psychotropic effects – no matter how damaging this would be (illegal drugs and/or medicine) – is widespread. Due to a lack of access to the preferred drug or because of controls (such as mandatory drug testing), some prisoners seem to switch from cannabis to heroin, even if on an experimental basis, because cannabis is deposed within fatty tissue and may be detected in urine up to 30 days after consumption;
- Some prisoners use the prison as an opportunity to "take a break", to "recover physically" or to stop using drugs in prison. This time of abstinence is often accompanied by stabilization of general health status (including an increase in weight). Further, many drug users in prisons come from the more disadvantaged groups in society, with a high prevalence of low educational attainment, unemployment, physical or sexual abuse, relationship breakdown or mental disorder. Many of these prisoners never had access to health care and health

promotion services before imprisonment. The health care services therefore offer an opportunity to improve their health and personal well-being;

- According to various studies undertaken in Europe, between 16% and 60% of people who injected on the outside continue to inject in prison;
- Needle-sharing and drug-sharing are widespread among prisoners who continue injecting. Although injecting drug users are less likely to inject while in prison, those who do are more likely to share injecting equipment and with a greater number of people. Many were accustomed to easy and anonymous access to sterile injecting equipment outside prisons and start sharing injecting equipment in prison because they lack access to equipment in prison. In the first documented outbreak of HIV within a prison population in 1993, 43% of inmates reported injecting within the prison – and all but one of these individuals had shared injecting equipment within the prison (Taylor and Goldberg 1996);
- Figures from a European study and some national and prison-based surveys indicate that between 7% and 24% of prisoners who inject say that they started to inject while in prison;
- Some prisoners may also discover new substances while in prison (medicines or tablets) or develop habits of mixing certain drugs they did not mix outside;
- Although smoking heroin ("chasing the dragon") instead of injecting plays an increasing and significant role all over Europe, this route of administration is not widespread in prison because drugs are so expensive in prisons and injecting maximizes the effect of a minimal amount of drugs;
- There is a high risk of acquiring communicable diseases (especially HIV infection and hepatitis) in prison for those who continue to inject drugs and share equipment. Several studies conducted outside penal institutions reveal a strong correlation between previous detention and the spread of infectious diseases. Although injecting drug use in prison seems to be less frequent than in the community, each episode of injecting is far more dangerous than outside due to the lack of sterile injecting equipment, the high prevalence of sharing and already-widespread infectious diseases. Prisons are high-risk environments for the transmission of HIV and other infections for several reasons, including:
    - a disproportionate number of inmates coming from and returning to backgrounds where the prevalence of HIV infection is high;
    - authorities not officially acknowledging HIV, thus hindering education efforts;
    - activities such as injecting drug use and unsafe sexual practices (consensual or otherwise) continuing to occur in prison, with clean injecting equipment and condoms rarely being provided to prisoners;

  - tattooing using non-sterile equipment being prevalent in many prisons; and
  - Epidemics of other sexually transmitted infections such as syphilis, coupled with their inadequate treatment, leading to a higher risk of transmitting HIV through sexual activity.

- A study carried out in 25 European prisons in 1996–1998 (Rotily and Weilandt 1999) found an overall prevalence of HIV infection of 5.7%, with substantially higher rates in prisons in Portugal (19.7%) and Spain (12.9%). The proportion of prisoners living with HIV is many times higher than the proportion in the general population (for example, 25 times higher in Germany). Rates of hepatitis B virus and hepatitis C virus infection and TB in inmate populations are also generally many times higher than in the population as a whole. Where HIV coexists with TB infection, the annual risk of developing TB disease is between 5% and 15% versus the estimated 10% lifetime risk for those not infected with HIV
- Prisoners often regard certain drugs (especially cannabis and benzodiazepines) as serving a useful function or as helping to alleviate the experience of incarceration. Inmates seem to regard cannabis as essentially harmless. Alongside these attitudes, inmates recognise a need for treatment among those with serious drug problems and were aware of some of the health implications of injecting. They also displayed a possibly exaggerated concern about the problems of drug withdrawal. In the same study, prison officer staff shared many of these attitudes, some commenting on the uses of drugs as palliatives and the relative harmlessness of benzodiazepines and cannabis. Others were concerned about the development of a black market in drugs. In general, staff were acutely aware that the problem of drug misuse in prisons reflected a similar problem in the community;
- Many drug users in prison had no previous contact with drug services before imprisonment despite the severity of their drug problems; and
- After release, many injecting drug users continue with their habit. A study (Turnbull et al. 1991) indicates that 63% of those who injected before prison inject again in the first three months after release. Prison therefore cannot be seen as providing a short- or longer-term solution to individuals' problems with drugs

Despite many control efforts illicit drugs get into prisons and prisoners consume them. Just as in the community, drugs are present in prisons because there is a demand and a market for them and because there is money to be made selling them. Many prisoners have a history of drug use or are actively using drugs at the time of incarceration. As such, drug users form a particularly over-represented group in the prison population in many countries (Kingma and Goos 1997). A typical profile for the group of drug users finally ending up in prison would include the following characteristics: socially deprived, poly-drug users with several stays in prison, having experienced several

treatment attempts with a high incidence of relapse and with severe health problems, including incurable infectious diseases and mental illness (Stöver 2001).

The number of drug-law offences in most EU countries has consistently risen over the past 15 years. As a result, the number of drug users in prisons has increased substantially (Stöver 2001). In addition to those people who enter prison with a history of, or active, drug use, a substantial proportion of prisoners start using drugs while in prison as a means to release tensions and to cope with living in an overcrowded and often violent environment (Taylor and Goldberg 1996).

For many prisoners, the first two weeks following release from prison is particularly dangerous, as many prisoners resume (higher levels of) drug use and are at very high risk of drug overdose. In the week following release, prisoners are about 40 times more likely to die than the general population. In this period, immediately post-release, most of these deaths (over 90%) were associated with drug - related causes (Singleton et al. 2003). Prisoners who have not taken drugs frequently during detention often have difficulty in adapting to the new situation after release. They return to old habits and consume drugs in the same quantity and quality as before prison. The transition from life inside prison to the situation in the community is an extremely sensitive period. The longer a drug user stays in prison, the more difficult adapting to life outside prison will be. Even a prison sentence of only several weeks, during which no drugs are consumed, poses a considerable risk to released drug users: because of a reduced tolerance for opiates, even small quantities can be life-threatening (Stöver and Weilandt 2007).

"In the countries of the European Union, for example, the number of prisoners who report ever having used illegal drugs is between 29% and 86%, with most studies reporting figures of 50% or greater. The number of prisoners actively using drugs during incarceration is between 16% and 54%. These EU studies indicate that figures for drug use are even higher among incarcerated women. In Canada, a 1995 survey by the Correctional Service of Canada found that 40% of prisoners reported having used drugs since arriving at their current institution" (Lines et al. 2006, p. 9).

The health threats prison health care services are facing also affect public health, because drug using inmates are often serving short term sentences and then return to society, to their partners, their children and their families and may transmit blood borne infections into the wider community (WHO et al. 2001a). The following problems are arising from the above described situation:

- High risk behaviour (e.g. sharing of injection equipment, unprotected sexual contacts; and tattooing/piercing) is widespread as needles and syringes are contraband and thus scarce in the prison setting; sexual relationships are a taboo.
- Blood borne infections (e.g. HIV, Hepatitis B and C) that are transmitted among drug users by unsafe injections, sexual practices, tattooing and piercing are massively over represented in prisons compared to the community (CEEHRN 2007; Laticevschi 2007; Lines 2007).

- The prevalence of drug use and sharing injection equipment among incarcerated women is higher than that among incarcerated men (Stöver and Lines 2006).
- Juveniles and migrants are at particular risk to acquire infectious diseases, as they often have a poor understanding of the nature and character and the dynamics of infectious diseases in closed settings (EMCDDA 2003a).
- A substantial number of drug users report having first started to inject while in prison Studies of drug users in prison suggest that between 3-26% first used drugs while they were incarcerated and up to 21% of injectors initiated injecting whilst in prison (EMCDDA 2003a).
- Drug related deaths in prisons and shortly after release as well as suicide attempts, self harm and several other drug use related diseases (mental illnesses, STIs, TB, etc) are higher than outside prisons walls (Bird and Hutchinson 2003; Bird et al. 2003; Christensen et al. 2006).
- Prison staff is at risk to get infected with blood borne diseases while searching cells or by accidental needle stick injuries (Bögemann 2007).
- The opportunities for treating drug abuse and dependence and the related diseases (such as anti-retroviral and antiviral treatment) are limited in comparison to services in the community. Often only organisational measures are taken (drug free wings/zones) in order to allow prisoners to be separated from drug using inmates.
- Prevention strategies (e.g. vaccination) are often not pro-actively offered to the inmates in most of the countries. In many countries education and information towards drug use is reduced to the transfer of knowledge. Approaches successfully applied and widespread in the community such as harm reduction (e.g. provision of condoms and sterile needles and syringes) are not implemented in most prison settings and are discussed controversially (WHO Europe 2005b).
- Health services in most countries are under the responsibility of the Ministry of Justice and are organisationally separated from the health service in the communities. This leads to problems in cooperation and communication among services (see Moscow Declaration: WHO 2003).
- Drug-related diseases, injuries and violence are causing costs to society in the health, welfare, employment and criminal justice sectors in EU 27 but the cost figure cannot be calculated.
- Several studies show that effective aftercare for drug using prisoners is essential to maintain gains made in prison-based treatment. Despite this widely acknowledged fact, prisoners often have difficulties in accessing treatment on release under community care arrangements.

- There is an obvious lack of systematic documentation and research on health issues in European prisons. Health reporting systems are not systematically applied in prisons. There are only few reliable data and information available on prevalence and incidence of infectious diseases, patterns and frequency of drug use, risk behaviour, and accessibility of prevention and care efforts and efficacy and efficiency of services used.
- Prisons and prison staff tend to understand illicit and non-prescribed drug use as a delinquent act to be punished. Any attempts to reduce the risks of continued use are viewed as supporting a prohibited behaviour and therefore unwelcome. Strict prohibition and rigid controls are regarded as the only acceptable prevention, and abstinence as an enforceable behaviour (Uchtenhagen 2006).

The promotion of health in prisons can make a major contribution to national strategies for tackling the problems of drugs in society (WHO and Council of Europe 2001, p. 1).

In 1988, the WHO Regional Office for Europe (1990) developed recommendations for managing health problems of drug users in prisons. Since then, other efforts to address problems related to drug use in prisons have been undertaken, including efforts to tackle drug users' health problems in juvenile (MacDonald et al. 2006) and adult prisons and the whole criminal justice system (WHO et al. 2001b). Starting in 1995, the WHO Health in Prisons Project (WHO) has addressed issues related to drug use in prisons.

5.2. Prevalence of risk behaviour related to transmission of blood-borne viral infections

Independent of drug use there is a number of behavioural patterns which comprises high risks of transmitting BBVs. This includes unprotected sex, tattooing, piercing, and other possible contacts with body fluids. As these risk behaviours can be in particular associated with vulnerable group of drug users, this adds to their existing risk behaviour.

5.2.1. Unprotected sex in prisons

Unprotected sexual contacts between prisoners pose a risk for the sexual transmission of HIV, Hepatitis and other sexually transmitted diseases. Within penal institutions, sexual contacts occur in different ways, and in varying frequencies. Sex may be consensual, or it may be forced or coercive. Sex may also be used as a form of currency within the prison and exchanged for money, protection, property, or drugs. Violent forms of unprotected sexual anal or vaginal intercourse, including rape, carry the highest risk for transmission HIV, particularly for the receptive partner who is more likely to suffer damage or tears in the membranes of the anus or vagina (Betteridge 2004).

Same-sex sexual activities are the most common forms of sexual contacts in prisons. Although homosexuality has been decriminalised in many countries, significant stigma is still attached to same-sex sexual activities (particularly male homosexuality) in many

societies and in many prison systems. This stigma can lead to discrimination by other prisoners and staff members. Men having sex with other men in particular may be subject to violence, discrimination, and social exclusion. These negative consequences can make sexually active male prisoners even more vulnerable to HIV infection by deterring them from accessing safer sex measures such as condoms (in prisons that provide them) for fear of identifying themselves as sexually active. Many prison systems maintain prohibitions against any sexual activity (whether consensual or non-consensual) that can also create barriers to prisoners accessing safer sex measures such as condoms.

The prevalence of sexual activity in prison is influenced by factors such as whether the accommodation is single-cell or dormitory, the duration of the sentence, the security classification, and the extent to which conjugal visits are permitted. Given the stigma in most societies against same-sex sexual relationships, levels of sexual activity among prisoners are difficult to estimate with any accuracy as these relationships (whether consensual or forced) generally occur in secrecy. Risk behaviour studies within prisons may also under-record the true amount of sexual activity, as many prisoners may be reluctant to disclose same-sex sexual behaviours to researchers. Dumond (2006) found that only a small minority of victims reports rapes to prison authorities (96 of 2,000 rapes reported): “In some ways, the victim is in a no-win situation” (Dumond and et al. 2006, p. 5). Only a few percent of correctional officers charged with direct supervision believed that rape was a rare occurrence. Staff may respond poorly or blame the victim (Jürgens 2007).

That said, several studies have provided evidence that significant rates of risky sexual behaviour occur in correctional settings. Studies of high – risk behaviour show widely varying estimations of the proportion of male inmates who have sex with other men (see Okie 2007). They range from 2 to 65% and estimations of the proportion of those who are sexually assaulted range from 0 to 40% (Krebs 2006). A study conducted among 373 male prisoners at all of South Australia’s prisons (Gaughwin et al. 1991) concluded that 12% engaged in anal intercourse at least once. Another study in South Australia (Douglas and al. 1989) reported that prison officers and prisoners estimated that between 14% and 34% of prisoners engaged in ‘occasional anal intercourse’. The European Network on HIV/AIDS and Hepatitis Prevention in Prison found rates for sexual intercourse among men in prison of between 0.4% (Sweden), 1.4% (Austria) and 5% (Spain). The rates of condom use for the last intercourse were between 0% (Belgium) and 30% for Spain (Rotily and Weilandt 1999). In the Austrian contribution to that Network study (Spirig and et al. 1999) it was found that 2.8% of the men stated that they were raped in prison, 1.4% stated that they had sexual intercourse with another man in prison, no one stated they had accepted payment for sexual intercourse, and no one stated they had used a condom. The nature of the prison’s physical environment (i.e., individual cells, shared cells, shared living units, dormitories, and barracks) can have particular impact on levels of coerced sexual activity, sexual abuse, and rape. Prison policy that allows children and young people to be housed with adults can also

increase the vulnerability of young prisoners to sexual abuse. Staffing levels and levels of supervision of prisoner living areas can also have an impact on levels of sexual activity, both consensual and coerced. Although most sexual contacts in prisons are same-sex activities, heterosexual contacts may also take place. These may occur between prisoners and prison staff (which may be coercive in nature, particularly for female prisoners) or during prison visits (whether or not such visits are officially "conjugal" in intent).

5.2.2. Tattooing and body piercing

Tattooing amongst prisoners is a common practice in many countries. Research has revealed high levels of tattooing among prisoners in countries including Australia (Dolan et al. 1999), Canada (Correctional Service Canada 1996), Ireland (Long and et al. 2000), Spain and the United States (Dolan 1999).

Because tattooing involves breaking the skin with a needle, it is an activity that poses a risk of transmission of blood-borne diseases though the sharing and reuse of tattooing equipment such as needles and inks – both of which come into contact with large amounts of blood during the tattooing process[7]. Tattooing and the possession of tattooing equipment are prohibited by prison authorities in many countries, and those found to be engaging in tattooing are subject to punitive sanctions. As a result, tattooing is an activity that takes place secretively, often in unhygienic environments, using homemade equipment and inks, and as quickly as possible so as to minimize the risk of detection by prison staff. All of these factors increase the risk of negative health consequences via tattooing in penal institutions (Bammann and Stöver 2006).

Conclusive clinical evidence of HCV or HIV transmission via tattooing is elusive. One of the barriers to demonstrating a clear causal relationship between the transmission of blood-borne disease and tattooing, particularly among prison populations, is the very high level of injecting drug use history among this group. It therefore becomes difficult to identify conclusively whether the source of infection was tattooing or syringe sharing. However, despite a lack of definitive evidence, there is significant anecdotal evidence of blood borne disease transmission through tattooing (inside and outside prisons), as well as a body of scientific opinion identifying the potential health risk when tattooing occurs in a non-sterile environment. Several studies of prison populations have found evidence linking tattooing to the transmission of blood-borne

[7] See also Resolution ResAP(2003)2 on tattoos and permanent make-up/ COUNCIL OF EUROPE COMMITTEE OF MINISTERS (https://wcd.coe.int/ViewDoc.jsp?id=45869) - (Adopted by the Committee of Ministers on 19 June 2003 at the 844th meeting of the Ministers' Deputies)

diseases in prisons (Estebanez Estebanez et al. 1990; Holsen et al. 1993; Thompson and et al. 1996; Post and al. 2001; Samuel et al. 2001).

On the related issue of body piercing, a review of various studies on the relationship between piercing and hepatitis transmission concluded that eight of twelve studies identified percutaneous exposure, including body piercing and ear piercing, as a risk factor for viral hepatitis. Six of the studies found that hepatitis seropositivity was significantly associated with ear piercing (Hayes and Harkness 2001).

There are still other risks for transmitting infections in prison; Exposure to human blood and body fluids (if infected with HIV/HCV) has the potential for transmitting infections. Within prisons, both prisoners and prison staff may be exposed to human blood or other body fluids as a result of

- assaults and fights (which can lead to open wounds and bleeding)
- accidental needle stick injuries from hidden or concealed syringes
- carrying out professional duties (as is the case with medical staff)
- providing first aid.

5.2.3. Injecting drug use and communicable diseases

In Europe the HIV prevalence among prisoners is primarily related to the sharing of injecting equipment inside and outside of prisons. Sharing syringes among intravenous drug users is a high-risk activity for the transmission of HIV due to the residual presence of blood in the syringe after injecting (Shah et al. 1996; Shapshak et al. 2000). Given the secure environment of penal institutions, it is often more difficult to smuggle syringes into prisons than it is to smuggle in drugs (Lines 2002b; Lines 2002a). As a result, syringes are typically scarce, and prisoners who inject drugs share and reuse syringes out of necessity (WHO 2004a). For people who inject drugs, imprisonment therefore increases the risk of contracting blood-borne infections such as HIV, through sharing needles.

In a prison, a syringe may circulate among (often large) numbers of people who inject drugs, or be hidden in a commonly accessible location where prisoners can use it as necessary. A needle may be owned by one prisoner and rented to others for a fee, or it may be used exclusively by one prisoner, reused again and again over a period of months until it disintegrates, is rendered totally unusable or is confiscated by prison staff (Lines 2002b; Lines 2002a). Sometimes the equipment used to inject drugs is homemade, with syringe substitutes fashioned out of available everyday materials, often resulting in additional vein damage, scarring, and injecting-site and other infections.

Injecting drug users (IDUs) in prisons are a far from homogeneous population, but one that comprises various subgroups that can benefit from targeted interventions:

- those who inject on the outside but not in prison;

- those with no previous history of injecting (approximately 5–10% of all IDUs start injecting while in prison);
- those who smoked drugs like heroin in the community but inject in prison, mostly for reasons of economy and efficiency;
- those who have a history of injecting in prison but no longer do so, having identified and resisted high-risk behaviour (similar to the first group);
- occasional injectors, for whom the behaviour may be opportunistic, recreational or impulsive;
- independent injectors, who are disciplined about risk reduction and have their own injecting equipment that they will not share or lend;
- closed-circle injectors, who share equipment only within their own group, whether to reduce risk or to avoid detection by prison officers;
- renters, who rent injecting equipment from others for money, drugs or favours; and
- hirers, who own injecting equipment and rent it out for a fee or service (Shewan et al. 2005).

There are obvious risk differences among these groups, especially for infection through contaminated equipment; for example, the renters are clearly at higher risk than the independent injectors. Moreover, all these groups will also contain both HIV-positive and HIV negative people, whose needs will often be different. HIV prevention programmes need to adjust their messages accordingly.

The high rates of injecting drug use, if coupled with lack of access to prevention measures, can result in frighteningly rapid spread of HIV. There were early indications that HIV could be transmitted extensively in prisons. In Thailand, the first epidemic outbreak of HIV in the country probably began among injecting drug users in the Bangkok prison system in 1988. Six studies in Thailand found that a history of imprisonment was associated significantly with HIV infection. HIV outbreaks in prison have been documented in a number of countries, including in Australia, Lithuania, the Russian Federation and Scotland (Stöver et al. 2007).

Studies conducted in various countries illustrate the degree to which drug use occurs in prison.

A national study in the US of 25,000 people who inject drugs found that approximately 80% had been in prison at some time (Dolan and et al. 1999). A 1995 WHO study of HIV risk behaviour among people who inject drugs in 12 cities found that 60% to 90% of respondents had been in prison since commencing injecting drug use, with the majority experiencing incarceration on multiple occasions (Ball and al. 1995).

This is not to say, however, that prison has no effect on patterns of drug injecting. In fact, research has demonstrated that incarceration affects patterns of injecting and decisions about injecting in various ways, often with the result of increasing the risk of

transmission of HIV and other blood-borne diseases. For example, while people who inject drugs typically inject less frequently in prisons (Shewan and al. 1996), studies have found that injecting tends to take place in a more "high-risk" fashion than injecting outside of prisons (Darke et al. 1998; Malliori et al. 1998). Drug users often choose to inject in prison when they would not normally inject outside prison, and networks of drug users who share injecting equipment can be larger in prisons than outside prisons (Long 2003; see for overview: Lines et al. 2006, p. 10). As stated by UNAIDS:

"Long experience has shown that drugs, needles and syringes will find their way through the thickest and most secure of prison walls," (UNAIDS 1997, p. 6)

Research has revealed a number of factors that encourage drug injecting among prisoners, or the switch to injecting among non-injectors. The inconsistent or scarce supply of drugs such as heroin is one. Because injecting is a more efficient means of drug consumption, resulting in less waste, it has been shown that some heroin smokers will elect to inject heroin rather than smoke it while incarcerated. The prison economy may also prove a factor, and provide an incentive for prisoners who "own" a syringe to rent it or trade it to others in exchange for drugs (Long 2003).

In addition to the extensive evidence of high risk behaviours among prisoners in many countries, there is also documented evidence of the transmission of HIV, as well as blood-borne infections such as HCV, within prisons (see with more details Stöver and Lines 2006).

And there are still other drug-related problems occurring in prisons, which are not the topic of this report, such as

- overdose
- drug related death after release
- suicide
- self-harm
- tuberculosis.

5.3. Environmental and institutional risks

There is a range of risks occurring in prison because of the special secluded and secured environment. All these risks can affect the health and/or social situation of the prisoners.

- overcrowding
- discontinuity of care and treatment (post and pre)
- psychiatric co-morbidity
- drug free orientation
- discrimination

- violence (against minorities)
- mothers and children
- sexual violence (US-Act)
- food and sport

Worldwide over 9.25 million people are held in penal institutions – almost half of these in the US, Russia or China (Walmsley 2006). In the 27 European Member States more than 600.000 people are incarcerated in prisons on a given day. The prison population in the member states of the European Union comprises 558.025 prisoners (including pre-trial prisoners) on 1st September 2004, while 40.085 persons in Romania and 10.935 persons in Bulgaria, were in prison at that time (Council of Europe 2004). The turn over rate is estimated to be at least threefold, which means that around 2 Mio people pass EU-custodial institutions annually. In average, the prison population rate per 100.000 inhabitants in the European union is 121,6 (with large variations between 56,4 in Slovenia and 337,9 in Estonia). In average, more than 5% of the prison population are female prisoners (for details see chapter 3).

Prison conditions are integrally linked to the physical health and mental well-being of prisoners. Poor living conditions can contribute to an increased risk of HIV transmission in prisons and a decline in the health of prisoners living with HIV/AIDS. First, substandard conditions can increase the risk of HIV transmission by promoting and encouraging drug use, (which usually involve unsafe injecting practices) to escape boredom or stress. They can also contribute to the increased risk of prison violence, sexual coercion and rape. Secondly, among prisoners living with HIV/AIDS, poor conditions can increase vulnerability to a decline in health by exposing them to contagious diseases and opportunistic infections; placing them at risk for dual infection with either TB or hepatitis; housing them in unhygienic and unsanitary environments; confining them in spaces that do not meet basic needs for size, natural lighting, and ventilation; failing to provide them with proper diet, nutrition and/or clean drinking water; and housing them in overcrowded, high-stress environments. Minimum standards for the housing and treatment of prisoners are defined by international agreement, yet many prison systems in Europe – whether in high-income countries or countries in economic transition – fail to meet these standards, due to strained financial resources and/or a lack of political and public interest in the well-being of prisoners. Failure to improve such confinement conditions can undermine the effectiveness of HIV/AIDS programmes and strategies (Lines et al. 2004a; MacDonald 2005).

The discrepancy between treatment need and receiving of treatment is an issue underlined in several studies. Most details on treatment assessments are provided by the report of the Home Office (Home Office 2003). 40 % of the total sample received help for drugs in prisons mainly detoxification and counselling. In addition 42 % of the women sought help for emotional or mental health problems by a prison doctor or psychiatrist. Not even half of those women in need received treatment and a number of

those who did were not satisfied with the help they got. The most common cause of dissatisfaction was the length of time to see the doctor or to receive treatment. In the European study of Dünkel, Kestermann et al. (Dünkel et al. 2005) did 17 % to 29 % of the women prisoners undergo drug treatment. The need for this kind of treatment reported 20 % to 35 % of the women. This gap is even more alarming regarding psychological treatment needs. Only 11-20 % of the women received psychological treatment although 14-37 % of the women said to be in need for this treatment. Women with drug problems and severe depression showed an even higher need for psychological treatment which was up to 56 %.

The results clearly demonstrate that treating of mental illness is inadequate as psychiatric services do not meet the extent of the women's need.

International literature shows that the number of ex-prisoners relapsing after release and becoming re-imprisoned is high and even increasing. Most studies found gender differences in terms of fewer women than men who re-offend after release but evidence suggests that reconviction rates for women tend to be the same proportion as adult males (Commission on Women and the Criminal Justice System 2004).

As regards gender differences a study from Finland reveals that of 30.000 individuals 59 % returned to prison during five years after release. Men re-offended more often (59 %) than women (45 %) (Hypén 2003). Similar recidivism rates for men and women are reported from Queensland, Australia (Walsh 2006).

Re-offending rates seems especially high for drug using prisoners. A review of seven studies on imprisoned drug users found that levels of re-offending post-release were significantly higher for drug users (62 %) than for abstainers (36 %) (Ramsay 2003b).

International research identified several reasons for the consistent fact that a majority of the prisoners re-offend after release. When summarising the main given reasons, relapses after release are related to

- substantial minorities of drug-using prisoners that received treatment (Ramsay 2003b),
- an insufficient preparation for release and the lack of someone who meets the prisoner at the gate upon release (Walsh 2006) and
- a persistent drug problem and a low self-efficacy to remain abstinent in high-risk situations(Pelissier and Jones 2006).

In addition deprived living conditions increase the likelihood to relapse after release. According to a recent study on gender differences in predictors of criminal recidivism (Benda 2005) childhood and recent abuses, living with a criminal partner, selling drugs, stress, depression, fearfulness, and suicidal thoughts are stronger positive predictors of recidivism for women than for men.

The findings highlight the importance of a health and social policy addressing the women's lives by providing drug treatment, mental health care, welfare benefits, housing, education, and employment. Addressing the realities of women prisoners through gender-sensitive programmes is fundamental to prevent relapses and to improve their resettlement in community (Bloom and al. 2004).

Last not least the destructive impact of imprisoning mothers underline the need for new pathways in handling female offenders (Zurhold et al. 2005).

5.3.1. Overcrowding and the over-representation of risk groups

Despite several attempts to improve the situation, nearly all prison services in the EU Member States are reporting overcrowding (Walmsley 2003; Walmsley 2006). A majority of 16 countries plus Bulgaria and Romania show a prison density per 100 places between around 90 and about 120. The highest rates can be found in Cyprus, Greece and Hungary (160,6 to 144,9) and the lowest in Malta (62,6). The EU average prison density is 109,6, indicating a general tendency of overcrowding in the prisons throughout the European Community (Council of Europe 2004). This represents institutional/environmental risk factors for prisoners.

Prisoners are a vulnerable group coming from vulnerable sectors of society with high unemployment rates, low levels of education and poor health (Møller et al. 2007). Generally in many countries the number of prisoners has dramatically increased over the two last decades (Stöver and Weilandt 2007). The EMCDDA estimates that at least half of the EU's prison population has a history of drug use, many with problematic and/or injecting drug use (EMCDDA 2003b). Only limited data are available about the exact percentage of injecting drug users. As already informed, the EMCDDA estimated in 2006 that the prevalence of injecting drug use among prisoners in Europe is between 7 % and 38 %, which shows that the spread of problematic drug use is varying widely throughout the countries and differs even within the country from one prison to the other. Drug use is seen as one of the main problems of the current prison system that threatens security measures, is dominating the relationships between prisoners and staff and leads to violence and bullying for both prisoners and often their spouses and friends in the community (Restellini 2007).

Research has demonstrated the detrimental impact of overcrowding in prisons, in relations to security issues and also on prisoners' health and access to other services such as education, work and visits from family members and other external organisations. With regards to prisoner health, overcrowding presents additional risks for prisoners with HIV or other infectious diseases, as they often experience poor nutrition, limited access to treatment and are also often engaged in high risk behaviours such as injecting drug use, sexual activity and tattooing (Tkachuk and Walmsley 2001; Lines et al. 2004a; WHO 2005b). Overcrowding in prisons has also been shown as a key factor in increasing levels of self-harming and suicide among prisoners, higher

prevalence of mental illness among prisoners and also as having a detrimental impact on resettlement and rehabilitation strategies (Howard League for Penal Reform 2001).

6. Prevention, treatment, care and support of drug users in prisons

In this chapter interventions for drug users in prison are described. These interventions can bee seen under three big headlines: prevention, treatment and harm reduction. They correspond to the three levels of prevention in a public health context. In which prevention in a prison setting can be referred to primary prevention (chapter 6.1 to 6.3), treatment to secondary prevention (chapter 6.4. to 6.7) and harm reduction (chapter 6.8 to 6.13) to tertiary prevention. Furthermore in the last two chapters 6.14 and 6.15 we focus on pre-and post release programmes and training of prison staff.

Within this chapter we aimed at giving information on the evidence of effectiveness. As there is hardly any research which meets the criteria of high-ranking evidence (RCT) we included all kinds of studies into this review. Whenever a review on a special topic was undertaken already, we usually did not review the cited studies again but relied on the existing reviews.

Generally speaking, the research situation on treatment effectiveness for drug users in prison varies greatly. The studies included on the evidence of effectiveness come from all available countries. A rather huge number of studies come from the US and also from Australia, in particular higher-ranked research. In the field of testing for infectious diseases and vaccination, and care for prisoners with HIV/AIDS and Hepatitis as well as pre- and post-release programmes the main research comes from the US. Whereas programmes on harm reduction measures as well as on drug testing are predominantly from European Studies. The origin of studies is indicated within the individual chapters.

Generally the interventions for drug and alcohol dependence vary greatly throughout Europe and ranges from 12 Steps programmes to acupuncture, therapeutic communities and methadone provision, cognitive-behavioural methods and educational programmes (Harrison et al. 2003; Merino 2003). In order to survey drug programmes in the criminal justice system in the EU, 36 programmes had been analysed by Merino (2003). As regards the objectives of prison-based programmes the analyses reveals that crime reduction along with early intervention is most common (24 %; 23 %). These objectives are followed by harm reduction (19%) and social integration (14%). In addition drug-free programmes, psychotherapy, drug-free areas and counselling are key services for crime and demand reduction. At least for the USA there are less often evidence-based practices offered in prison than in the community, which might be similar for Europe, as there is not much research on the evidence of effectiveness (Friedmann et al. 2007).

However, it is important to accommodate those prisoners who are not motivated or able to stop using drugs, but do need to better understand how to reduce the harms associated with drug use. Research has highlighted the need for treatment providers, in any setting, to identify the needs of clients and their goals, whether this be maintenance or abstinence, and provide support in accordance with this (Marlatt et al. 2001; Stöver et

al. 2004). All in all it can be stated that "Positive experience from in-prison treatment helps inmates to continue treatment after release, reduce relapse rates and related health risks, and also reduce delinquency recidivism" (Uchtenhagen 2006).

In the UK the Department of Health has published a guide on clinical management of drug dependence in the prison setting, which should be developed accordingly (Department of Health 2006).

6.1. Testing of infectious diseases and vaccination

Testing of infectious diseases and vaccination in a prison setting is significant factor to ensure the prisoners health during incarceration and to ensure the health of their families and friends after discharge. Therefore not only the individual risk but the public health aspect has to be put in the fore hold. Besides, the knowledge of an infectious disease is a prerequisite to organize and receive the appropriate care (WHO et al. 2007b)

According to the WHO database on disease in prison elaborated by the WHO disease testing mostly takes place on admission rather on release, with the exceptions of Estonia, Finland and Lithuania where HIV is tested both on admission and on release. In Lativa, Luxembourg and Belgium half of the prisoners are tested for infectious diseases (WHO). If there is mandatory HIV testing in prison, the patient confidentially needs to be addressed cautiously. This is from particular importance if the test revealed a positive result (MacDonald et al. 2006).

As it has been stated earlier prisoners are a high-risk group for acquiring infectious diseases. In several European countries (e.g. the United Kingdom, Germany, the Czech Republic) vaccination for prisoners is recommended. Vaccination of HBV takes more often place than vaccination for HAV. This seems to be the case for central and eastern European countries (CEEHRN 2007) and for western European countries.

From the available literature there is no indication for other vaccinations in European prisons such as tetanus vaccine, live measles, mumps and rubella vaccine or influenza.

Main results:

Testing of infectious dieseas and vaccination is a major opportunity to promote and secure health in prison. Tremendous opportunities exist that have impact on the health of the incarcerated, the correctional employees and the communities to which the inmates returns.

In many countries HCV, HBC and HAV pose an even bigger problem than HIV to prisons. Due to the high turn over rates, screening and vaccination for HAV and HBV often remain incomplete. As Hepatitis B infection may constitute a severe co-infection to HIV/AIDS the risk of acquiring an infection in prisons may be reduced by a vaccination both for prisoners and for staff.

Similar to drug testing (see following chapter) testing for infectious diseases in prisons is rarely evaluated. Testing for infectious diseases includes testing for blood-borne

diseases such HIV, HCV, HBC and HAV, but also for TB and for STD such as syphilis (Bick 2007).

The consciousness of HIV status is essential for receiving the adequate care, treatment and support. There are major differences upon access to voluntary HIV testing. Also there are still differences in the way HIV tests are offered: voluntary or mandatory.

It has been shown, that offering HIV test voluntary resulted in a large number of prisoners accepting HIV testing and counselling. Liddicoat and colleagues (Liddicoat et al. 2006) showed that offering HIV test upon incarceration combined with a brief group counselling and a private informed consent significantly increased HIV testing rates compared to a historical cohort. In the intervention group 73,1% accepted HIV testing, whereas in the control group only 18% accepted (73,1% vs. 18%; $p<0,0001$).

This result was also shown in an earlier study undertaken in Wisconsin, USA, were in three consecutive years a blinded sample followed by a voluntary sample were assessed. The emphasis of this study was laid on possible bias that persons at risks systematically deterred from voluntary testing. This hypothesis could be refuted, because the total number of IDU did not increase (Hoxie and al. 1990).

It is known, that mandatory HIV testing and segregation are counterproductive (Jacobs 1995). Besides testing in an environment in which a great number of persons at high risk are assumed fails to reach a sizeable number of HIV-infected individuals [Jenkins, CDC].

One way to encourage voluntary testing, as proposed by Bausermann et al (2003), is offering oral tests to inmates.

The majority of the European countries perform HIV tests on admission. From those countries the majority performs voluntary test. But there also countries in which HIV testing is mandatory (The Netherlands (since 2006) for all risk groups, Cyprus (since 2006)(WHO).

Testing for infectious diseases does not only apply to testing for HIV also for Hepatitis and for sexual transmitted diseases. The entrance in the prison poses a good opportunity to test prisoners for Hepatitis. There are various forms in which this is done, upon request, testing only prisoners at risk or routinely testing all prisoners. All viral hepatitis forms present a major challenge to the prison health systems (Spaulding et al. 2006), therefore screening and vaccination are ways to face and handle this problem.

Hepatitis B vaccination has been widely integrated and evaluated in the Scottish and England prison system. It has been shown, that with the implementation of a HBV vaccination program in the Scottish prison service in 1999, the uptake of at least one dose of HBV vaccine had more than tripled (16% to 52%) compared to recent initiates to injecting drug users.

In England two large HBV vaccination campaigns were launched in 2001: 41 jails participated to target the large number of individuals that pass through the prison

system. To expand the effectiveness of the program the campaign was extended to all prison sites including female and young offenders' prisons (Gilbert et al. 2004a). The overall aim of this vaccination program was to increase the coverage of HBV vaccination within the group of IDUs by 20%. It was shown that the proportion of self-reported vaccine uptake rose between 1998 and 2004 from 27% to 59% (adjusted OR=3,7; 95% CI: 3,2-4,3). In an attendant survey it was revealed that the greatest proportion of the IDUs received the vaccination in prison. The authors concluded that achievement of an increase of 20% coverage of HBV was highly attributed by prisons (Hope et al. 2007). Although it had been stated that HBV vaccination in prison can have an affect on the prevalence of HBV in the general population (Sutton et al. 2006), this has not been shown yet. Nevertheless various studies has been shown, that the prison setting is good opportunity to prevent HBV infection by vaccination (Hammett 2003; Kuo et al. 2004; Weinbaum et al. 2005).

Similar to HBV every prisoner should know their hepatitis A status and should be offered vaccination (Bick 2007).The risk of acquiring HAV is not as high as for HBV and the complication risk is low. There is only one HAV epidemic in prison described in the literature, which occurred in Queensland, Australia (Whiteman et al. 1998).

After an increase of HAV cases was observed in South Yorkshire, again in England a community-based HAV vaccination program was set up and hereupon expanded into the prisons system. This step showed a significant impact on the incidence of HAV in the community (Gilbert et al. 2004b).

To sum up, vaccination against HAV should be offered to prisoners at risk (Neff 2003) (Whiteman et al. 1998) whereas HBC vaccine (Kuo et al. 2004; Sutton et al. 2006) should be made available for all prisoners.

Screening for TB can be done in three different ways: systematic screening latent or active tuberculosis with the Mantoux test, systematic screening of all jail inmates by x-ray or systematic screening with skin tests. Whereas the sensitivity of the latter is rather low with 10-15% false-positive results. Regardless of what kind of test used, it is important to screen incoming inmates with active signs of TB (Niveau 2006)

Table 4: HIV testing and vaccination

Study	Quality	Main results
Liddicoat et al, 2007	**C**	In this evaluation study carried out in Boston, MA., USA, 1,004 inmates were offered routine, voluntary HIV testing. 734 (73.1%) accepted; 2 (0.3%) were HIV positive. The testing rate of 73.1% was significantly increased from the rate of the control period (p<0.001).
Hoxie et al, 1989	**C**	From 1986 to 88 voluntary and blinded HIV testing was conducted among Wisconsin, US, male prison entrants. HIV seroprevalce was 0.30% in 1986, 0.53% in 1987, and 0.56% in 1988.Voluntary HIV testing was accepted by 71% of male prisoners.
Hope et al, 2007	**C**	Hepatitis B immunization among IDUs is strongely recommend. In England, the Department of Health, aims to expand the coverage by 20%. Therefore a in 2001 a vaccination programme for prison inmates in England was instigated. A significant rose from self-reported vaccine uptake from 27% in 1998 to 59% in 2004 (OR=3.7; 95%CI:3.2-4.3). In a following, aiming at locating the source of the received vaccine, prisons were the most common sources followed by drugs services and general practioners.
Gilbert et al, 2007	**C**	In South Yorkshire an increase in cases of hepatitis A was observerd. A community-based vaccination programm did not yield at any success. By implementation of the vaccination campaign in the local prison, vaccinating 1,236 prisoners, the notification of cases of hepatitis A from South Yorkshire ceased.

6.2. Drug testing

Drug testing is the testing of individuals for their drug use. The aim of drug testing is to deter drug use in the prison, to identify drug users and to provide information on the level of drug use and the type of drugs used (MacDonald 1997). The testing in prison is usually done by urinalysis, other possibilities would be hair or blood analysis. The frequency as well as the mode of testing can vary considerably: on admission and/or release, before/after holidays or weekend leaves, by suspicion of drug consumption, per random routine, mandatory for all prisoners or only subgroups (Dean 2005).

Drug testing is conducted in virtually all European countries, but the mode and frequency of testing as well as the aims associated with it varies greatly. For example in Cyprus and Malta random drug testing is done in all prisons as well as on admission, by suspicion, and before holiday leave. In some countries, mandatory drug testing is conducted in a few prisons, e.g. in Ireland, while in Latvia drug tests are mainly conducted by suspicion. Other countries like Belgium and Poland only use drug tests in a few prisons or only in medical services when needed (see for details country reports in Annex). In England, Wales and Scotland, mandatory random drug testing has been introduced in 1995 and was discontinued in Scotland in 2005, while giving additional days for positive tests was discontinued already in 2002 (Dean 2005).

Main results

Drug testing can have very different aims and methods. Mandatory drug testing in prison can encourage people to switch from smoking "soft" drugs (i.e. Cannabis) to injecting "hard" drugs (i.e. heroin) for the latter is not as long detectable. Mandatory drug testing is rather expensive. Mandatory drug testing can be counterproductive and can increase tension in the prison.

Drug testing is very rarely evaluated. The most discussed form of testing is the mandatory drug testing. Some research has been done on the programme of mandatory drug testing in England, Wales and in Scotland. A pilot trial was conducted in 1994/95 in eight prisons and continued afterwards in all prisons in the country.

Mandatory drug testing is one factor found to influence drug-use patterns in prisons. It may decrease or alter drug use due to the fear of detection and sanctioning (Edgar and O'Donnell 1998; Prendergast et al. 2004a; Scottish Prison Service 2000, cited in Dean 2005). But mandatory testing can also have unintended outcomes; In the English pilot trial the percentage of positive tests for opiates and benzodiazepines rose from 4.1% to 7.4% (Gore et al. 1996). A survey among prisoners and staff concluded mandatory drug testing to be counterproductive, especially without adequate follow-up like treatment and counselling programmes. It can also increase the tension inside prison and deflects attention from other important issues (MacDonald 1997), as shown by the number of assaults increased by 20% from 1993 to 1995 (Gore et al. 1996). For this programme also a cost analysis was conducted. Although some forms of drug testing can give a good estimation on the prevalence of drug use (Gore et al. 1999; Fraser and Zamecnik 2002; Harrell and Kleiman 2002), even if not all users will be detected (Edgar and O'Donnell 1998), other studies claim that mandatory drug testing seriously underestimates the prisoners need for harm reduction (Bird et al. 1997). Rather high costs especially for punishment of refusals and for cannabis testing were found. Costs of a compulsory drug testing would be twice as much as a rehabilitation and drug reduction programme at the time of the study, and less beneficial (Gore and Bird 1996). The additional days given as punishment for drug offences in England and Wales in 1997 amounted to an extra 360 prisoners places per year (HM Prison Service 2003).The cost for this additional time to the prison sentence was estimated at seven million £ in 1998 (Edgar and O'Donnell 1998).

Prisoners with a positive test result can face penalties under criminal laws or administrative/institutional penalties, which can result in loss of privileges or an increase in the amount of time a prisoner will be incarcerated, in England up to 28 additional days in prison (Hughes 2000a), only seldom treatment and rehabilitation are offered to those tested positive (Dean 2005). Therefore, there is a great incentive for prisoners who use illicit drugs to avoid detection. While urinalysis can detect the presence of drugs in urine, some drugs clear the human body in relatively short order (e.g. heroin in about three days), while other drugs remain detectable for much longer periods of time (e.g. cannabis for up to 28 days), so this is a particularly significant

factor in the context of the transmission of blood-borne diseases in prisons (e.g. MacDonald 1997; Jürgens 2002; Lines et al. 2006, p. 9). Therefore, it is logical that some prisoners choose to inject drugs (with serious public health impacts) rather than risk the penalties associated with smoking cannabis (which has a negligible public health risk) simply to minimise the risk of detection and punishment. Anyway, given the scarcity of sterile needles and the frequency of needle sharing in prison, the switch to injecting drugs surely has devastating health consequences for individual prisoners, as almost every injection is infection relevant. Such a conversion from soft drugs to hard drugs has been found in Zurich, Switzerland (according to Gore et al. 1996) as well as in the above-mentioned pilot trial in England and Wales (Edgar and O'Donnell 1998). As the difficulties of mandatory drug testing can be serious, not only regarding the transmission of diseases but also the tension inside the institution, such programmes, if needed at all, should always be linked with adequate treatment and counselling programmes (MacDonald 1997), but to this inmates might fear sanctioning and therefore don’t approach staff (Hughes 2000a). The form and mode of drug testing should be carefully considered and research recommends that resources should be shifted from mandatory testing to other interventions (e.g. Gore and Bird 1996; Dean 2005).

Table 5: Drug testing

Study	Quality	Main results
Dean 2005	**F**	Scottish research on MDT: Especially suspicion testing leads to resentment among prisoners. Provision of Mandatory drug testing will not combat the problem of drug misuse. Results of drug testing in 2004/05: 22% with random testing positive, 46% on suspicion, 50% on liberation. 21% of all prisoners tested positive while in custody but estimated 71% of arrestees are drug users. On admission drug use has decreased as a result of testing.
Edgar and O'Donnell 1998	**survey**	148 prisoners and 146 staff in England interviewed. Prevalence of drug use in prison changed because of fear of detection and sanctioning. Switching from cannabis to heroin occurred but not persisted. Not all users were detected by MTD. Additional costs by additional time as sanction likely to be 360 places per year.
Gore, Bird et al. 1996	**G**	Pilot study on English Mandatory drug testing 1995 in 8 prisons: positive tests for opiates and benzodiazepines rose from 4.1% to 7.4%. Number of assaults increased by 20% from 1993 to 1995.
Gore and Bird 1996	**G**	England/Wales: If testing all inmates, costs were twice as much as running a rehabilitation and drug reduction programme and about half the total healthcare expenditure for a prison. More than 50% of the costs would be for cannabis testing. 5% of all IDUs are in prison, so 5% of prevention and treatment costs should be directed there. no evidence for effectiveness of compulsory drug testing.
Hughes 2000	**G**	17 qualitative inmates interviews in England found MDT to be received as unfair. Switching was reported. Treatment was not offered for those tested positive, and inmates reluctant to approach the staff with drug problems because of fear of sanctioning.
MacDonald 1997	**survey**	Interviewed staff in England thought, that testing would decrease drug use a little, prisoners not. Both stated it would shift the use from soft to hard drugs. Prisoners viewed process as unfair and punishments as unreasonable. Insufficient following rehabilitative programmes for positive tested users. Evidence that mandatory drug testing encourages users to switch from "soft" drugs to less long-term detectable "hard" drugs. Testing process is counterproductive, increases tension in prison, deflects attention from other crucial areas. Money could better be spent on treatment and counselling follow-up.
Prendergast et al. 2004		150 inmates per week were tested from the eligible inmate general population in two US prisons, results supported the effectiveness of systematic random urine testing in reducing prison substance use, as measured by the number of inmates refusing to test or testing positive for illicit substances.

6.3. Health education and promotion for prisoners

Health promotion means by definition: Health promotion is the process of enabling people to increase control over, and to improve their health (WHO 1998). This definition serves as a catalyst for providing health education and promotion in prisons.

Providing information and education on HIV transmission, transmission routes, and prevention strategies is typically the first approach in developing an HIV programme in prisons. Developments in several countries have shown that the justice system is an important setting for the education of groups or individuals who are potentially at risk of becoming infected with HIV, or other blood-borne or sexually transmitted infections. Individuals arrested, detained or incarcerated, in police stations, pre-trial detention centres or penal institutions, can be informed, trained, and provided with the means to protect themselves. Often they are in contact with help facilities for the first time in their life, even though they may have been drug users for a fairly long period of time. Prison-based services should include the same range and quality of education programmes offered in the community (see e.g. UNAIDS), and provide accurate information in a non-judgemental fashion. Prison-based educational programmes on HIV/AIDS, drug use, and sex work can be more successful when they reflect an integrated approach between prison and community health services, bringing prison health and public health services closer together (see WHO 2003). Information about HIV/AIDS is generally regarded as a prerequisite for effective HIV prevention programmes, and there is no evidence to show that education is sufficient on its own.

In developing educational initiatives, the following targets should be met:

- To raise awareness of health problems connected to drug use, drug-related infectious diseases, drug injecting, sexually transmitted infections and tattooing and piercing.
- To initiate and support a discussion about risk reduction as response to these health problems
- To increase the knowledge and skills of both prisoners and staff with regard to drug use, drug related infectious diseases, drug injecting, STIs, tattooing and piercing as health problems
- To encourage a positive attitude towards risk reduction activities by both prisoners and staff.
- To disseminate accurate and non-judgemental information relevant for HIV prevention and health promotion by a range of means.
- To stimulate and support the realisation of risk reduction activities for prisoners as well as for staff members.

Education strategies should include (see Stöver and Trautmann 2001):

- Accurate and non-judgemental HIV/HBV/HCV information must be widely available and in the relevant languages.
- Prison and community-based programmes should be integrated/connected and offered on an ongoing basis.
- Demand reduction efforts should be undertaken to support and motivate prisoners to abstain from drugs during imprisonment.
- Safer drug use information to avoid HIV transmission and other health damage related to intravenous drug use and the sharing of injecting equipment.
- Safer sex information adjusted to specific life settings (i.e., private relations, sex work).
- The methods applied should reflect the growing need for interactive learning (Stichting Mainline 1999).
- Peer-education initiatives and materials should be encouraged and supported.
- Relapse prevention programmes (how to avoid recidivism and overdose after release).
- Services must meet needs and individual resources of the concerned.
- Delays and barriers to access support and counselling must be minimised
- Consistent availability of services and support.
- Safer drug use, safer sex and safer work (re sex work) seminars should be offered

Education on HIV/AIDS for both prisoners and prison staff is usually provided at the beginning, when a person first enters prison or begins new employment. Ongoing refresher courses and seminars should be used to sustain and reinforce the HIV/AIDS related health messages.

Modern educational methods, peer education initiatives, and visual aids are now well-established outside prison and should be encouraged and supported. Information should be delivered through a variety of channels, including:

- General awareness campaigns, including general education sessions by prison staff, posters, pamphlets, and other materials.
- The provision of targeted information through health and social services frequented by injecting drug users or sex workers.
- Peer education and outreach, particularly to drug users and other marginalised populations within the prisons.

- Involvement of civil society and other health professionals from outside the prison.
- Face to face communication, particularly to support drug users and sex workers to turn information into actual behaviour change through a process of clarification and reinforcement.

Harm reduction services, the embedding of educational programmes into comprehensive prevention, and treatment and support packages for injecting drug users and sex workers can be crucial for their success. Psycho-social support is known to add a major additional help to such programmes. Information and/or training before release to prepare prisoners with experience of drug use and/or sex work for the risks faced after release (information about enhanced overdose risk after release, safer injecting, safer sex etc.) is a service available in only a few prisons, and should also be developed.

6.4. Healthcare for prisoners with AIDS and Hepatitis

Whether a person living with HIV/AIDS lives in prison or in the outside community, they have very similar medical care, treatment, and support needs. However, within many prison systems, lack of funding and medical infrastructure, lack of properly trained medical staff, lack of access to antiretroviral therapies (ARVs) and other HIV treatments, and inappropriate prison policies and practices mean that HIV-positive prisoners often live in conditions that increase their vulnerability to medical neglect, opportunistic infections, needless suffering, and untimely death[8].

As it had been stated earlier, the WHO´s Guidelines on HIV Infection and AIDS in Prison pronounce that prisoners have the right to receive health care "equivalent to that available in the community without discrimination". Those recommendations also state in detail aspects related to care and support for HIV-positive prisoners. In a latter recommendations (2006) the United Nations Office of Drugs and Crime (UNODC), joined with WHO and UNAIDS emphasized the equivalence principle of receiving ART for prisoners. In nearly all European countries ART is available in all prisons.

Main results:

The provision of healthcare for prisoners with AIDS and Hepatitis is not only a human right, but also a proven effective and safe intervention. By entering the prison, prisoner with AIDS should be offered HAART. Existing HAART should not be discontinuied and prisoners not receiving HAART should be encouraged to start HAART. Similar to AIDS, as treatment for HCV is safe and feasible in prison.

The treatment of HIV and AIDS with highly highly active anti-retroviral therapy (HAARTI has been scientifically evaluated and can be said that it is effective in the

[8] Guiding questions for scrutinizing the prison health care services come from the CPT and are extremely helpful Council of Europe (1999). Health care services in prisons. Strasbourg..

suppression of HIV viral load, the preservation of immunologic function, the improvement of quality of life and the reduction of HIV-related mortality and morbidity (Pontali 2005). With the adoption of HAART HIV has lost the life-threatening aspects and has changed into a treatable, chronic disease (WHO 2007)

The deliverance of HIV care in correctional institutes is despite different opinions of correctional healthcare providers less comprehensive than in community settings (De Groot 2000; Bernard et al. 2007).Treating HIV-infected prisoners with ART will not only have an affect on the individual health but also an impact of public health outside of the prison. It has been emphasized that the deliverance of HAART in a prison where the medical care is provided by the correctional institution and not by public health authorities is regarded as rather problematic. If that is the case the implementation of HIV-care in a prison setting can rely on proper resources (Pontali 2005).

The cohort of persons entering prisons consists of persons already lacking access to proper medical resources. Therefore the correctional institution in which structural barriers to health care are removed and the prisoner is capable should offer HAART to all HIV-infected prisoners.

There has been evidence that often treatment is initiated in prison. Altice and Mostashari (2001,1998) reports that up to 67% of HIV-positive prisoners first received HAART while in prison (Mostashari et al. 1998; Altice et al. 2001)

The success of a therapeutic intervention is revealed by the adherence to the program. Especially dealing with (HAART this is a matter of great concern. Because the highest benefit can only be achieved when there is full adherence several methods needs to be undertaken to ensure that the prisoner takes the medication. The complex issue of drug resistance is the consequence of improperly or inconsistently taken HIV medication.

This was revealed in a study conducted in Spain where the prevalence of genotypic resistance among HIV-positive incarcerated was analyzed. It was differentiated between primary resistance and drug resistance. 127 drug-naïve subjects were recognized in 13% in 1999 versus 15% in 2001. Whereas drug resistance was found in 35% and 59% of 182 pre-treated subjects in 1999 and 2001. Resistance was seen in drugs with low genetic barrier, such as lamivudien and nonnucleoside reverse transcriptase inhibitors (Wohl et al. 2003).

There are also studies which report good or excellent adherence of HAART in prisons. Another Spanish study carried out by Soto Blanco and colleagues (2005) showed that the adherence to HAART was higher than in the wider community. 117 HIV-infected were asked to fill out a questionnaire concerning their adherence to the therapeutic regimen. 24.3% were non-adherent. Predictors of non-compliance were for instance poor or lack of ability to follow the prescribed treatment regimen, no visits in a months, difficulties in taken the medication or methadone maintenance treatment (Soto Blanco et al. 2005).

An excellent adherence of 94% was observed in the study by Kirkland et al (Kirkland et al. 2002). The primary goal of this randomized controlled trial was to evaluate a compact regimen with one daily tablet administered twice daily. Both therapeutic regimens were well tolerated and only 4 patients dropped out of because of adverse events (AE).The occurrence and the severity of AEs are a predictive factor in the adherence of HAART. This was demonstrated in a study carried out in Connecticut were the most predictive factor associated with nonadherence in the multivariate analysis was the composite variable "side-effects". An even greater impact on the adherence to HAART had social isolation (12-fold increase versus 11-fold increase)(Altice et al. 2001).

Furthermore it had been evaluated that attitudes related to trust in medications and the health system have a significant impact on the adherence to HAART. The prisoner's view of the person who is dispending the medication will have a probably undeterminable effect of the adherence of HAART (Mostashari et al. 1998).

Besides of the factors that have an impact on the adherence of HART the modalities of administration differ and therefore influence the adherence. In general three different modalities are differentiated: Directly observed therapy (DOT), modified DOT and keep on person (KOP) (Pontali 2005).DOT refers to a system in which the prisoners goes to the medical unit or pharmacy and swallows the medication under sight check. During this routine visits the medical staff can record possible side effects, give brief counseling to the patient and react quickly to signs of discomfort of the patient. It can be said that the adherence within is the greatest compared to KOP, but it should kept in mind, that the routine visits of the patient involves the loss the confidentially as the prisoners fear to get "discovered" by other inmates. The difference in a modified DOT is that here the patient receives the daily doses in one package. It is up to the nurse to watch the patient swallow. So the medical staff gets in contact with the patient every day, but the inmate is fully responsible. KOP (sometimes called self-administered therapy (SAT) is the system that allows the inmates to keep a monthly or weekly rationale of medication in their cells and take them independently. Here the confidentially and privacy rights of the patients are fully secured (Pontali 2005).

The literature is inconsistent about the evidence about which modality to prefer. Babudieri et al (2000) reported that DOT compared to modified DOT was associated with a better virological and immunological response (Babudieri and al. 2000). Contrarily it was reported that the degree of adherence was similar in all three regimens. But selection bias needs to be considered, that only highly motivated patients tend to choose KOP.

The treatment for HCV has improved substantially over the last decade and it has been show to be efficient. Depending on the genotype either a 24- to 48-week combination therapy of pegylated interferon and ribavirin is given. This combination achieves an overall sustained virologic response (SVR) of 50% to 80%. Whereat the genotype 2 and

3 have a higher success rate, with a SVR at about 76-80%, than genotype 1 with SVR for 46-54% (Fried et al. 2002)

It has been show that treatment for HCV is also feasible and successful for marginalized groups such as IDUs. Although a very high proportion of HCV infected IDUs circle through the correctional system for a large proportion no therapeutic approach is being made.

Only four studies were identified which evaluated a prison-based treatment of HCV. The newest study was undertaken in France, where 37 medical units' French jails participated. In this prospective cohort study 217 patients were included. They were treated with a combination of pegylated interferon alpha and ribavirin. Six months after the completion of treatment 200 patients were analysed regarding their SVR. Ninety-five patients (47.5%) experienced a SVR. Data was missing data for 61 patients and 24 patients were non-responders (Remy et al. 2006).

A Canadian study designed as a retrospective analysis of medical charts from 10 federal correctional facilities included 114 inmates. Analysis was performed for 80 treatment subjects. 66.3% of this treatment sample achieved SVR. Those with Genotype 2 and 3, injecting drug use and completion of treatment were significantly more likely to achieve SVR (Farley and al. 2005; Farley et al. 2005).

Two small observational studies were carried in the United States (Allen et al. 2003; Sterling et al. 2004). In the study conducted by Allen et al, 93 incarcerated patients were treated with interferon alpha and ribavirin. SVR were achieved by 46% (26 out of 53) after 6 months of treatment.

The second study revealed a response of 34 out of 59 (58%) patients and a SVR was seen in 21 patients. Predictors of SVR were being Caucasian and being infected with genotype 2 or 3. Besides the treatment of HCV, for this study telemedicine, which allowed the use of electronic information and communication technologies was deployed and it the acceptance off the prisoners´ staff was fine.

Although there are only very few studies published on the topic of Hepatitis C treatment, the evidence seems to be clear. Treatment in infected inmates is feasible and safe. By reducing the HCV prevalence among inmates in prisons the prevalence of HCV in the general population is also reduced. Therefore, especially from a public-health point of view the implementation of HCV treatment in prison and the access to care for all infected prisoners needs to be provoked.

Table 6: Provision of HAART and treatment of Hepatits C

Study	Quality	Main results
Wohl,et al	C	Prisoners under HAART revealed a higher rate of virological failure in conjunction with an unexpected lower rate of drug resistance.
Soto Blanco et al	F	Cross-sectional study with 117 HIV infected prisoners out of two Spanish prisons. 24.3% were not adherent to therapeutic regimen.
Farley et al	E	Retrospective review of medical charts of 114 inmates treated for HCV from Canadian prisons. 4 out 5 completed treatment (78.8%); 66.3% achieved SVR.
Remy et al	E	Analysis of 200 treated patients for HCV in French prisons revealed an SVR for 95 (45.5%) patients.
Allen et al	F	93 patients were treated for HCV in Rhode Island, USA for HCV.63% (50 of 79) of patients achieved viral clearance after 6 months of therapy and 46% (26 of 57) achieved SVR 6 months after treatment.
Sterling et al	F	59 consecutive enrolled HCV positive patients were treated with interferon and ribavirin. SVR was achieved by 21 patients. Additionally it was asked, whether there racial differences between Caucasian and African Americans.

6.5. Abstinence-oriented programmes

This kind of programmes refers to different approaches of psychosocial interventions aiming at abstinence by providing rehabilitation and social reintegration. Another term used is “demand reduction”, which describes

“policies or programmes directed towards reducing the consumer demand for narcotic drugs and psychotropic substances covered by the international drug convention control conventions” (United Nations 1998).

The goal of these programmes is to support prisoners in leading a drug-free life in response to an awareness of risks associated with the use of drugs especially in the prison setting. The most common approaches include therapeutic communities, drug free wings, and cognitive-behavioural programmes. Access to these programmes is voluntary under certain conditions, sometimes even with contracts for behavioural change. The central objective is abstinence. Therefore urine testing plays a major role to ensure the drug-free status. These programmes are mostly run in separate sections of the prison with no direct contact with other prisoners and a high control standard.

Therapeutic communities offer support for prisoners suffering from ‘emotional disturbance’ in a group setting and are based on principles of a ‘collaborative, democratic and de-institutionalised approach to staff-patient interaction’ (see Association of Therapeutic Communities 2007). As prisoners are effectively a captive audience, this offers some advantages to prison based therapeutic communities,

however, the regime can also impede such programmes effectiveness, due to strict regulations impact on group and individuals' decisions regarding treatment.

Drug free units are formed on separate sections within prisons, offering support to those prisoners who wish to cease all types of drug use (often including smoking). Prisoners are routinely tested, attend regular and often intensive counselling programmes and group activities, which might include cognitive behavioural programmes. They focus on ceasing drug use during the sentence and also may provide after care services once prisoners are released (Hough 1996).

Cognitive-Behavioural programmes are structured psychosocial interventions aiming at modifying cognition and behaviour. It usually includes some kind of skills training and practice to deal with craving as well as relapse prevention. Different modifications and

The provision of abstinence-based treatment programmes in prison varies considerably throughout the EU. According to Turnbull, by 1997 80% of all Council of Europe countries had abstinence-based programmes, but the extent varies greatly (Turnbull and Webster 1998). Some countries show an increase of drug-free areas since the mid-nineties of 300-400% (Turnbull and McSweeney 2000, p. 48). Therapeutic communities and other rehabilitative programmes are available in most European countries, but not sufficient data for the new member states are available. Drug-free units are available in Austria, Denmark, England/Wales, Finland, Germany, Ireland, Luxembourg, Netherlands, Norway, Portugal, Scotland, Spain, and Sweden, mostly in only parts of the prison system, and no drug-free wings exist in Belgium and France, whereas there were no data for the new EU-member states (Merino 2005).

Main results

Prison-based TC reduces criminal activity, recidivism and relapse. Drug-free wings and other abstinence-oriented treatment seem to be helpful as well.

Not many studies have been conducted on the effectiveness of psychosocial interventions in the prison setting (Strang et al. 2007), and a need for more studies on effectiveness of treatment programmes was identified (Costall et al. 2006). Studies indicate that it is important for prison systems to develop particular strategies for prison drug treatment rather than simply just reflecting those strategies that exist in the community (Turnbull and Sweeney 1999). Generally there is a growing consensus that drug treatment programmes in prison can be effective if they are based on the needs and resources of prisoners and are of sufficient length and quality (Ramsay 2003b).

The effectiveness of TC on recidivism for incarcerated drug users was shown (Pearson and Lipton 1999), other treatment approaches including cognitive-behavioural interventions and 12-step programmes were declared as promising but there was not enough studies to evaluate (Pearson and Lipton 1999). Two RCTs (Wexler et al. 1999; Sacks et al. 2004) were identified on TC in prison, both from the USA. TC in prison was associated with reductions in criminal activity, recidivism, and relapse, compared to a prison control group. For the reincarceration rate no significant difference was

found at 12 months but at five years (Smith et al. 2006; Strang et al. 2007). No effectiveness of boot-camps (a military-style scheme) for young offenders was demonstrated in two US studies, as the treatment group did not differ from the control group (Strang et al. 2007). For incarcerated women case management, skills training, and TCs are especially recommended (Lewis and Lewis 2006).

On drug-free units a German study found significant lower criminal recidivism in regular programme completers than in drop-outs (Heinemann et al. 2002). There are some indicators that drug-free units reduce drug use, and some conflicting evidence on recidivism (WHO et al. 2007b). Counselling programmes in prison seem to be effective in reducing re-offending but not drug use, and voluntary programmes seem to be more effective than other programmes, but the study quality on these issues is not good (WHO et al. 2007b).

Abstinence-based treatment programmes provide a good opportunity for those prisoners who are motivated and capable to cease using drugs.

Table 7: Example studies on abstinence-based treatment in prison

Study	Quality	Results
Costall et al. 2006	survey	Interventions in nine European countries are presented. The effectiveness needs to be studied, and models of interventions should be evaluated.
Heinemann et al. 2002	survey	408 prisoners in two drug-free units in Hamburg/Germany were followed. Those who finished the programme regularly had significant lower criminal recidivism than drop-outs. Drop-out during first 100 days predicted worst outcome.
Persaon and Lipton 1999	E	TC is effective on reducing recidivism; boot camps and drug-focused counselling are not. ST, 12-step, cognitive-behavioural approaches, and substance abuse education are all promising but too few studies to evaluate.
Rosen et al. 2004	D	220 inmates in substance abuse treatment compared to 441 not in treatment. Treatment motivation was evaluated; increased focus on internal motivation may lead to more effective treatment.
Smith et al. 2006	F	This Cochrane review found two RCTs on TC in prison; participants had significantly fewer re-incarcerations criminal activity, alcohol and drug offences after 12 months, compared to Mental Health treatment group.
Strang et al. 2007	F	Two RCTs on TC, same as Smith et al. Two studies on bootcamps did find no difference between treatment and control group in a traditional juvenile camp.
Turnbull and Webster 1998	survey	Extend of drug demand programmes varies widely between countries. Most common interventions are to provide information and to encourage treatment contact.

6.6. Detoxification

Detoxification describes the process of discontinuation of a consumed substance under medical supervision. In the course of an addiction therapy detoxification plays an important role. Complications e.g. seizures and delirium should be avoided to help the patient tackle this difficult phase. For the treatment of opiate addiction a detoxification without medical assistance is not reasonable. The symptoms of an opiate withdrawal symptom according to ICD-10:

- Craving
- Rhinorrhea
- Lacrimation
- Muscle pain
- Abdominal pain and spasm
- Nausea and vomiting
- Diarrhea
- Sleeping disorder

In generell, detoxification is possible with methadone, buprenorphine, clonidin and opiate antagonist, for example naltrexone.

According to the WHO prison data base detoxification without medication is available in Belgium, Finland, Lativa, Portugal and Malta. No detoxification without medication is available in Cyprus, Czech Republic, Estonia, Hungary, Netherlands and Slovakia (WHO). This double negotiation means that prisoners must undergo detoxification by themselves ("cold turkey").

Detoxification with medication is available in Belgium, Czech Republic, Estonia, Finland, Hungary and in Lativa. Agonist treatment is available in Belgium, Finland, Lativa and in Portugal (WHO). Due to missing data no statement for other EU countries can be made.

Main results:
Detoxification with medication is rarely available throughout Europe, although opioid detoxification without medical assistance is not recommended. There is lack of evidence for detoxification programs, with only two studies published. Therefore further research is needed.

The literature search for prison-based opiate detoxification retrieved only two relevant studes. In a Southern England all-male prison a RCT for opioid detoxification was conducted. The study employed a randomised double-blind, two-group comparison design to compare the relative efficacy, side effect profiles and participant acceptability

of opioid detoxification. The used medications were methadone and lofexidine. Seventy-six patients could be included in the trial. Due to withdrawal of patients and errorly detoxification, only 68 patients commenced the treatment. Thirty-two patients received lofexidine and 36 patients, respcectively, methadone. The socio-demographic and patterns of opioid use were comparable. Twenty-one patients were loss-to-follow up due to various reasons. Withdrawal scores showed very similar patterns and derived withdrawal scores indices showed no significant differences between treatment groups (Howells et al. 2002).

In an Australian prison the introduction of naltrexone was evaluated. Participants were recruited from 14 prisons. Data were analysed from two subsets drawn from 204 male inmates who participated in a former unsuccessful randomised trial. Patients received either naltrexone (n=68) (first sub-sample) or in the second sub-sample naltrexone (n=14), methadone (n=21) or buprenorphine (n=21) over 24 months.

Only nine of 68 subjects actually started naltrexone treatment. The main reason for refusing naltrexone was failure in detoxification for methadone or buprenorphin. Retention rates were analysed for subjects in the second sub-sample. Retention in methadone was significantly higher in methadone compared to naltrexone (log rank statistic = 11.52, df=1, p=0.007). The evaluation of this study yieled at a negative result for naltrexone for prisoners (Shearer et al. 2007).

One promising study has been set up in the UK: the Leeds Evaluation of Efficacy of Detoxification Study (LEEDS). The study protocol has been published in January 2007. This study will take place in a prison in Leeds with a sample size of 120 (Sheard et al. 2007).

Table 8: Detoxification treatment

Study	Quality	Results
Howells et al	A	74 opioid dependent male inmates at a Southern England prison were randomised to receive either methadone or lofexidine. No significant differences in the severity of withdrawal symptoms
Shearer et al	A	68 + 47 participants were randomised to naltrexone, methadone or buprenorphine treatment. 13% of the sample started naltrexone, with 7% remained in treatment after six months. Six-month retention was significantly lower in naltrexone compared to methadone (p=0.007)

6.7. Substitution treatment

One major approach to aim at both harm reduction and social integration represents the substitution maintenance treatment. The term “substitution treatment” (ST) refers to the medically supervised treatment of individuals with opioid dependency, based on the prescription of opioid agonists (Thomas 2001). These can include methadone, buprenorphine, codeine, morphine, and diamorphine. The treatment options include the

management of withdrawal on admission as a gradual detoxification (proceeding to abstinence-oriented treatment) or the long-term substitution maintenance.

In countries that provide methadone in prisons, it is most commonly used for short-term detoxification, and less frequently as a maintenance treatment. In some countries, such as Austria and Spain, substitution treatment is provided as standard therapy to all prisoners who began treatment in the community and are deemed likely to continue it after release (Stöver et al. 2004). In others, including Greece and Sweden, it is not available in prisons at all. A recent study on practice and policies of in-prison substitution treatment in 18 European countries (Stöver et al. 2006) concludes that there are heterogeneous and inconsistent regulations and treatment modalities throughout Europe. Even though the scope of substitution treatment has extended considerably across Europe, there remains a treatment gap between prisoners requiring substitution maintenance treatment and those receiving it. Most countries use methadone for the substitution treatment, like in the community, but e.g. in France buprenorphine is by far the most common medicine for substitution, as well inside and outside prison (Michel 2005).

Main results

Prison-based substitution treatment is effective in reducing mortality, crime rates, re-incarceration rates and HCV infection. The frequency of injecting was reduced in long-term ST with a sufficient dosage. There is evidence for the feasibility in a range of prison settings.

The long-term impact of ST has been investigated in imprisoned male heroin users by Dolan et al. (2003). 382 individuals participated in a randomized controlled trial of prison-based ST and had been followed-up. The results show that retention in ST is associated with reduced hepatitis C infection, re-incarceration rates and mortality. For instance the re-incarceration risk was lowest during ST episodes of eight months or longer. ST periods of two months or less were associated with greatest risk of re-incarceration. An increased risk of hepatitis C seroconversion was significantly associated with prison sentences of less than two months and ST episodes less than five months.

Evidence shows that methadone maintenance treatment can reduce injecting risk behaviour in penal institutions such as reduced frequency of illicit drug use in prison and reduced involvement in the prison drug trade (Dolan et al. 1998). The frequency of injecting was reduced in prisoners enrolled in ST for the entire duration of imprisonment (Lenton 2003). An Australian Study found reduced crime rates (officially recorded offending rates) for participants in ST, and this was true for a number of different offences, e.g. robbery, motor vehicle thefts, break and enters (Lind et al. 2004), so ST is an effective crime prevention measure. Studies have also demonstrated that methadone maintenance treatment provision in a prison healthcare setting was effective in reducing heroin use, drug injection and syringe sharing among incarcerated heroin

users (Dolan et al. 2002). A sufficiently high dosage also seems to be important for an increase in the retention rate, which then can be used for additional health care services, a sufficient dosage seems to be at least 60 mg methadone (WHO et al. 2007b). There is evidence that continued MMT in prison has a beneficial impact on transferring prisoners into drug treatment after release. The initiation of MMT in prisons also contributes to a significant reduction in serious drug charges and in behaviour related to activities in the drug subculture (WHO et al. 2007b). In addition, ST can increase the uptake of antiretroviral and other therapies (WHO et al. 2007b), and does reduce the mortality (Dolan et al. 2005), which is especially important on release (WHO et al. 2007b). A 2001 evaluative study of the methadone programme of the Correctional Service of Canada concluded that participation in methadone programmes had positive post-release outcomes. The study found that opiate users accessing ST during their incarceration were less likely to be readmitted to prison following their release – and were less likely to have committed new offences – than were those not accessing methadone. The study further concluded that:

An important implication of these findings is that CSC may spend less money on these offenders in the long term. The cost of the institutional MMT program may be offset by the cost savings of offenders successfully remaining in the community for a longer period of time than equivalent offenders not receiving MMT. In addition, health related costs such as treatment for HIV or Hepatitis C infection would be affected by MMT availability in prisons (Correctional Service of Canada 2001).

Research into the subjective experiences of prisoners participating in substitution programmes reveals the heterogeneity of prescription practices in prisons. In particular, short courses of methadone detoxifications were frequently experienced as insufficient and inadequate. Most striking was the inconsistency in substitution treatment inside prison compared to the community (Hughes 2000b). Forty years after the introduction of substitution treatment for opioid dependent persons its implementation is often far from adequate in prison settings. Here the availability, the implementation, clinical management, and the evaluation of substitution treatment is often deficient (Stöver et al. 2004). The practice and policy of substitution treatment differs not only from country to country, but also from state to state, and from prison to prison (Michel and Maguet 2003; Michels et al. 2007). Notably, the disruption of treatment when entering the institution often leads to physical and psychological problems and increases the risk of intravenous drug use and sharing of injection equipment (Stöver et al. 2004). There was also an impact of prison-based ST found on post-release drug use (WHO et al. 2007b).

Although substitution therapy has been widely recognized as an effective treatment for opioid dependence in the general community (Farrell et al. 2001; WHO 2004b, see also Work Package 1), having crime reducing effects (Lind et al. 2004) and though methadone and buprenorphine have just been added to WHO's Model List of Essential Medicines (WHO 2005a), it remains highly controversial for prisons, particularly in Eastern Europe, where substitution treatment is still prohibited in the community

(Trimbos Instituut 2006), it still misses standards of substitution treatment in community as regards access and continuity. Despite the controversy, experience has clearly shown the benefits of this treatment in prisons (Heimer and al. 2005; WHO et al. 2007b). The WHO states:

"The advantages of using substitution therapy are very great. These include reducing suicide and self-harm during withdrawal, improving regimen management problems during withdrawal and reducing the risk of fatal overdose following release from prison. The high-level endorsement by international organizations and the growing appreciation that this does work, and cost-effectively, indicates that the priority in the immediate future is to develop the clinical and other standards urgently required" (WHO 2005b, p. 15).

Acknowledgement that the benefits of substitution treatment in the community might also apply to the prison setting has taken years. The source of the controversy – and the slow and patchy manner of the intervention's implementation thus far – can be traced to the prison ethos of coercion, which usually manifests itself in a strict abstinence-based approach to drug use. Therefore, while opioid-dependent individuals in the community may be treated as patients and receive substitution treatment, in prison they continue to be treated as prisoners who are supposed to remain drug free. This double standard leads to frequent interruptions in treatment and inconsistency in dosages, especially as many opioid users spend periods of time incarcerated.

Several studies on the effects of the divergent practices of substitute prescribing in penal institutions reflect the development of substitution treatment in prisons (Stöver et al. 2004):

- Substitution treatment has become more widespread in many countries,
- Prison policy and administration are looking for standards and protocols and are reviewing the progress,
- Access and treatment modalities have changed substantially,
- Additional substitution drugs are prescribed (e.g. buprenorphine).

In 1995, prisoners in Oberschöngrün prison in Switzerland were enrolled in a heroin maintenance trial that coincided with a community trial (Kaufmann et al. 1997). The prescription of heroin in prison was found to be feasible and does takes place in two Swiss prisons. Although there has been heroin trials in other countries (The Netherlands, Germany, Spain (Andalusia and Catalonia), Canada and the United Kingdom), which all showed that heroin maintenance is a safe and feasible maintenance therapy for severly opiate addicts, no other heroin-assisted treatment was integrated into a prison setting.

Clear protocols and guidelines are needed to regulate entry into and conduction of substitution programmes in prison (Palmer 2003). This is also necessary for exiting and transferring patients to community based programmes (NSW Health Department 1999).

Finally substitution treatment is offering a daily contact between health care service in prison and patient, a relationship that can serve as baseline for raising further health issues and a linkage with other HIV/AIDS preventive strategy matters. It is also a central topic in preventing relapse the high mortality of drug users after release.

Table 9: Example studies on substitution treatment

Study	Quality	Results
Dolan et al. 2003	A	191 each in ST and control group. Heroin use was significantly lower at 5-months follow-up. Lower levels of drug use were reported. No difference in HIV or HCV incidence.
Levasseur et al. 2002	D	420 dossiers of opiate addicts from 9 French prisons included. ST both with methadone and buprenorphine reduces re-incarceration rate after 3.5 years.
Lind et al. 2004		This Australian study analysed court and imprisonment data in connection with ST data. Reduction in crime rates were found for participants in ST.
Stallwitz and Stöver 2007	F	Literature review concerning the effectiveness of prison-based ST. Results indicated that PMMT is the primary used MT. PMMT found to be effective in contributing to health and social stabilisation if a sufficiently high methadone dose (at least 60 mg) is dispensed.
Stöver, Casselmann et al. 2006	F	ST is very likely to be discontinued in prison, treatment provision is often not enough.
WHO2007	F	Prison-based ST appears to be effective in reducing the frequency of injecting drug use, when long-term in a sufficient dosage provided. Positive effect on prison safety as drug-seeking behaviour decreased. Health benefits are likely, re-incarceration is reduced. No security or safety problems were found. ST increases access to help for antiretroviral therapies.

6.8. Harm reduction in prisons

Harm reduction programs aim to limit as far as possible drug-use related health risks to individuals, the community and society. The theme of these harm reduction programs is: ‘If you use drugs in prisons, do it as ‘safely as possible!’ and ‘Behave yourself as if everybody is positive’ (Stöver and Trautmann 2001). The practical support for users matches the individual needs and resources of the drug users.

Harm reduction is an important public health measure because reusing and sharing needles or other equipment for preparing and injecting drugs represent a highly efficient method of transmitting HIV and hepatitis C. In the absence of harm reduction activities, HIV prevalence among injecting drug users can rise to 40% or more within one or two years after the virus is introduced in their communities. Worldwide, more than 114 countries now report HIV epidemics associated with injecting drug use (Aceijas et al. 2006).

Harm reduction measures are highly politically loaded, cannot be introduced due to resistance of staff, or are perceived as inappropriate for the prison setting (e.g. needle

exchange). The introduction of harm reduction measures is relatively new to prison systems and is often perceived as threatening to the traditional abstinence-oriented drug policy in prisons. The goal of abstinence which is the ultimate goal is presupposed to be achieved in prisons and abstinence is seen as covered with the goal of the sentence (to lead a life without committing crime). Various harm reduction measures are generally seen as undermining the security measures of the prison system. This is different due to different measures. Substitution treatment for instance is more and more seen as a medically supervised adequate treatment of opioid dependent inmates. The benefit for the whole system in keeping the institution 'calm' is more and more seen as a benefit arising from prescribing the substance (see Stallwitz and Stöver in press). This is different when it comes to prison needle exchange projects, which are perceived as undermining the goal of abstinence and needles are symbolized as 'giving up' – a failure to control drug traffic within the institution as well. Furthermore they are seen as instrument to threaten staff and inmates. However, it is recognised that these concerns are often the result of failing to see harm reduction as more effective treatment and care for prisoners with special needs. The positive aspects and results from scientific work have not been communicated as it is needed. An important aspect of the thinking behind harm reduction is to add another valuable element to the health care of drug-dependent prisoners and to reduce the health risks to personnel.

Despite the problems inherent in implementing harm reduction measures, many aspects of harm reduction are now widely accepted and applied throughout Europe. An analysis of prison-based programmes contained in the EMCDDA information system Exchange on Drug Demand Reduction Action (EDDRA) (Merino 2003) found that about one fifth of the prison interventions had reducing drug-related harm as their main objective. Prison systems in Europe are often especially reluctant to support the introduction of needle- and syringe-exchange schemes because they feel it might lead to an increase in injecting drug use, accidental needle pricks and conflicts among prisoners or between prisoners and staff and the risk that syringes or needles would be used as weapons.

Evidence shows that schemes have been introduced in prisons in Spain and in five other European countries without these problems arising (Stöver and Nelles 2003; Lines et al. 2004b). Nevertheless, harm reduction in prisons involves much more than needle-exchange schemes. Useful harm reduction programmes can still be established where such schemes are currently not being considered.

The implementation of harm reduction programmes is quite heterogeneous in European prisons. In a report of the implementation of the Council Recommendation (of 18 June 2003[9]) on the prevention and reduction of health-related harm associated with drug dependence[10] (Commission of the European Communities 2007) it is said that a policy to provide drug users in prisons with services that are similar to those available to drug users outside prisons exists in 20 Member States and is about to be introduced in four

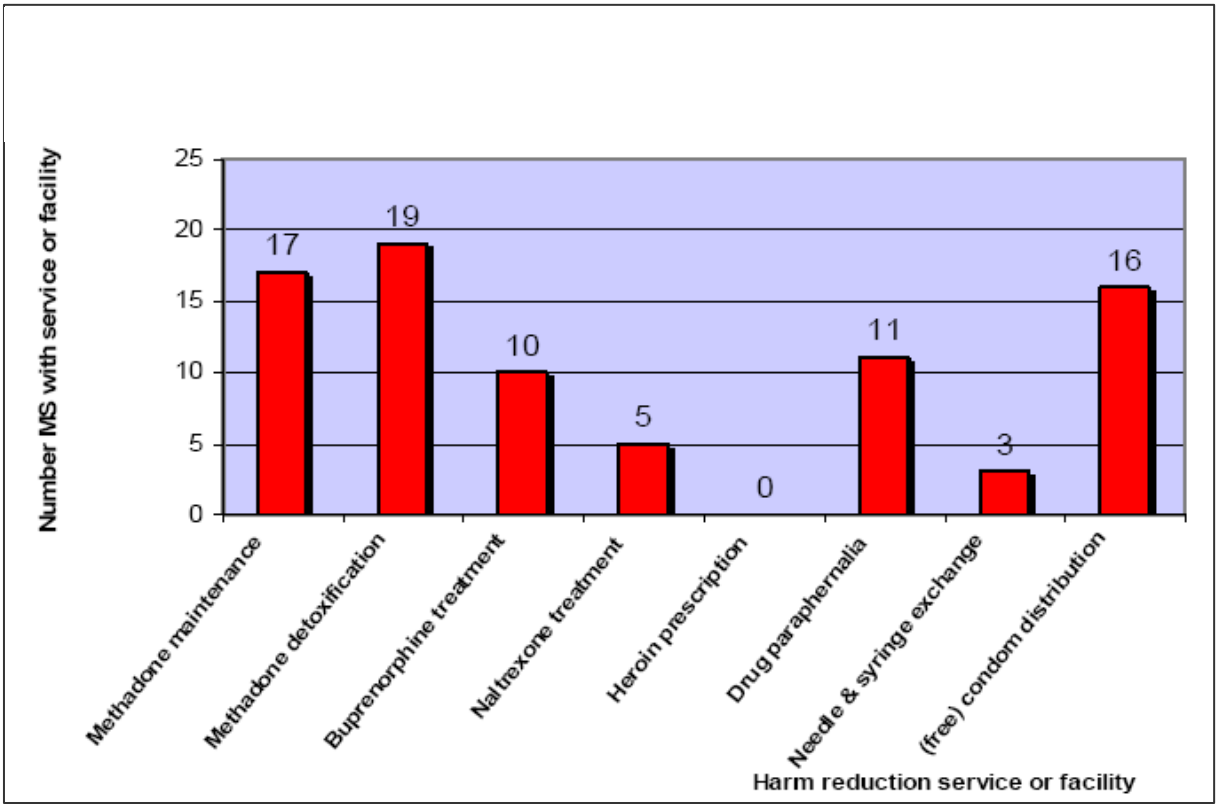
[9] http://europa.eu.int/eur-lex/pri/en/oj/dat/2003/l_165/l_16520030703en00310033.pdf

[10] http://ec.europa.eu/health/ph_determinants/life_style/drug/drug_rec_en.htm

countries (see Figure 26). The distribution of drug paraphernalia is not a common practice in the prisons (11 countries only). Three countries in the European Union (Spain, Luxembourg, Germany) provide needle and syringe exchange in prisons.

In view of the increased spread of needle/syringe sharing and drug use in European prisons, it is necessary to raise the issue of infection risks and protection possibilities in every penal institution out of damage limitation considerations. This does not necessarily mean that syringes have to be provided or that syringe vending machines must be installed in every prison. The type of individual measures necessary for infection prevention or the choice of how syringe provision takes place (hand-to-hand or vending machine) can be made according to the needs, the structure of the prison, the prison's spatial conditions and staff capacity as well as the prisoners' culture of drug use. For instance, intravenous opiate use in parts of England, but particularly in The Netherlands, is traditionally far less widespread than, say, inhaling or smoking. Consequently the subject of infection prophylaxis in prison must be discussed first and foremost. The decision taken by a prison depends on this discussion and an inventory of drug use, risk behaviour, etc. If syringe provision is opted for, then great demands must be made on the smooth running of any scheme.

Figure 26: Harm reduction services available in prison (R2.8)



Source: Commission of the European Communities 2007

6.9. Prison needle exchange programme

Needle exchange is one of the important measures of harm reduction. The term refers to all kind of injecting equipment distribution to people who inject drugs. Prison needle exchange programmes (PNEP), also called needle and syringe programmes or syringe exchange programmes, are often accompanied by counselling or other services (WHO et al. 2007a). Usually the exchange of needles and syringes is done on a one-to-one base: One used needle is exchanged for one new. There exist different methods of exchange; hand-to-hand by medical prison staff, or by external organizations, or by peer workers, or exchange by automated exchange machines (Lines et al. 2006). The aims of PNEP are to reduce the risk of transmitting blood-borne diseases by needle sharing, especially HIV and HCV and other injecting-related harm.

Outside prison, needle exchange exists in many European countries and is usually a widespread and accepted harm reduction measure. In prisons, syringe exchange/distribution programmes have been operating for more than 15 years. The first prison syringe exchange programme was established in 1992 in Switzerland. By 2003 PNEP was provided in 46 prisons (Stöver and Nelles 2003), and at present, there are programmes operating in more than 60 prisons (see table below), but of the 27 European countries only five countries provide PNEP. In some countries, syringe exchange is available in only a few prisons, while in Spain and Kyrgyzstan syringe exchange is authorised in all prisons.

Table 2: Prevalence of needle exchange programmes

Country	Start of programme	Number of prisons with PNEP	remarks
Armenia	2004	3	
Belarus	2003	1	In 2004
Germany	1996	1	6 others were closed because of political reasons
Iran	2005	?	programmes expected to open in 2006
Kyrgyz Republic	2002	11	
Luxembourg	2005	1	
Moldova	1999	7	
Portugal	2008		implementation planned by 2008
Scotland	2007		A study planned for 2007
Spain	1997	38	
Switzerland	1992	7	
Ukraine	2007	2	expected to start in 2007

Source: adapted from WHO et al. 2007a

Syringe exchanges were typically implemented on a pilot basis and later expanded based on the information learned during the pilot phase. Several different methods of

syringe distribution are employed, based on the specific needs and the environment of the given institution. These methods include automatic dispensing machines; hand-to-hand distribution by prison physicians/health-care staff or by external community health workers; and programs using prisoners trained as peer outreach workers, each model having advantages and disadvantages (Stöver 2002b; Stöver and Nelles 2003). Prison syringe exchange programmes have been implemented in both men's and women's prisons, in institutions of varying sizes, in both civilian and military systems, in institutions that house prisoners in individual cells and those that house prisoners in barracks, in institutions with different security ratings, and in different forms of custody (remand and sentenced, open and closed).

The question remains unanswered as to why, despite the numerous positive results from different projects, syringe provision in prison settings is still so controversial, and that syringe provision has only been introduced in four European countries to date, and even there only in specific penal institutions in aid of infection prophylaxis and harm limitation in relation to the use of illegal drugs. The answer cannot be based on logic. In fact there is sufficient fundamental experience in, and knowledge about, syringe provision in penal institutions to justify an extensive introduction of these measures. Measures for syringe provision cannot be imposed, as the experience in Switzerland has shown, where despite an official order a number of prisons rejected them. Firstly, one must work on translating these measures into reality: all-encompassing political decisions and support to the penal institutions in practical, individual questions (legal, communicative and technical aspects) are required, to help obtain the necessary breakthrough as regards effective harm reduction in prisons.

Main results

Evidence for the effectiveness of PNEP has been gathered in a number of very different prison settings.

PNEP reduces needle sharing very effectively, can increase uptake of drug treatment as well as the safety in the prison, and can reduce abscesses and fatal overdoses.

PNEP does not increase injecting drug use, nor has it shown any other negative effects.

A Position Paper of the United Nations System identifies syringe exchange as one component of "a comprehensive package for HIV prevention among drug abusers", stating that

"Several reviews of the effectiveness of needle and syringe exchange programmes have shown reductions in needle risk behaviours and HIV transmission and no evidence of increase into injection drug use or other public health dangers in the communities served. Furthermore, such programmes have shown to serve as points of contact between drug abusers and service providers, including drug abuse treatment programmes" (United Nations 2002).

Since then, a further number of reviews on PNEPs have been undertaken, and gathered evidence for the effectiveness of PNEP (Rutter et al. 2001; Stöver and Nelles 2003; Lines et al. 2005; Lines et al. 2006; WHO et al. 2007a), so a further discussion on the implementation is needed (Hughes 2000c), as evidence indicates that the implementation of such measures is possible and feasible with no security problems (e.g. Kerr et al. 2004).

One of the most important results is the massive decline of needle sharing; a German project in Berlin found 71% of needle sharing before the start of the PNEP, decreasing to 11% at four-month follow up and to almost zero afterwards (Stark et al. 2006). Another outcome from a Swiss evaluation is the decrease over time of injecting drug use after implementing a harm-reduction programme including needle exchange in a female prison (Nelles et al. 1999). Other evidence from those countries where prison needle exchange programs exist demonstrates that such programs do not endanger staff or prisoner safety, and in fact, make prisons safer places to live and work; do not increase drug consumption or injecting; reduce risk behaviour and disease (including HIV and HCV) transmission. A drastic reduction in overdoses is reported in some prisons and also increased referral to drug treatment programmes. PNEP has successfully cohabited in prisons with other drug addiction prevention and treatment programmes (Meyenberg et al. 1999; Nelles and Stöver 2002). The method of distribution needs to be considered, as machines may be unreliable (Heinemann and Gross 2001), and on the other hand a personal distribution won't be anonymous; there are advantages and disadvantages for both (Stöver and Nelles 2003).

Another international review on PNEP evaluation found 6 evaluations on PNEP and all were in favour of the programme due to the fact that needle sharing decreased dramatically, no new cases of transmission of BBV were reported, and no serious negative events occurred (Dolan et al. 2003). A further more recent literature review and additional interviews on six countries with PNEP (Germany, Switzerland, Spain, Moldova, Belarus, Kyrgyzstan) found similar outcomes in very different prison settings: large and small institutions, for men and women, single cell and dorm, needle distribution by machines, peers or hand to hand from medical staff:

- No injuries of staff were reported in evaluation reports,
- syringes were not used as weapons,
- drug use or injecting did not increase (only one out of twelve studies found that it did in some cases)
- PNEP can increase uptake of drug treatment services
- PNEP is very effective to decrease needle sharing (only one study found small decrease)
- Abscesses and fatal overdoses decreased in some prisons (Lines et al. 2005; Lines et al. 2006).

The acceptance of PNEP by prison staff has been surveyed and was usually but not always in favour of PNEP, as fear of needle accidents or use as a weapon were expressed (e.g. Heinemann and Gross 2001; Dolan et al. 2003). This emphasizes the importance of adequate staff training on issues of harm reduction. PNEP should be accompanied by accompanying measures like information, and counselling. A Dutch study then found hardly any injecting drug use in prison and therefore no need for a needle exchange programme (van Haastrecht et al. 1997), so the need of PNEP in each prison should be carefully monitored and evaluated, as the drug use behaviour of prisoners might change over time.

Evidence of research is all in favour of PNEP, as well as the numerous overviews and reviews on the topic. Important international organisations like WHO and the Council of Europe strongly recommend the implementation of PNEP (Rutter et al. 2001) as an effective measure of HIV and HCV prevention, to reduce the risk of infectious diseases and other harms connected with injecting drug use. Needle exchange programmes have proven to be an effective HIV prevention measure that reduces needle sharing, and therefore the risk of HIV and HCV transmission, among people who inject drugs and their sexual partners. Despite the success of these programs in the community, only a small number of countries have extended syringe exchange programmes into prisons. Those countries that have initiated syringe exchange in prisons have been met with remarkable success.

Table 11: Example studies on PNEP

Study	Quality	Results
Dolan et al. 2003	F	6 evaluations identified: drug use decreased or remained stable, needle sharing declined dramatically, no new transmission of BBV reported, no serious unintended effects, staff attitude varied.
Heineman n and Gross 2001	cross-sectional investiga-tion	No seroconversions of HIV, HBV, HCV during a German needle exchange programme. More than 12 000 needles changed in 12 months. Dispensing machines were unreliable, needle sharing still occurred. Acceptance of the programme was rising among IDUs but not among non-drug users and staff.
Lines, Jürgens et al. 2006	F	12 studies included. PNEP increased safety, no injuries of staff reported, did not increased drug use (only one study found single cases). PNEP can increase uptake of treatment services, very effective in decreasing needle sharing and therefore HIV/HCV infections, decreased fatal overdoses and abscesses in some prisons. Prison settings with PNEP very different.
Stark et al. 2006	follow-up	N=174 IDUs in 2 German prisons. PNEP since 1998: Level of needle sharing declined from 71% to 11% during 4-month follow-up and almost zero afterwards. Baseline seroprevalence for HIV, HBV, HCV: 18, 53, 82%. No HIV and HBV seroconversions but four HCV seroconversions occurred.
WHO 2007	F	9 evaluations of PNEP identified. PNEP is feasible in many different prison settings. It reduces needle sharing, is accepted by prisoners and staff, and there is no evidence for serious unintended negative effects.

6.10. Provision of bleach and disinfectants

The provision of bleach and disinfectants in order to clean injecting equipment and also tattooing equipment and therefore reduce the risk of infectious diseases is an important harm reduction measure. Different methods are used and different disinfectants are provided for the purpose of disinfect injection equipment. Before 1993, guidelines for syringe cleaning stipulated a method known as the `2x2x2' method. This method involved flushing injecting equipment twice with water, twice with bleach and twice with water. Newer cleaning guidelines recommended that injecting equipment should be soaked in fresh full strength bleach (5% sodium hypochlorite) for a minimum of 30 seconds (Shapshak and al. 1993). More time is needed for decontamination if diluted concentrations of bleach are used. For example, injecting equipment needs to be immersed in bleach for two hours in order to be disinfected.

By August 2001, bleach was provided in 11 of 23 pre-expansion EU prison systems (Stöver et al. 2004). Still bleach is not provided in every European prison system; Bulgaria, Cyprus, Czech Republic, Hungary, Latvia, Malta, Romania, and Slovakia don’t provide bleach, while in Slovenia there are financial problems in practically providing, and some countries don’t have data on bleach provision. In Ireland, Lithuania, Netherlands and Poland, bleach is distributed in some prisons, and in Belgium, Estonia, Scotland and Spain bleach is made available in every prison (see

tables in Annex) , but the method may vary, e.g. in some places prisoners have to ask for it, while in others it is made available discreetly and anonymously. Many prison systems internationally have adopted programmes that provide disinfectants such as bleach to prisoners who inject drugs as a means to disinfect injecting equipment before re-using it. According to UNAIDS in 1997, the provision of full-strength bleach to prisoners as a measure had also been successfully adopted in prisons, Australia, Africa, and Central America (UNAIDS 1997), and is also implemented now in Indonesia as an important HIV prevention measure (Winarso et al. 2006).

Main results

As disinfecting injecting equipment with bleach is rather complicated to be effective, it should be used as a "second" measure only, where PNEP is not provided yet.

There is no evidence of effectiveness of decontamination with bleach in the community and therefore it seems rather unlikely to be effective in prison.

Disinfection as a means of HIV prevention is of varying efficiency, and is regarded only as a secondary strategy to syringe exchange programmes (WHO Europe 2005a). The effectiveness of disinfection procedures is also largely dependent upon the method used. Research in 1993 raised doubts about the effectiveness of the'2x2x2' method in the decontamination of used injecting equipment (Shapshak and al. 1993). Scottish research on the effectiveness of bleach provision in a Scottish long-term prison found the measure being suboptimal (Champion et al. 2004), but together with other harm reduction interventions (substitution treatment, HBV vaccination, staff training and counselling) there was no evidence for new HIV infections after 12 months of the programme, whereas before there was a massive HIV-outbreak in one Scottish prison (Goldberg and al. 1998). A new review by the WHO recommends bleach only as a second-line strategy after PNEP, as there is no evidence of effectiveness in the community and therefore less likely in prison, due to the rather complicated decontamination process (WHO et al. 2007a). The WHO reported that concerns that bleach might be used as a weapon proved unfounded, and that this "has not happened in any prison where bleach distribution has been tried." (UNAIDS 1997, p 6).

The effective use of bleach and disinfectants in prisons is complicated, where fear of detection by prison staff often means that drug use happens quickly, and that prisoners will often not take the time to practice optimal disinfection techniques (WHO et al. 2004). Furthermore bleach is effective in killing the HIV virus, but not 100% the hepatitis C virus. This then can lead to a false security feeling of having equipment cleaned efficiently. However, despite the limitations, provision of disinfectants to prisoners is an important option to reduce the risk of HIV transmission, particularly where access to sterile syringes is not available. The provision of bleach as one part of harm reduction measures should therefore be available to all prisoners also from a public health and human rights perspective (Kerr et al. 2004; Jürgens and Betteridge 2005).

Table 12: Example studies on bleach provision

Study	Quality	Results
Champion et al. 2004	C	In a Scottish harm reduction programme including bleach distribution the effectiveness of bleach was found suboptimal.
Goldberg et al. 1998	Follow-up	After initiation of a harm reduction programme including bleach provision in Scotland no evidence for further HIV-spread after 12 months.
WHO et al. 2007	F	Bleach distribution is feasible but because there is hardly evidence for the effectiveness, it is only recommended as second-line strategy to PNEP.

6.11. Provision of sterile tattooing equipment

Tattooing is a common practice in many prisons (see chapter 5.2.2.), and because of the possibility of transmission of BBVs the provision of sterile tattooing equipment is an important harm reduction measure. As tattooing in prison is rather popular, it is a high risk behaviour

Tattooing equipment is provided in a number of European prisons in England/Wales, France, Netherlands, Norway, and Catalonia, no data on the new member states (Merino 2005). In Canada tattooing pilot projects in prison were set up as a trial in 2004 (Jürgens 2004).

Main results

No research was found explicitly evaluating the distribution of sterile tattooing equipment. Still this measure should be recommended to reduce the risk of transmitting diseases, as tattooing occurs often in prison.

Despite numerous evidence of the transmission of BBVs by tattooing in prison, no research on the evidence of provision of tattooing equipment was found. An overview found providing sterile equipment as well as training to reduce tattooing-related HCV-transmission (Lenton 2003). To reduce tattooing (and other risk behaviours) in prison, a peer educational programme was evaluated in a Russian prison, which seemed to be effective in decreasing the prevalence of tattooing (Dolan et al. 2004)

The provision of sterile tattooing equipment seems nevertheless an effective HIV/HCV prevention measure and should therefore be available for prisoners.

6.12. Provision of condoms, dental dams, and water-based lubricants

The provision of condoms aims at preventing STDs by sexual contacts (see chapter 5.2.1. of this report). Condom use is internationally accepted as the most effective method for reducing the risk of the sexual transmission of HIV and other BBVs (WHO and UNAIDS 2001). Water-based lubricants reduce the probability of condom breakage

and dental dams reduce the risk of STD transmission during oral sex (WHO et al. 2007c).

Many prisons across the world provide condoms to prisoners as part of their institutional health policies. As early as 1991, a WHO study found that 23 of 52 prison systems surveyed provided condoms to prisoners (Canadian HIV/AIDS Legal Network 2002). By August 2001, 18 of the 23 prison systems in the pre-expansion EU were distributing condoms (Stöver and Trautmann 2001). This is in keeping with the recommendation of the WHO Guidelines on HIV Infection and AIDS in Prisons recommends that:

Since penetrative sexual intercourse occurs in prison, even when prohibited, condoms should be made available to prisoners throughout their period of detention. They should also be made available prior to any form of leave or release (WHO 1993, p. 20).

Most European prison systems provide condoms to the inmates, but the mode varies; sometimes they are distributed by medical or other staff and the prisoner has to ask for condoms or buy them in the prison shop; in other prisons condoms are available anonymously in different places of the prison. In Lithuania they are only available for long-term visits; and in Bulgaria, Cyprus, Hungary, Ireland, Malta, Netherlands, and Romania, condoms are not available in prisons (see country tables in Annex), and for some countries there is no data. For the prevalence of provision of dental dams and lubricants there is only occasional data. In Scotland, Italy and Ireland, sexual relations are prohibited in prison and condoms or lubricants are not available for prisoners. They are partly handed out for home leavers and/or as part of the release pack (Merino 2005). In many Esatern European countries condoms are available in theory but often with limited access and confidentiality (MacDonald 2004).

Main results

Condoms are likely to be the most effective method for preventing STDs. No serious negative effects of condom provision in prisons have been found, and the provision of condoms seems feasible in a wide range of prison settings.

Although there is a body of research on sexual activity in prison, there are not many studies evaluating the distribution of condoms in prison. Perkins (1998) examined the accessibility of condoms in European prisons and found a wide range of different policies "...on a continuum spanning endorsement of free distribution within prison to total prohibition" Nine of the fifteen EU countries had clear official policies allowing free access to condoms for prisoners, in line with the WHO Guidelines. The other six occupied different positions on the road towards allowing such access, from the extreme of prohibition based on lack of recognition of the problem.

In 1995 in Australia, 50 prisoners launched a legal action against the state of New South Wales for non-provision of condoms, arguing that "[i]t is no proper part of the punishment of prisoners that their access to preventative means to protect their health is

impeded" (Jürgens 2007). Since then, at least in part because of the legal action, the New South Wales government has decided to make condoms available. Other Australian systems have also made condoms available.

No negative consequences have been reported from those prison systems where condoms are available and the provision seems feasible in a wide range of prison settings (Jürgens 2006). The provision did not compromise prison security and safety, and there was no increase in sexual activity found (WHO et al. 2007c). Another study found decreased risk behaviour after the initiation of condom distribution and high levels of condom use among prisoners (WHO et al. 2007c).

Condoms need to be easily and discreetly accessible, as prisoners often might fear to be detected as gay (WHO et al. 2007c). The fieldwork indicates the importance of a clear and committing policy in developing best practice in this regard. "Implementation begins with clear messages from the top about policy commitment. The message needs to be reiterated through various levels of organisation." (Perkins 1998, p. 34). One example is the Austrian policy on that matter. In July 1994 the Ministry of Justice of Austria issued the following ruling that "...condoms have to be provided in such a way that unobserved taking out of a container is ensured" (Bundesministerium für Justiz/Republik Österreich 1994, p. 2). Access to condoms should be easy, and in varying anonymous locations of the prison (WHO et al. 2007c).

Despite the availability of condoms, barriers exist to their use in many prisons, and there is often poor knowledge among prisoners of sexual risk behaviour and individual risk prevention (Todts and al. 1997; WHO et al. 2007c). These barriers include the fact that homosexuality is not accepted by most of the prison population and prisons do not offer enough privacy for the occurrence of this behaviour. Furthermore there is evidence that condoms, dental dams, and water-based lubricants are not easily and discreetly available, or are not available on a 24-hour basis. In many prisons, consensual sex is also prohibited, which can result in prisoners being reluctant to access safer sex measures for fear of identifying themselves as engaged in such activities. In order to maximise HIV prevention efforts in prison, and reduce the risk of transmission via unsafe sex, condoms, dental dams, and water-based lubricants should be easily and discreetly available through a variety of distribution channels. Experience has shown that discreet areas such as toilets, waiting rooms, workshops, or day rooms are options that increase the confidentiality of prisoners accessing condoms.

Other important measures alongside with condom provision are educational and informational activities for prisoners and staff on topics of STDs and the provision of condoms (WHO et al. 2007c).

Table 3: Example studies on provision of condoms

Study	Quality	Results
WHO et al. 2007	F	Condom provision is feasible in different prison settings. Acceptance rises among prisoners and staff after implementation of the programme. No study has determined if infections have prevented due to condoms, but there is evidence that prisoners use condoms to prevent infections.

6.13. Pre and post release programmes

The time before and after release from prison has very important impact on future criminal activity, re-incarceration, and relapse (WHO et al. 2007b). The time just after release from prison is especially difficult and needs to be considered separately. The risk of opiate overdose is especially high in the two weeks after release. There is a twenty to fifty fold increase of drug related deaths in the first week after release, this drops by 50% per week and plateaus at 4 weeks (Farrell 2005). Pre- and post-release treatments as well as throughcare programmes constitute important features of treatment.

Main results

Aftercare (and throughcare) is essential

Continuity of treatment provision is an important factor, particularly as aftercare following release and this is linked to re-offending rates (Porporino et al. 2002).

The prevention of relapses after release and the reduction of recidivism among inmates is one of the major concerns of a penal system bound to rehabilitation. Nevertheless in Europe, there is not much evidence for efforts to provide relapse prevention programmes or to evaluate the effects of those treatments provided. If one wants to know what works, you have to look for findings from Northern-America. Here, a number of specific treatment programmes combined with aftercare had been established in several state prisons. Most of these programmes base upon in-prison therapeutic communities (TC) - often for drug dependents - which are followed by gradually release programmes and participation in aftercare treatment. The most famous programmes are the Californian “Forever Free” in-prison, residential, substance abuse treatment program designed for women (Hall et al. 2004), the “Amity” TC program (Prendergast et al. 2004b), and the corrections-based drug treatment “Key-Crest” in Delaware (Butzin et al. 2005). In addition there are evaluations of prison-based TC’s from New York (Metraux and Culhane 2004; Turley et al. 2004). These studies have been done by tracking the same cohort of inmates over time to assess the impact of treatment on recidivism.

One of the Californian studies was conducted among 4.155 participants of in prison-based TC treatment (Burdon et al. 2004). The results highlight the importance of duration of time spent in treatment. Increased time spent in prison-based treatment

predicted increased participation in aftercare and decreased the 12-month recidivism. The "Forever Free" assessment based upon a 1-year follow up of a treatment (N=101) and a comparison group (N=79) (Hall et al. 2004). According to the findings did those women with more lifetime arrests show a significantly increased risk of re-incarceration. Treated women had significantly fewer arrests, less drug use, and greater employment. Similar results are to be found in the "Amity" 5-year post release follow-up (Prendergast et al. 2004b). Again the treatment group had significantly lower rates of re-incarceration than the control group. Those who attended also aftercare had even lower levels of re-incarceration and higher levels of employment. Another 5-year follow-up study examined the effects of post-release transitional therapeutic community treatment in Delaware corrections system (Butzin et al. 2005). The comparison between the treatment and control group showed substantial and persistent benefits for the treatment group even for those with extensive criminal history, low rates of marital bonds, and substantial unemployment. About 32 % of the treatment participants were drug-free compared to 10 % of non-treated. The time to relapse was a mean of 28.8 months in the treatment group versus 13.2 months in the no-treatment group. The impact of prison-based treatment and aftercare programmes in reducing the rates of re-incarceration significantly are as well underlined by two studies from New York (Metraux and Culhane 2004; Turley et al. 2004).

In English prisons the drug treatment programme provided by RAPt (Rehabilitation of Addicted Prisoners Trust) has been assessed (Ramsay 2003b). This programme for male prisoners aims at a total abstinence from drugs and alcohol. After a 2-year follow up period the reconviction rate was significantly lower for the treatment group than for untreated prisoners (40 % vs. 50 %. The main finding was that good-quality treatment can be effective in reducing drug use and re-offending. To be effective treatment needs to be

- tailored to individual needs,
- of sufficient duration,
- followed up by high-quality aftercare, both in prison and on release.

Another study from UK evaluated the effectiveness of different types of treatment for drug dependent prisoners (Harrison et al. 2003). According to the results the strongest evidence for effectiveness have first behavioural skills training and second cognitive-behavioural therapies and Motivational Interviewing. Relapse prevention as a cognitive behavioural approach is proofed to be generally effective to prolong the intervals between relapses and to reduce the severity of relapses. Methadone maintenance has been found to reduce injecting risk behaviour in prison and to decrease crime rates. However, the authors concluded that the success of prison-based treatment is closely connected with the provision of throughcare and aftercare arrangements.

Apart from treatment needs prisoners often have several inter-related resettlement requirements (accommodation, employment, training, health issues) when leaving

prison. For this reason Crow (2006) underlined the "importance of multi-modal action addressing the full range of offenders' needs". Agencies can play a part in encouraging and reinforcing ex-prisoners' own efforts and to support these efforts good linkage between agencies is essential. Psychological impairment (Messina et al. 2006) and the situation that there is nothing in place at the time of release increase the likelihood to return to drug uses and related offending.

Because of the high risk of overdose after release, a linkage to immediate substitution treatment is recommended (Rich et al. 2005).

The importance of continued and integrated interventions in the different stages (incarceration until aftercare) are highlightened by Inciardi (1996).

One release programme operating since 1992 is Antenne Toxicomanie, an intensive pre-release course, which decreases the reincarceration rate: 39% of participants returned to prison within one year, compared to 63% in a control group (Turnbull and Webster 1998).

"Especially good-quality aftercare that covers the vulnerable period from release until the first months of re-entry into the community has been proofed to be vital to the success of treatment programmes in prison." (Zurhold et al. 2005).

6.14. Training and information of prison staff

Prison staff should to be involved and informed on varies issues of drug dependence and treatment, especially in the area of harm reduction.

Main results

Staff training can change the attitudes towards more acceptance. It can help staff to have a sufficient educational level and give them self-esteem in dealing with the prisoners. Drug treatment interventions can be only as effective if the staff is informed and convinced.

Harm reduction measures are often perceived as threatening to the traditional abstinence oriented drug policy. Harm reduction often is highly politically loaded, cannot be introduced due to resistance of staff, or are perceived as inadequate for the prison setting (i.e. needle exchange, condom provision).

Prison staff are often particularly reluctant to support the introduction of harm reduction measures, because they feel it would contribute to a wrong message or a double bind situation (drug free orientation as major goal and at the same time providing instruments from continuing habits which are not allowed or even risky or life threatening).

Regarding substitution treatment in prisons it is said both by prisoners and staff that the prison setting is supposed to be drug free. Substitution drugs are seen not a therapeutics but as street drugs, prisoners often experience with buying or selling these drugs in their street drug career. The perspective of prison as a drug free environment is taken by both staff and prisoners (Stöver et al. 2004).

Regarding needle/syringe exchange schemes objections are that they will lead to an increase in intravenous drug use, an increase of accidental needle stick injuries, an increase in conflicts between prisoners or between prisoners and staff, and the risk that syringes/needles would be used as weapons or as goods within the prison economy. There is now evidence that schemes have been introduced in prisons, for example in Switzerland, Spain and Germany, without these problems arising (see Stöver and Nelles 2003).

Regarding the provision of condoms it is often said that condoms are misused for drug trafficking purposes, and that the provision of condoms is difficult to transmit for partners and families outside, because it suggests that sex is a common behaviour in prisons.

HIV/AIDS is not only an issue affecting the health of prisoners. It also has significant implications for the workplace health and safety of staff, and on their duties and professional responsibilities. Therefore it is essential that all prison staff receive regular training and education on HIV/AIDS/HCV prevention, infection control in the workplace, harm reduction and the needs of prisoners living with HIV/AIDS.

According to the International Labour Office's Code (ILO) of Practice on HIV/AIDS and the World of Work:

"Workplace information and education programmes are essential to combat the spread of the epidemic and to foster greater tolerance for workers with HIV/AIDS. Effective education can contribute to the capacity of workers to protect themselves against HIV infection. It can significantly reduce HIV-related anxiety and stigmatization, minimize disruption in the workplace, and bring about attitudinal and behavioural change." (International Labour Office 2002, p. 13)

Therefore, training and education of prison staff on HIV/AIDS as well as on broader themes of harm reduction should include information to enable them to protect themselves against HIV infection though their own personal risk behaviours, education to combat HIV-related stigma and discrimination, and specific strategies related to managing HIV/AIDS in the workplace. Prison staff should also be trained in the importance of confidentiality and the privacy of medical information.

Training on the use of universal precautions and protective equipment as part of infection control should be provided for all employees who may come into contact with human blood or body fluids, whether as a consequence of their professional responsibilities, their working environment, or through administering first aid. The ILO further recommends that *"Training [on HIV/AIDS] should be targeted at, and adapted to, the different groups being trained." (International Labour Office 2002, p. 16)* Therefore different training should be provided for different categories of prison staff depending upon their duties (i.e., security staff, medical staff, etc.). Specific training should be provided to prison medical staff to ensure that their knowledge and skills are kept current with emerging medical treatments, prevention strategies and research.

Training and education on harm reduction measures should form a compulsory component of initial training for all new staff, and thereafter HIV/AIDS should be included as a component of the annual training plan in the workplace (International Labour Office 2002). This should include education and training on existing prison policy and legislation related to HIV/AIDS, the rationales behind those laws and policies, and the duties and responsibilities of prison staff to follow them. Furthermore training should focus on the practice and philosophy of harm reduction, as this often is seen as opposing the goals of the prison sentence. Experiences have shown that participative methods are suitable and appropriate to relieve staff's anxiety[11].

The ILO recommends that training may be provided by "external support from national AIDS programmes or other relevant stakeholders" and also encourages the development of peer education initiatives, noting that "The best trainers are often staff themselves."[12]

How can this be done practically? Training seminars for prison / drug service staff

Especially important issues for training seminars for prison staff include:

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[11] Personal Communication Mónica Suárez (Ministerio de Sanidad y Consumo) about the experiences in Spain when introducing needle exchange projects in prisons, February 2005

[12] Ibid.

- Seminars that help prison staff to identify themselves with and support the objective of preventing infections (emotional level)
- Seminars in which prison staff acquire basic knowledge about drugs, drug use, infectious diseases and other drug use related health risks
- Seminars in which individual and collective needs for
- safety are discussed and agreed upon. Again the focus of these seminars cannot only be on knowledge but should also focus on:
- Skills, e.g. in the field of counselling;
- Raising awareness about the staff's attitude towards drug use, sexual behaviour, etc.

The training seminars should focus on adequate behaviour patterns as part of measures initiated to prevent the spread of infections in prison. A single training on behaviour change, however, will not be efficient without accompanying structural changes in the prison setting. According to interviews with prison staff, the three following goals need to be met (Stöver and Trautmann 2001):

Identification with the goal of preventing infections:

Prison staff and management can only personally identify with the objective of preventing infections if they accept that infections are a threat for everybody, both in and even outside prisons and therefore should be fought. They need to understand that they have a vital role in doing so successfully. Using print media as leaflets is not enough. These are only suited to complementing other preventive measures such as personal counselling and other services but they cannot replace such measures. Implementation of preventive measures is frequently jeopardized by individual attitudes and prejudice of prison staff ("Inmates know exactly what they are doing; they are grown-ups and they are responsible for themselves").

Moreover, prison staff often considers drug consumption a weakness of character ("Addiction can be overcome if the will is strong enough. Quitting is the only solution!") or religious reasons are given for why earthly means are hardly suitable for combating risks of infection ("AIDS is the well-deserved punishment imposed by a higher power!"). Such attitudes and beliefs are deeply rooted in people. They cannot be changed easily. Hence training offered to prison staff should aim at familiarizing them cautiously with new attitudes and at sensitising staff towards the situation of drug-using inmates and of course, allaying the fears of colleagues.

Acquiring basic medical knowledge:

The use of illegal drugs and the use of medical services and medication are often related to each other. However, frequently, drug-using inmates are reluctant to seek help concerning their use of illegal drugs directly from medical services. The situation is

getting more complicated by the taboo under which drug use (in prison) operates. Therefore it is crucial that prison staff learn basics of medical knowledge in order to:

- Avoid infections, especially viral infections often associated with drug use,
- Allow prevention and early treatment of health damage related to drug use.

Accepting and meeting individual and collective needs for safety:

This is an important issue when training prison staff, as it has been shown that fear, insecurity and the wish to separate oneself from others have a negative effect on the atmosphere and on interactions and relations between staff and inmates. Although separation from others can be considered a method of protecting oneself against supposed or real threats, it should be overcome in order to establish a closer relationship between prison staff and inmates. This is a prerequisite for successful risk reduction activities, such as discussing safer behaviour. A closer relationship can only be established if the prison staff´s need for safety is accepted and met. Seminars should focus on supporting prison staff, helping them to feel more secure in handling drug-related problems. Besides extending their knowledge on drug and drug use related issues, seminars should also answer questions related to the risk to prison staff of getting infected, and inform participants on things like Post-Exposure-Prophylaxis (PEP) after a needle stick injury, first aid in drug-related emergencies, adequate treatment of wounds and the availability of vaccinations. Often guidelines and protocols for avoiding risk exposure and adequate safety behaviour (such as wearing gloves when searching cells etc.) do already exist. These can be used, as basic material and problems in applying these recommendations then can be discussed. Besides taking up the staff's needs and fears as an initial point of departure for training, one can use major parts of this manual for designing training seminars for prison staff.

Training seminars for mixed groups:

Combining the target groups of prison staff and inmates can be quite powerful with regard to the exchange of information, changes of attitude, etc. Exercises from the European Peer Support Manual have proved to be useful in this respect (Trautmann and Barendregt 1994). Here, again, a needs assessment might be a good thing to start with. From our experiences working with peer support in prisons (Stöver and Trautmann 1998) we know that peer support can be an issue to deal with in seminars for mixed groups. Peer support and peer education can be useful approaches to contribute to risk reduction in prisons. To work out a plan for peer support one could organise a mixed seminar to present and discuss options of peer support as part of a risk reduction strategy. How and what can drug users contribute, how can they be supported by prison staff, etc. could be issues of discussion. Using exercises on safer use (such as how to inject safely, etc.) can show prison staff that drug users do have valuable information and know-how. However, peer support in general should be first introduced to prison staff as part of an introduction of risk reduction strategies in prisons, for example, by seminars on drug use in general. It does not make sense to focus in a seminar or training

seminar on peer support without having discussed first the basics of risk reduction. Our experience has also taught us that peer support initiatives are most successful when supported by professional or voluntary organisations (Trautmann and Barendregt 1994). In the closed setting of a prison, a risk reduction strategy would be impossible without the support of prison staff.

7. Formulation of service gaps and recommendations

1. There is a clear need for prison systems throughout the EU to acknowledge that the use of drugs and sexual activity occurs within their institutions, in order to prevent prison health problems becoming public health problems (Ramsay 2003b).
2. Alternatives to imprisonment are the logical consequence for drug-using offenders and should always be preferred, as imprisonment is the most severe consequence for the individual's health and the community. Drug-related treatment that is linked to the penalty has been progressively introduced over recent decades for problem drug users. The alternatives to prison that may be offered to drug-using offenders cover a range of sanctions that may delay, avoid, replace or complement prison sentences for those drug users who have committed an offence normally sanctioned with imprisonment by national law.
3. Currently, the prison population in Europe is predominantly male (90–95%), with an increasing proportion of foreign prisoners. On the whole, prisoners are a vulnerable group coming from vulnerable areas of society, and their difficulties can be exacerbated by problematic drug use, exposure to infectious diseases, mental health issues and poor conditions within the prison. In addition their behaviour in prison can be high risk, such as injecting and other forms of drug use, unprotected sexual contacts and tattooing/piercing which remain associated with the transmission of infectious diseases. Health problems are over-represented in all prison systems compared to the outside world, and these include drug use, infectious diseases (HCV, HIV/ AIDS, STIs and TB), suicide and self harm. The treatment of chronic conditions such as diabetes or hepatitis in prisons is also problematic due security constraints and lack of resources.
4. Drug strategies in prisons require actions to be taken both on the level of individual behavioural change and on the structural level. Although targeting programmes at individual prisoners or groups of prisoners is important, there is also a need for more structurally oriented measures to run concurrently, to comprehensively address necessary improvements in the living conditions of the prisoners and the working conditions of prison staff.
5. Throughout the EU, the introduction of prevention, treatment and harm reduction measures in prisons is still failing compared to developments achieved in the last 20 years in the community and in prison systems in other countries such as Australia and Canada. An EU report emphasises this lack of equivalence, in that interventions in prisons within the EU are still not in accordance with the principle of equivalence adopted by the UN General Assembly[13], UNAIDS/ WHO[14] and UNODC[15], which

13 http://www.pogar.org/publications/garesolutions/a45-111-90e.pdf

14 http://data.unaids.org/Publications/IRC-pub01/JC277-WHO-Guidel-Prisons_en.pdf

15 http://data.unaids.org/pub/Report/2006/20060701_hiv-aids_prisons_en.pdf.

calls for equivalence between health services and care (including harm reduction) inside prison and those available to society outside prison. Therefore, it is important for the European countries to adopt prison-based activities to meet the needs of drug users and to improve access to services which do already exist.

6. The need for continuity of care (throughcare) is particularly important for those receiving substitution treatments, HAART or treatment for HCV prior to their sentence, so they can continue with this treatment during their sentence. Also, this principle must be considered for those receiving any sort of medical treatment or other forms of support such as counselling for those prisoners close to being released, so they continue to get this support in the community.

   Health problems are deriving mostly from injecting drug use and afford extra efforts in policy and practice to tackle this severe problem in prison. This needs to be done in order to protect prisoners, staff, but also families and partners of prisoners in the community.

   Many public health experts are now aware of the over-representation of health risks of prisoners, however, the strategies to respond to these challenges differed in goals and methods.

7. However, the degree of success and effectiveness in implementing interventions to treat drug dependence varies widely, as in most countries, problems and difficulties were identified with the distribution of condoms, bleach, clean needles and the provision of differentiated treatment options. Apart from harm reduction strategies that seem politically difficult to implement (e.g. needle exchange projects) many prisons in Europe show awareness and develop actions to reduce health risks for prisoners. Several harm reduction measures can be implemented when these strategies are supported by political leadership (with legislative or regulative changes as supposition for the introduction of harm reduction measures), and professional consensus based on an exchange of prison health care services and those in the community.

8. Learning from existing experience in developing harm reduction programmes in prisons, and using that knowledge to develop effective measures is an important strategy for prison administrations to adopt. The clear evidence demonstrating the need and effectives of harm reduction measures and how to overcome resistance to them presents useful guidelines and good practice example to ensure, as far as possible, as successful implementation. Infectious disease prevention programmes targeted at injecting drug users in the community, for example, can be a valuable guide in the development of effective initiatives in prisons. Prison-based infectious diseases programmes internationally can provide valuable evaluated models of good and safe practice.

9. National and international networking and exchange of good practice models seems to be a valuable method for all prison systems to engage in. In addition, international

networks and journals need to disseminate internationally available good practice models and knowledge about evidence-based strategies into the prison settings and/or on the level of prison administration. Guidelines and detailed protocols are needed on how exactly certain treatment options can and have to be implemented to support prison doctors/ nurses and prison administration in delivering adequate health care services (e.g. for substitution treatment to opiate dependent prisoners).

10. Time limited pilot tests may be utilised as a tool in developing and implementing new or innovative programmes. Pilot test projects may be valuable in developing staff and prisoner education, prevention of infectious diseases, drug treatment services, and medical services. In addition to providing an opportunity to test project implementation processes and evaluate programme outcomes, pilot projects may be used to encourage change in staff culture, and promote wider support for the implementation of HIV programmes and services. It is essential however that pilot tests do not delay action on harm reduction in prisons, nor be used as an end in themselves. Pilot tests should always be designed as a stepping-stone to wider implementation of programmes, rather than a reason to delay or prevent wider implementation, and should be mainstreamed rapidly upon completion. This should include the development of "pilot regions" in which wider integrated responses within prisons, and between the prison and the community, are established and evaluated.

11. Adequate funding is key to implementing effective action, and national governments and the international donors should address issues of HIV in prisons as a primary concern in developing national harm reduction and public health strategies. At a national level, parameters of any funding allocated to national drug strategies (including harm reduction strategies), national HIV treatment roll-outs, public health programmes, women's health, youth health, and public medical care should be expanded to incorporate prisons. Similarly, the parameters of national funding to prisons and drug law enforcement should also be expanded to include harm reduction initiatives. In assessing the issue of prisons, national governments should consider the overall cost savings of taking action to prevent the spread of infectious diseases among prisoners and the broader community and the costs of other health damages.

12. The implementation of any form of intervention should be accompanied by precise evaluation studies. There is clear lack of high-evidence studies for the prison setting. Less than ten randomised controlled trials were found within this literature search. In advance of the implementation of randomised controlled trials ethical issues, such as informed consent, confidentiality, respect for human right and scientific integrity needs to be considered. In particular for the prison setting these ethical issues should be outstanding to ensure the prisoners rights. Despite these ethical issues, there seems to be no hindrance to perform randomised controlled trial. If this is not possible, for instance due to lack of financial resources, at least cohort studies –

retrospective or prospective – with clear defined exposure groups should be accomplished. In this case clear effect measure measures to determine the effect of the exposure on the health outcome can be quantified.

13. The coercive, punitive ethos and abstinence-based policies (excluding substitution programmes) that currently underpins prison health policy in most countries must be removed. To view the prisoner as a patient seems to be the necessary shift to achieve this, for example for those prisoners with drug dependence, to see it as a disease rather than a criminal activity, subculture and hedonistic pleasure seeking behaviour. Without this major shift, the principle of equivalence will remain only an aspiration. An important step towards this is for public health care institutions to take over the responsibility for providing health care in prisons, as it is done in Norway, France and now in England & Wales.

14. Finally, governments must acknowledge the fact that respecting the rights of those at risk is good public health policy and good human rights practice.[16]

[16] *Declaration of Commitment – United Nations General Assembly Special Session on HIV/ AIDS* [("UNGASS Declaration"), June 2001 states "Realization of human rights and fundamental freedoms for all is essential to reduce vulnerability to HIV/AIDS. Respect for the rights of people living with HIV/AIDS drives an effective response." Preventing the Transmission of HIV Among Drug Abusers: A Position Paper of the United Nations System (Approved on behalf of ACC by the High-Level Committee on programme at its first regular session of 2001, Vienna, 26–27 February, 2001), paragraph 25, states "Protection of human rights is critical to the success of prevention on HIV/AIDS. People are more vulnerable to infection when their economic, health, social or cultural rights are not respected. Where civil rights are not respected, it is difficult to respond effectively to the epidemic".

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Annexes: Country reports

Contents

1. Country reports

This annex provides an overview on key issues in the context of single countries. It comprises the data which could be compared within the scheme “below EU-mainstream”, “EU-mainstream” and “above EU-mainstream” concerning “Penal Statistics” and “General Population Epidemiology”. Additionally, data and information concerning “Interventions Monitoring” are taken into account as far as they could be compared according to the scheme “100%” of prisons, “>50%”, “<50%” and “0%”. Due to the lack of information, there are no data on “Penal Epidemiology”. The following sources were used:

The data on penal statistics and general epidemiology are from public European databases:

- Council of Europe Annual Penal Statistics (SPACE I, Survey 2002, 2003 and 2004)
- European health for all database (HFA-DB) from the WHO Regional Office for Europe
- “EuroHIV. HIV/AIDS Surveillance in Europe. End-year report 2005. Saint-Maurice: Institut de veille sanitaire, 2006. No. 73.”
- “Euro TB and the national coordinators for tuberculosis surveillance in the WHO European Region. Surveillance of tuberculosis in Europe. Report on tuberculosis cases notified in 2004, Institut de veille sanitaire, Saint-Maurice, France. February 2006”
- WHO Mental Health country reports on suicide

The data and information on interventions monitoring come from the following sources:

- WHO Prison health database 2007 (http://data.euro.who.int/hip/)
- EMCDDA National Reports 2006
- Personal communication with key persons (names and organisations mentioned in the respective tables)

1.1 Austria

Penal Statistics Austria

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Prison population rate		x		
% of female prisoners		x		
% of foreign prisoners		x		
% of prisoners under 18		x		
% of prisoners from 18 to <21			x	
Prison density		x		
% of sentenced prisoners		x		
Sentenced prisoners per inhabitants		x		
% of drug offences				x
% of sentences <1 year			x	
% of sentences ≥ 5 years and lifetime		x		
Rate of entries per inhabitants		x		
% of entries before final sentence		x		
Average length of imprisonment		x		
% of suicides among total deaths		x		
Mortality rate			x	
Suicide rate		x		
% of treatment staff		x		
% of custodial staff		x		
Rate of prisoners by treatment staff		x		
Rate of prisoners by custodial staff		x		

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 1) and tables (annex 2).

As the first table of 1.1 regarding the ***Penal Statistics*** shows**,** in Austria most of the analysed variables range within the EU-mainstream. No data were given on the *percentage of prisoners sentenced due to drug offences*.

Variation is found regarding *the percentage of prisoners from 18 to less than 21 years* that lies above the EU-mainstream as well the category "*rates of sentences shorter than one year*". Additionally, in the category '*mortality rate per 10000 prisoners in penal institutions*" Austria shows quite a high rate that ranges far above the EU-mainstream. The high mortality rate can neither be explained by a high suicide rate (refer to the category "*suicide rate per 10000 prisoners in penal institutions*") that ranges in the EU-mainstream, nor by the "*suicides as a percentage of total deaths"* that also ranges in the EU-mainstream.

General Population Epidemiology Austria

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Rate of newly diagnosed HIV infections		x		
IDU among new HIV infections				x
IDU in cumulative new HIV cases				x
Rate of AIDS incidences		x		
IDU among AIDS cases		x		
IDU in cumulative AIDS cases		x		
Rate of viral hepatitis incidences		x		
Rate of incidences of viral hepatitis A		x		
Rate of incidences of viral hepatitis B			x	
Rate of incidences of viral hepatitis C		x		
Rate of tuberculosis incidences		x		
Rate of syphilis incidences		x		
Rate of gonococcal incidences		x		
Rate of homicide and intentional injury		x		
Rate of suicide mortality		x		

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 2) and tables (annex 2).

Regarding the table on ***General Population Epidemiology*** the Austrian data range most of the time within the EU-mainstream. Data on the *proportion of intravenous drug users (IDUs) among newly diagnosed HIV infections* are missing as well as on *IDUs among cumulative totals of newly diagnosed HIV infections.*

Deviation from the EU-mainstream is found regarding the *rate of incidence of viral Hepatitis B*, which lies above the EU-mainstream.

Interventions Monitoring Austria in 2006

Variables	100%	>50%	<50%	0%	no data	Comments*
HIV/ Hepatitis Testing						
HIV testing on admission					x	optional, on request of the inmate
Hepatitis B and/or C testing on admission				x		optional, on request of the inmate
HIV testing on release					x	optional, on request of the inmate
Hepatitis B and/or C testing on release				x		optional, on request of the inmate
Substance use						
Drug testing in prison	x					All prisons use drug tests (screening etc.).
- on admission					x	occasional
- before holidays/ weekend leaves					x	occasional
- by suspicion of drug consumption*	x					occasional
- per random routine					x	occasional
Prevention						
Needle/ syringe exchange				x		not possible
Availability of condoms*	x					
Availability of disinfectants					x	
Possibility of non-supervised visits*			x			In three of 28 prisons (long term visits)
Drug free units*			x			In three of 28 prisons
Vaccination against Hepatitis B					x	optional, on request of the inmate
Care						
Antiviral treatment for Hepatitis C					x	on recommendation of the doctor
Antiretroviral treatment for HIV					x	on recommendation of the doctor
Brief detoxification with medication					x	on recommendation of the doctor
Drug free treatment w. psychosoc. support					x	on recommendation of the doctor
Treatment with antagonists					x	
Substitution treatment	x					Whereas syringe exchange is not (yet) possible in Austrian prisons, substitution treatment can be continued or started in prison.
External drug services					x	optional, on request of the care personnel (social worker, psychologist)
External HIV services					x	optional, on request of the care personnel (social worker, psychologist)
Initiation of substitution treatment	x					
Referral to outside drug services					x	for seamless provision of care; optional on request of the care personnel (social worker, psychologist)
Education						
Distribution of information material*	x					
Counselling by professionals	x					especially before the end of prison to ensure seamless provision of care
Peer education					x	
Safer injecting/ safer use training					x	
Education for prison *staff*	x					In order to support doctors who attend to persons in prison, the Federal Ministry of Justice issued guidelines for prison physicians.

Sources: WHO Prison Health Database 2007, EMCDDA Annual Report 2006

*In addition, with estimates (no valid data available) and/or comments from Walter Kahl, Federal Ministry of Justice, Vienna/Austria (walter.kahl@bmj.gv.at)

As the table above on ***Interventions Monitoring*** in Austrian prisons shows, *HIV, Hepatitis B and Hepatitis C testing* is not performed routinely in prisons, but is optional and inmates may be tested on request.

All Austrian prisons use drug tests *by suspicion of drug consumption* and occasionally in other cases (*on admission, before holidays/ weekend leaves*, etc.).

Concerning prevention measures, *condoms* are available in all prisons in Austria, whereas *non-supervised visits* (long-term visits) and *drug free units* are only existing in three of twenty-eight prisons. *Vaccination against Hep B* is optional, i.e. performed on request of inmates. *Needle/ syringe exchange* is not possible in Austrian prisons.

Antiviral treatment for Hepatitis C, antiretroviral treatment for HIV are offered on recommendation of the doctor. Concerning drug related treatments, *brief detoxification with medication* and *drug free treatment with psychosocial support* are offered on recommendation of the doctor as well. Whereas syringe exchange is not (yet) possible in Austrian prisons, *substitution treatment* can be continued or started in all prisons. *External drug services* and *external HIV services* are optional, i.e. intervene on request of the care personnel (social worker, psychologist). Concerning drug-related pre-release interventions, *initiation of substitution treatment* is possible in all Austrian prisons, whereas *referral to outside drug services* is optional, i.e. applied on request of the care personnel (social worker, psychologist), for a seamless provision of care.

As regards education measures, *distribution of information material, counselling by professionals* (especially before the end of prison to ensure seamless provision of care) and *education for prison staff* (i.e. the Federal Ministry of Justice issued guidelines for prison physicians) are measures to be found in all Austrian prisons.

1.2 Belgium

Penal Statistics Belgium

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Prison population rate		x		
% of female prisoners		x		
% of foreign prisoners			x	
% of prisoners under 18		x		
% of prisoners from 18 to <21		x		
Prison density		x		
% of sentenced prisoners	x			
Sentenced prisoners per inhabitants	x			
% of drug offences				x
% of sentences <1 year	x			
% of sentences ≥ 5 years and lifetime		x		
Rate of entries per inhabitants		x		
% of entries before final sentence		x		
Average length of imprisonment		x		
% of suicides among total deaths			x	
Mortality rate		x		
Suicide rate			x	
% of treatment staff		x		
% of custodial staff		x		
Rate of prisoners by treatment staff		x		
Rate of prisoners by custodial staff	x			

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 1) and tables (annex 2).

In the table above information on the ***Penal Statistics*** in Belgium are shown. Data on the *percentage of drug offences* were missing.

Regarding the Belgium prisons, the *percentage of sentenced prisoners* as well as the *number of sentenced prisoners per 100 000 inhabitants* and the *percentage of sentences less than one year* range below the EU-mainstream. The *rate of prisoners by custodial staff* also lies below the EU-mainstream.

The *percentage of suicides among total deaths* as well as the *suicide rate* range in Belgian prisons above the EU-mainstream. Furthermore, the *percentage of foreign prisoners* ranges above the mainstream.

General Population Epidemiology Belgium

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Rate of newly diagnosed HIV infections		x		
IDU among new HIV infections	x			
IDU in cumulative new HIV cases		x		
Rate of AIDS incidences		x		
IDU among AIDS cases			x	
IDU in cumulative AIDS cases		x		
Rate of viral hepatitis incidences				x
Rate of incidences of viral hepatitis A			x	
Rate of incidences of viral hepatitis B			x	
Rate of incidences of viral hepatitis C		x		
Rate of tuberculosis incidences		x		
Rate of syphilis incidences		x		
Rate of gonococcal incidences		x		
Rate of homicide and intentional injury				x
Rate of suicide mortality			x	

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 2) and tables (annex 2).

Regarding the ***General Population Epidemiology*** in Belgium there is some variation referring to the EU-mainstream. No data was found on the *rate of viral Hepatitis incidences* as well as on the *rate of homicide and intentional injury*.

On the one hand the proportion of *IDUs among new HIV infections* ranges below the EU-mainstream. On the other hand the proportion of *IDUs among AIDS cases* lies above the mainstream. Additionally, the *rates of incidences of viral Hepatitis A* as well as *B* and the rate *of suicide mortality* lie above the mainstream.

Interventions Monitoring Belgium in 2006

Variables	100%	>50%	<50%	0%	no data	comments
HIV/ Hepatitis Testing						
HIV testing on admission			x			offered to prisoners if requested, but not available in all prisons (30% of all prisoners in Belgium requested to be tested)[1]
Hepatitis B and/or C testing on admission			x			offered to prisoners if requested, but not available in all prisons[1]
HIV testing on release			x			
Hepatitis B and/or C testing on release				x		
Substance use						
Drug testing in prison						only in medical services when needed[1]
- on admission			x			
- before holidays/ weekend leaves				x		
- by suspicion of drug consumption				x		
- per random routine				x		
Prevention						
Needle/ syringe exchange				x		
Availability of condoms	x					Condoms are available in prison canteens, as well as in the medical services, where they can be obtained for free. Condoms are also available free of charge in the rooms for conjugal visits. In practice, the canteens do not have their own stocks but have to procure them on demand at the local pharmacy. This expensive and hardly discreet mode of distribution actually limits accessibility. In the French Community, a specific packaging has therefore been developed. Each packaging is composed of one condom and one attached lubricant. Different alternative ways of distributing have been studied according to each prison.
Availability of disinfectants		x				In 2002, all medical services were advised to make disinfectants (liquid bleach solution with guidelines) available whenever prisoners ask for it.
Possibility of non-supervised visits	x					
Drug free units			x			There are pilot projects for drug-free units in some prisons (capacity: 60) and one therapeutic community-like programme in one Flemish prison.
Vaccination against Hepatitis B	x					on request; free of charge; offered to risk groups in a minority of prisons, but in a majority of prisons: vaccination against A and/or B in case of HIV+, HCV+, HBV+
Care[2]						
Antiviral treatment for Hepatitis C	x					
Antiretroviral treatment for HIV	x					
Brief detoxification with medication	x					
Drug free treatment w. psychosoc. support			x			
Treatment with antagonists	x					only when requested by prisoner [1] Naltrexone is an option available to our services. However, it is hardly ever used in Belgium. In prison, we have no patients on antagonist medication.

Variables	100%	>50%	<50%	0%	no data	comments
Substitution treatment	x					300 prisoners were undergoing MMT in 2006; ST for acute detox., for prisoners who have been under ST before prison without time limit; maintenance ST available to all prisoners.
External drug services		x				Assistance to drug users is provided by the prison health services and the prison psychosocial services. In addition, a number of external specialized therapeutic services are invited to assist the prisoners but difficulties are reported by these external services. Prisoners can ask to see their own medical doctor or therapist(NR 2006).
External HIV services				x		not at the moment, but planning to create it based on the existing structure of external involvement of HCV services[1]
Initiation of substitution treatment	x					
Referral to outside drug services	x					There is also an ongoing project in some Flemish prisons with a central intake unit ("centraal aanmeldingspunt") that aims at improving the through-care for prisoners. In this project, prison staff and specialised drug workers cooperate to link prisoners with treatment upon release. The project will be expanded to include more prisons. Specialised drug treatment organisations also provide treatment to ex-prisoners on parole or on probation.
Education						
Distribution of information material		x				The availability of information material depends on each individual prison and its medical service and/or on the possible presence of an NGO specialised in AIDS prevention. Specific information material on AIDS and hepatitis prevention for drug users in prison has been developed by NGOs in coordination with health services of the penitentiary administration of the Ministry of Justice and has been widely distributed in prisons.
Counselling by professionals		x				Some external therapeutic settings arrange treatment in prison for prisoners. They also organise introduction sessions to inform about treatment possibilities. Aftercare is, when it concerns psychotherapeutic help, offered by some of them. Social help is provided by workers of the centres for juridical welfare.
Peer education			x			Limited to certain prisons[3]
Safer injecting/ safer use training			x			[1]
Education for prison *staff*	x					More than 10 hours drug-specific training in the basic training courses and regular updates; counselling: psychosocial department is available; local steering groups in every prison to look

Variables	100%	>50%	<50%	0%	no data	comments
						at these problems four times/year (minimum).

Sources: WHO Prison Health Database 2007, EMCDDA Annual Report 2006

[1] BE NFP

[2] in 2007

[3] Personal communication (Alexis Goosdeel)
All other info presented in this table originates from the EMCDDA National Report 2006 (NR 2006).

Information on ***Interventions Monitoring*** in Belgian prisons in 2006 are given in the table above.

Regarding HIV and Hepatitis testing in Belgium, *HIV and Hepatitis testing on admission* as well as *HIV testing on release* are available for less than 50% of all prisoners. These tests are offered to prisoners if requested, but are not available in all prisons (for example, 30% of all prisoners in Belgium requested to be tested for HIV on admission). *Hepatitis testing on release* is not available.

Drug testing is only conducted in medical services when needed and is only possible *on admission* (in less than half of Belgian prisons).

As measures of prevention, *condoms*, *non-supervised visits* and *vaccination against Hepatitis B* (the latter: on request; free of charge; offered to risk groups in a minority of prisons, but in a majority of prisons: vaccination against A and/or B in case of HIV+, HCV+, HBV+) are provided in all Belgian prisons. Condoms are available in prison canteens, as well as in the medical services, where they can be obtained for free. Condoms are also available free of charge in the rooms for conjugal visits. In practice, the canteens do not have their own stocks but have to procure them on demand at the local pharmacy. This expensive and hardly discreet mode of distribution actually limits accessibility. In the French Community, a specific packaging has therefore been developed. Each packaging is composed of one condom and one attached lubricant. Different alternative ways of distributing have been studied according to each prison. In 2002, all medical services were advised to make *disinfectants* (liquid bleach solution with guidelines) available whenever prisoners ask for it. They are available in more than 50% of the prisons. Furthermore, there are pilot projects for *drug-free units* in some prisons (capacity: 60; exist in less than half of the prisons) and one therapeutic community-like programme in one Flemish prison. There is no *needle/ syringe exchange programme* at all in Belgian prisons.

Antiretroviral treatment for HIV and *antiviral treatment for Hepatitis C* are available in all Belgian prisons. Regarding drug-related treatments, *brief detoxification with medication, treatment with antagonists* (only when requested by prisoner; Naltrexone is an option available, however, it is hardly ever used in Belgium; in prison, no patients on antagonist medication in 2006) and *substitution treatment* (300 prisoners were undergoing MMT in 2006; ST for acute detoxification, for prisoners who have been under ST before prison without time limit; maintenance ST available to all prisoners) are available in all

Belgian prisons. *Drug free treatment with psycho-social support* is provided in less than half of Belgian prisons.

As regards external health services, access to *external drug services* is available in more than half of the prisons. Assistance to drug users is provided by the prison health services and the prison psychosocial services. In addition, a number of external specialized therapeutic services are invited to assist the prisoners but difficulties are reported by these external services. Prisoners can ask to see their own medical doctor or therapist (NR 2006). *External HIV health services* are not available at the moment, but it is planned to create such an access based on the existing structure of external involvement of HCV services. Concerning drug-related pre-release interventions, all Belgian prisoners beneficiate of *initiation of ST* and *referral to outside drug services*. There is also an ongoing project in some Flemish prisons with a central intake unit ("centraal aanmeldingspunt") that aims at improving the through-care for prisoners. In this project, prison staff and specialised drug workers cooperate to link prisoners with treatment upon release. The project will be expanded to include more prisons. Specialised drug treatment organisations also provide treatment to ex-prisoners on parole or on probation.

As measures to prevent drug-related harm and/or infectious diseases, *distribution of information material* and *counselling by professionals* are offered in more than half of Belgian prisons, whereas *peer education programmes* and *safer use training* are measures limited to certain prisons (less than half). The availability of *information material* depends on each individual prison and its medical service and/or on the possible presence of an NGO specialised in AIDS prevention. Specific information material on AIDS and Hepatitis prevention for drug users in prison has been developed by NGOs in coordination with health services of the penitentiary administration of the Ministry of Justice and has been widely distributed in prisons. As for *counselling by professionals,* some external therapeutic settings arrange treatment in prison for prisoners. They also organise introduction sessions to inform about treatment possibilities. Aftercare is, when it concerns psychotherapeutic help, offered by some of them. Social help is provided by workers of the centres for juridical welfare. *Education for prison staff* is available in all prisons in Belgium (more than 10 hours drug-specific training in the basic training courses and regular updates; counselling: psychosocial department is available; local steering groups in every prison to look at these problems four times/year (minimum)).

1.3 Bulgaria

Penal Statistics Bulgaria

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Prison population rate		x		
% of female prisoners	x			
% of foreign prisoners	x			
% of prisoners under 18	x			
% of prisoners from 18 to <21		x		
Prison density			x	
% of sentenced prisoners		x		
Sentenced prisoners per inhabitants		x		
% of drug offences				x
% of sentences <1 year			x	
% of sentences ≥ 5 years and lifetime		x		
Rate of entries per inhabitants	x			
% of entries before final sentence	x			
Average length of imprisonment			x	
% of suicides among total deaths	x			
Mortality rate			x	
Suicide rate	x			
% of treatment staff			x	
% of custodial staff	x			
Rate of prisoners by treatment staff		x		
Rate of prisoners by custodial staff			x	

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 1) and tables (annex 2).

Regarding the ***Penal Statistics*** for Bulgaria, the data vary a lot across the analysed variables. Only for the *percentage of drug offences* no data is available.

The *percentage of female prisoners*, of *foreign prisoners* and of *prisoners under 18 years* lie below the EU-mainstream, as well as the *rate of entries per 100 000 inhabitants* and the *percentage of entries before final sentences*.

Additionally, the *percentage of suicides among total deaths* and the *suicide rate* lie below the EU-mainstream, while the *mortality rate* ranges above.

Also above the EU-mainstream is the *prison density.* Additionally, the *percentage of sentence less than 1 year* and *the average length of imprisonment* lies above the EU-mainstream.

While the *percentage of treatment staff* lies above the *percentage of custodial staff* is lower than the EU-mainstream. Correspondingly, the *rate of prisoners by custodial staff* ranges again above the EU-mainstream.

General Population Epidemiology Bulgaria

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Rate of newly diagnosed HIV infections	x			
IDU among new HIV infections			x	
IDU in cumulative new HIV cases		x		
Rate of AIDS incidences	x			
IDU among AIDS cases		x		
IDU in cumulative AIDS cases	x			
Rate of viral hepatitis incidences			x	
Rate of incidences of viral hepatitis A			x	
Rate of incidences of viral hepatitis B			x	
Rate of incidences of viral hepatitis C		x		
Rate of tuberculosis incidences			x	
Rate of syphilis incidences				x
Rate of gonococcal incidences				x
Rate of homicide and intentional injury			x	
Rate of suicide mortality		x		

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 2) and tables (annex 2).

Regarding the ***General Population Epidemiology*** for Bulgaria the data not often ranges within the EU-mainstream. No data is available for the *rate of syphilis* and of *gonococcal incidences*.

Above the mainstream are the *proportion of IDUs among new HIV infections* and the *rate of viral hepatitis*, *hepatitis A* and *B*, likewise the *rate of tuberculosis incidences* and the *rate of homicide and intentional injury*.

The *rate of newly diagnosed HIV infections*, of *AIDS incidences* and the *proportion of IDUs in cumulative AIDS cases* ranges below the EU-mainstream.

Interventions Monitoring Bulgaria in 2005

Background

According to the available data, a three-fold rise in the number of drug-using prisoners was observed over the last three years - in 2003 565 drug-using prisoners were registered, in 2005 their number climbed to 1071, and for the last count at the beginning of March 2006, 1728 drug-using prisoners were counted. Most of them are cannabis users - 487 inmates, 313 prisoners use cocaine, 425 – use heroin, and 216 inject drugs. According to the Bulgarian National Report, at the beginning of 2006 15,6 % of all inmates in Bulgaria were drug users. It a relative rise in the number of prisoners detoxified with methadone. Until recently, this treatment was used by between 20 and 30 prisoners, while the last count reports 69 persons undergoing detoxification with methadone. (2)

Variables	**100%**	**>50%**	**<50%**	**0%**	**no data**	**comments**
HIV/ Hepatitis Testing						
HIV testing on admission Hepatitis B and/or C testing on admission HIV testing on release Hepatitis B and/or C testing on release						According to the head of health care at the Bulgarian Department for Punishment Execution, prisoners are tested for syphilis, hepatitis A, B and C and are also offered an HIV test. The HIV test is voluntary but prisoners do request to be tested.[1] Testing not provided upon admission and/or release. Testing for HCV, HBV and HIV when suspected due to symptoms.[3]
Substance use						
Drug testing in prison						
- on admission						Medical staff do not use drug tests at admission but ask prisoners if they use drugs (Head of Health Care, Department for Punishment Execution, June 2003).[1]
- before holidays/ weekend leaves						
- by suspicion of drug consumption						
- per random routine						
Prevention						
Needle/ syringe exchange				x		[3, 1]
Availability of condoms						Condoms are not available in Bulgarian prisons, nor can they be bought at prison shops. According to the study, the lack of availability seems to be mainly due to budget problems rather than policy-related[1]
Availability of disinfectants				x		[3, 1]
Possibility of non-supervised visits						
Drug free units						There is a the detached therapeutic sector for drug users in the prison of Bourgas which conducts activities on the principle of therapeutic communities[2]
Vaccination against Hepatitis B						yes [3]
Care						
Antiviral treatment for Hepatitis C						Most often only symptoms are treated. In theory, antiviral treatment can be provided

Variables	100%	>50%	<50%	0%	no data	comments
						as in community in case patient has health insurance, however limited in practice due to limited diagnostics in prisons.[3]
Antiretroviral treatment for HIV					x	
Brief detoxification with medication						In Bulgaria, for detoxification, prisoners would normally go to Sofia prison hospital. There is some methadone used in the hospital if the prisoner was using it in the community for detoxification (NOT ST!). Although the majority of prisoners go through withdrawal at the pre-trial prisons there are still some who come direct to the prison. There are few medicines available in the prisons for treating IDUs at the time of withdrawal, mainly pain-relief medications.[1] HOWEVER, according to the Bulgarian National Report, all medical units of the General Directorate "Implementation of Punishments" are supplied with the necessary medicaments and consumables for detoxification. The detoxification of drug-dependent inmates is more and more intensively accompanied with consultations, therapeutic and crisis interventions.[2]
Drug free treatment w. psychosoc. support						Bulgaria is one of the countries where drug treatment can be compulsory in prison if ordered by the courts and can continue after the end of the prisoner's sentence. Apart from this compulsory treatment set by the courts, the only other treatment for drug users is from short-term projects provided by NGOs. There are two prison hospitals for compulsory drug treatment ordered by the courts, one in Sofia and the other in Lovech prison. The treatment of drug users in Bulgaria, both in prison and the community, is carried out mainly by psychiatrists.[1] In the prisons of Bourgas, Lovetch, Pleven, Stara Zagora and Sofia, 14 psychotherapeutic groups worked with over 200 inmates.[2] In Sofia, psychologists accredited by the GD "Implementation of Punishments" provide cognitive-behavioural support to drug-dependent inmates.[2]
Treatment with antagonists				x		[1]
Substitution treatment				x		
External drug services						yes, with NGOs but not every prison[1, 2]
External HIV services					x	
Initiation of substitution treatment				x		
Referral to outside drug services						some prisons[1]
Education						
Distribution of information material						Staff at the Bulgarian Department for Punishment Execution said that all prisoners are given information about drug

Variables	100%	>50%	<50%	0%	no data	comments
						taking and communicable diseases and how to get treatment while in prison. According to the study[1], this did not seem to be the reality in the prisons. There was no clear prevention and harm-reduction policy in either of the sample prisons. In Bourgas, an NGO called "Dose of Love" provides informative prevention material and condoms to inmates. [2]
Counselling by professionals						
Peer education						
Safer injecting/ safer use training				x		[3]
Education for prison *staff*						

Sources: WHO Prison Health Database 2007, EMCDDA Annual Report 2006

[1] A Study of the Health Care Provision, Existing Drug Services and Strategies Operating in Prisons in Ten Countries from Central and Eastern Europe', MacDonald, 2005

[2] Bulgarian National Report 2006, EMCDDA

[3] Hepatitis C among Injecting Drug Users in the New EU Member States and Neighbouring Countries: Situation, Guidelines and Recommendations, CEEHRN, 2007

The table above gives information on ***Interventions Monitoring*** in Bulgarian prisons in 2005.

According to the head of health care at the Bulgarian Department for Punishment Execution, prisoners are tested for Syphilis, Hepatitis A, B and C and are also offered an HIV test. The *HIV test* is voluntary but prisoners do request to be tested. Testing is not provided upon admission and/or release, but *HCV, HBV and HIV tests* are carried out when suspicion due to symptoms.

Medical staff do not use *drug tests at admission* but ask prisoners if they use drugs (Head of Health Care, Department for Punishment Execution, June 2003).

As regards prevention in Bulgarian prisons, the only measure existing seems to be *vaccination against Hepatitis B*. Similar to *drug free units*, there is a the detached therapeutic sector for drug users in the prison of Bourgas which conducts activities on the principle of therapeutic communities. *Condoms* are not available in Bulgarian prisons, nor can they be bought at prison shops. According to the study (McDonald, 2005), the lack of availability seems to be mainly due to budget problems rather than policy-related. *Needle/ syringe exchange* and *disinfectants* are not provided in any of the prisons in Bulgaria.

Concerning measures of care in Bulgarian prisons, most often only symptoms are treated. In theory, *antiviral treatment for Hepatitis C* can be provided as in community in case patient has health insurance, however limited in practice due to limited diagnostics in prisons. As for drug-related treatment, for *detoxification*, prisoners would normally go to Sofia prison hospital. There is some methadone used in the hospital if the prisoner was using it in the community for detoxification (not substitution treatment!).

Although the majority of prisoners go through withdrawal at the pre-trial prisons there are still some who come direct to the prison. There are few medicines available in the prisons for treating IDUs at the time of withdrawal, mainly pain-relief medications. However, according to the Bulgarian National Report, all medical units of the General Directorate (GD) "Implementation of Punishments" are supplied with the necessary medicaments and consumables for detoxification. The detoxification of drug-dependent inmates is more and more intensively accompanied with consultations, therapeutic and crisis interventions. Bulgaria is one of the countries where *drug treatment* can be compulsory in prison if ordered by the courts and can continue after the end of the prisoner's sentence. Apart from this compulsory treatment set by the courts, the only other treatment for drug users is from short-term projects provided by NGOs. There are two prison hospitals for compulsory drug treatment ordered by the courts, one in Sofia and the other in Lovech prison. The treatment of drug users in Bulgaria, both in prison and the community, is carried out mainly by psychiatrists. In the prisons of Bourgas, Lovetch, Pleven, Stara Zagora and Sofia, 14 psychotherapeutic groups worked with over 200 inmates. In Sofia, psychologists accredited by the GD "Implementation of Punishments" provide cognitive-behavioural support to drug-dependent inmates. There is no other drug-related treatment (i.e. *treatment with antagonists*, *substitution treatment*) in Bulgarian prisons.

There are *external drug services* with NGOs, but not in every Bulgarian prison. As regards pre-release interventions, *initiation of substitution treatment* is not provided, but *referral to outside drug services* is applied in some prisons.

Concerning measures to prevent drug-related harm and/or infectious diseases, staff at the Bulgarian Department for Punishment Execution said that all prisoners are given information about drug taking and communicable diseases and how to get treatment while in prison. According to the study (McDonald, 2005), this did not seem to be the reality in the prisons. There was no clear prevention and harm-reduction policy in either of the sample prisons. In Bourgas, an NGO called "Dose of Love" provides *informative prevention material* and condoms to inmates. There is no *safer injecting and safer use training*.

1.4 Cyprus

Penal Statistics Cyprus

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Prison population rate	x			
% of female prisoners	x			
% of foreign prisoners			x	
% of prisoners under 18				x
% of prisoners from 18 to <21		x		
Prison density			x	
% of sentenced prisoners		x		
Sentenced prisoners per inhabitants		x		
% of drug offences		x		
% of sentences <1 year				x
% of sentences ≥ 5 years and lifetime				x
Rate of entries per inhabitants		x		
% of entries before final sentence		x		
Average length of imprisonment	x			
% of suicides among total deaths				x
Mortality rate	x			
Suicide rate	x			
% of treatment staff	x			
% of custodial staff			x	
Rate of prisoners by treatment staff			x	
Rate of prisoners by custodial staff	x			

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 1) and tables (annex 2).

Results on ***Penal Statistics*** in Cyprus are shown in the first table of 1.4. For Cyprus no data was available neither on *the percentage of prisoners under 18*, on the *percentages of sentences less than one year* as well as on *sentences over five years and lifetime sentences*, nor was information available on the *percentage of suicides among total deaths*.

The *prison population rate* and the *percentage of female prisoners* are lower than the mainstream as well as the *average length of imprisonment*. Regarding the *mortality* and *suicide rate* the values lie below the mainstream, too.

The *percentage of foreign prisoners* is higher than the mainstream as well as the *prison density*. Furthermore, prisons in Cyprus show high values for *custodial* and low values for *treatment staff*. Correspondingly the *rate of prisoners by treatment staff* ranges above and the *rate of prisoners by custodial staff* lies below the EU-mainstream.

General Population Epidemiology Cyprus

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Rate of newly diagnosed HIV infections		x		
IDU among new HIV infections	x			
IDU in cumulative new HIV cases	x			
Rate of AIDS incidences				x
IDU among AIDS cases				x
IDU in cumulative AIDS cases				x
Rate of viral hepatitis incidences		x		
Rate of incidences of viral hepatitis A		x		
Rate of incidences of viral hepatitis B		x		
Rate of incidences of viral hepatitis C		x		
Rate of tuberculosis incidences	x			
Rate of syphilis incidences		x		
Rate of gonococcal incidences		x		
Rate of homicide and intentional injury		x		
Rate of suicide mortality				

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 2) and tables (annex 2).

Regarding the ***General Population Epidemiology*** for Cyprus data was neither available on the *rate of AIDS incidences*, *the proportion of intravenous drug users among AIDS cases* nor on the *proportion of IDUs in cumulative total of AIDS cases*.

Rates below the EU- mainstream were found regarding the *proportion of IDUs among new HIV infections* and the *IDUs in cumulative new HIV cases*. The *rate of tuberculosis* ranges below the EU-mainstream.

Interventions Monitoring Cyprus in 2006

Variables	100%	>50%	<50%	0%	no data	comments
HIV/ Hepatitis Testing						
HIV testing on admission	x					Although not mandatory, approximately 99% of the inmates consent for testing.
Hepatitis B and/or C testing on admission	x					Although not mandatory, approximately 99% of the inmates consent for testing.
HIV testing on release				x		
Hepatitis B and/or C testing on release				x		
Substance use						
Drug testing in prison						
- on admission	x					
- before holidays/ weekend leaves	x					
- by suspicion of drug consumption	x					
- per random routine			x			
Prevention						
Needle/ syringe exchange				x		
Availability of condoms				x		
Availability of disinfectants			x			upon request
Possibility of non-supervised visits				x		
Drug free units				x		
Vaccination against Hepatitis B	x					free of charge; offered to prisoners pertaining to risk groups or on request for all prisoners

Care						
Antiviral treatment for Hepatitis C				x		In 2004 a comprehensive plan of a programme providing treatment to inmates with a drug use history was planned and is expected to be implemented by 2009. However, in the framework of suggesting amendments for the implementation of the Care and Treatment of Drug Addicts Law of 1992, the Cyprus Antidrugs Council officially recommended the implementation of a well structured programme for addicted inmates lodged at Wing nine of the Central Prison, until the new facilities and programmes are ready to function (EMCDDA National Report 2006).
Antiretroviral treatment for HIV	x					
Brief detoxification with medication					x	
Drug free treatment w. psychosoc. support		x				
Treatment with antagonists				x		
Substitution treatment				x		
External drug services				x		
External HIV services	x					
Initiation of substitution treatment				x		
Referral to outside drug services				x		
Education						
Distribution of information material	x					
Counselling by professionals		x				
Peer education				x		
Safer injecting/ safer use training				x		
Education for prison *staff*		x				The National Focal Point provides training pertaining to the implementation of the Treatment Demand Indicator as well as to the Infectious Diseases Indicator to the prison's mental health providers. Further, the prison's mental health providers participate in training seminars organized by the Focal Point. The prison's mental health providers also provide basic health related training to the correctional officers in the framework of the basic course of the correctional officer's academy.

Sources: WHO Prison Health Database 2007, EMCDDA Annual Report 2006;
Reviewed and partly commented by Natasa Savvopoulou, Cyprus Monitoring Center for Drugs and Drug Addiction (www.ektepn.org.cy)

Information on ***Interventions Monitoring*** in Cyprian prisons in 2006 are given in the table above.

As regards HIV and Hepatitis testing, *HIV* and *Hepatitis B and/or C tests* are mandatory *on admission* in all prisons in Cyprus (approximately 99% of the inmates give their consent anyway). Such testing is not applied on release.

As regards *drug testing*, it is applied *on admission, before holidays/weekend leaves* and *by suspicion of drug consumption* in all and *per random routine* in less than half of Cyprian prisons.

Concerning prevention, *vaccination against Hepatitis B* is the only measure available to all prisoners and this free of charge (offered to prisoners pertaining to risk groups and on request for all prisoners). *Disinfectants* are available to less than half of the prisoners in Cyprus. *Needle/syringe exchange, condoms, non-supervised visits* and *drug free units* are not found at all in Cyprian prisons.

Regarding care, *antiretroviral treatment for HIV* is provided in all and *antiviral treatment for Hepatitis C* in none of Cyprian prisons. As regards drug-related treatments, *drug free treatment with psycho-social support* is offered in more than 50% of prisons, whereas *treatment with antagonists* and *substitution treatment,* not at all. In 2004, a comprehensive plan of a programme providing treatment to inmates with a drug use history was planned and is expected to be implemented by 2009. However, in the framework of suggesting amendments for the implementation of the Care and Treatment of Drug Addicts Law of 1992, the Cyprus Antidrugs Council officially recommended the implementation of a well structured programme for addicted inmates lodged at Wing nine of the Central Prison, until the new facilities and programmes are ready to function (EMCDDA National Report 2006).

Concerning external health services, *external HIV services* cooperate with all of Cyprian prisons and *external drug services*, not at all. Regarding drug-related pre-release interventions, the *initiation of substitution treatment* and the *referral to outside drug services* is not provided in any of the prisons in Cyprus.

Concerning measures to prevent drug-related harm and/or infectious diseases, *distribution of information material* is offered in all Cyprian penal institutions, whereas *counselling by professionals* and *education for prison staff,* in more than half of them. The National Focal Point provides training pertaining to the implementation of the Treatment Demand Indicator as well as to the Infectious Diseases Indicator to the prison's mental health providers. Further, the prison's mental health providers participate in training seminars organized by the Focal Point. The prison's mental health providers also provide basic health related training to the correctional officers in the framework of the basic course of the correctional officer's academy. *Peer education* and *safer injecting / safer use training* are not provided at all.

1.5 Czech Republic

Penal Statistics Czech Republic

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Prison population rate			x	
% of female prisoners		x		
% of foreign prisoners		x		
% of prisoners under 18				x
% of prisoners from 18 to <21				x
Prison density		x		
% of sentenced prisoners		x		
Sentenced prisoners per inhabitants			x	
% of drug offences	x			
% of sentences <1 year		x		
% of sentences ≥ 5 years and lifetime		x		
Rate of entries per inhabitants		x		
% of entries before final sentence		x		
Average length of imprisonment			x	
% of suicides among total deaths			x	
Mortality rate	x			
Suicide rate		x		
% of treatment staff			x	
% of custodial staff	x			
Rate of prisoners by treatment staff	x			
Rate of prisoners by custodial staff		x		

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 1) and tables (annex 2).

The first table of 1.5 shows the ***Penal Statistics*** of the Czech Republic. Data were missing on the *percentage of prisoners under 18 years* and on the *percentage of prisoners from 18 to less than 21 years*.

In Czech prisons, the *prison population rate* ranges above the EU-mainstream and so does the rate of *sentenced prisoners per 100 000 inhabitants* as well as the *average length of imprisonment and t*he *percentage of suicides among total deaths*

At the same time, the mortality rate in Czech prisons is located below the EU-mainstream as well as *the percentage of drug offences*.

The rate of prisoners by treatment staff is lower than the EU-average. Correspondingly, the *percentage of treatment staff* in the Czech Republic ranges above the EU-mainstream and has the highest rate of all analysed countries, while the *percentage of custodial staff* is relatively low.

General Population Epidemiology Czech Republic

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Rate of newly diagnosed HIV infections	x			
IDU among new HIV infections		x		
IDU in cumulative new HIV cases		x		
Rate of AIDS incidences	x			
IDU among AIDS cases	x			
IDU in cumulative AIDS cases	x			
Rate of viral hepatitis incidences		x		
Rate of incidences of viral hepatitis A		x		
Rate of incidences of viral hepatitis B		x		
Rate of incidences of viral hepatitis C		x		
Rate of tuberculosis incidences		x		
Rate of syphilis incidences			x	
Rate of gonococcal incidences		x		
Rate of homicide and intentional injury		x		
Rate of suicide mortality		x		

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 2) and tables (annex 2).

The second table of 1.5 shows data on ***the General Population Epidemiology*** in the Czech Republic.

The rate of *newly diagnosed HIV infections*, the *rate of AIDS incidences* and the *proportion of IDU among AIDS cases* as well as *in cumulative AIDS cases* all range below the EU-mainstream, whereas the *rate of tuberculosis incidences* is higher compared to the mainstream.

Interventions Monitoring Czech Republic in 2005

Variables	100%	>50%	<50%	0%	no data	comments
HIV/ Hepatitis Testing						
HIV testing on admission			x			mandatory for all risk groups
Hepatitis B and/or C testing on admission			x			
HIV testing on release				x		
Hepatitis B and/or C testing on release				x		
Substance use						
Drug testing in prison	x					urine test predominant
- on admission		x				
- before holidays/ weekend leaves				x		
- by suspicion of drug consumption	x					
- per random routine	x					
Prevention						
Needle/ syringe exchange				x		
Availability of condoms	x					to buy
Availability of disinfectants				x		
Possibility of non-supervised visits			x			
Drug free units		x				capacity: 1606; therapy is not included in the programme of drug-free zones
Vaccination against Hepatitis B	x					on request; not free of charge
Care						
Antiviral treatment for Hepatitis C				x		in prison hospital
Antiretroviral treatment for HIV	x					Number of HIV+ prisoners under ART in 12/2005: 16
Brief detoxification with medication	x					
Drug free treatment w. psychosoc. support			x			
Treatment with antagonists				x		
Substitution treatment				x		
External drug services				x		
External HIV services				x		
Initiation of substitution treatment	x					Methadone is used as the substitution preparation; in exceptional cases and when recommended by an attending physician, Subutex can also be administered.
Referral to outside drug services	x					
Education						
Distribution of information material	x					
Counselling by professionals	x					Drug prevention counselling offices have been established in all 35 prisons and they provide individual and group therapy to addicted drug users.
Peer education					x	
Safer injecting/ safer use training				x		
Education for prison *staff*	x					The NGOs supplied training to 170 employees of the prison service.

Sources: WHO Prison Health Database 2007, EMCDDA Annual Report 2006

As shown in the table above on ***Interventions Monitoring***, in less than half of the Czech prisons, prisoners are tested on *HIV, Hepatitis B or C on admission* (mandatory for all risk groups). None of the Czech prisons offer *HIV, Hepatitis B or Hepatitis C testing on release*.

Drug testing (urine test predominant) in prisons by *suspicion of drug consumption* and per *random routine* is found in all Czech prisons, drug *testing on admission* in more than 50% of the prisons, but in none of them *before holidays and weekend leaves*.

As measures of prevention, all Czech prisons offer *condoms* (but not free of charge) and *vaccinations against Hepatitis B*, more than half have a *drug free unit* (capacity in 2005: 1606) and less than 50% have the possibility of *non-supervised visits*. *Needle exchange* and *disinfectants* were not available in 2005 in any of the Czech prisons.

As measures of care, *antiretroviral treatment for HIV* is offered in all prisons (number of HIV+ prisoners under ART in 12/2005: 16), whereas *antiviral treatment for Hepatitis C* is not available at all, except in prison hospital. Concerning drug related treatments, *brief detoxification with medication* (in 100% of prisons) as well as *drug free treatment with psycho-social support* (in less than 50% of prisons) is offered but no other treatment. There are no external health services in Czech prisons. Concerning drug related pre-release interventions, all Czech prisons offer *initiation of substitution treatment* (Methadone is used as the substitution preparation; in exceptional cases and when recommended by an attending physician, Subutex can also be administered) and *referral to outside drug services.*

As regards education measures, *distribution of information material* and *counselling by professionals* (drug prevention counselling offices have been established in all 35 prisons and they provide individual and group therapy to addicted drug users) is given in all prisons, so is *education for the prison staff* (NGOs supplied training to 170 employees of the prison service). *Safer use training* is not offered in any of the prisons.

1.6 Denmark

Penal Statistics Denmark

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Prison population rate	x			
% of female prisoners		x		
% of foreign prisoners		x		
% of prisoners under 18	x			
% of prisoners from 18 to <21	x			
Prison density		x		
% of sentenced prisoners		x		
Sentenced prisoners per inhabitants	x			
% of drug offences		x		
% of sentences <1 year			x	
% of sentences ≥ 5 years and lifetime	x			
Rate of entries per inhabitants			x	
% of entries before final sentence				x
Average length of imprisonment	x			
% of suicides among total deaths		x		
Mortality rate			x	
Suicide rate			x	
% of treatment staff		x		
% of custodial staff		x		
Rate of prisoners by treatment staff	x			
Rate of prisoners by custodial staff	x			

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 1) and tables (annex 2).

As shown in the table above on ***Penal Statistics***, Denmark shows a great variation among the analysed penal statistic variables with regard to the EU-mainstream. Data were missing on the *percentage of entries before the final sentence.*

The *prison population rate* in Denmark lies below the EU-mainstream as well as the *percentage of prisoners under 18 years* and of *prisoners from 18 to 21 years*. Regarding the rate of *sentenced prisoners per habitants* a lower value than the mainstream is found, too.

In Danish prisons the *percentage of sentences less than one year* are higher than the overall mainstream while at the same time the *percentage of sentences over five years and lifetime sentences* is lower than the mainstream. Corresponding to these results the *average length of imprisonment* ranges below the EU-mainstream but the *rate of entries per inhabitants* in Denmark has quite a high value and therefore lies above the mainstream. At the same time both, the *mortality rate* and the *suicide rate* range above the EU-mainstream.

Furthermore, the *rate of prisoners by treatment staff* as well as by custodial staff lies in Danish prisons below the mainstream.

General Population Epidemiology Denmark

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Rate of newly diagnosed HIV infections		x		
IDU among new HIV infections		x		
IDU in cumulative new HIV cases		x		
Rate of AIDS incidences		x		
IDU among AIDS cases		x		
IDU in cumulative AIDS cases		x		
Rate of viral hepatitis incidences		x		
Rate of incidences of viral hepatitis A			x	
Rate of incidences of viral hepatitis B		x		
Rate of incidences of viral hepatitis C		x		
Rate of tuberculosis incidences		x		
Rate of syphilis incidences		x		
Rate of gonococcal incidences		x		
Rate of homicide and intentional injury				x
Rate of suicide mortality		x		

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 2) and tables (annex 2).

Regarding the ***General Population Epidemiology*** of Denmark most of the variables lie within the EU-mainstream. Data were missing on the *rate of homicide and intentional injury*.

Solely the *rate of incidences of viral Hepatitis A* lies above the EU-mainstream.

Interventions Monitoring Denmark in 2006

Variables*	100%	>50%	<50%	0%	no data	comments
HIV/ Hepatitis Testing						
HIV testing on admission			x			
Hepatitis B and/or C testing on admission			x			
HIV testing on release				x		
Hepatitis B and/or C testing on release				x		
Substance use						
Drug testing in prison	x					
- on admission					x	
- before holidays/ weekend leaves					x	
- by suspicion of drug consumption	x					
- per random routine	x					
Prevention						
Needle/ syringe exchange				x		
Availability of condoms	x					
Availability of disinfectants	x					
Possibility of non-supervised visits	x					
Drug free units		x				
Vaccination against Hepatitis B			x			offered by the prison system, as stated by the ministry, but no statistics are available and the uptake is estimated to be very low
Care						
Antiviral treatment for Hepatitis C			x			
Antiretroviral treatment for HIV	x					All HIV+ with treatment indication will receive treatment.
Brief detoxification with medication	x					
Drug free treatment w. psychosoc. support	x					
Treatment with antagonists					x	
Substitution treatment	x					
External drug services				x		
External HIV services	x					
Initiation of substitution treatment			x			
Referral to outside drug services					x	takes place in some prisons to ensure a seamless provision of care and to reduce "relapse overdoses"
Education						
Distribution of information material	x					
Counselling by professionals	x					
Peer education					x	
Safer injecting/ safer use training				x		
Education for prison *staff*	x					

Source: Estimates (not based on published reports) from Peer Brehm Christensen, Odense University Hospital, Denmark (peer.christensen@dadl.net.dk)

As the table above on ***Interventions Monitoring*** in Danish prisons shows, *HIV, Hepatitis B and Hepatitis C testing on admission* is available in less than half of the prisons, but not performed at all *on release*.

All Danish prisons use drug tests *by suspicion of drug consumption* and *per random routine*.

Concerning prevention measures, *condoms, disinfectants* and *non-supervised visits* are available in all prisons in Denmark and *drug free units* exist in more than half of the prisons. *Vaccination against Hep B* is offered by the prison system, as stated by the ministry, but no statistics are available and the uptake is estimated to be very low. *Needle/ syringe exchange* does not exist in Danish prisons.

Antiretroviral treatment for HIV is offered in all Danish prisons, whereas a*ntiviral treatment for Hepatitis C* only in less than half of the prisons. Concerning drug related treatments, *brief detoxification with medication, drug free treatment with psychosocial support* and *substitution treatment* are offered in all Danish prisons as well. Access to *external HIV services* is available in all Danish prisons, but there is no access to *external drug services*. Concerning drug-related pre-release interventions, *initiation of substitution treatment* is possible in less than half of all Danish prisons. *Referral to outside drug services* takes place in some prisons to ensure a seamless provision of care and to reduce "relapse overdoses".

As regards education measures, *distribution of information material, counselling by professionals* and *education for prison staff* are measures to be found in all Danish prisons, whereas *safer injecting/ safer use training* in none of them.

1.7 Estonia

Penal Statistics Estonia

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Prison population rate			x	
% of female prisoners	x			
% of foreign prisoners		x		
% of prisoners under 18		x		
% of prisoners from 18 to <21			x	
Prison density		x		
% of sentenced prisoners		x		
Sentenced prisoners per inhabitants			x	
% of drug offences	x			
% of sentences <1 year		x		
% of sentences ≥ 5 years and lifetime		x		
Rate of entries per inhabitants			x	
% of entries before final sentence		x		
Average length of imprisonment		x		
% of suicides among total deaths		x		
Mortality rate		x		
Suicide rate		x		
% of treatment staff			x	
% of custodial staff		x		
Rate of prisoners by treatment staff		x		
Rate of prisoners by custodial staff			x	

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 1) and tables (annex 2).

In the first table of 1.7 ***Penal Statistics*** in Estonia are shown.

The *prison population rate* in Estonia is higher than the EU-mainstream as well as the *percentage of sentenced prisoners per inhabitant*, the *rates of entries per inhabitants and* the percentage *of prisoners in between 18 and 21* years. Additionally, the *percentage of treatment staff* ranges above, as well as the *rate of prisoners by custodial staff* .

The *percentage of female prisoners* lies below the mainstream, *as well as the percentage of drug offences*.

General Population Epidemiology Estonia

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Rate of newly diagnosed HIV infections			x	
IDU among new HIV infections				x
IDU in cumulative new HIV cases				x
Rate of AIDS incidences		x		
IDU among AIDS cases			x	
IDU in cumulative AIDS cases		x		
Rate of viral hepatitis incidences		x		
Rate of incidences of viral hepatitis A		x		
Rate of incidences of viral hepatitis B			x	
Rate of incidences of viral hepatitis C		x		
Rate of tuberculosis incidences			x	
Rate of syphilis incidences			x	
Rate of gonococcal incidences			x	
Rate of homicide and intentional injury			x	
Rate of suicide mortality			x	

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 2) and tables (annex 2).

Regarding the ***General Population Epidemiology***, data on *IDUs among new HIV infections* as well as on *IDUs in cumulative new HIV cases* were missing.

It is striking that Estonia has high rates of various infectious diseases. The rate of *newly diagnosed HIV infections* as well as the *proportion of IDUs among AIDS cases* is higher than the EU-mainstream. Furthermore, the *rate of viral Hepatitis B,* as well as the *rates of tuberculosis incidences, syphilis incidences and gonococcal incidences* are in Estonia above the EU- mainstream.

Additionally, regarding the *rate of homicide and intentional injury* and the *rate of suicide m*ortality Estonia lies above the mainstream.

Interventions Monitoring Estonia in 2006

Variables	100%	>50%	<50%	0%	no data	comments
HIV/ Hepatitis Testing						
HIV testing on admission		x				voluntary
Hepatitis B and/or C testing on admission[2]		x				voluntary
HIV testing on release[2]		x				voluntary
Hepatitis B and/or C testing on release				x		
Substance use[1]						
Drug testing in prison						urine tests predominant
- on admission				x		
- before holidays/ weekend leaves				x		
- by suspicion of drug consumption	x					
- per random routine	x					
Prevention						
Needle/ syringe exchange				x		
Availability of condoms	x					free of charge
Availability of disinfectants[2]		x				only liquid bleach solution; always with guidelines
Possibility of non-supervised visits	x					
Drug free units			x			capacity: 22
Vaccination against Hepatitis B	x					free of charge; in general offered to sentenced prisoners pertaining to risk groups
Care						
Antiviral treatment for Hepatitis C[2]				x		
Antiretroviral treatment for HIV	x					
Brief detoxification with medication	x					
Drug free treatment w. psychosoc. support	x					
Treatment with antagonists[2]			x			
Substitution treatment			x			for acute detox.
External drug services	x					
External HIV services	x					
Initiation of substitution treatment				x		
Referral to outside drug services				x		
Education						
Distribution of information material	x					
Counselling by professionals	x					
Peer education	x					
Safer injecting/ safer use training				x		
Education for prison *staff*	x					

Sources: WHO Prison Health Database 2007, EMCDDA Annual Report 2006

[1] in 2005

[2] estimated by Ene Katkosilt, Head of medical department, Tallinn Prison, Estonia (ene.katkosilt@just.ee)

Information on ***Interventions Monitoring*** in Estonian prisons are given in the table above.

Regarding HIV and Hepatitis testing in Estonia, *HIV and Hepatitis testing on admission* as well as *HIV testing on release* are available for more than 50% of all prisoners, on a voluntary basis.

Drug testing by suspicion of drug consumption and *per random routine* is conducted (predominantly through urine tests) in all Estonian prisons, but *drug testing on admission* and *before holidays or weekend leaves* are not applied in any prison.

As measures of prevention, *condoms* (free of charge), *vaccination against Hepatitis B* (free of charge; in general offered to sentenced prisoners pertaining to risk groups) and *non supervised visits* are provided in all Estonian prisons. *Disinfectants* (only liquid bleach solution; always with guidelines of use) are available in more than 50% of the prisons. Furthermore, *drug free units* (capacity in 2006: 22) exist in less than 50% of the prisons, but no *needle/ syringe exchange* at all.

Antiretroviral treatment for HIV is available in all Estonian prisons, whereas *antiviral treatment for Hepatitis C* is not available at all. Regarding drug related treatment, only *brief detoxification with medication* and *drug free treatment with psycho-social support* are available in all Estonian prisons, *treatment with antagonists* and *substitution treatment* (for acute detoxification) are applied in less than 50% of all prisons.

As regards external health services, *external drug* and *external HIV health services* are available in all prisons. Concerning drug-related pre-release interventions, none of the Estonian prisoners beneficiate of *initiation of ST* or *referral to outside drug services*.

As measures to prevent drug related harm and/ or infectious diseases, *distribution of information material, counselling by professionals* and *peer education programmes* are offered to all Estonian prisoners, but no *safer use training*. *Education for prison staff* is available to all prison staff in Estonia.

1.8 Finland

Penal Statistics Finland

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Prison population rate	x			
% of female prisoners		x		
% of foreign prisoners		x		
% of prisoners under 18	x			
% of prisoners from 18 to <21	x			
Prison density		x		
% of sentenced prisoners			x	
Sentenced prisoners per inhabitants		x		
% of drug offences		x		
% of sentences <1 year			x	
% of sentences ≥ 5 years and lifetime	x			
Rate of entries per inhabitants		x		
% of entries before final sentence	x			
Average length of imprisonment		x		
% of suicides among total deaths		x		
Mortality rate		x		
Suicide rate		x		
% of treatment staff			x	
% of custodial staff	x			
Rate of prisoners by treatment staff	x			
Rate of prisoners by custodial staff		x		

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 1) and tables (annex 2).

In the first table of 1.8 ***Penal Statistics*** in Finland are shown. With regard to the EU-mainstream, Finland shows a great variation among the analysed variables.

The *prison population rate* in Finland lies below the EU-mainstream, so does the *percentage of prisoners under 18 years* and the *percentage of prisoner from 18 to less than 21 years* as well as the *percentage of entries before final sentence* and the *percentage of sentences over five years and lifetime sentences*. Correspondingly, the *percentage of sentences less than one year* lies above the EU-mainstream.

The *percentage of sentenced prisoners* lies above the mainstream. Furthermore, the *percentage of treatment staff* is relatively high, correspondingly, the *rate of prisoners by treatment staff* is lower than the EU-mainstream while the *percentage of custodial staff* lies below it.

General Population Epidemiology Finland

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Rate of newly diagnosed HIV infections		x		
IDU among new HIV infections		x		
IDU in cumulative new HIV cases		x		
Rate of AIDS incidences	x			
IDU among AIDS cases		x		
IDU in cumulative AIDS cases		x		
Rate of viral hepatitis incidences			x	
Rate of incidences of viral hepatitis A		x		
Rate of incidences of viral hepatitis B		x		
Rate of incidences of viral hepatitis C			x	
Rate of tuberculosis incidences		x		
Rate of syphilis incidences		x		
Rate of gonococcal incidences		x		
Rate of homicide and intentional injury			x	
Rate of suicide mortality			x	

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 2) and tables (annex 2).

In the table above information on ***General Population Epidemiology*** in Finland is given.

Most of the variables lie within the EU-mainstream, only the *rate of AIDS incidences* ranges below while the *rate of viral hepatitis incidences* and the *rate of viral hepatitis C incidences* lie above it. Furthermore, the *rate of homicide and intentional injury* as well as the *rate of suicide mortality* lie above the EU-mainstream.

Interventions Monitoring Finland in 2006

Variables	100%	>50%	<50%	0%	no data	comments
HIV/ Hepatitis Testing						
HIV testing on admission	x					voluntary
Hepatitis B and/or C testing on admission	x					voluntary
HIV testing on release	x					voluntary
Hepatitis B and/or C testing on release	x					voluntary
Substance use						
Drug testing in prison	x					
- on admission	x					
- before holidays/ weekend leaves	x					
- by suspicion of drug consumption	x					
- per random routine		x				mainly in open institutions and in drug free units
Prevention						
Needle/ syringe exchange				x		
Availability of condoms		x				free of charge
Availability of disinfectants	x					only bleach tablets
Possibility of non-supervised visits	x					
Drug free units		x				
Vaccination against Hepatitis B	x					free of charge
Care						
Antiviral treatment for Hepatitis C	x					only one prisoner got ARV-injection in 2006, in communal hospital
Antiretroviral treatment for HIV	x					15 prisoners in 2006
Brief detoxification with medication	x					
Drug free treatment w. psychosoc. support		x				
Treatment with antagonists	x					
Substitution treatment		x				acute detox.; for prisoners under ST before entering prisons: without time limit; maintenance for all prisoners; mainly cognitive/behaviouristic supportative methods and relaxation techniques
External drug services			x			During the last 6 months of penalty, it is possible to use community drug services
External HIV services	x					
Initiation of substitution treatment				x		
Referral to outside drug services	x					
Education						
Distribution of information material	x					
Counselling by professionals	x					
Peer education			x			
Safer injecting/ safer use training			x			
Education for prison *staff*			x			

Sources: WHO Prison Health Database 2007, EMCDDA Annual Report 2006

The table above gives information on ***Interventions Monitoring*** in prisons of Finland.

HIV, Hepatitis B and/or C testing on admission and *on release* are available in all Finnish prisons on a voluntary basis.

In all prisons, *drug testing* is performed *on admission, before holidays and weekend leaves* and *by suspicion of drug consumption*; in more than half of the prisons in Finland, mainly in open institutions and in drug free units, *drug testing* is carried out *per random routine.*

As regards measures of prevention, *vaccinations against Hepatitis B* are available free of charge in all Finnish prisons as well as *disinfectants* (only bleach tablets). *Non-supervised visits* are also possible in all prisons. *Condoms* (free of charge) and *drug free units* are provided in more than half of the prisons. *Needle/syringe exchange* is not provided in any of the Finnish prisons.

Antiviral treatment for Hepatitis C (only one prisoner got ARV-injection in 2006, in communal hospital) and *antiretroviral treatment for HIV* (15 prisoners in 2006) are provided in all Finnish prisons. Regarding drug-related treatments, *brief detoxification with medication* and *treatment with antagonists* are available in all prisons as well. *Drug free treatment with psychosocial support* and *substitution treatment* (acute detoxification; for prisoners under substitution treatment before entering prisons: without time limit; maintenance for all prisoners; mainly cognitive/behaviouristic supportative methods and relaxation techniques) are provided in more than half of the prisons in Finland. During the last six months of penalty, it is possible to use *community drug services* in less than half of prisons, but all Finnish prisons offer access to *external HIV services.* Concerning drug-related pre-release interventions, *referral to outside drug services* is applied in all Finnish prisons, whereas *initiation of substitution treatment* in none of them.

Concerning measures to prevent drug-related harm and infectious diseases, the *distribution of information material* and *counselling by professionals* is given in all, whereas *peer education, safer injecting/ safer use training* and *education for prison staff,* in less than half of the Finnish prisons.

1.9 France

Penal Statistics France

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Prison population rate		x		
% of female prisoners		x		
% of foreign prisoners		x		
% of prisoners under 18		x		
% of prisoners from 18 to <21		x		
Prison density		x		
% of sentenced prisoners		x		
Sentenced prisoners per inhabitants		x		
% of drug offences		x		
% of sentences <1 year		x		
% of sentences ≥ 5 years and lifetime			x	
Rate of entries per inhabitants		x		
% of entries before final sentence			x	
Average length of imprisonment		x		
% of suicides among total deaths		x		
Mortality rate		x		
Suicide rate			x	
% of treatment staff		x		
% of custodial staff		x		
Rate of prisoners by treatment staff		x		
Rate of prisoners by custodial staff		x		

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 1) and tables (annex 2).

The first table of 1.9 shows that most of the analysed variables on ***Penal Statistics*** for France lie within the EU-mainstream.

Solely the *percentage of sentences over five years and lifetime sentences* are higher, as well as the *entries before final sentence*. Furthermore, the *suicide rate* ranges above the EU-mainstream.

General Population Epidemiology France

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Rate of newly diagnosed HIV infections		x		
IDU among new HIV infections		x		
IDU in cumulative new HIV cases		x		
Rate of AIDS incidences		x		
IDU among AIDS cases		x		
IDU in cumulative AIDS cases		x		
Rate of viral hepatitis incidences				x
Rate of incidences of viral hepatitis A				x
Rate of incidences of viral hepatitis B				x
Rate of incidences of viral hepatitis C				x
Rate of tuberculosis incidences		x		
Rate of syphilis incidences	x			
Rate of gonococcal incidences				x
Rate of homicide and intentional injury				x
Rate of suicide mortality		x		

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 2) and tables (annex 2).

Regarding the ***General Population Epidemiology*** in France a lot of data were missing, especially on the rates of infectious diseases. No data was available for the *rates of viral hepatitis incidences, of incidences of hepatitis A, B* and *C,* as well as on the *rates of gonococcal incidences* and on *homicide and intentional injury*.

The *rate of syphilis incidences* ranges below the EU-mainstream.

interventions Monitoring France in 2006

Variables	100%	>50%	<50%	0%	no data	comments
HIV/ Hepatitis Testing						
HIV testing on admission[1]	x					To detainees a voluntary and confidential HIV test is offered on admission.
Hepatitis B and/or C testing on admission[1]	x					screening for Hepatitis C alongside a Hepatitis B vaccination
HIV testing on release[2]				x		not done or only on patient request
Hepatitis B and/or C testing on release[2]				x		not done or only on patient request
Substance use						
Drug testing in prison[2]	x					at doctor's initiative and remain confidential
- on admission					x	
- before holidays/ weekend leaves					x	
- by suspicion of drug consumption					x	
- per random routine					x	
Prevention						
Needle/ syringe exchange[1]				x		There is no provision in French law for making materials available for injecting in prison.
Availability of condoms[1]	x					
Availability of disinfectants[1]	x					
Possibility of non-supervised visits[2]			x			very few recent family units in some prisons
Drug free units[2]				x		
Vaccination against Hepatitis B	x					on admission, alongside a screening of Hep C
Care[2]						
Antiviral treatment for Hepatitis C	x					
Antiretroviral treatment for HIV	x					
Brief detoxification with medication	x					
Drug free treatment w. psychosoc. support	x					
Treatment with antagonists	x					
Substitution treatment	x					
External drug services		x				
External HIV services	x					
Initiation of substitution treatment	x					
Referral to outside drug services	x					
Education[2]						
Distribution of information material	x					
Counselling by professionals	x					
Peer education			x			
Safer injecting/ safer use training				x		
Education for prison *staff*			x			

Sources: [1] WHO Prison Health Database 2007, EMCDDA Annual Report 2006
[2] Laurent Michel, Hôpital Emil Roux, Paris/France (laurent.michel@erx.ap-hop-paris.fr)

As the table above on ***Interventions Monitoring*** in French prisons shows, *testing of HIV* (on a voluntary and confidential basis), *Hepatitis B and Hepatitis C* (alongside a Hep B vaccination) is available to all prisoners *on admission*, but not performed *on release*, except on patient request.

All French prisons use drug tests at doctor's initiative and the results remain confidential.

Concerning prevention measures, *condoms* and *disinfectants* are available in all prisons in France. *Vaccination against hepatitis B* is offered to all detainees on admission, alongside a screening of hepatitis C. As for the *possibility of non-supervised visits*, there are very few recent family units in some prisons. Concerning *needle/ syringe exchange,* there is no provision in French law for making materials available for injecting in prison. *Drug free units* do not exist either in French prisons.

Antiretroviral treatment for HIV and *antiviral treatment for Hepatitis C* are available in all French prisons. Concerning drug-related treatments, *brief detoxification with medication, drug free treatment with psychosocial support, treatment with antagonists* and *substitution treatment* are offered in all French prisons as well. Access to *external HIV services* is available in all French prisons, and there is access to *external drug services* in more than half of the prisons. Concerning drug-related pre-release interventions, *initiation of substitution treatment* and *referral to outside drug services* is possible in all prisons in France.

As regards education measures, *distribution of information material* and *counselling by professionals* are measures to be found in all French prisons, whereas *peer education* and *education for prison staff* in less than half of the prisons. *Safer injecting/ safer use training* is not offered at all.

1.10 Germany

Penal Statistics Germany

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Prison population rate		x		
% of female prisoners		x		
% of foreign prisoners		x		
% of prisoners under 18		x		
% of prisoners from 18 to <21		x		
Prison density		x		
% of sentenced prisoners		x		
Sentenced prisoners per inhabitants		x		
% of drug offences		x		
% of sentences <1 year			x	
% of sentences ≥ 5 years and lifetime	x			
Rate of entries per inhabitants		x		
% of entries before final sentence	x			
Average length of imprisonment		x		
% of suicides among total deaths		x		
Mortality rate		x		
Suicide rate		x		
% of treatment staff		x		
% of custodial staff		x		
Rate of prisoners by treatment staff		x		
Rate of prisoners by custodial staff		x		

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 1) and tables (annex 2).

As shown in the first table of 1.10, most of the analysed variables regarding ***Penal Statistics*** in Germany lie within the EU-average.

Solely the *percentage of sentences less than one year* ranges above the EU-mainstream, correspondingly, the *percentage of sentences over five years and lifetime sentences* lies below it. Furthermore, the *percentage of entries before final sentence* is lower than the EU-mainstream.

General Population Epidemiology Germany

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Rate of newly diagnosed HIV infections		x		
IDU among new HIV infections		x		
IDU in cumulative new HIV cases		x		
Rate of AIDS incidences		x		
IDU among AIDS cases		x		
IDU in cumulative AIDS cases		x		
Rate of viral hepatitis incidences		x		
Rate of incidences of viral hepatitis A		x		
Rate of incidences of viral hepatitis B		x		
Rate of incidences of viral hepatitis C		x		
Rate of tuberculosis incidences		x		
Rate of syphilis incidences		x		
Rate of gonococcal incidences				x
Rate of homicide and intentional injury		x		
Rate of suicide mortality		x		

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 2) and tables (annex 2).

Regarding the ***General Population Epidemiology*** in Germany all of the results lie within the EU-mainstream. No data was available on the *rate of gonococcal incidences*.

Interventions Monitoring Germany in 2006

Variables	100%	>50%	<50%	0%	no data	comments
HIV/ Hepatitis Testing						
HIV testing on admission[1]			x			
Hepatitis B and/or C testing on admission[1]			x			
HIV testing on release					x	
Hepatitis B and/or C testing on release					x	
Substance use						
Drug testing in prison[1]	x					
- on admission					x	
- before holidays/ weekend leaves [2]		x				
- by suspicion of drug consumption [2]	x					
- per random routine[1]	x					
Prevention						
Needle/ syringe exchange [2]			x			In the past, syringe programmes for injecting inmates of penal institutions were developed and evaluated in Federal States. However, all but one (prison for female inmates Berlin) have meanwhile been stopped.
Availability of condoms[1]		x				
Availability of disinfectants [2]					x	
Possibility of non-supervised visits[1]			x			
Drug free units[1]			x			
Vaccination against Hepatitis B [2]			x			
Care						
Antiviral treatment for Hepatitis C[1]			x			
Antiretroviral treatment for HIV[1]	x					
Brief detoxification with medication[1]			x			
Drug free treatment w. psychosoc. support[1]			x			
Treatment with antagonists					x	
Substitution treatment[1]			x			
External drug services [2]			x			
External HIV services[1]		x				
Initiation of substitution treatment[1]			x			
Referral to outside drug services[1]		x				
Education						
Distribution of information material[1]	x					
Counselling by professionals[1]	x					
Peer education [2]					x	
Safer injecting/ safer use training [2]					x	
Education for prison *staff* [2]		x				

Sources: [1] WHO Prison Health Database 2007, EMCDDA Annual Report 2006

[2] Heino Stöver, Universität Bremen, Germany (heino.stoever@uni-bremen.de)

As the table above on ***Interventions Monitoring*** in German prisons shows, *testing of HIV, Hepatitis B and Hepatitis C* is available *on admission* to less than half of the prison population.

All German prisons use drug testing *by suspicion of drug consumption* and *per random routine,* and more than half of the prisons perform such screening *before holidays/ weekend leaves.*

Concerning prevention measures, *condoms* are available in all prisons in Germany. *Vaccination against hepatitis B,* the *possibility of non-supervised visits* and *drug free units* are offered in less than half of the prisons. In the past, *needle/ syringe exchange* programmes for injecting inmates of penal institutions were developed and evaluated in Federal States. However, all but one (prison for female inmates Berlin) have meanwhile been stopped.

Antiretroviral treatment for HIV is available in all German prisons, whereas *antiviral treatment for Hepatitis C* in less than half of them. Concerning drug-related treatments, *brief detoxification with medication, drug free treatment with psychosocial support* and *substitution treatment* are offered in less than half of all German prisons as well. Access to *external HIV services* is available in more than half of German prisons and there is access to *external drug services* in less than half of them. Concerning drug-related pre-release interventions, *referral to outside drug services* is possible in more than half of the prisons in Germany, whereas *initiation of substitution treatment* in less than half of them.

As regards education measures, *distribution of information material* and *counselling by professionals* are measures to be found in all German prisons, whereas *education for prison staff* in more than half of the prisons.

1.11 Greece

Penal Statistics Greece

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Prison population rate		x		
% of female prisoners		x		
% of foreign prisoners			x	
% of prisoners under 18				x
% of prisoners from 18 to <21				x
Prison density			x	
% of sentenced prisoners		x		
Sentenced prisoners per inhabitants		x		
% of drug offences			x	
% of sentences <1 year		x		
% of sentences ≥ 5 years and lifetime			x	
Rate of entries per inhabitants				x
% of entries before final sentence				x
Average length of imprisonment				x
% of suicides among total deaths	x			
Mortality rate		x		
Suicide rate	x			
% of treatment staff	x			
% of custodial staff	x			
Rate of prisoners by treatment staff			x	
Rate of prisoners by custodial staff			x	

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 1) and tables (annex 2).

As shown in the table above on ***Penal Statistics***, Greece shows a great variation in the analysed variables regarding the EU-mainstream. Data was missing on the *percentage of prisoners under 18 years* as well as *over 18 and less than 21 years*. Furthermore, no data was available on the *rate of entries per inhabitants*, the *percentage of entries before final sentence* and the *average length of imprisonment.*

The *percentage of foreign prisoners, the prison density, the percentage of drug offences and the percentage of sentences over five years and lifetime sentences* are in Greek prisons higher than the EU-mainstream.

The *percentage of suicides among total deaths* as well as the *suicide rate i*n Greek prisons lie below the mainstream.

Regarding the prison staff the *proportion of* both *treatment and custodial staff* lies below the EU-mainstream and correspondingly the *rates of prisoners by treatment* and *custodial staff* both lie above the mainstream.

General Population Epidemiology Greece

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Rate of newly diagnosed HIV infections		x		
IDU among new HIV infections		x		
IDU in cumulative new HIV cases		x		
Rate of AIDS incidences		x		
IDU among AIDS cases		x		
IDU in cumulative AIDS cases	x			
Rate of viral hepatitis incidences				x
Rate of incidences of viral hepatitis A		x		
Rate of incidences of viral hepatitis B		x		
Rate of incidences of viral hepatitis C	x			
Rate of tuberculosis incidences		x		
Rate of syphilis incidences				x
Rate of gonococcal incidences				x
Rate of homicide and intentional injury		x		
Rate of suicide mortality	x			

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 2) and tables (annex 2).

The variables on the ***General Population Epidemiology*** in Greece lie most of the time within the EU-mainstream. No data were available on the *rate of viral hepatitis* incidences, the *rate of syphilis incidences* as well as on the *rate of gonococcal incidences*.

The proportion *of IDUs in cumulative AIDS cases, the rate of incidences of viral hepatitis C and the rate of suicide mortality* in Greece lie below the EU-mainstream

Interventions Monitoring Greece in 2006

Variables	100%	>50%	<50%	0%	no data	comments
HIV/ Hepatitis Testing						
HIV testing on admission	x					
Hepatitis B and/or C testing on admission		x				
HIV testing on release					x	
Hepatitis B and/or C testing on release					x	
Substance use						
Drug testing in prison					x	
- on admission					x	
- before holidays/ weekend leaves					x	
- by suspicion of drug consumption					x	
- per random routine					x	
Prevention						
Needle/ syringe exchange					x	
Availability of condoms					x	
Availability of disinfectants					x	
Possibility of non-supervised visits					x	
Drug free units					x	
Vaccination against Hepatitis B					x	
Care						
Antiviral treatment for Hepatitis C					x	administration of interferon treatment, in cooperation with public hospitals
Antiretroviral treatment for HIV					x	
Brief detoxification with medication					x	
Drug free treatment w. psychosoc. support					x	
Treatment with antagonists					x	
Substitution treatment					x	
External drug services					x	
External HIV services					x	
Initiation of substitution treatment					x	
Referral to outside drug services					x	
Education						
Distribution of information material	x					
Counselling by professionals	x					Support groups are the most important in-prison activity designed to respond to the individual needs of drug dependent prisoners. Such interventions are organised by governmental and non governmental organisations as well as by voluntary organisations specializing in therapy design and implementation.
Peer education					x	
Safer injecting/ safer use training					x	
Education for prison *staff*					x	

Sources: WHO Prison Health Database 2007, EMCDDA Annual Report 2006

As shown in the table above on **Interventions Monitoring** in Greek prisons, *HIV testing on admission* is conducted in all and *Hepatitis B and/or C testing on admission* in more than half of the Greek prisons.

Concerning measures of care, *antiviral treatment for Hepatitis C* is offered in some prisons in Greece: administration of interferon treatment, in cooperation with public hospitals.

Concerning measures to prevent drug related harm and/ or infectious diseases, the *distribution of information material* as well as *counselling by professionals* is provided in all prisons in Greece. Support groups are the most important in-prison activity designed to respond to the individual needs of drug dependent prisoners. Such interventions are organised by governmental and non governmental organisations as well as by voluntary organisations specializing in therapy design and implementation.

1.12 Hungary

Penal Statistics Hungary

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Prison population rate		x		
% of female prisoners		x		
% of foreign prisoners	x			
% of prisoners under 18		x		
% of prisoners from 18 to <21		x		
Prison density			x	
% of sentenced prisoners		x		
Sentenced prisoners per inhabitants		x		
% of drug offences	x			
% of sentences <1 year		x		
% of sentences ≥ 5 years and lifetime		x		
Rate of entries per inhabitants		x		
% of entries before final sentence	x			
Average length of imprisonment		x		
% of suicides among total deaths		x		
Mortality rate		x		
Suicide rate	x			
% of treatment staff		x		
% of custodial staff	x			
Rate of prisoners by treatment staff		x		
Rate of prisoners by custodial staff			x	

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 1) and tables (annex 2).

As shown in table 1.12 on ***Penal Statistics,*** in Hungary most of the variables lie within the EU-mainstream.

The *prison density* lies above the EU-mainstream. Furthermore, the *rate of prisoners by custodial staff* is higher than the mainstream, correspondingly, the *percentage of custodial staff* is lower,

Regarding the prison structure, the *percentage of foreign prisoners* is lower than the EU-mainstream, as well as the *percentage of drug offences*, the *percentage of entries before final sentence* and he *suicide rate*.

General Population Epidemiology Hungary

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Rate of newly diagnosed HIV infections	x			
IDU among new HIV infections		x		
IDU in cumulative new HIV cases	x			
Rate of AIDS incidences	x			
IDU among AIDS cases	x			
IDU in cumulative AIDS cases	x			
Rate of viral hepatitis incidences		x		
Rate of incidences of viral hepatitis A		x		
Rate of incidences of viral hepatitis B		x		
Rate of incidences of viral hepatitis C	x			
Rate of tuberculosis incidences			x	
Rate of syphilis incidences				x
Rate of gonococcal incidences				x
Rate of homicide and intentional injury		x		
Rate of suicide mortality			x	

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 2) and tables (annex 2).

Regarding the General ***Population Epidemiology*** in Hungary, the results show a great variation regarding the EU-mainstream. Data were missing on the *rate of syphilis* as well as on *gonococcal incidences*.

The results concerning *HIV* and *AIDS* - except for the *IDUs among new HIV infections* that ranges in the EU-mainstream – all lie below the EU-mainstream.

Referring to other infectious disease it can be seen that the *rate of incidences of viral Hepatitis C* in Hungary also lies below, but the *rate of tuberculosis* ranges above the mainstream.

Additionally, the *rate of suicide mortality* in Hungary lies above as well.

Interventions Monitoring Hungary in 2005

Variables	100%	>50%	<50%	0%	no data	comments
HIV/ Hepatitis Testing						
HIV testing on admission			x			HIV test on admission are voluntary.
Hepatitis B and/or C testing on admission				x		
HIV testing on release				x		Prisoners can donate blood which is tested for STD's. In case of any positive results the prisoners will be informed.
Hepatitis B and/or C testing on release				x		Prisoners can donate blood which is tested for STD's. In case of any positive results the prisoners will be informed.
Substance use						
Drug testing in prison	x					Predominantly urine tests are used.
- on admission				x		
- before holidays/ weekend leaves				x		
- by suspicion of drug consumption	x					
- per random routine		x				
Prevention						
Needle/ syringe exchange				x		
Availability of condoms				x		
Availability of disinfectants				x		
Possibility of non-supervised visits				x		
Drug free units				x		
Vaccination against Hepatitis B	x					Vaccinations against Hepatitis B are free of charge. They are offered for prisoners pertaining to risk groups.
Care						
Antiviral treatment for Hepatitis C	x					
Antiretroviral treatment for HIV			x			
Brief detoxification with medication			x			
Drug free treatment w. psychosoc. support	x					
Treatment with antagonists				x		
Substitution treatment			x			Substitution maintenance treatment is only possible for detainees who have been under substitution treatment before entering prison.
External drug services		x				
External HIV services			x			
Initiation of substitution treatment			x			
Referral to outside drug services			x			
Education						
Distribution of information material				x		
Counselling by professionals		x				
Peer education			x			
Safer injecting/ safer use training				x		
Education for prison *staff*	x					

Sources: WHO Prison Health Database 2007, EMCDDA Annual Report 2006

As shown in the table above on ***Interventions Monitoring*** in prisons in Hungary, *HIV testing on admission* is conducted in less than 50% of Hungarian prisons, on a voluntary basis. There is no other testing, except in case of blood donation: Prisoners can donate blood which is tested for STD's. In case of any positive results the prisoners will be informed.

Drug testing is applied in all prisons (all prisons take drug tests *by suspicion of drug consumption*, more than 50% of prisons *per random routine)*. None of the prisons take *drug tests on admission* or *before holidays or weekend leaves*.

The only measure of prevention available in Hungarian prisons is *vaccination against Hepatitis B* (free of charge; for prisoners pertaining to risk groups).

Concerning measures of care, *antiviral treatment for Hepatitis C* is offered in all prisons and *antiretroviral treatment for HIV* is offered in less than 50% of prisons. As regards drug related treatment, *drug free treatment* is found in all prisons, whereas less than 50% of prisons offer *brief detoxification with medication* and *substitution treatment* (substitution maintenance treatment is only possible for detainees who have been under substitution treatment before entering prison). Concerning external health services, *drug services* cooperate with more than 50% of Hungarian prisons, but no *external HIV services*. As regards drug related pre-release interventions, the *initiation of substitution treatment* as well as *referral to outside drug services* is offered in less than 50% of all prisons.

Concerning measures to prevent drug related harm and/ or infectious diseases, the *distribution of information material* as well as *safer injecting and safer use training* are not found in any of Hungarian prisons. *Counselling by professionals* is provided in more than 50% and *peer education* in less than 50 % of the prisons. *Education for prison staff* is offered in all prisons.

1.13 Ireland

Penal Statistics Ireland

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Prison population rate		x		
% of female prisoners	x			
% of foreign prisoners		x		
% of prisoners under 18		x		
% of prisoners from 18 to <21			x	
Prison density		x		
% of sentenced prisoners			x	
Sentenced prisoners per inhabitants		x		
% of drug offences		x		
% of sentences <1 year		x		
% of sentences ≥ 5 years and lifetime		x		
Rate of entries per inhabitants			x	
% of entries before final sentence		x		
Average length of imprisonment	x			
% of suicides among total deaths		x		
Mortality rate		x		
Suicide rate		x		
% of treatment staff		x		
% of custodial staff			x	
Rate of prisoners by treatment staff		x		
Rate of prisoners by custodial staff	x			

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 1) and tables (annex 2).

As the first table of 1.13 on ***Penal Statistics*** in Ireland shows there is some variation in the analysed variables compared with the EU-mainstream.

The *percentage of prisoners from 18 to less than 21 years*, the *percentage of sentenced prisoners* and the *rate of entries per inhabitants* are higher than the mainstream.

Regarding the structure of the prison population one can see that there are less *female prisoners* in Irish prisons than in the EU-mainstream. Additionally, the *average length of imprisonment* is lower than the mainstream.

Irish prisons have a higher *percentage of custodial staff* and, correspondingly, a lower *rate of prisoners per custodial staf*f.

General Population Epidemiology Ireland

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Rate of newly diagnosed HIV infections		x		
IDU among new HIV infections			x	
IDU in cumulative new HIV cases			x	
Rate of AIDS incidences		x		
IDU among AIDS cases		x		
IDU in cumulative AIDS cases		x		
Rate of viral hepatitis incidences				x
Rate of incidences of viral hepatitis A		x		
Rate of incidences of viral hepatitis B		x		
Rate of incidences of viral hepatitis C			x	
Rate of tuberculosis incidences		x		
Rate of syphilis incidences			x	
Rate of gonococcal incidences		x		
Rate of homicide and intentional injury				x
Rate of suicide mortality		x		

* Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 2) and tables (annex 2).

While data were missing on the *rate of viral hepatitis incidences* and the *rate of homicide and intentional injury* the results on ***General Population Epidemiology*** show some variation for Ireland regarding the EU-mainstream.

Such as the fact that the *proportion of IDUS among new HIV infections* and the *proportion of IDUs in cumulative new HIV cases* range above the EU-mainstream. Furthermore, the *rate of incidences of viral hepatitis C* and the *rates of syphilis incidences* lie above the mainstream.

Interventions Monitoring Ireland in 2006

Background

With regard to drug treatment in prison, a number of positive developments are reported, such as the introduction of evidence-based methadone treatment services that can be accessed by the majority of opiate-dependent prisoners. Attempts have also been made to vaccinate a significant minority of prisoners against hepatitis B, something that very few prisons, nor, indeed, community health services, have managed. (Irish NR 2005)

Variables	100%	>50%	<50%	0%	no data	comments
HIV/ Hepatitis Testing						
HIV testing on admission					x	testing on request or where clinically indicated with the consent of the individual[6]
Hepatitis B and/or C testing on admission					x	as above[6]
HIV testing on release					x	
Hepatitis B and/or C testing on release					x	
Substance use						
Drug testing in prison						Prison Rules (2007) makes provision for the introduction of mandatory drug testing.
- on admission						
- before holidays/ weekend leaves						
- by suspicion of drug consumption						
- per random routine						In St Patrick's prison, inmates are selected randomly twice a week for urine analysis to ensure they remain drug free (IPS Annual report 2005), which reflects the guidelines from the Irish Prison Health Care standards for inmates undergoing substitution treatment.
Prevention						
Needle/ syringe exchange				x		[4]
Availability of condoms				x		[4]
Availability of disinfectants						in some prisons [5] In no case to date is bleach specifically provided in prison for the purpose of harm reduction. [6]
Possibility of non-supervised visits						yes [4] All visits are supervised. [6]
Drug free units						yes (NR 2005); Policy is that all prison should have a drug-free unit. Implementation depends on resources. [4]
Vaccination against Hepatitis B	x					[4] info from 2001
Care						
Antiviral treatment for Hepatitis C					x	Antiviral treatment is provided where clinically indicated. [6]
Antiretroviral treatment for HIV					x	as above[6]
Brief detoxification with medication						Not brief but progressive detox according to [4] and the Mountjoy Prison in Dublin has the only detoxification unit which provides a six week course involving detoxification and where necessary,

Variables	100%	>50%	<50%	0%	no data	comments
						intensive counselling and psychological support for participants.[3]
Drug free treatment w. psychosoc. support						yes [4]
Treatment with antagonists					x	
Substitution treatment						The total number of inmates who received methadone treatment in 8 prisons in Ireland during 2005 is 1564[6] (1477 in 7 prisons in 2003).
External drug services						Yes, in order to follow the 2001 recommendations which state that same care should be provided in prison as in the community.[1]
External HIV services					x	
Initiation of substitution treatment						Yes (Irish Prison Service, 2005 Annual Report) Methadone. Where there is clear clinical indication and necessity. Undertaken in conjunction with community treatment resources.[4]
Referral to outside drug services					x	
Education						
Distribution of information material					x	occurs in a number of locations through healthcare facilities[6]
Counselling by professionals					x	occurs where resources allow[6]
Peer education					x	
Safer injecting/ safer use training					x	
Education for prison *staff*					x	The Irish Prison Service Health Care Standards manual published in 2004 provides staff with clear guidance regarding health services and facilities required (NR 2006).

Sources: WHO Prison Health Database 2007, EMCDDA Annual Report 2006

1 Irish National report 2006
2 Irish National Report 2005
3 http://www.irishprisons.ie/prisonsItem.asp?prisonID=5
4 An overview study: Assistance to drug users in European Union prisons, EMCDDA 2001.
5 EMCCDA Annual report 2002
6 Enda Dooley, Irish Prison Service, Dublin/Ireland (emdooley@irishprisons.ie)

As shown in the table above, there are very few published data on ***Interventions Monitoring*** in Irish prisons. *Testing of HIV, Hepatitis B and Hepatitis C on admission* is available on request or where clinically indicated with the consent of the individual.

Prison Rules (2007) make provision for the introduction of mandatory *drug testing*. In St Patrick's prison, inmates are selected *randomly* twice a week for urine analysis to ensure they remain drug free (IPS Annual report 2005), which reflects the guidelines from the Irish Prison Health Care standards for inmates undergoing substitution treatment.

The only measure of prevention which is available in all Irish prisons is *vaccination against Hepatitis B. Condoms* and *needle/ syringe exchange* programmes are available in none of them. *Disinfectant* is available in some prisons, but in no case to date is bleach specifically provided in prison for the purpose of harm reduction. *Visits* are possible, but they are all supervised. Policy is that all prisons should have a *drug-free unit*. Implementation depends on resources.

Antiretroviral treatment for HIV and *antiviral treatment for Hepatitis C* are provided where clinically indicated. Concerning drug-related treatments, *brief detoxification with medication* is not available but progressive detoxification. The Mountjoy Prison in Dublin has the only detoxification unit which provides a six week course involving detoxification and, where necessary, intensive counselling and psychological support for participants. *Drug free treatment with psychosocial support* as well as *substitution treatment* are available, at least in some prisons. The total number of inmates who received methadone treatment in eight prisons in Ireland during 2005 is 1564 (1477 in 7 prisons in 2003). There is access to *external drug services,* at least in some prisons, in order to follow the 2001 recommendations which state that same care should be provided in prison as in the community. Concerning drug-related pre-release interventions, *initiation of substitution treatment* (with Methadone) is applied where there is clear clinical indication and necessity, and undertaken in conjunction with community treatment resources.

As regards education measures, *distribution of information material* occurs in a number of prisons through healthcare facilities. *Counselling by professionals* occurs where resources allow. Concerning *education for prison staff,* the Irish Prison Service Health Care Standards manual published in 2004 provides staff with clear guidance regarding health services and facilities required.

1.14 Italy

Penal Statistics Italy

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Prison population rate		x		
% of female prisoners		x		
% of foreign prisoners		x		
% of prisoners under 18				x
% of prisoners from 18 to <21	x			
Prison density			x	
% of sentenced prisoners		x		
Sentenced prisoners per inhabitants		x		
% of drug offences			x	
% of sentences <1 year		x		
% of sentences ≥ 5 years and lifetime			x	
Rate of entries per inhabitants		x		
% of entries before final sentence			x	
Average length of imprisonment		x		
% of suicides among total deaths		x		
Mortality rate		x		
Suicide rate		x		
% of treatment staff		x		
% of custodial staff			x	
Rate of prisoners by treatment staff		x		
Rate of prisoners by custodial staff	x			

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 1) and tables (annex 2).

As the table above on ***Penal Statistics*** shows, most of the analysed variables in Italy lie within the EU-mainstream. Data was missing on the *percentage of prisoners* under 18 years.

The *percentage of prisoners from 18 to 21 years* lies below the mainstream. Furthermore, the *rate of prisoners by custodial staff* lies below the EU-mainstream and correspondingly the *percentage of custodial staff* lies above.

Also above the mainstream ranges the *prison density*. Regarding legal aspects, offences and the degree of penalty, the *percentage of drug offences*, the *percentage of sentences over five years and lifetime sentences,* as well as the *proportion of entries before final sentence* are higher than the mainstream.

General Population Epidemiology Italy

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Rate of newly diagnosed HIV infections		x		
IDU among new HIV infections		x		
IDU in cumulative new HIV cases		x		
Rate of AIDS incidences		x		
IDU among AIDS cases		x		
IDU in cumulative AIDS cases			x	
Rate of viral hepatitis incidences				x
Rate of incidences of viral hepatitis A		x		
Rate of incidences of viral hepatitis B		x		
Rate of incidences of viral hepatitis C	x			
Rate of tuberculosis incidences		x		
Rate of syphilis incidences	x			
Rate of gonococcal incidences	x			
Rate of homicide and intentional injury				x
Rate of suicide mortality	x			

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 2) and tables (annex 2).

In the table above on ***General Population Epidemiology*** in Italy, data was missing on the *rate of viral hepatitis incidences* and on the *rate of homicide and intentional injury*.

Regarding infectious diseases, in Italy the *proportion of IDUs in cumulative AIDS cases* lies above, the *rate of incidences of viral Hepatitis C, syphilis and gonococcal infections* below the EU-mainstream.

Furthermore, the *rate of suicide mortality* ranges in Italy below the mainstream.

Italy: Interventions Monitoring Italy in 2006

Variables	100%	>50%	<50%	0%	no data	comments
HIV/ Hepatitis Testing						
HIV testing on admission					x	
Hepatitis B and/or C testing on admission					x	
HIV testing on release					x	
Hepatitis B and/or C testing on release					x	
Substance use						
Drug testing in prison					x	
- on admission					x	
- before holidays/ weekend leaves					x	
- by suspicion of drug consumption					x	
- per random routine					x	
Prevention						
Needle/ syringe exchange					x	
Availability of condoms					x	
Availability of disinfectants					x	
Possibility of non-supervised visits					x	
Drug free units					x	
Vaccination against Hepatitis B					x	
Care						
Antiviral treatment for Hepatitis C					x	
Antiretroviral treatment for HIV					x	
Brief detoxification with medication					x	
Drug free treatment w. psychosoc. support					x	
Treatment with antagonists					x	
Substitution treatment					x	
External drug services					x	
External HIV services					x	
Initiation of substitution treatment					x	
Referral to outside drug services					x	
Education						
Distribution of information material					x	
Counselling by professionals					x	
Peer education					x	
Safer injecting/ safer use training					x	
Education for prison *staff*					x	

Sources: WHO Prison Health Database 2007, EMCDDA Annual Report 2006

1.15 Latvia

Penal Statistics Latvia

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Prison population rate			x	
% of female prisoners		x		
% of foreign prisoners	x			
% of prisoners under 18			x	
% of prisoners from 18 to <21		x		
Prison density	x			
% of sentenced prisoners		x		
Sentenced prisoners per inhabitants			x	
% of drug offences	x			
% of sentences <1 year	x			
% of sentences ≥ 5 years and lifetime			x	
Rate of entries per inhabitants				x
% of entries before final sentence				x
Average length of imprisonment				x
% of suicides among total deaths		x		
Mortality rate		x		
Suicide rate		x		
% of treatment staff		x		
% of custodial staff		x		
Rate of prisoners by treatment staff		x		
Rate of prisoners by custodial staff			x	

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 1) and tables (annex 2).

Regarding the ***Penal Statistic*** for Latvia no data were found on the *rate of entries per inhabitants,* the *percentage of entries before final sentence* and the *average length of imprisonment.*

The *percentage of foreign prisoners* ranges below the mainstream as well as the *prison density*, the *percentage of drug offence* and the *percentage of sentences under 1 year*.

Correspondingly to the last variable, the *percentage of sentences under 5 years and lifetime* lies above the EU-mainstream, as well as the *prison population rate,* the *percentage under 18* and the sentenced prisoners per inhabitants. Additionally, *the rate of prisoners by custodial staff* relatively high.

General Population Epidemiology Latvia

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Rate of newly diagnosed HIV infections			x	
IDU among new HIV infections			x	
IDU in cumulative new HIV cases			x	
Rate of AIDS incidences			x	
IDU among AIDS cases			x	
IDU in cumulative AIDS cases			x	
Rate of viral hepatitis incidences			x	
Rate of incidences of viral hepatitis A		x		
Rate of incidences of viral hepatitis B			x	
Rate of incidences of viral hepatitis C		x		
Rate of tuberculosis incidences			x	
Rate of syphilis incidences			x	
Rate of gonococcal incidences			x	
Rate of homicide and intentional injury			x	
Rate of suicide mortality			x	

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 2) and tables (annex 2).

Almost all data regarding the ***General Population Epidemiology*** in Latvia lie above the EU-mainstream. Only the *rate of incidences of viral hepatitis A* and *the rate of incidences of viral hepatitis C* range within the EU-mainstream.

Interventions Monitoring Latvia in 2006

Variables	100%	>50%	<50%	0%	no data	comments
HIV/ Hepatitis Testing						
HIV testing on admission	x					voluntary
Hepatitis B and/or C testing on admission			x			testing if a patient wants to be tested and pays for it or if a patient has medical symptoms of acute disease
HIV testing on release			x			on request
Hepatitis B and/or C testing on release			x			on request and not free of charge
Substance use						
Drug testing in prison	x					urine testing predominant
- on admission				x		
- before holidays/ weekend leaves				x		
- by suspicion of drug consumption	x					Most of prisoners are tested.
- per random routine				x		
Prevention						
Needle/ syringe exchange				x		
Availability of condoms	x					not free of charge
Availability of disinfectants				x		
Possibility of non-supervised visits	x					
Drug free units				x		
Vaccination against Hepatitis B	x					Not free of charge; on request. Since Hep. B vaccination is expensive, prisoners rarely request it.
Care						
Antiviral treatment for Hepatitis C				x		
Antiretroviral treatment for HIV	x					32 of 401 HIV+ prisoners are under ARVT on 12/2006; ARVT conducted by specialist from Infectology Center of Latvia (LIC)
Brief detoxification with medication	x					
Drug free treatment w. psychosoc. support	x					
Treatment with antagonists			x			
Substitution treatment				x		
External drug services				x		
External HIV services	x					Prisons send analyses (3-4 times/year) of HIV+ prisoners to LIC and organize the individual consultations for HIV+ and prisoners with AIDS (doctors from LIC).
Initiation of substitution treatment				x		
Referral to outside drug services				x		
Education						
Distribution of information material	x					
Counselling by professionals	x					
Peer education				x		only as pilot projects in the routine
Safer injecting/ safer use training				x		education for guards
Education for prison *staff*	x					

Sources: WHO Prison Health Database 2007, EMCDDA Annual Report 2006

The table above gives information on ***Interventions Monitoring*** in prisons of Latvia.

As regards HIV and Hepatitis testing, only *HIV testing on admission* is offered in all Latvian prisons, on a voluntary basis.

Less than half of prisons offer *Hepatitis testing on admission* (on request and not free of charge, or if medical symptoms of acute disease) and *HIV* (on request) *and Hepatitis testing on release* (on request and not free of charge).

Drug testing by suspicion of drug consumption (urine test predominantly; most of prisoners are tested) is conducted in all Latvian prisons. No other drug testing, i.e. *on admission*, *before holidays/ week end leaves* or *per random routine* is applied.

As measures of prevention *condoms* (not free of charge), *non-supervised visits and vaccination against Hepatitis B* (not free of charge; on request. Since Hep. B vaccination is expensive, prisoners rarely request it) are provided in all prisons. None of the prisons have *needle exchange programmes*, provide *disinfectants* or have *drug free units*.

Antiviral treatment for Hepatitis C is found in none, *antiretroviral treatment for HIV* is found in all Latvian prisons (32 of 401 HIV+ prisoners are under ARVT on 12/2006; ARVT conducted by specialist from Infectology Center of Latvia: LIC). As regards drug related treatment, *brief detoxification with medication* and *drug free treatment with psycho-social support* is offered in all, *treatment with antagonists* in less than 50% of all prisons. *Substitution treatment* is not available in any of Latvian prisons in 2006. *External HIV services* cooperate with all Latvian prisons (Prisons send analyses 3-4 times/year of HIV+ prisoners to LIC and organize the individual consultations for HIV+ and prisoners with AIDS), but *no external drug services*. None of the prisons offer the *initiation of substitution treatment* or *referral to outside drug services*.

Regarding the availability of measures to prevent drug related harm and/ or infectious diseases, the *distribution of information material, counselling by professionals* and *education for prison staff* is given in all, whereas *peer education* as well as *safer injecting and safer use training* (only as pilot projects in the routine education for guards) in none of the Latvian prisons.

1.16 Lithuania

Penal Statistics Lithuania

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Prison population rate			x	
% of female prisoners	x			
% of foreign prisoners	x			
% of prisoners under 18		x		
% of prisoners from 18 to <21		x		
Prison density	x			
% of sentenced prisoners		x		
Sentenced prisoners per inhabitants	x			
% of drug offences	x			
% of sentences <1 year		x		
% of sentences ≥ 5 years and lifetime		x		
Rate of entries per inhabitants			x	
% of entries before final sentence		x		
Average length of imprisonment		x		
% of suicides among total deaths		x		
Mortality rate		x		
Suicide rate		x		
% of treatment staff			x	
% of custodial staff	x			
Rate of prisoners by treatment staff	x			
Rate of prisoners by custodial staff			x	

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 1) and tables (annex 2).

As the first table of 1.16 on ***Penal Statistics*** in Lithuania shows, there is some variation in the analysed variables as regards the EU-mainstream.

Regarding the *structure of prison population* one can see that the *percentage of female prisoners* and foreign prisoners lies below the mainstream, as well as the *percentage of drug offences* and the *prison density*,

The *prison population rate* in Lithuanian prisons lies above the EU-mainstream, as well as the rate of entries per inhabitants but the *sentenced prisoners per inhabitants* are below the mainstream.

Furthermore, the *percentage of treatment staff* ranges above the mainstream and respectively the *number of prisoner by treatment staff* below the mainstream. On the other hand, the *percentage of custodial staff* lies below the mainstream and correspondingly the *rate of prisoners by custodial staff* above it.

General Population Epidemiology Lithuania

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Rate of newly diagnosed HIV infections		x		
IDU among new HIV infections			x	
IDU in cumulative new HIV cases			x	
Rate of AIDS incidences	x			
IDU among AIDS cases			x	
IDU in cumulative AIDS cases		x		
Rate of viral hepatitis incidences		x		
Rate of incidences of viral hepatitis A		x		
Rate of incidences of viral hepatitis B			x	
Rate of incidences of viral hepatitis C		x		
Rate of tuberculosis incidences			x	
Rate of syphilis incidences			x	
Rate of gonococcal incidences		x		
Rate of homicide and intentional injury			x	
Rate of suicide mortality			x	

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 2) and tables (annex 2).

Regarding the ***General Population Epidemiology*** of Lithuania as shown in the second table of 1.16, it is striking that the results on infectious diseases often range above the EU-mainstream.

The *proportion of IDUs among new HIV cases* on the one hand and in *cumulative new HIV cases* on the other both range above the mainstream as well as the *proportion of IDUs among AIDS cases*. But the *rate of AIDS incidences* lies below the EU-mainstream.

Furthermore the rates *of incidences of viral Hepatitis B, tuberculosis* and *syphilis* lie above the mainstream as well as the *rates of homicide and intentional injury* and of *suicide mortality*.

Interventions Monitoring Lithuania in 2006

Variables	100%	>50%	<50%	0%	no data	comments
HIV/ Hepatitis Testing						
HIV testing on admission	x					Currently, according to the effective procedure applied in prisons all incoming and outgoing prisoners are, on a compulsory basis, tested for HIV, also long-term prisoners are screened for HIV on a regular basis. Due to shortage of funds not all prisoners are screened for HBV and HCV. [2]
Hepatitis B and/or C testing on admission	x					Not all prisoners are tested for hepatitis, as there is not a regular procedure like the one for HIV testing. [1]
HIV testing on release						HCV testing is not provided upon admission and/or release, but suggested when suspected due to symptoms or available on request and medically indicated to all people with HIV. [3]
Hepatitis B and/or C testing on release						In Lithuania pre-test counselling is provided by prison medical staff. If a prisoner has a positive HIV test result, counselling is done by a specialist. [1]
Substance use						
Drug testing in prison					x	
- on admission					x	
- before holidays/ weekend leaves					x	
- by suspicion of drug consumption					x	
- per random routine					x	
Prevention						
Needle/ syringe exchange				x		[3]
Availability of condoms						Although the Lithuanian Correctional Affairs Department provides condoms for use during the long visits, they are not provided for general use in the prison. Prisoners can buy condoms from the prison shop. Condoms are provided (about 4 or 5 and free) for each long-term visit.[1]
Availability of disinfectants						in some prisons; information/guidelines how to use are also provided [3]
Possibility of non-supervised visits						Could be inferred from the text on condom availability that such 'long visits' are non-supervised.
Drug free units					x	
Vaccination against Hepatitis B						limited availability in some prisons [3]
Care						
Antiviral treatment for Hepatitis C						In theory should be available in all prisons since 2003. Complicated to start antiviral treatment because liver biopsy should be done and it is not done in prisons. Following tests a person has to sign an agreement, which states that if patient will use drugs, the treatment will be cancelled. [3]
Antiretroviral treatment for HIV					x	
Brief detoxification with medication						Detoxification is not available in Lithuanian prisons, nor are there methadone programmes available for prisoners. [3]

Variables	100%	>50%	<50%	0%	no data	comments
Drug free treatment w. psychosoc. support						Drug treatment programmes in Lithuanian prisons are not as yet established. [3] No formal Lithuanian prison drug strategy existed in 2005. The Correctional Affairs Department is involved in the National Drug Prevention Programme (Director General, Correctional Affairs Department 2003). The main component of the Correctional Affairs Department's response to drugs in prison is to control the supply of drugs getting into the prisons. [1]
Treatment with antagonists						Could be inferred that it does not exist.
Substitution treatment				x		[3]
External drug services						
External HIV services					x	
Initiation of substitution treatment				x		
Referral to outside drug services					x	
Education						
Distribution of information material						According to the Lithuanian Correctional Affairs Department, the medical staff in the prisons provide staff training about communicable diseases, especially after the HIV outbreak at Alytus Correction House. Healthcare institutions provide some lectures and health care departments in the prisons provide some written materials. The provision of information is now done in a more interactive way and information is given to prisoners at reception to the prison via leaflets and posters. Each prison decides the content of the information (Semenaite, Correctional Affairs Department 2003). [1]
Counselling by professionals					x	
Peer education						
Safer injecting/ safer use training				x		[3]
Education for prison *staff*						In Lithuania staff training is a priority for the Correctional Affairs Department and a range of training is being organised to complement the re-organisation of the prisons (Director General, Correctional Affairs Department 2003). [3]

Sources: WHO Prison Health Database 2007, EMCDDA Annual Report 2006

[1] A Study of the Health Care Provision, Existing Drug Services and Strategies Operating in Prisons in Ten Countries from Central and Eastern Europe', MacDonald, 2005

[2] Lithuanian National Report 2006

[3] Hepatitis C among Injecting Drug Users in the New EU Member States and Neighbouring Countries: Situation, Guidelines and Recommendations, CEEHRN, 2007

The table above gives information on ***Interventions Monitoring*** in prisons of Lithuania.

Currently, according to the effective procedure applied in prisons, *all incoming and outgoing prisoners* are, on a compulsory basis, *tested for HIV;* also long-term prisoners are screened for HIV on a regular basis. Not all prisoners are *screened for HBV and HCV,* due to shortage of funds and as there is no regular procedure like the one for HIV testing. *HCV testing* is not provided upon admission and/or release, but suggested when suspected due to symptoms or available on request and medically indicated to all people with HIV. In Lithuania, pre-test counselling is provided by prison medical staff. If a prisoner has a positive HIV test result, counselling is done by a specialist.

As regards measures of prevention, although the Lithuanian Correctional Affairs Department provides *condoms* for use during the long visits, they are not provided for general use in the prison. Prisoners can buy condoms from the prison shop. Condoms are provided (about 4 or 5 and free) for each long-term visit, i.e. *non-supervised visits. Vaccination against Hepatitis B* and *disinfectants* (with guidelines for use) are available in some prisons in Lithuania. None of the prisons have *needle exchange* programmes.

Concerning measures of care, *antiviral treatment for Hepatitis C* in theory should be available in all prisons since 2003. However, it is complicated to start antiviral treatment because liver biopsy should be done and it is not done in prisons. Following tests, a person has to sign an agreement, which states that if patient will use drugs, the treatment will be cancelled. As regards drug related treatments, *detoxification* is not available in Lithuanian prisons, nor are there methadone programmes (i.e. *substitution treatments*) available for prisoners. Drug treatment programmes in Lithuanian prisons are not as yet established. No formal Lithuanian prison drug strategy existed in 2005. The Correctional Affairs Department is involved in the National Drug Prevention Programme (Director General, Correctional Affairs Department 2003). The main component of the Correctional Affairs Department's response to drugs in prison is to control the supply of drugs getting into the prisons. None of the prisons provide the *initiation of substitution treatment.*

Regarding the availability of measures to prevent drug related harm and/or infectious diseases, according to the Lithuanian Correctional Affairs Department, the medical staff in the prisons provide *staff training* about communicable diseases, especially after the HIV outbreak at Alytus Correction House. Healthcare institutions provide some *lectures* and health care departments in the prisons provide some *written materials*. The provision of information is now done in a more interactive way and *information is given to prisoners at reception to the prison via leaflets and posters*. Each prison decides the content of the information (Semenaite, Correctional Affairs Department 2003). *Safer injecting and safer use training* is not provided in any of the Lithuanian prisons.

1.17 Luxembourg

Penal Statistics Luxembourg

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Prison population rate		x		
% of female prisoners	x			
% of foreign prisoners			x	
% of prisoners under 18		x		
% of prisoners from 18 to <21		x		
Prison density	x			
% of sentenced prisoners	x			
Sentenced prisoners per inhabitants	x			
% of drug offences		x		
% of sentences <1 year		x		
% of sentences ≥ 5 years and lifetime			x	
Rate of entries per inhabitants		x		
% of entries before final sentence	x			
Average length of imprisonment		x		
% of suicides among total deaths				x
Mortality rate				x
Suicide rate				x
% of treatment staff		x		
% of custodial staff		x		
Rate of prisoners by treatment staff		x		
Rate of prisoners by custodial staff		x		

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 1) and tables (annex 2).

As the first table of 1.17 on ***Penal Statistics*** in Luxemburg shows, there is some variation in the analysed variables as regards the EU-mainstream. Data was missing on the *percentage of suicides among total deaths*, the *mortality* and the *suicide rate.*

As regards the prisoner structure, the *percentage of female prisoners* lies below the mainstream while the *percentage of foreign prisoners* ranges above.

Furthermore, the *prison density*, the *percentage of sentenced prisoners* and *the rate of sentenced prisoners* per inhabitants range below the mainstream as well as the *percentage of entries before final sentence*.

Finally, the *percentage of sentences over five years and lifetime sentences* is relatively high.

General Population Epidemiology Luxembourg

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Rate of newly diagnosed HIV infections			x	
IDU among new HIV infections		x		
IDU in cumulative new HIV cases		x		
Rate of AIDS incidences		x		
IDU among AIDS cases		x		
IDU in cumulative AIDS cases		x		
Rate of viral hepatitis incidences		x		
Rate of incidences of viral hepatitis A		x		
Rate of incidences of viral hepatitis B	x			
Rate of incidences of viral hepatitis C	x			
Rate of tuberculosis incidences		x		
Rate of syphilis incidences		x		
Rate of gonococcal incidences	x			
Rate of homicide and intentional injury	x			
Rate of suicide mortality		x		

* Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 2) and tables (annex 2).

As shown in the table above on ***General Population Epidemiology*** in Luxemburg, most of the analysed variables lie within the EU-mainstream.

While only the *rate of newly diagnosed HIV infections* lies above the mainstream, the *rates of Hepatitis B* and *C* and the *rate of gonococcal incidences* lie below it. Furthermore the *rate of homicide an intentional injury* is relatively low.

Interventions Monitoring Luxembourg in 2006

Variables	100%	>50%	<50%	0%	no data	comments
HIV/ Hepatitis Testing[1]						
HIV testing on admission		x				all tests are voluntary
Hepatitis B and/or C testing on admission		x				all tests are voluntary
HIV testing on release			x			all tests are voluntary
Hepatitis B and/or C testing on release			x			all tests are voluntary
Substance use[2]						
Drug testing in prison	x					
- on admission		x				these tests are voluntary
- before holidays/ weekend leaves			x			
- by suspicion of drug consumption	x					
- per random routine				x		
Prevention[2]						
Needle/ syringe exchange			x			officially introduced in March 2006
Availability of condoms	x					
Availability of disinfectants	x					
Possibility of non-supervised visits				x		
Drug free units				x		
Vaccination against Hepatitis B	x					voluntary
Care[2]						
Antiviral treatment for Hepatitis C	x					
Antiretroviral treatment for HIV	x					
Brief detoxification with medication			x			
Drug free treatment w. psychosoc. support			x			
Treatment with antagonists				x		
Substitution treatment	x					
External drug services	x					
External HIV services	x					
Initiation of substitution treatment	x					
Referral to outside drug services	x					contacts are informal
Education[2]						
Distribution of information material	x					
Counselling by professionals	x					
Peer education			x			
Safer injecting/ safer use training			x			
Education for prison *staff*	x					

Sources: [1] WHO Prison Health Database 2007, EMCDDA Annual Report 2006

[2] estimated and/or commented by Carlo Reuland, Luxembourg Prison (carlo.reuland@apsch.etat.lu)

As the table above on ***Interventions Monitoring*** in Luxembourg prisons shows, over 50% of all Luxembourg prisons conduct *HIV, Hepatitis B, and Hepatitis C testing on admission*, whereas in less than half of all prisons, these tests are also conducted *on release*. All these tests are voluntary.

As regards *drug testing in prison*, all prison take tests *by suspicion of drug consumption*, more than 50% of prisons take tests *on admission* (on a voluntary basis), less than 50% *before holidays/ weekend leaves* and none of the prisons take tests *per random routine*.

Concerning prevention measures, *condoms*, *disinfectant* and *vaccination against Hep B* (voluntary) are available in all prisons in Luxemburg, whereas *non-supervised visits* and *drug free units* are not available at all. *Needle/ syringe exchange* has been officially introduced in March 2006 in Luxemburg prisons and is available to less than 50% of prisoners.

Antiviral treatment for Hepatitis C and *antiretroviral treatment for HIV* are offered in all prisons. Concerning drug related treatments, *brief detoxification with medication* and *drug free treatment with psychosocial support* are found in less than 50% of prisons, whereas *treatment with antagonists* in none and *substitution treatment* all prisons. *External drug services* and *external HIV services* are cooperating with all prisons in Luxemburg. Concerning drug-related pre-release interventions, *initiation of substitution treatment* and *referral to outside drug services* are applied in all prisons.

As regards education measures, *distribution of information material, counselling by professionals* and *education for prison staff* are measures to be found in all prisons, whereas *peer education* and *safer injecting/ safer use training* in less than 50% of prisons.

1.18 Malta

Penal Statistics Malta

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Prison population rate	x			
% of female prisoners		x		
% of foreign prisoners		x		
% of prisoners under 18		x		
% of prisoners from 18 to <21	x			
Prison density	x			
% of sentenced prisoners		x		
Sentenced prisoners per inhabitants	x			
% of drug offences			x	
% of sentences <1 year		x		
% of sentences ≥ 5 years and lifetime			x	
Rate of entries per inhabitants		x		
% of entries before final sentence			x	
Average length of imprisonment		x		
% of suicides among total deaths				x
Mortality rate	x			
Suicide rate	x			
% of treatment staff		x		
% of custodial staff		x		
Rate of prisoners by treatment staff	x			
Rate of prisoners by custodial staff	x			

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 1) and tables (annex 2).

Regarding the ***Penal Statistics*** for Malta, variation is found across the analysed variables. Only for the *percentage of suicides among total deaths* no data are available.

The *percentage of sentences due to drug offences*, of *sentenced prisoners by length of sentences more than five years and lifetime* and the *percentage of entries before final sentence* range above the EU-mainstream.

The *prison population rate*, the *percentage of prisoners from 18 to 21 years*, the *prison density* and the *rate of sentenced prisoners per 100 000 inhabitants* are below the mainstream as well as the *mortality* and the *suicide rate* and the *rate of prisoners by treatment* and *by custodial staff*.

General Population Epidemiology Malta

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Rate of newly diagnosed HIV infections		x		
IDU among new HIV infections	x			
IDU in cumulative new HIV cases		x		
Rate of AIDS incidences		x		
IDU among AIDS cases	x			
IDU in cumulative AIDS cases	x			
Rate of viral hepatitis incidences	x			
Rate of incidences of viral hepatitis A	x			
Rate of incidences of viral hepatitis B		x		
Rate of incidences of viral hepatitis C	x			
Rate of tuberculosis incidences	x			
Rate of syphilis incidences		x		
Rate of gonococcal incidences		x		
Rate of homicide and intentional injury		x		
Rate of suicide mortality	x			

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 2) and tables (annex 2).

Regarding the ***General Population Epidemiology*** for Malta nearly half of the variables range within the EU-mainstream while the other lie below the mainstream.

The *IDUs among the newly diagnosed HIV infections* and *among the AIDS cases* like the *IDUs in cumulative AIDS cases* lie below the mainstream. With exception of the *rate of incidences of viral hepatitis B* all other *rates of hepatitis incidences* range below the EU-mainstream. Likewise the *rate of tuberculosis incidences* and the *of suicide mortality* lie below the mainstream.

Interventions Monitoring Malta in 2006

Variables	100%	>50%	<50%	0%	no data	comments
HIV/ Hepatitis Testing						
HIV testing on admission	x					tests on admission are voluntary
Hepatitis B and/or C testing on admission	x					
HIV testing on release				x		
Hepatitis B and/or C testing on release				x		
Substance use						
Drug testing in prison	x					predominantly urine tests
- on admission	x					
- before holidays/ weekend leaves	x					
- by suspicion of drug consumption	x					
- per random routine	x					
Prevention						
Needle/ syringe exchange				x		
Availability of condoms				x		
Availability of disinfectants	x					only liquid bleach available
Possibility of non-supervised visits	x					
Drug free units				x		
Vaccination against Hepatitis B				x		
Care						
Antiviral treatment for Hepatitis C				x		Data on 'care' is from 2005
Antiretroviral treatment for HIV	x					
Brief detoxification with medication	x					
Drug free treatment w. psychosoc. support				x		
Treatment with antagonists				x		
Substitution treatment	x					
External drug services	x					
External HIV services	x					
Initiation of substitution treatment				x		
Referral to outside drug services	x					
Education						
Distribution of information material				x		
Counselling by professionals	x					
Peer education				x		
Safer injecting/ safer use training				x		
Education for prison *staff*	x					during training before deployment . No in-service training is done so far

Sources: WHO Prison Health Database 2007, EMCDDA Annual Report 2006

The table above gives information on ***Interventions Monitoring*** in prisons of Malta.

HIV, Hepatitis B and C testing is provided on a voluntary basis to all Maltese prisoners *on admission*, but not *on release*.

Regarding the drug testing practice, *drug tests on admission, before holidays and weekend leaves, by suspicion of drug consumption* and *per random routine* are performed in all Maltese prisons.

As regards measures of prevention, *disinfectant* (liquid bleach) is provided in all Maltese prisons and the *possibility of non-supervised visits* as well, but no other preventive measure listed in the table above.

Concerning measures of care in 2005, *antiretroviral treatment for HIV* is given in all Maltese prisons, but no *treatment for Hepatitis C*. Regarding drug-related treatments, *brief detoxification with medication* and *substitution treatment* are provided in all prisons, but no other treatment listed. *External drug* and *HIV services* cooperate with all Maltese prisons. As concerns drug-related pre-release interventions, *referral to outside drug services* is provided in all prisons, but no *initiation of substitution treatment*.

As regards measures to prevent drug related harm and infectious diseases, *counselling by professionals* is provided to prisoners in all prisons, but no other listed measure. Additionally, *education for prison staff* is offered in all Maltese prisons as well (during training before deployment; no in-service training is done so far).

1.19 Netherlands

Penal Statistics Netherlands

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Prison population rate		x		
% of female prisoners		x		
% of foreign prisoners		x		
% of prisoners under 18	x			
% of prisoners from 18 to <21		x		
Prison density		x		
% of sentenced prisoners	x			
Sentenced prisoners per inhabitants	x			
% of drug offences		x		
% of sentences <1 year			x	
% of sentences ≥ 5 years and lifetime	x			
Rate of entries per inhabitants		x		
% of entries before final sentence		x		
Average length of imprisonment		x		
% of suicides among total deaths				x
Mortality rate				x
Suicide rate		x		
% of treatment staff		x		
% of custodial staff		x		
Rate of prisoners by treatment staff		x		
Rate of prisoners by custodial staff		x		

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 1) and tables (annex 2).

Regarding the ***Penal Statistics*** for the Netherlands the majority of the analysed variables range within the EU-mainstream, no data are available for the *percentage of suicides among total deaths* and for the *mortality rate*.

Only the *percentage of sentenced prisoners by length of sentence less than one year* lies above the EU-mainstream and correspondingly the *percentage of sentenced prisoners by length of sentence more than 5 years and lifetime* below it. Also lower than the mainstream are the *percentage of prisoners under 18 years*, the *percentage of sentenced prisoners* and the *rate of sentenced prisoners per 100 000 inhabitants*.

General Population Epidemiology Netherlands

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Rate of newly diagnosed HIV infections		x		
IDU among new HIV infections		x		
IDU in cumulative new HIV cases		x		
Rate of AIDS incidences		x		
IDU among AIDS cases		x		
IDU in cumulative AIDS cases		x		
Rate of viral hepatitis incidences		x		
Rate of incidences of viral hepatitis A		x		
Rate of incidences of viral hepatitis B			x	
Rate of incidences of viral hepatitis C	x			
Rate of tuberculosis incidences		x		
Rate of syphilis incidences				x
Rate of gonococcal incidences				x
Rate of homicide and intentional injury		x		
Rate of suicide mortality		x		

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 2) and tables (annex 2).

For the Netherlands most of the analysed variables regarding the ***General Population Epidemiology*** ranges within the EU-mainstream. No data is given for the *rate of syphilis incidences* and for the *rate of gonococcal incidences*.

While the *rate of incidences of viral hepatitis B* lies above the EU-mainstream, the *rate of incidences of viral hepatitis C* lies below it.

Interventions Monitoring Netherlands in 2006

Variables✓	100%	>50%	<50%	0%	no data	comments
HIV/ Hepatitis Testing						
HIV testing on admission*		x				Tests on admission and/or during the detention period are mandatory for all risk groups (drug users, persons with STD's, prostitutes and their clients). Any prisoner who wants an HIV test can ask for it at any time, not only on admission but also during their stay in prison. The test will be done after pre-test counselling (informed consent).
Hepatitis B and/or C testing on admission			x			
HIV testing on release				x		
Hepatitis B and/or C testing on release				x		
Substance use						
Drug testing in prison	x					predominantly urine tests are used
- on admission		x				
- before holidays/ weekend leaves		x				
- by suspicion of drug consumption	x					
- per random routine	x					
Prevention						
Needle/ syringe exchange				x		
Availability of condoms	x					condoms are available free of charge
Availability of disinfectants				x		
Possibility of non-supervised visits	x					
Drug free units			x			in some prison facilities drug users can participate in resocialisation programmes in Drug-free Addict Support Units.
Vaccination against Hepatitis B		x				vaccinations against Hepatitis B are free of charge. They are offered to prisoners pertaining to risk groups
Care						
Antiviral treatment for Hepatitis C	x					
Antiretroviral treatment for HIV	x					
Brief detoxification with medication					x	
Drug free treatment w. psychosoc. support	x					
Treatment with antagonists					x	
Substitution treatment	x					Substitution maintenance is only possible for detainees who have been under substitution treatment before entering prison. Start of substitution maintenance is only possible on medical indication and if aftercare/continuity of care is guaranteed.*
External drug services	x					
External HIV services			x			
Initiation of substitution treatment	x					
Referral to outside drug services	x					
Education						
Distribution of information material	x					
Counselling by professionals	x					
Peer education				x		
Safer injecting/ safer use training				x		
Education for prison *staff*	x					

Sources: WHO Prison Health Database 2007, EMCDDA Annual Report 2006

* commented by Gerda van't Hoff, Ministry of Justice, The Hague/Netherlands (g.van.t.hoff@dji.minjus.nl)

The table above gives information on ***Interventions Monitoring*** in prisons of the Netherlands.

HIV tests on admission and/or during the detention period are mandatory for all risk groups (drug users, persons with STD's, prostitutes and their clients). Any prisoner who wants an HIV test can ask for it at any time, not only on admission but also during their stay in prison. The test will be done after pre-test counselling (informed consent). *Hepatitis B and/or C testing on admission* is performed for less than half of the Dutch prison population. No tests are performed routinely *on release*.

In all Dutch prisons, *drug tests* (urine tests predominantly) are taken by *suspicion of drug consumption* and *per random routine*; in more than half of the prisons, *drug testing* is performed *on admission* and *before holidays and weekend leaves.*

As regards measures of prevention, *condoms* are available free of charge in all Dutch prisons and *non-supervised visits* are possible in all prisons as well. *Vaccinations against Hepatitis B* are free of charge. They are offered to prisoners pertaining to risk groups. In some prison facilities, drug users can participate in re-socialisation programmes in *Drug-free Addict Support Units*. *Disinfectants* and *needle/syringe exchange* are not available in any of the Dutch prisons.

Antiviral treatment for Hepatitis C and *antiretroviral treatment for HIV* are provided in all Dutch prisons. Regarding drug-related treatments, *drug free treatment with psychosocial support* and *substitution treatment* are offered in all prisons as well. Substitution maintenance is possible for detainees who have been under substitution treatment before entering prison. Start of substitution maintenance is only possible on medical indication and if aftercare/continuity of care is guaranteed. All prisoners in the Netherlands have access to *external drug services*, but less than half of Dutch prisons offer access to *external HIV services.* Concerning drug-related pre-release interventions, both *initiation of substitution treatment* and *referral to outside drug services* are possible in all Dutch prisons.

Concerning measures to prevent drug-related harm and infectious diseases, *education for prison staff,* the *distribution of information material* and *counselling by professionals* is given in all, whereas *safer injecting/ safer use training* and *peer education* in none of the Dutch prisons.

1.20 Poland

Penal Statistics Poland

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Prison population rate			x	
% of female prisoners	x			
% of foreign prisoners	x			
% of prisoners under 18				x
% of prisoners from 18 to <21				x
Prison density		x		
% of sentenced prisoners		x		
Sentenced prisoners per inhabitants			x	
% of drug offences				x
% of sentences <1 year				x
% of sentences ≥ 5 years and lifetime				x
Rate of entries per inhabitants		x		
% of entries before final sentence		x		
Average length of imprisonment		x		
% of suicides among total deaths		x		
Mortality rate		x		
Suicide rate	x			
% of treatment staff			x	
% of custodial staff	x			
Rate of prisoners by treatment staff		x		
Rate of prisoners by custodial staff			x	

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 1) and tables (annex 2).

There is great variation found for the data regarding the ***Penal Statistics*** for Poland. Less than half of the analysed variables range within the EU-mainstream. No information is given about the *percentage of prisoners under 18* and *from 18 to 21 years*. As well there is no data available for the *percentage of sentences due to drug offences*, of the *sentences less than one year* and *more than five years and lifetime*.

The *prison population rate*, the *rate of sentenced prisoners per 100 000 inhabitants*, the *percentage of treatment staff* and the *rate of prisoners by custodial staff* range above the EU-mainstream.

Correspondingly the *percentage of custodial staff* lies below the mainstream, as well as the *percentage of female prisoners* and *of foreign prisoners* and the *suicide rate.*

General Population Epidemiology Poland

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Rate of newly diagnosed HIV infections	x			
IDU among new HIV infections			x	
IDU in cumulative new HIV cases			x	
Rate of AIDS incidences	x			
IDU among AIDS cases			x	
IDU in cumulative AIDS cases			x	
Rate of viral hepatitis incidences		x		
Rate of incidences of viral hepatitis A		x		
Rate of incidences of viral hepatitis B		x		
Rate of incidences of viral hepatitis C		x		
Rate of tuberculosis incidences	x			
Rate of syphilis incidences		x		
Rate of gonococcal incidences	x			
Rate of homicide and intentional injury		x		
Rate of suicide mortality		x		

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 2) and tables (annex 2).

Regarding the ***General Population Epidemiology*** for Poland the data are for less than half of the variables within the EU-mainstream.

While the *IDUs among new HIV infections* and *among AIDS cases* as well as the *IDUs in cumulative new HIV cases* and *in cumulative AIDS cases* lie above the EU-mainstream, the *rate of newly diagnosed HIV infections* and the *rate of AIDS incidences* lie below the EU-mainstream.

The *rate of tuberculosis* and the *rate of gonococcal incidences* range as well below the mainstream.

Interventions Monitoring Poland in 2007

Variables	100%	>50%	<50%	0%	no data	comments
HIV/ Hepatitis Testing						
HIV testing on admission			x			HIV tests on admission are voluntary
Hepatitis B and/or C testing on admission				x		
HIV testing on release				x		
Hepatitis B and/or C testing on release				x		
Substance use						
Drug testing in prison			x			predominantly urine tests are used
- on admission					x	
- before holidays/ weekend leaves					x	
- by suspicion of drug consumption*	x					
- per random routine*			x			
Prevention						
Needle/ syringe exchange				x		
Availability of condoms*			x			condoms are available free of charge
Availability of disinfectants				x		
Possibility of non-supervised visits			x			
Drug free units			x			
Vaccination against Hepatitis B*			x			
Care						
Antiviral treatment for Hepatitis C			x			
Antiretroviral treatment for HIV	x					
Brief detoxification with medication			x			
Drug free treatment w. psychosoc. support			x			
Treatment with antagonists					x	
Substitution treatment			x			substitution maintenance is only possible for detainees who have been under substitution treatment before entering prison
External drug services			x			
External HIV services				x		
Initiation of substitution treatment				x		
Referral to outside drug services				x		
Education						
Distribution of information material	x					
Counselling by professionals	x					
Peer education*				x		
Safer injecting/ safer use training				x		
Education for prison *staff**			x			

Sources: WHO Prison Health Database 2007, EMCDDA Annual Report 2006

* reviewed and own estimations by Wojciech Rudalski, Warsaw Branch of Polish Health Education Society, Poland (rudalski@poczta.onet.pl)

Information on ***Interventions Monitoring*** in prisons of Poland are given in the table above.

As regards HIV and Hepatitis testing, *HIV tests on admission* are offered on a voluntary basis in less than 50% of all Polish prisons.

As regards *drug testing*, it is applied *by suspicion of drug consumption* in all and *per random routine* in less than half of Polish prisons.

Concerning measures of prevention, *condoms* (free of charge), the possibility of *non-supervised visits, drug free units* and *vaccination against Hepatitis B* are available in less than 50% of all prisons. *Needle/syringe exchange* and *disinfectants* are not provided in any of the prisons in Poland.

Regarding care, *antiretroviral treatment for HIV* is provided in all and *antiviral treatment for Hepatitis C* in less than half of Polish prisons. As regards drug-related treatments, *brief detoxification with medication, drug free treatment with psycho-social support* and *substitution treatment* are offered in less than 50% of prisons, whereas *treatment with antagonists,* not at all. Substitution maintenance is only possible for detainees who have been under substitution treatment before entering prison. Concerning external health services, *external drug services* cooperate with less than half of Polish prisons and *external HIV services*, not at all. Regarding drug-related pre-release interventions, the *initiation of substitution treatment* and the *referral to outside drug services* is not provided in any of the prisons in Poland.

Concerning measures to prevent drug-related harm and/or infectious diseases, *distribution of information material* and *counselling by professionals* are offered in all Polish penal institutions, whereas *education for prison staff,* only in less than half of them. *Peer education* and *safer injecting / safer use training* are not provided at all.

1.21 Portugal

Penal Statistics Portugal

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Prison population rate		x		
% of female prisoners			x	
% of foreign prisoners		x		
% of prisoners under 18		x		
% of prisoners from 18 to <21		x		
Prison density		x		
% of sentenced prisoners		x		
Sentenced prisoners per inhabitants		x		
% of drug offences			x	
% of sentences <1 year	x			
% of sentences ≥ 5 years and lifetime		x		
Rate of entries per inhabitants	x			
% of entries before final sentence			x	
Average length of imprisonment			x	
% of suicides among total deaths		x		
Mortality rate			x	
Suicide rate		x		
% of treatment staff		x		
% of custodial staff		x		
Rate of prisoners by treatment staff		x		
Rate of prisoners by custodial staff		x		

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 1) and tables (annex 2).

Regarding the ***Penal Statistics*** for Portugal the majority of the analysed variables range within the EU-mainstream.

Only the *percentage of sentenced prisoners by length of sentence less than one year* and the *rate of entries per 100 000 inhabitants* lies below the EU-mainstream.

The *percentage of female prisoners*, the *percentage of sentences due to drug offences* and of *entries before final sentence* range above the mainstream. The *average of imprisonment* and the *mortality rate* also lie above the EU-mainstream.

General Population Epidemiology Portugal

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Rate of newly diagnosed HIV infections		x		
IDU among new HIV infections			x	
IDU in cumulative new HIV cases			x	
Rate of AIDS incidences			x	
IDU among AIDS cases			x	
IDU in cumulative AIDS cases			x	
Rate of viral hepatitis incidences	x			
Rate of incidences of viral hepatitis A		x		
Rate of incidences of viral hepatitis B		x		
Rate of incidences of viral hepatitis C	x			
Rate of tuberculosis incidences			x	
Rate of syphilis incidences		x		
Rate of gonococcal incidences	x			
Rate of homicide and intentional injury		x		
Rate of suicide mortality		x		

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 2) and tables (annex 2).

Regarding the ***General Population Epidemiology*** for Portugal less than the half of the analysed variables are within the EU-mainstream.

On the one hand, the *rate of viral hepatitis incidences*, and of the *incidences of viral hepatitis C* like the *rate of gonococcal incidences* lie below the EU-mainstream.

On the other hand, the *IDUs among newly diagnosed HIV infections* and *among AIDS incidences* like the *IDUs in cumulative new HIV cases* and in *cumulative AIDS cases* and the *rate of AIDS incidences* lie above the mainstream. Also the *rate of tuberculosis incidences* ranges above the EU-mainstream.

Interventions Monitoring Portugal in 2006

Variables	100%	>50%	<50%	0%	no data	comments
HIV/ Hepatitis Testing						
HIV testing on admission		x				tests on admission are voluntary
Hepatitis B and/or C testing on admission		x				tests on admission are voluntary
HIV testing on release					x	
Hepatitis B and/or C testing on release					x	
Substance use						
Drug testing in prison			x			predominantly urine tests are used
- on admission					x	
- before holidays/ weekend leaves			x			
- by suspicion of drug consumption			x			
- per random routine			x			
Prevention						
Needle/ syringe exchange				x		
Availability of condoms	x					condoms are available free of charge
Availability of disinfectants		x				only liquid bleach available
Possibility of non-supervised visits			x			
Drug free units			x			
Vaccination against Hepatitis B	x					vaccinations against Hepatitis B are free of charge
Care						
Antiviral treatment for Hepatitis C	x					
Antiretroviral treatment for HIV	x					
Brief detoxification with medication					x	
Drug free treatment w. psychosoc. support			x			
Treatment with antagonists	x					
Substitution treatment	x					Substitution maintenance is possible for all detainees who were under substitution treatment before entering prison; in 7 prisons, ST can start after entering prison.
External drug services			x			
External HIV services			x			
Initiation of substitution treatment			x			
Referral to outside drug services			x			
Education						
Distribution of information material		x				
Counselling by professionals		x				
Peer education				x		
Safer injecting/ safer use training				x		
Education for prison *staff*			x			

Sources: WHO Prison Health Database 2007, EMCDDA Annual Report 2006

Information on ***Interventions Monitoring*** in prisons of Portugal are given in the table above.

HIV, Hepatitis B and/or C testing on admission is available to more than half of the Portuguese prison population, on a voluntary basis.

Drug testing takes place in less than half of the prisons, *before holidays/ weekend leaves, by suspicion of drug consumption* and *per random routine.*

As regards prevention, *condoms* are available in all Portuguese prisons, so is *vaccination against Hepatitis B,* both of them free of charge. *Disinfectant* (liquid bleach) is available in more than half of the prisons. Less than half of the prisons provide *non-supervised visits* and *drug free units*. *Needle/ syringe exchange* programmes do not exist.

Antiviral treatment for Hepatitis C and *antiretroviral treatment for HIV* are provided in all Portuguese prisons. Concerning drug-related treatments, *treatment with antagonists* and *substitution treatment* are offered in all prisons. Substitution maintenance is possible for all detainees who were under substitution treatment before entering prison; in seven prisons, substitution treatment can start after entering prison. *Drug free treatment with psychosocial support* is available in less than half of the prisons. As regards external health services, *external drug services* and *external HIV services* cooperate with less than half of Portuguese prisons. Concerning drug-related pre-release interventions, *initiation of substitution treatment* and *referral to outside drug services* are possible in less than half of the prisons.

As regards measures to prevent drug-related harm and/or infectious diseases, the *distribution of information material* and *counselling by professionals* are found in more than half of all penal institutions in Portugal, and *education for prison staff* is provided in less than half of them. *Peer education* and *safer use/ safer injecting training* is offered in none of the prisons.

1.22 Romania

Penal Statistics Romania

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Prison population rate			x	
% of female prisoners		x		
% of foreign prisoners	x			
% of prisoners under 18		x		
% of prisoners from 18 to <21		x		
Prison density		x		
% of sentenced prisoners			x	
Sentenced prisoners per inhabitants			x	
% of drug offences	x			
% of sentences <1 year	x			
% of sentences ≥ 5 years and lifetime			x	
Rate of entries per inhabitants		x		
% of entries before final sentence				x
Average length of imprisonment			x	
% of suicides among total deaths	x			
Mortality rate		x		
Suicide rate	x			
% of treatment staff		x		
% of custodial staff		x		
Rate of prisoners by treatment staff		x		
Rate of prisoners by custodial staff			x	

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 1) and tables (annex 2).

In Romania the data regarding the ***Penal Statistics*** vary across the analysed variables from the EU-mainstream. No data is available regarding the *percentage of entries before final sentence*.

The *prison population rate* ranges above the EU-mainstream, as well as both the *percentage of sentenced prisoners* and the *rate of sentenced prisoners per 100 000 inhabitants*. Also relatively high are the *rate of prisoners by custodial staff*, the *average length of imprisonment* and the *percentage of sentences more than 5 years and lifetime.*

Correspondingly, the *percentage of sentences less than 1 year* is lower than the EU-mainstream. Also the *percentage of final sentences due to drug offences* and the *percentage of foreign prisoners* lies below. Finally, like the *percentage of suicides among total deaths* the suicide *rate* ranges below the EU-mainstream.

General Population Epidemiology Romania

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Rate of newly diagnosed HIV infections	x			
IDU among new HIV infections	x			
IDU in cumulative new HIV cases	x			
Rate of AIDS incidences		x		
IDU among AIDS cases	x			
IDU in cumulative AIDS cases	x			
Rate of viral hepatitis incidences			x	
Rate of incidences of viral hepatitis A			x	
Rate of incidences of viral hepatitis B			x	
Rate of incidences of viral hepatitis C	x			
Rate of tuberculosis incidences			x	
Rate of syphilis incidences			x	
Rate of gonococcal incidences		x		
Rate of homicide and intentional injury			x	
Rate of suicide mortality		x		

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 2) and tables (annex 2).

Regarding the ***General Population Epidemiology*** for Romania only the *rate of AIDS incidences*, the *rate of gonococcal incidences* and the *rate of suicide mortality* ranges in the EU-mainstream.

As well as the *rate of newly diagnosed HIV infections*, the *IDUs among new HIV cases* and the *proportion of IDUs among cumulative new HIV* cases, the *IDUs among the AIDS cases* and the *IDUs in cumulative AIDS cases* lies below the EU-mainstream.

While only the *rate of incidences of viral hepatitis C* lies below the mainstream, the *rate of viral hepatitis incidences* as well as the *rates of incidences of viral hepatitis A* and *B* range above the it. Additionally, the *rate of tuberculosis and of syphilis incidences* is high compared to the EU-mainstream, as well as the *rate of homicide and intentional injury*.

Interventions Monitoring Romania in 2006

Variables	100%	>50%	<50%	0%	no data	comments
HIV/ Hepatitis Testing						
HIV testing on admission				x		
Hepatitis B and/or C testing on admission				x		
HIV testing on release				x		
Hepatitis B and/or C testing on release				x		
Substance use						
Drug testing in prison	x					predominantly urine tests are used
- on admission					x	
- before holidays/ weekend leaves					x	
- by suspicion of drug consumption	x					
- per random routine					x	
Prevention						
Needle/ syringe exchange				x		
Availability of condoms	x					condoms are available free of charge
Availability of disinfectants				x		
Possibility of non-supervised visits	x					
Drug free units				x		
Vaccination against Hepatitis B				x		
Care						
Antiviral treatment for Hepatitis C	x					
Antiretroviral treatment for HIV	x					
Brief detoxification with medication			x			
Drug free treatment w. psychosoc. support			x			
Treatment with antagonists				x		
Substitution treatment				x		
External drug services	x					
External HIV services		x				
Initiation of substitution treatment				x		
Referral to outside drug services				x		
Education						
Distribution of information material	x					
Counselling by professionals	x					
Peer education		x				
Safer injecting/ safer use training		x				
Education for prison *staff*	x					

Sources: WHO Prison Health Database 2007, EMCDDA Annual Report 2006

The table above gives information on ***Interventions Monitoring*** in prisons of Romania.

In Romanian prisons, there are neither *HIV nor Hepatitis tests* provided. *Drug tests* are carried out *by suspicion of drug consumption* in all prisons.

Concerning measures of prevention, *condoms* are available free of charge in all prisons and *non-supervised visits* are possible in all prisons as well. No other listed measure is available.

As regards measures of care, *antiviral treatment of Hepatitis C* and *antiretroviral treatment for HIV* are offered in all Romanian prisons. Concerning drug related treatments, *brief detoxification with medication* and *drug-free treatment with psychosocial support* are provided in less than half of Romanian penal institutions. There is no other listed drug related treatment.

In all Romanian prisons, there is access to *external drug services*, and in more than half of the prisons, to *external HIV services.* None of the *pre-release interventions* listed in the table above are to be found in Romanian penal institutions.

As regards measures to prevent drug related harm and/or infectious diseases, *education for prison staff* as well as *distribution of information material* and *counselling by professionals* are found in all Romanian prisons, while *peer education* programmes and *safer injecting and safer use training* are provided in more than half of the prisons.

1.23 Slovakia

Penal Statistics Slovakia

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Prison population rate			x	
% of female prisoners		x		
% of foreign prisoners	x			
% of prisoners under 18		x		
% of prisoners from 18 to <21		x		
Prison density		x		
% of sentenced prisoners		x		
Sentenced prisoners per inhabitants		x		
% of drug offences	x			
% of sentences <1 year		x		
% of sentences ≥ 5 years and lifetime		x		
Rate of entries per inhabitants		x		
% of entries before final sentence	x			
Average length of imprisonment		x		
% of suicides among total deaths		x		
Mortality rate		x		
Suicide rate		x		
% of treatment staff		x		
% of custodial staff		x		
Rate of prisoners by treatment staff		x		
Rate of prisoners by custodial staff		x		

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 1) and tables (annex 2).

Regarding the ***Penal Statistics*** for Slovakia most of the analysed variables range within the EU-mainstream.

Only the *prison population rate* lies above the EU-mainstream. Below the mainstream range the *percentage of foreign prisoners*, the *percentage of drug offences* and the *percentage of entries before final sentence*.

General Population Epidemiology Slovakia

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Rate of newly diagnosed HIV infections	x			
IDU among new HIV infections	x			
IDU in cumulative new HIV cases	x			
Rate of AIDS incidences	x			
IDU among AIDS cases	x			
IDU in cumulative AIDS cases	x			
Rate of viral hepatitis incidences		x		
Rate of incidences of viral hepatitis A			x	
Rate of incidences of viral hepatitis B		x		
Rate of incidences of viral hepatitis C	x			
Rate of tuberculosis incidences		x		
Rate of syphilis incidences		x		
Rate of gonococcal incidences				x
Rate of homicide and intentional injury				x
Rate of suicide mortality		x		

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 2) and tables (annex 2).

Considerable variation is found for Slovakia regarding the ***General Population Epidemiology***. Only five variables lie within the EU-mainstream. No data are available for the rate of *gonococcal incidences* and of *homicide and intentional injury*.

Only the *rate of incidences of viral hepatitis A* lies above the EU-mainstream, while several indicators of infectious diseases range below the mainstream: the *rate of newly diagnosed HIV infections* and the *rate of AIDS incidences* as well as the *IDUs among newly diagnosed HIV infections* and *among AIDS cases* and the *IDUs in cumulative HIV* and in *cumulative AIDS cases*. Likewise the *rate of incidences of viral hepatitis C* lies below the mainstream.

Interventions Monitoring Slovakia in 2005

Variables	100%	>50%	<50%	0%	no data	comments
HIV/ Hepatitis Testing						
HIV testing on admission			x			Blood tests for HIV, Hep B & C as part of screening/early diagnostics of infectious diseases in risk behaviour persons (0,1% positive results of 919 HIV tests; 18,3% positive results of 862 anti HCV tests; 2,2% positive results of 817 HBsAg tests).
Hepatitis B and/or C testing on admission					x	
HIV testing on release					x	
Hepatitis B and/or C testing on release					x	
Substance use*						
Drug testing in prison	x					urine test predominant
- on admission				x		
- before holidays/ weekend leaves				x		
- by suspicion of drug consumption	x					
- per random routine	x					mobile testing laboratories
Prevention*						
Needle/ syringe exchange				x		
Availability of condoms	x					to buy
Availability of disinfectants				x		
Possibility of non-supervised visits			x			
Drug free units					x	capacity of drug free units: approx. 400
Vaccination against Hepatitis B	x					not free of charge; on request
Care						
Antiviral treatment for Hepatitis C	x					
Antiretroviral treatment for HIV	x					
Brief detoxification with medication	x					
Drug free treatment w. psychosoc. support			x			Drug free treatment is provided as ordered by the court ("anti-drug protective treatment" and "anti-alcohol protective treatment") or on request, and in the drug-free zones.
Treatment with antagonists				x		
Substitution treatment				x		
External drug services				x		
External HIV services				x		
Initiation of substitution treatment				x		
Referral to outside drug services	x					New in 2005: Establishment of "exit teams" whose main task is to prepare the convict for the condition after release of prison and for his/her integration in the society
Education						
Distribution of information material	x					
Counselling by professionals	x					
Peer education				x		
Safer injecting/ safer use training				x		
Education for prison *staff*	x					specialized training units

Sources: WHO Prison Health Database 2007, EMCDDA Annual Report 2006

* in 2004

The table above gives information on ***Interventions Monitoring*** in Slovakian prisons in 2005 (where indicated, in 2004).

HIV testing on admission is offered to less than half of Slovakian prisoners. Blood tests for HIV, Hepatitis B and C are performed in prisons as part of screening/early diagnostics of infectious diseases in risk behaviour persons. In 2005, there were 0,1% of positive results out of 919 HIV tests performed in prisons; 18,3% of positive results out of 862 anti HCV tests and 2,2% of positive results out of 817 HBsAg tests (refer to EMCDDA Annual Report 2006).

In 2004, *drug testing* (urine test) *by suspicion of drug consumption* and *per random routine* was performed by mobile testing laboratories in all Slovakian prisons, whereas *drug tests on admission* and *before holidays and weekend leaves* were not taken in any of the prisons.

As regards measures of prevention in 2004, *condoms* (to buy) and *vaccination against Hepatitis B* (not free of charge; on request) are available in all Slovakian prisons*. Non-supervised visits* are possible in less than half of penal institutions. *Needle/ syringe exchange* and *disinfectants* are not provided in any of the prisons. The capacity of drug-free zones is of 362 in 2005 (refer to EMCDDA Annual Report 2006).

Concerning measures of care, *antiviral treatment for Hepatitis C* and *antiretroviral treatment for HIV* are offered in all Slovakian prisons. As for drug-related treatment, *brief detoxification with medication* is offered in all, *drug free treatment with psycho-social support* in less than half of all penal institutions. Drug-free treatment is provided as ordered by the court ("anti-drug protective treatment" and "anti-alcohol protective treatment") or on request, and in the drug-free zones. There is no other drug-related treatment (i.e. *treatment with antagonists*, *substitution treatment*). There are no *external health services* available in Slovakian prisons. As regards pre-release interventions, *initiation of substitution treatment* is not available in Slovakian prisons, but convicts being released are *referred to outside drug services:* In 2005, so-called "exit teams" are newly established, whose main task is to prepare the convict for the condition after release of prison and for his/her integration in the society.

Concerning measures to prevent drug-related harm and/ or infectious diseases, *education for prison staff* (specialized training units), *distribution of information material* and *counselling by professionals* is provided in all Slovakian prisons. There is no *peer education* programme or *safer injecting and safer use training*.

1.24 Slovenia

Penal Statistics Slovenia

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Prison population rate	x			
% of female prisoners		x		
% of foreign prisoners		x		
% of prisoners under 18		x		
% of prisoners from 18 to <21		x		
Prison density		x		
% of sentenced prisoners		x		
Sentenced prisoners per inhabitants	x			
% of drug offences	x			
% of sentences <1 year		x		
% of sentences ≥ 5 years and lifetime		x		
Rate of entries per inhabitants		x		
% of entries before final sentence	x			
Average length of imprisonment	x			
% of suicides among total deaths			x	
Mortality rate		x		
Suicide rate	x			
% of treatment staff		x		
% of custodial staff	x			
Rate of prisoners by treatment staff	x			
Rate of prisoners by custodial staff		x		

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 1) and tables (annex 2).

Regarding the ***Penal Statistics*** for Slovenia little more then the half of the analysed variables range within the EU-mainstream.

Only the *percentage of suicides among total deaths* lies above the EU-mainstream.

The *prison population rate*, as well as the *rate of sentenced prisoners per 100 000 inhabitants* range below the mainstream. Likewise the *percentage of final sentences due to drug offences*, the *percentage of entries before final sentence* and the *average length of imprisonment* lie below the EU-mainstream. Just as the *suicide rate*, the *percentage of custodial staff* and the *rate of prisoners by treatment staff* are below the EU-mainstream.

General Population Epidemiology Slovenia

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Rate of newly diagnosed HIV infections	x			
IDU among new HIV infections	x			
IDU in cumulative new HIV cases		x		
Rate of AIDS incidences	x			
IDU among AIDS cases	x			
IDU in cumulative AIDS cases		x		
Rate of viral hepatitis incidences		x		
Rate of incidences of viral hepatitis A		x		
Rate of incidences of viral hepatitis B		x		
Rate of incidences of viral hepatitis C	x			
Rate of tuberculosis incidences		x		
Rate of syphilis incidences	x			
Rate of gonococcal incidences	x			
Rate of homicide and intentional injury		x		
Rate of suicide mortality	x			

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 2) and tables (annex 2).

Regarding the ***General Population Epidemiology*** for Slovenia more than half of the analysed variables range below the EU-mainstream.

The *rate of newly diagnosed HIV infections* and of the *AIDS incidences* as well as the *IDUs among the newly diagnosed HIV infections* and *among the AIDS cases* lie below the EU-mainstream. Again the *rate of incidences of viral hepatitis C*, the *rate of syphilis* and *gonococcal incidences* and the *rate of suicide mortality* range below the mainstream.

Interventions Monitoring Slovenia in 2006

Variables	100%	>50%	<50%	0%	no data	comments
HIV/ Hepatitis Testing						
HIV testing on admission						HIV testing is not routinely offered to all prisoners. Prisoners are only tested if they are known to be injecting drug users or they confirm that they have been involved in risk behaviour.[1]
Hepatitis B and/or C testing on admission						HCV testing is not routinely carried out in Slovenian prisons[1]. HCV testing is suggested when suspected HCV due to symptoms. HCV is provided to PLWHA/tested positive for HIV in prison. [3]
HIV testing on release						
Hepatitis B and/or C testing on release				x		
Substance use						
Drug testing in prison						
- on admission						
- before holidays/ weekend leaves						
- by suspicion of drug consumption						
- per random routine						
Prevention						
Needle/ syringe exchange						Currently the Slovenian national prison administration is considering a pilot needle exchange project. The recommendations are that needle exchanges should at least be available in Dob and Ljubljana prisons and Radeče, the young offenders prison. [1]
Availability of condoms [1]	x					
Availability of disinfectants						In theory, in Slovenia bleach is allowed in prisons and should be available to prisoners, but financial limitations are making bleach difficult to provide (Hren, 2002).
Possibility of non-supervised visits						Slovenian prisons provide facilities for intimate visits. [1]
Drug free units						Drug Free Units are available at the moment in four prisons with one of them in the only female prison in the country. [1]
Vaccination against Hepatitis B		x				Available info concerns vaccinations for prison employees of the prison administration [1] and is free for at-risk groups and/or on request [3].
Care						
Antiviral treatment for Hepatitis C						available [3]
Antiretroviral treatment for HIV						
Brief detoxification with medication						Detoxification programme that includes a gradual reduction of therapy (medicine or methadone), checks by urine tests and psychological assistance which comprises motivation and support programmes. [1]
Drug free treatment w. psychosoc. support						available in drug free units [1]
Treatment with antagonists						yes, naltrexone
Substitution treatment [1]	x					Methadone was prescribed to 380 inmates.

Variables	100%	>50%	<50%	0%	no data	comments
						125 inmates were detoxified, maintenance methadone treatment was prescribed for 210 inmates and methadone was introduced to 45 inmates. Compared to 2003, the number of inmates receiving methadone increased by 13,7%. [2] All methadone patients in prisons have to agree to drug testing (a urine test). As part of the methadone programme, prisoners agree to participate in a psychosocial programme.[1]
External drug services						The NGO Association for Harm Reduction 'Stigma' visit drug users in prison who were previously their clients in the community and also prisoners they have not previously met. Their prison work is mainly at Ljubljana prison for two hours, twice per week.[1]
External HIV services						
Initiation of substitution treatment						45 inmates initiated ST in 2004 [2]
Referral to outside drug services						A link is established with therapeutic centres that are available to prisoners after release. The information is given to prisoners but the onus is placed upon the individual to take the initiative and follow-up the contacts themselves.[1]
Education						
Distribution of information material						Programmes for raising awareness and prevention of infectious diseases intended for prisoners and staff in prisons are provided via lectures by doctor-specialists and via the distribution of leaflets (Head of Treatment, National Prison Administration 2003).
Counselling by professionals						See external drug services
Peer education						
Safer injecting/ safer use training[17]					x	
Education for prison *staff*						See distribution of info material

Sources: WHO Prison Health Database 2007, EMCDDA Annual Report 2006

1 A Study of the Health Care Provision, Existing Drug Services and Strategies Operating in Prisons in Ten Countries from Central and Eastern Europe', McDonald, 2005

2 Slovenian National Report 2005

3 Hepatitis C among Injecting Drug Users in the New EU Member States and Neighbouring Countries: Situation, Guidelines and Recommendations, CEEHRN, 2007

The table above gives information on ***Interventions Monitoring*** in Slovenian prisons (*Please also refer to the sources indicated at the end of the table above). HIV testing* is not routinely offered to all prisoners. Prisoners are only tested if they are known to be injecting drug users or they confirm that they have been involved in risk behaviour. *Hepatitis C testing* is not routinely carried out in Slovenian prisons either. It is

suggested when HCV is suspected due to symptoms. HCV is provided to PLWHA/tested positive for HIV in prison. There is no such testing on release.

As regards measures of prevention, *condoms* are available in all prisons and *vaccination against Hepatitis B*, in more than half of them. The information available concern vaccinations for employees of the prison administration; they are free for at-risk groups and/or on request. Currently the Slovenian national prison administration is considering a pilot *needle exchange* project. The recommendations are that needle exchanges should at least be available in Dob and Ljubljana prisons and Radeče, the young offenders prison. In theory, *bleach* is allowed in prisons in Slovenia and should be available to prisoners, but financial limitations are making bleach difficult to provide (Hren, 2002). Slovenian prisons provide facilities for intimate *non-supervised visits*. *Drug Free Units* are available at the moment in four prisons with one of them in the only female prison in the country.

Concerning measures of care, *antiviral treatment for Hepatitis C* is available in Slovenian prisons. As for drug-related treatment, *detoxification programmes* that include a gradual reduction of therapy (medicine or methadone), checks by urine tests and psychological assistance which comprises motivation and support programmes are offered. *Drug free treatment with psycho-social support* is available in drug free units. *Treatment with antagonists* (Naltrexone) is available as well. Concerning *substitution treatment,* methadone was prescribed to 380 inmates in 2004. 125 inmates were detoxified, maintenance methadone treatment was prescribed for 210 inmates and methadone was introduced to 45 inmates. Compared to 2003, the number of inmates receiving methadone increased by 13,7%. All methadone patients in prisons have to agree to *drug testing* (a urine test). As part of the methadone programme, prisoners agree to participate in a psychosocial programme. As regards *external drug services* in Slovenian prisons, the NGO Association for Harm Reduction 'Stigma' visit drug users in prison who were previously their clients in the community and also prisoners they have not previously met. Their prison work is mainly at Ljubljana prison for two hours, twice per week. As regards pre-release interventions, 45 inmates were *initiated in substitution treatment* in 2004. Concerning *referral to outside drug services*, a link is established with therapeutic centres that are available to prisoners after release. The information is given to prisoners but the onus is placed upon the individual to take the initiative and follow-up the contacts themselves.

Concerning measures to prevent drug-related harm and/ or infectious diseases, programmes for raising awareness and prevention of infectious diseases intended *for prisoners and staff in prisons* are provided via lectures by doctor-specialists and via the *distribution of leaflets* (Head of Treatment, National Prison Administration 2003).

1.25 Spain

Penal Statistics Spain

Variables	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Prison population rate		x		
% of female prisoners			x	
% of foreign prisoners		x		
% of prisoners under 18				x
% of prisoners from 18 to <21	x			
Prison density			x	
% of sentenced prisoners		x		
Sentenced prisoners per inhabitants		x		
% of drug offences		x		
% of sentences <1 year				x
% of sentences ≥ 5 years and lifetime				x
Rate of entries per inhabitants		x		
% of entries before final sentence				x
Average length of imprisonment			x	
% of suicides among total deaths		x		
Mortality rate		x		
Suicide rate		x		
% of treatment staff			x	
% of custodial staff		x		
Rate of prisoners by treatment staff		x		
Rate of prisoners by custodial staff			x	

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 1) and tables (annex 2).

Regarding the ***Penal Statistics*** for Spain the majority of the analysed variables range within the EU-mainstream. No data are available for the *percentage of prisoners under 18 years*. As well there is no information given for the *percentage of sentenced prisoners by length of sentence less than 1 year* and *more than 5 years and lifetime*. As well there are no data available for the *percentage of entries before final sentence.*

Only the *percentage of prisoners from 18 to less than 21 years* is lower than the mainstream.

The *percentage of female prisoners*, the *prison density* and the *average length of imprisonment* range above the mainstream. Likewise the *percentage of treatment staff* and the *rate of prisoners by custodial staff* lie above the mainstream.

General Population Epidemiology Spain

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Rate of newly diagnosed HIV infections				x
IDU among new HIV infections				x
IDU in cumulative new HIV cases				x
Rate of AIDS incidences			x	
IDU among AIDS cases			x	
IDU in cumulative AIDS cases			x	
Rate of viral hepatitis incidences		x		
Rate of incidences of viral hepatitis A		x		
Rate of incidences of viral hepatitis B		x		
Rate of incidences of viral hepatitis C		x		
Rate of tuberculosis incidences		x		
Rate of syphilis incidences		x		
Rate of gonococcal incidences	x			
Rate of homicide and intentional injury		x		
Rate of suicide mortality		x		

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 2) and tables (annex 2).

Regarding the ***General Population Epidemiology*** for Spain the majority of the analysed variables are within the EU-mainstream. No information is given for the *rate of newly diagnosed HIV infections*, the *IDUs among newly diagnosed HIV infections* and the *IDUs in cumulative new HIV cases*.

The *rate of AIDS incidences*, the *IDUs among AIDS cases* and the *IDUs in cumulative AIDS cases* range above the EU-mainstream.

Only the *rate of gonococcal incidences* is lower than the mainstream.

Interventions Monitoring Spain in 2006

Variables	100%	>50%	<50%	0%	no data	Comments
HIV/ Hepatitis Testing						
HIV testing on admission		90%				Ofrecer serologías de enfermedades prevalentes a todo ingreso en las prisiones. Serologías de VIH/ VHC/ VHB y sífilis. [3]
Hepatitis B and/or C testing on admission		x				Programa de Vacunaciones (gripe, tétanos, hepatitis B, antineumocócica, antihemophilus B, meningitis C y otras). Se oferta a todos los internos a su ingreso en prisión la realización de pruebas serológicas para determinar su situación inmunitaria frente a la hepatitis B, procediéndose a la vacunación cuando está indicado de acuerdo con los resultados. [2]
HIV testing on release						
Hepatitis B and/or C testing on release						
Substance use						
Drug testing in prison						
- on admission						
- before holidays/ weekend leaves						
- by suspicion of drug consumption						
- per random routine						
Prevention						
Needle/ syringe exchange		x				This offer is available at every centre managed by the General Directorate of Penitentiary Institutions and in two centres in Catalonia. In 2005, there were 34 penitentiary centres with registered users. During this same year, 22989 syringes were distributed at centres belonging to the central administration. [1]
Availability of condoms[1]	x					También se reparten preservativos a todos los internos junto con el material higiénico y en los departamentos de comunicaciones. El seguimiento, control y tratamiento de los pacientes VIH/SIDA o con Hepatitis C crónica se realiza de forma programada e individualizada, y
Availability of disinfectants	x					Provision of bleach and condoms at every centre. In addition, some penitentiary centres provide aluminium foil and smoking filters.[1]
Possibility of non-supervised visits						
Drug free units						
Vaccination against Hepatitis B						yes[1]
Care						
Antiviral treatment for Hepatitis C						yes[1]
Antiretroviral treatment for HIV						Prevalence of inmates undergoing antiretroviral treatment under the General Directorate of Penitentiary Institutions: 6.0% of the whole prison population.[1]
Brief detoxification with medication						Detoxification programmes are offered to everyone who is diagnosed as a drug addict upon entering prison and who has not been entered in a methadone treatment programme. The number of inmates included in regulated detoxification during 2005 was 1868 drug addicts incarcerated in 56 penitentiary centres managed by the Central State Administration (Ministry of Interior. General Directorate of Penitentiary Institutions). Prevalence as of 31st December 2005 was determined to be 0,13% of the prison population. *Outpatient detoxification programmes*. Treated inmates live alongside the rest of the prison population and use the centre's general resources. During 2005, this treatment was given to 3557 inmates in 65

Variables	100%	>50%	<50%	0%	no data	Comments
						penitentiary centres, with a prevalence as of 31st December 2005 of 3,11% of the prison population. *Detoxification programmes in specific treatment spaces*. These programmes take place in a specific space within the centre – they can be either day centres or treatment modules for staying overnight in the same space. During 2005, 3268 inmates from 25 penitentiary centres participated in the treatment module programme, with a prevalence as of 31st December 2005 of 2,56% of the prison population. 363 inmates participated in the day centre programme at 9 different penitentiary centres, with a prevalence of 0,31% of the prison population. [1]
Drug free treatment w. psychosoc. support						Drug-free programmes: This type of therapeutic treatment was given to 7188 inmates in 2005.[1]
Treatment with antagonists						
Substitution treatment	x					These treatments have been offered in the prison system since 1992, acquired momentum and underwent notable developments since 1994, and in 1998 were extended to all penitentiary centres. During 2005, a total of 19010 inmates from 66 penitentiary centres have received methadone treatment, with a prevalence as of 31st December 2005 of 15,32%.[1]
External drug services						During 2005, 4,693 inmates have been brought from penitentiary centres to treatment: A total of 604 inmates to external outpatient centres. A total of 3244 inmates to external methadone programmes. A total of 531 inmates to external therapeutic communities. A total of 314 inmates to other detoxification/ withdrawal resources. A decrease has been observed in the number of persons referred (in 2004, 5245 persons were referred to community resources), in spite of the increase in referrals to therapeutic communities. In this sense, it is necessary to highlight the fall in the number of prisoners attended in methadone programmes, both inside penitentiary centres and in community resources. This change in the demand of services, increases in the number of participants in drug-free programmes compared with the decrease in participants in substitution programmes could mean a change in the inmates' consumption pattern.[1]
External HIV services						
Initiation of substitution treatment						yes
Referral to outside drug services						
Education						
Distribution of information material						
Counselling by professionals						Every penitentiary centre now offers preventive and health education programmes, using their own resources as well as co-ordinating with communitarian mechanisms. These programmes are not only aimed at drug addicts but also at inmates who are at risk of beginning to use drugs in prison, mainly first-time and young inmates. In 2005, 15804 inmates from all penitentiary centres managed by the Central Administration have passed through this kind of programme.[1]
Peer education						Psychosocial and health support groups for the prison population infected with HIV or at risk of infection.[1]
Safer injecting/ safer use training						
Education for prison *staff*						Training courses are given to all Government employees who enter the Penitentiary System.

Variables	100%	>50%	<50%	0%	no data	Comments
						Following admission, they are given periodic courses to update them on the prevalent pathologies and new treatment alternatives. During the year 2005, the General Directorate of Penitentiary Institutions has organised training activities in a centralised fashion, dealing with aspects of prevention and health care, which were attended by a total of 1337 prison system professionals.[1]

Sources: WHO Prison Health Database 2007, EMCDDA Annual Report 2006

[1] National Report 2006 for the EMCDDA

[2] Ministerio del Interior (http://www.mir.es/INSTPEN/INSTPENI/Sanidad/Sanidad2.html)

[3] Salidad asistencial en prisiones (CAPRI) http://www.sesp.es/capri/html/prologo.htm

The table above gives information on ***Interventions Monitoring*** in prisons of Spain.

HIV, Hepatitis B and/or C testing is available *on admission* in most Spanish prisons.

As regards measures of prevention, *needle/ syringe exchange* programmes are provided in about half of the prisons in Spain. This offer is available at every centre managed by the General Directorate of Penitentiary Institutions and in two centres in Catalonia. In 2005, there were 34 penitentiary centres with registered users. During this same year, 22989 syringes were distributed at centres belonging to the central administration. *Condoms* and *disinfectants* (bleach) are provided in all Spanish prisons. In addition, some penitentiary centres provide aluminium foil and smoking filters. *Vaccinations against Hepatitis B* are available as well.

Antiviral treatment for hepatitis C and *antiretroviral treatment for HIV* (prevalence of inmates undergoing antiretroviral treatment under the General Directorate of Penitentiary Institutions: 6% of the whole prison population) are provided in Spanish prisons. Regarding drug-related treatments, *detoxification programmes* are offered to everyone who is diagnosed as a drug addict upon entering prison and who has not been entered in a methadone treatment programme. The number of inmates included in regulated detoxification during 2005 was 1868 drug addicts incarcerated in 56 penitentiary centres managed by the Central State Administration (Ministry of Interior. General Directorate of Penitentiary Institutions). The prevalence as of 31/12/2005 was determined to be 0,13% of the prison population. *Outpatient detoxification programmes:* Treated inmates live alongside the rest of the prison population and use the centre's general resources. During 2005, this treatment was given to 3557 inmates in 65 penitentiary centres, with a prevalence as of 31/12/2005 of 3,11% of the prison population. *Detoxification programmes in specific treatment spaces:* These programmes take place in a specific space within the centre – they can be either day centres or treatment modules for staying overnight in the same space. During 2005, 3268 inmates from 25 penitentiary centres participated in the treatment module programme, with a prevalence as of 31/12/2005 of 2,56% of the prison population. 363 inmates participated in the day centre programme at 9 different penitentiary centres, with a prevalence of 0,31% of the prison population. *Drug-free programmes*: This type of therapeutic treatment was given to 7188 inmates in 2005. *Substitution treatments* have been offered in the prison system since 1992, acquired

momentum and underwent notable developments since 1994, and in 1998 were extended to all penitentiary centres. During 2005, a total of 19010 inmates from 66 penitentiary centres have received methadone treatment, with a prevalence as of 31/12/ 2005 of 15,32%.

Concerning the access to *external drug services,* during 2005, 4693 inmates have been brought from penitentiary centres to treatment:
A total of 604 inmates to external outpatient centres.
A total of 3244 inmates to external methadone programmes.
A total of 531 inmates to external therapeutic communities.
A total of 314 inmates to other detoxification/ withdrawal resources.
A decrease has been observed in the number of persons referred (in 2004, 5245 persons were referred to community resources), in spite of the increase in referrals to therapeutic communities. In this sense, it is necessary to highlight the fall in the number of prisoners attended in methadone programmes, both inside penitentiary centres and in community resources. This change in the demand of services, increases in the number of participants in drug-free programmes compared with the decrease in participants in substitution programmes could mean a change in the inmates' consumption pattern.

Concerning drug-related pre-release interventions, both *initiation of substitution treatment* and *referral to outside drug services* are applied in Spanish prisons.

Concerning measures to prevent drug-related harm and infectious diseases, every penitentiary centre now offers *preventive and health education programmes*, using their own resources as well as co-ordinating with communitarian mechanisms. These programmes are not only aimed at drug addicts but also at inmates who are at risk of beginning to use drugs in prison, mainly first-time and young inmates. In 2005, 15804 inmates from all penitentiary centres managed by the Central Administration have passed through this kind of programme. Psychosocial and health support groups for the prison population infected with HIV or at risk of infection exist in some Spanish prisons. *Training courses for staff* are given to all Government employees who enter the Penitentiary System. Following admission, they are given periodic courses to update them on the prevalent pathologies and new treatment alternatives. During the year 2005, the General Directorate of Penitentiary Institutions has organised training activities in a centralised fashion, dealing with aspects of prevention and health care, which were attended by a total of 1337 prison system professionals.

1.26 Sweden

Penal Statistics Sweden

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Prison population rate		x		
% of female prisoners		x		
% of foreign prisoners		x		
% of prisoners under 18	x			
% of prisoners from 18 to <21		x		
Prison density		x		
% of sentenced prisoners		x		
Sentenced prisoners per inhabitants		x		
% of drug offences		x		
% of sentences <1 year			x	
% of sentences ≥ 5 years and lifetime		x		
Rate of entries per inhabitants				x
% of entries before final sentence				x
Average length of imprisonment				x
% of suicides among total deaths		x		
Mortality rate		x		
Suicide rate		x		
% of treatment staff		x		
% of custodial staff		x		
Rate of prisoners by treatment staff		x		
Rate of prisoners by custodial staff	x			

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 1) and tables (annex 2).

Regarding the ***Penal Statistics*** for Sweden most of the analysed variables range within the EU-mainstream. For the *rate of entries per inhabitants*, the *percentage of entries before final sentence* and the *average length of imprisonment* no data is available.

Above the mainstream ranges only the *percentage of sentence less than 1 year*.

The *percentage of prisoners under 18 years* and the *rate of prisoners by custodial staff* lie below the EU-mainstream.

General Population Epidemiology Sweden

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Rate of newly diagnosed HIV infections		x		
IDU among new HIV infections		x		
IDU in cumulative new HIV cases		x		
Rate of AIDS incidences	x			
IDU among AIDS cases		x		
IDU in cumulative AIDS cases		x		
Rate of viral hepatitis incidences			x	
Rate of incidences of viral hepatitis A		x		
Rate of incidences of viral hepatitis B		x		
Rate of incidences of viral hepatitis C			x	
Rate of tuberculosis incidences	x			
Rate of syphilis incidences		x		
Rate of gonococcal incidences		x		
Rate of homicide and intentional injury				x
Rate of suicide mortality		x		

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 2) and tables (annex 2).

Sweden ranges in the EU-mainstream in most of the analysed variables regarding the ***General Population Epidemiology***. No data is available for the *rate of homicide and intentional injury*.

Variation is found for the *rate of incidences of viral hepatitis and of hepatitis C* which lies above the EU-mainstream.

As well as the *rate of AIDS incidences* the *rate of tuberculosis incidences* ranges below the mainstream.

Interventions Monitoring Sweden in 2006

Variables	100%	>50%	<50%	0%	no data	comments
HIV/ Hepatitis Testing[1]						
HIV testing on admission						HIV tests are offered in all prisons
Hepatitis B and/or C testing on admission	x					
HIV testing on release					x	
Hepatitis B and/or C testing on release					x	
Substance use[2]						
Drug testing in prison						
- on admission		x				
- before holidays/ weekend leaves		x				
- by suspicion of drug consumption	x					
- per random routine		x				
Prevention[1]						
Needle/ syringe exchange						There are no needle exchange programs in prisons.
Availability of condoms						condoms are frequently available
Availability of disinfectants					x	
Possibility of non-supervised visits					x	
Drug free units					x	
Vaccination against Hepatitis B	x					
Care[2]						
Antiviral treatment for Hepatitis C					x	
Antiretroviral treatment for HIV		x				
Brief detoxification with medication			x			
Drug free treatment w. psychosoc. support			x			
Treatment with antagonists				x		
Substitution treatment			x			
External drug services			x			
External HIV services			x			
Initiation of substitution treatment			x			
Referral to outside drug services			x			
Education[2]						
Distribution of information material			x			
Counselling by professionals					x	
Peer education				x		
Safer injecting/ safer use training				x		
Education for prison *staff*			x			

Sources: [1] WHO Prison Health Database 2007, EMCDDA Annual Report 2006

[2] Estimations from Lars Håkan Nilsson, Prison and Probation Service, Sweden (larshakan.nilsson@kriminalvarden.se)

The table above gives information on ***Interventions Monitoring*** in Sweden.

HIV, Hepatitis B and/or C testing is available in all Swedish prisons.

Drug tests are taken by *suspicion of drug consumption* in all Swedish prisons, and in more than half of the prisons *per random routin*e, *on admission* and *before holidays and weekend leaves.*

As regards measures of prevention, *condoms* are frequently available in Swedish prisons and *vaccinations against Hepatitis B* are provided in all prisons. In Sweden, there are no *needle/ syringe exchange* programmes in prisons.

Antiretroviral treatment for HIV is provided in more than half of Swedish prisons. Regarding drug-related treatments, *brief detoxification with medication, drug free treatment with psychosocial support* and *substitution treatment* are offered in less than half of the prisons, *treatment with antagonists*, not at all. Access to *external drug services* and *external HIV services* exists in less than half of Swedish prisons. Concerning drug-related pre-release interventions, both *initiation of substitution treatment* and *referral to outside drug services* are possible in less than half of Swedish prisons.

Concerning measures to prevent drug-related harm and infectious diseases, *education for prison staff* and the *distribution of information material* is given in less than half, whereas *safer injecting/ safer use training* and *peer education* in none of the Swedish prisons.

1.27 United Kingdom

Penal Statistics United Kingdom

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Prison population rate		x		
% of female prisoners		x		
% of foreign prisoners		x		
% of prisoners under 18			x	
% of prisoners from 18 to <21			x	
Prison density		x		
% of sentenced prisoners		x		
Sentenced prisoners per inhabitants		x		
% of drug offences		x		
% of sentences <1 year		x		
% of sentences ≥ 5 years and lifetime		x		
Rate of entries per inhabitants			x	
% of entries before final sentence		x		
Average length of imprisonment		x		
% of suicides among total deaths				x
Mortality rate		x		
Suicide rate		x		
% of treatment staff		x		
% of custodial staff		x		
Rate of prisoners by treatment staff			x	
Rate of prisoners by custodial staff		x		

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 1) and tables (annex 2).

Regarding the ***Penal Statistics*** for the United Kingdom most of the analysed variables range within the EU-mainstream. Only for the *percentage of suicides among total deaths* no data is available.

The *percentage of prisoners under 18* and of *prisoners from 18 to less than 21 years* lies above the mainstream. Again the *rate of entries per 100 000 inhabitants* and the *rate of prisoners by treatment staff* range above the EU-mainstream.

General Population Epidemiology United Kingdom

Variables*	below EU-mainstream	within EU-mainstream	above EU-mainstream	no data
Rate of newly diagnosed HIV infections			x	
IDU among new HIV infections		x		
IDU in cumulative new HIV cases		x		
Rate of AIDS incidences		x		
IDU among AIDS cases	x			
IDU in cumulative AIDS cases		x		
Rate of viral hepatitis incidences		x		
Rate of incidences of viral hepatitis A		x		
Rate of incidences of viral hepatitis B		x		
Rate of incidences of viral hepatitis C		x		
Rate of tuberculosis incidences		x		
Rate of syphilis incidences		x		
Rate of gonococcal incidences			x	
Rate of homicide and intentional injury	x			
Rate of suicide mortality	x			

*Variable labels are abbreviations; for exact and full definitions, please refer to the respective charts (chapter 2) and tables (annex 2).

For the United Kingdom most of the data regarding the ***General Population Epidemiology*** range within the EU-mainstream.

On the one hand, the *rate of newly diagnosed HIV infections* and the *rate of gonococcal incidences* lie above the mainstream.

On the other hand, the *proportion of IDUs among AIDS cases* as well as the *rate of homicide and intentional injury* and the *rate of suicide mortality* range below the EU-mainstream.

Interventions Monitoring UK except Scotland in 2006

Variables	100%	>50%	<50%	0%	no data	comments
HIV/ Hepatitis Testing						
HIV testing on admission					x	It is reported that those in prison have access to HIV and Hep testing.
Hepatitis B and/or C testing on admission					x	
HIV testing on release					x	
Hepatitis B and/or C testing on release					x	
Substance use						
Drug testing in prison	x					The Mandatory Drug Testing (MDT) programme is performed in all establishments in accordance with national instructions. Establishments provide Voluntary Drug Testing (VDT) for all suitable prisoners.
- on admission					x	
- before holidays/ weekend leaves					x	
- by suspicion of drug consumption					x	
- per random routine	x					random Mandatory Drug Testing (rMDT)
Prevention						
Needle/ syringe exchange				x		
Availability of condoms					x	unofficially available in some prisons
Availability of disinfectants						Disinfectant tablets have been issued to prisons.
Possibility of non-supervised visits					x	
Drug free units		x				
Vaccination against Hepatitis B						It is reported that Hepatitis B vaccinations are available to prisoners (HM Prison Service 2006).
Care[1]						
Antiviral treatment for Hepatitis C					x	
Antiretroviral treatment for HIV	x					available for all those as required
Brief detoxification with medication	x					clinical management of withdrawal
Drug free treatment w. psychosoc. support	x					All establishments provide Counselling, Assessment, Referral, Advice and Throughcare Services (CARATs) for prisoners identified as having drug related problems.
Treatment with antagonists					x	
Substitution treatment			x			pilot projects in some prisons
External drug services	x					Area Managers have arrangements for monitoring the contracts with external drug agencies for the provision of CARATs, rehabilitation programmes and therapeutic communities. There is effective liaison between establishments and local Drug Action Teams. Communication and linking is in operation between prison staff including personal officers, Healthcare, CARAT services, probation and community drug workers.
External HIV services	x					Health Care in prison is linked to NHS thus HIV services are available to prisoners.
Initiation of substitution treatment		x				in pilot project prisons

Variables	100%	>50%	<50%	0%	no data	comments
Referral to outside drug services	x					Participation in multi agency partnerships to co-ordinate treatment, help and support for inmates when they re-enter the community. All consenting prisoners have a release plan with the CARATs.
Education						
Distribution of information material					x	
Counselling by professionals	x					Each establishment has a written drug strategy containing details of the provision of treatment, counselling and support, health promotion and harm minimisation. All establishments provide Counselling, Assessment, Referral, Advice and Throughcare Services (CARATs) for prisoners identified as having drug related problems.
Peer education					x	
Safer injecting/ safer use training					x	
Education for prison *staff*	x					Staff training meets requirements of national instructions.

Sources: WHO Prison Health Database 2007, EMCDDA Annual Report 2006,
http://www.hmprisonservice.gov.uk/assets/documents/10001E7B10_drug_strategy_jul_06.pdf;
amended by Morag MacDonald, Centre for Research into Quality, University of Central England in Birmingham (morag.macdonald@uce.ac.uk).

Information on ***Interventions Monitoring*** in British prisons (except Scotland) are shown in the table above.

Regarding *HIV and Hepatitis testing*, it is reported that inmates in British prisons have access to such tests.

The Mandatory *Drug Testing* (MDT) programme is performed *per random routine* in all establishments in accordance with national instructions. Establishments provide Voluntary Drug Testing (VDT) for all suitable prisoners.

As measures of prevention, *condoms* (unofficially), *disinfectants* (sterilising tablets) and *vaccination against Hepatitis B* are provided in some British prisons. *Drug free units* exist in more than half of the prisons, whereas *needle/ syringe exchange,* not at all.

Antiretroviral treatment for HIV is available for all those as required. Regarding drug-related treatments, *brief detoxification with medication* (so-called clinical management of withdrawal) is provided in all British prisons. All establishments provide Counselling, Assessment, Referral, Advice and Throughcare Services (**CARATs**) for prisoners identified as having drug related problems. There are pilot projects of substitution treatment in some prisons (in less than half of them).

As regards the access to external health services in prisons of the UK, Area Managers of each establishments have arrangements for monitoring the contracts with external drug agencies for the provision of CARATs, rehabilitation programmes and therapeutic communities. There is effective liaison between establishments and local Drug Action Teams. Communication and linking is in operation between prison staff including personal officers, Healthcare, CARAT services, probation and community drug workers. Health Care in prison is linked to NHS thus *external drug* and *HIV services* are available to all prisoners.

Concerning drug-related pre-release interventions, *initiation of substitution treatment* is available in some prisons (more than half of them) through pilot projects. *Referral to outside drug services* is applied through the participation in multi agency partnerships to co-ordinate treatment, help and support for inmates when they re-enter the community. All consenting prisoners have a release plan with the CARATs.

As measures to prevent drug-related harm and/or infectious diseases, each establishment has a *written drug strategy* containing details of the *provision of treatment, counselling and support, health promotion and harm minimisation*. All establishments provide Counselling, Assessment, Referral, Advice and Throughcare Services (CARATs) for prisoners identified as having drug related problems.

Interventions Monitoring Scotland in 2007

Variables	100%	>50%	<50%	0%	no data	comments
HIV/ Hepatitis Testing[2]						
HIV testing on admission Hepatitis B and/or C testing on admission HIV testing on release Hepatitis B and/or C testing on release					x x x x	Not routinely offered but testing is Available for any prisoner who requests It. Prisoners are aware that this service is available. No collated data available.
Substance use[1, 2]						
Drug testing in prison	x					Urine testing is universal
- on admission	x					Dip testing in most prisons by nurses for those prisoners requesting substitute or detox prescription.
- before holidays/ weekend leaves				x		
- by suspicion of drug consumption	x					
- per random routine				x		No random mandatory testing now takes place in Scotland. We have a yearly prevalence test which is anonymous, voluntary and has no punishment attached. There is also opt-in testing for prisoner management, which does have punishment attached for a +ve result.
Prevention[1, 2]						
Needle/ syringe exchange				x		• Needle replacement at reception protocols are established in 6 Scottish prisons. • Paraphernalia provision (Harm Reduction Protocol) will be available in all prisons in Scotland by April 2008. • A pilot needle exchange is still being negotiated.
Availability of condoms	x					free of charge
Availability of disinfectants	x					sterilising tablets with guidelines of use
Possibility of non-supervised visits				x		
Drug free units				x		Drug Free Areas have been replaced by addiction support areas.
Vaccination against Hepatitis B	x					All prisoners offered Hep B vaccination on admission, free of charge (uptake is on average 70+percent). Hep A immunisation is offered to prisoners who are Hep C+.
Care[1, 2]						
Antiviral treatment for Hepatitis C					x	There are prisoners in treatment.
Antiretroviral treatment for HIV			x			19 known +ve, 7 on treatment (dec 06)
Brief detoxification with medication					x	available
Drug free treatment w. psychosoc. support					x	available
Treatment with antagonists					x	available
Substitution treatment			x			18% on methadone (1400 approx)
External drug services					x	
External HIV services			x			HIV treatment is provided free by local health service
Initiation of substitution treatment					x	Available no data collated
Referral to outside drug services					x	The Throughcare Addiction Service (TAS) provide psychosocial continuity of care. Addiction Nurses provide continuity with community clinical providers such as GPs and specialist health service drug services

Variables	100%	>50%	<50%	0%	no data	comments
Education[1, 2, 3]						
Distribution of information material	x					Material in various formats including film on various subjects relating to drug and alcohol related harm.
Counselling by professionals	x					Provided by contracted psychosocial services and SPS addiction nurses
Peer education		x				Provided in some prisons
Safer injecting/ safer use training	x					Provided as part of paraphernalia (Harm Reduction Protocol) provision in all prisons by April 2008.
Education for prison *staff*	x					voluntary training in blood borne virus and safer injecting as well as a broad range of addiction related subjects

Sources: [1] WHO Prison Health Database 2007, EMCDDA Annual Report 2006
[2] Reviewed and commented by Stephen Heller-Murphy, Addiction Policy Development, Scottish Prison Service, Edingburgh/Scotland
[3] in 2006

Information on ***Interventions Monitoring*** in Scottish prisons are shown in the table above.

Regarding *HIV and Hepatitis testing* in Scotland, it is not routinely offered but testing is available for any prisoner who requests it. Prisoners are aware that this service is available. There are no collated data available.

Drug testing (urine testing) *by suspicion of drug consumption* and *on admission* (dip testing in most prisons by nurses for those prisoners requesting substitute or detoxification prescription) is conducted in all Scottish prisons, but *drug testing before holidays or weekend leaves* and *per random routine* are not applied in any prison. No random mandatory testing now takes place in Scotland. There is a yearly prevalence test which is anonymous, voluntary and has no punishment attached. There is also opt-in testing for prisoner management, which does have punishment attached for a positive result.

As measures of prevention, *condoms* (free of charge), *disinfectants* (sterilising tablets with guidelines of use) and *vaccination against Hepatitis B* (offered to all prisoners on admission; free of charge; uptake is on average 70 percent; Hep A immunisation offered to prisoners who are Hep C positive) are provided in all Scottish prisons. On the other hand, *non-supervised visits, drug free units* (Drug Free Areas have been replaced by addiction support areas) and *needle/ syringe exchange* do not exist. However, there are some new developments: Needle replacement at reception protocols are established in 6 Scottish prisons; Paraphernalia provision (Harm Reduction Protocol) will be available in all prisons in Scotland by April 2008 and a pilot needle exchange is still being negotiated.

Antiretroviral treatment for HIV (some prisoners are currently in treatment) and *antiviral treatment for Hepatitis C* (19 known positive, 7 of them were on treatment in December 2006) are available in some Scottish prisons, but there are no collated data available. Regarding drug-related treatment, *brief*

detoxification with medication, drug free treatment with psycho-social support, treatment with antagonists and *substitution treatment* (18% on Methadone, i.e. approx. 1400) are existing in prisons of Scotland but no collated data are available.

As regards external health services, *external HIV health services* (local health services) provide HIV treatment to prisoners. Concerning drug-related pre-release interventions, *initiation of ST* is available but there are no data collated. *Referral to outside drug services* is applied: The Throughcare Addiction Service (TAS) provide psychosocial continuity of care. Addiction Nurses provide continuity with community clinical providers such as GPs and specialist health service drug services.

As measures to prevent drug-related harm and/or infectious diseases, *distribution of information material* (material in various formats including film on various subjects relating to drug and alcohol related harm), *counselling by professionals* (provided by contracted psychosocial services and Scottish Prison Service addiction nurses) and *safer use training* (provided as part of paraphernalia -Harm Reduction Protocol- provision in all prisons by April 2008) are offered to all Scottish prisoners and *peer education programmes* exist in more than half of the prisons. *Education for prison staff* is available to all prison staff in Scotland: Voluntary training in blood borne virus and safer injecting as well as a broad range of addiction related subjects.

Annex 2

Directorate - General
for Health and Consumers

Drug policy and harm reduction

SANCO/2006/C4/02

Final Report Work Package 5

Current approaches to monitor/analyse drug use among prisoners

April 2008

Universität Bremen

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Scientific Institute of the
German Medical Association

ZIS
Centre for Interdisciplinary
Addiction Research (CIAR)

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Contents Page

List of Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
EMCDDA	European Monitoring Centre for Drugs and Drugs Addiction
ENDIPP	European Network of Drugs and Infections Prevention in Prison
HIPP	Health in Prison Project
HIV	Human Immunodeficiency Virus
KABP	Knowledge Attitude Behaviour Practice
NFPs	National Focal Points
WASH	Willing Anonymous Salivary HIV Surveys
WHO	World Health Organization
WIAD	Scientific Institute of the German Medical Association

Summary

Current approaches to monitor/analyse drug use among prisoners are described, based on data and methods available from the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), World Health Organization (WHO) and the European Network on Drugs and Infections Prevention in Prison (ENDIPP). Based on the assessment of the data quality, ways of improving availability and reliability of such information have been analysed.

Many countries are reporting an increase in the use of illicit drugs in prisons, but national routine data on drug use in prison is rare. Prison related data collected by the EMCDDA come from a range of sources, which are often not comparable in terms of the methods used. Variations across countries and across surveys make comparisons between and within countries difficult and are related to issues such as sampling strategy, sample size, geographical coverage, population selection, and methods of measurement of drug use (self-report, medical assessment). Moreover, studies in different countries use different measures of prevalence (lifetime or last year or month prevalence) and frequency as well as patterns of drug use.

Information on the accessibility, coverage rates, quality and the utilisation of such facilities, with a particular focus on at-risk populations, need to be improved in order to obtain an overview of the situation in the different countries with clear indications on coverage as a core-element in policy evaluation.

In 2006, the Health in Prison Project (HIPP) of the World Health Organization Regional Office for Europe (WHO) has launched a Prison Health Database, which has been developed in collaboration with the EMCDDA and the Scientific Institute of the German Medical Association (WIAD). This prison health database was developed in order to increase the knowledge of prison health, trends in prison health and their importance for public health. The indicators of this database cover four subjects: Penal Statistics, General Population Epidemiology, Interventions Monitoring and Penal Epidemiology. Up to now, the data reported from Member States to the WHO Health in prison database is quite limited and can be improved.

Overall, there is an obvious lack of systematic monitoring and research on drugs and health issues in European prisons. There are some valuable starting points in gathering information, which could support health planning and policy making, but these systems have to be improved and need strong support from national authorities. It is a future challenge to develop and implement EU standard protocols to collect data on drug use, infectious diseases and risk behaviours in prison population that could then be used by countries to assess these issues in prison. Such protocols would have to include standard questionnaires but also methodological and ethical recommendations about how to implement a prison survey on health and drug-related issues.

1. Introduction

Monitoring of drug use inside prisons and developing standards for monitoring and documentation of drug use and infectious diseases in prisons is of utmost importance for planning target-group specific and tailor-made health care interventions directed to the needs of prisoners**.** As drug use in prison like in the community is heterogeneous and varies greatly between countries and even from one prison to the other, standardised and comparable monitoring of drug use in prison would be useful to acquire a better knowledge and understanding of the levels, dynamics, patterns and consequences of drug use in prison and the responses to it and thus be able to draw evidence based conclusions on prisoners' needs in terms of prevention and harm reduction.

In general, monitoring in this area has three components:

1. Monitoring of drug use among prisoners (drug monitoring)
2. Monitoring of drug related infectious diseases among prisoners (disease monitoring)
3. Monitoring of the availability and accessibility of prevention and harm reduction measures in prisons (response/policy monitoring)

This report summarises current monitoring approaches in all three areas and will draw conclusions and recommendations for the improvement of data quality, coverage rates and reporting in the European Union.

2. Background

Today drugs are seen as one of the main problems of the prison system in the European Union. Drug use and related health and social problems are widespread among prison inmates and much more prevalent compared to the general population[1]. All kinds of drugs are used either as addictive substances or to cope with lack of work and stress and boredom behind bars. Furthermore, drugs are one of the central currencies in prison[2].

Problematic drug use may vary widely across Europe and differs even within a given country from one region to the other[3]. Drug use also threatens security measures, as it dominates the relationships between prisoners and staff and leads to violence and bullying for both prisoners and often their partners and friends in the community[4]. Apart from this, drug use leads to severe health damages expressed in significantly higher prevalences of morbidity rates of pris-

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1 http://www.emcdda.europa.eu/stats07/duptab01

2 See "Sex and prisons": http://www.hawaii.edu/hivandaids/links_prisonsex.htm

3 EMCDDA Annual Report 2006

4 Restellini, Jean-Pierre (2007): Prison-specific ethical and clinical problems. In: Møller, L., Stöver, H., Jürgens., R. & Gatherer, A. (ed.; 2007): Promoting health in prisons. The essentials. Copenhagen/Denmark (in press)

oners (e.g. drug-related diseases such as HIV/AIDS and Hepatitis B and C) and mortality after release from prisons[6].

The increasing use of drugs in prison[7] influences life in prison: the penal system as a whole changes, the behaviour of drug users in detention changes and drug service providers are faced with new demands. Thus, in many countries, the rising spread of illicit drug consumption outside prisons and the implications arising from it may also be observed in prisons: drug-related deaths, drug-induced cases of emergency, increase in the number of drug users, dealer hierarchies, debts, mixed drugs, drugs of poor quality, incalculable purity of drugs, and risks of infection (HIV/AIDS and hepatitis) resulting from the fact that no sterile syringes are available in detention and therefore contaminated injection equipment is shared[8]. All EU-Member States are facing similar problems of drug use, infectious diseases in prisons, lack of throughcare and continuity of treatment.

Prisons and prison staff tend to understand illicit and non-prescribed drug use more as a delinquent act to be punished than a chronic disease. Any attempts to reduce the risks of continued use are viewed as supporting a prohibited behaviour and therefore unwelcome. Strict prohibition and rigid controls are regarded as the only acceptable prevention, and abstinence as an enforceable behaviour[9].

Prison management is faced with increased public pressure to keep prisons drug-free and only a small number of prison managers talk frankly about the issue in public, establish adequate drug services and develop new drug strategies. Confessing that drug use also appears in prison is to be mistaken for failing to maintain security in prisons. Admitting drug problems in the institution looks as if the security task has not been fulfilled. Thus many managers think they did not do their security job properly[10]. Additionally, many prison doctors believe that they cure the inmates drug problem, when an inmate is temporarily obliged to stop using drugs.

High quality monitoring of drug use in prison is needed in order to increase our limited knowledge of the prison health situation and of the specific responses and thus provide a basis for evidence based interventions at national and European level.

Data quality on drug use/addiction, drug use patterns, associated risk behaviours and consequently resulting infectious diseases in prisons can be improved and become more standard-

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6 Seaman, S. R.; Brettle, R.P.; Gore, S.M. Mortality from overdose among injecting drug users recently released from prison: database linkage study. In: British Medical Journal 7th February 1998: 426ff

7 Shewan, D., Stöver, H., Dolan, K.: Injecting in Prisons. In: Pates, R.; McBride, A.; Arnold, K. (ed.): Injecting Illicit Drugs. Blackwell: Oxford, 2005, pp.69-81; www.hipp-europe.org

8 WHO, UNAIDS, United Nations Office on Drugs and Crime (UNODC) (2004): Policy brief: reduction of HIV transmission in prisons. Geneva, (WHO/HIV/2004.05; http://www.who.int/hiv/pub/idu/idupolicybriefs).

9 Uchtenhagen 2006: The Lisbon Agenda for Prisons

10 WHO Regional Office for Europe (2005): Status paper on prisons, drugs and harm reduction. Copenhagen, http://www.euro.who.int/eprise/main/WHO Progs/SHA/prevention/20050622.

ised across the EU in order to get a comprehensive and regular overview of the dynamics of drug use, risk behaviours and infectious diseases in prisons.

3. Methodology

The main objective was to report on current approaches to monitor/analyse drug use among prisoners as one determinant for prisoners service needs, based on data and methods available from relevant DG SANCO cofunded projects (e.g. the European Network on Drugs and Infections Prevention in Prison (ENDIPP), the Prison Health Database by the World Health Organisation (Regional Office for Europe)[12], the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA)[13], and current literature, assessing the data quality and analysing ways of improving availability and reliability of such information.

Existing strategies to monitor and analyse drug use, infectious diseases, related behaviours among prisoners and the availability and accessibility of harm reduction measures have been analysed. Methods and systems of data collection already in place (EMCDDA and its REITOX focal points, World Health Organisation/HIPP, ENDIPP Network) have been examined. Apart from the description of existing methods of data collection, the data quality, coverage, possible gaps have been assessed and suggestions for improving availability and reliability of such information have been concluded. The analyses were carried out in close cooperation with the scientific staff of the EMCDDA in charge of data collection and the World Health Organisation (Regional Office for Europe) and integrated the work of WIAD (Scientific Institute of the German Medical Association) pursued under the former EC funded ENDIPP network. The methods of data collection applied currently were described and assessed. Based on these analyses, suggestions to improve data collection were outlined.

4. Monitoring of drug use in prison (drug monitoring)

When analysing the current literature, it becomes obvious that many countries are reporting an increase in the use of illicit drugs in prisons[14], but national routine data on drug use in prison is rare[15]. The percentage of drug offences among sentenced prisoners is one (very rough) indicator for the global dimension of the drug problem in prisons, although this indicator has to be interpreted carefully, because many drug users are not convicted for drug related offences, but for other crimes like property offences. Figure 1 shows great differences in the composition of the prison population with regard to drug offences.

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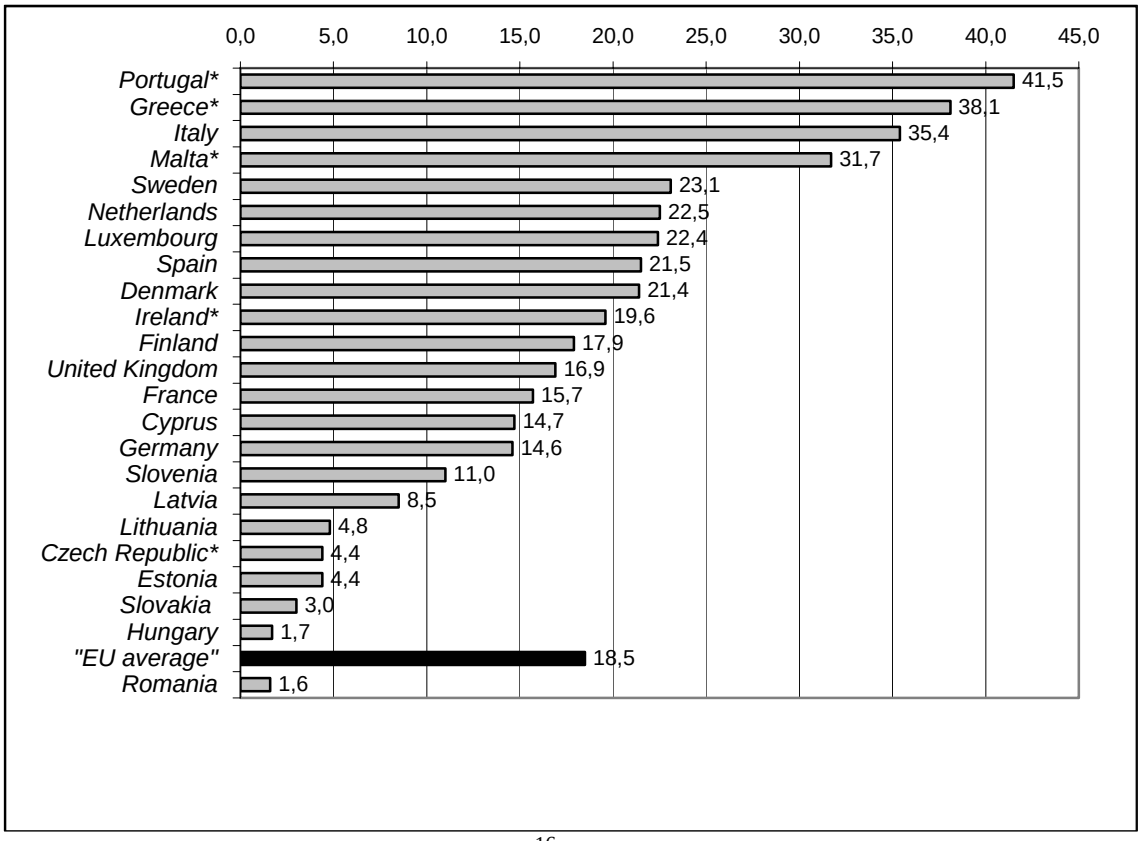
[12] Health in prisons Project, see http://www.euro.who.int/prisons/20070221_1

[13] http://www.emcdda.europa.eu/

[14] Stöver, H.; MacDonald, M,; Atherton, S.; Harm Reduction for Drug Users in European Prisons. Oldenburg/Germany, London/UK 2007

[15] EMCDDA, 2006

Figure 1: Sentenced prisoners by main offence: drug offences in percent



Source: Council of Europe, SPACE 2004[16]

In Portugal and Greece but also in Italy and Malta, drug offenders are an important group, while in Hungary and Romania, but also in the Slovak Republic, the Czech Republic, Estonia and Lithuania, these crimes are of little importance. Data on the percentage of drug offences among main offences are not available for Austria, Belgium, Poland and Bulgaria. While the "EU average" is 18,5%, 11 from 22 Member States range between about 15 and 23%. At the same time, all new EU Member States show figures clearly below 10% - plus Slovenia with 11%.

However, these figures do not reflect the actual situation as regards the prevalence of drug use inside prisons, because they depend on the penal system of the respective country and most of all because drug users might not be convicted for violation of drug related offences but for several other reasons.

[16] The following own calculations were added: Totals for Spain and the United Kingdom; "EU average"which takes into account the demographical weighting of the countries involved (i.e. is strongly determined by Germany, France, the United Kingdom, Italy, Spain and Poland, which have the biggest prison populations). Romania and Bulgaria have not been included in this calculation, since they were not yet EU Member States in 2004.

The answers to the partly revised SPACE I survey 2004[17] suggested that "cross-national comparisons of prison population rates must be conducted cautiously as the categories included in the total number of prisoners vary from country to country." The sometimes significant differences between the member states indicate different forms of social control regarding crime or the social definition of crime, respectively. These differences must result in differently composed prison populations and consequently have an impact on epidemiological structures and the distribution of risk groups and behaviour. The policy on drug consumption and its penalisation, for example, will influence the structure of a country's prison population.

Monitoring the situation of drug use and its consequences in the EU is a primary activity for the European Monitoring Centre for Drugs and Drug Addiction and improving the comparability of data across the Member States is one of its main tasks.

Indeed, the EMCDDA develops and recommends new methods and instruments in order to collect and analyse harmonised, good quality data at European level. The EU Action Plan on Drugs (2000-04) already called for Member States to provide reliable and comparable information on five key epidemiological indicators[18] according to the EMCDDA's recommended technical tools and guidelines.

Each year, the data that has been collected and analysed by the Centre is summarised in an Annual Report on the state of the drug problem in Europe[19]. Twenty-three Member States report compliance with the five key EMCDDA indicators. However, some do not yet implement all five. Every year, EMCDDA provides feedback to individual countries on the quality of their input and possible deficiencies in their information.

The EMCDDA coordinates a network of National Focal Points (NFPs) set up in the 27 EU Member States, Turkey, Croatia and Norway, and the European Commission. Together, these information collection and exchange points form Reitox, the European Information Network on Drugs and Drug Addiction. This network links specialised national information centres in the 27 Member States, Turkey, Croatia and Norway and the European Commission to the EMCDDA.

Since 1999, the EMCDDA collects through its Reitox network of National Focal Points (NFPs) data available on drug use in prison populations, based on existing studies carried out at local or national level. Studies conducted since the early 1990s are documented in the EMCDDA Statistical Bulletin. Standard Table 12 was designed as an instrument for the NFPs to report annually to the EMCDDA new data on drug use in prison populations in their country.

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[17] http://www.coe.int/T/E/legal_affairs/legal_cooperation/Prisons_and_alternatives/Statistics_SPACE_I/List_Space_I.asp

[18] http://www.emcdda.europa.eu/html.cfm/index1365EN.html

[19] http://www.emcdda.europa.eu/html.cfm/index419EN.html

To date, data from 23 EU countries and Norway have been reported to the EMCDDA. They can be consulted in the EMCDDA Statistical Bulletin[20].

Generally, information on drug use among prisoners is patchy. Many of the data available in Europe come from ad hoc studies, sometimes carried out at local level in establishments not representative of the national prison system, and using samples of prisoners that vary considerably in size. As a result, differences in terms of the characteristics of the populations studied limit comparisons of data between surveys - within and between countries - as well as extrapolation of results and trend analysis[21].

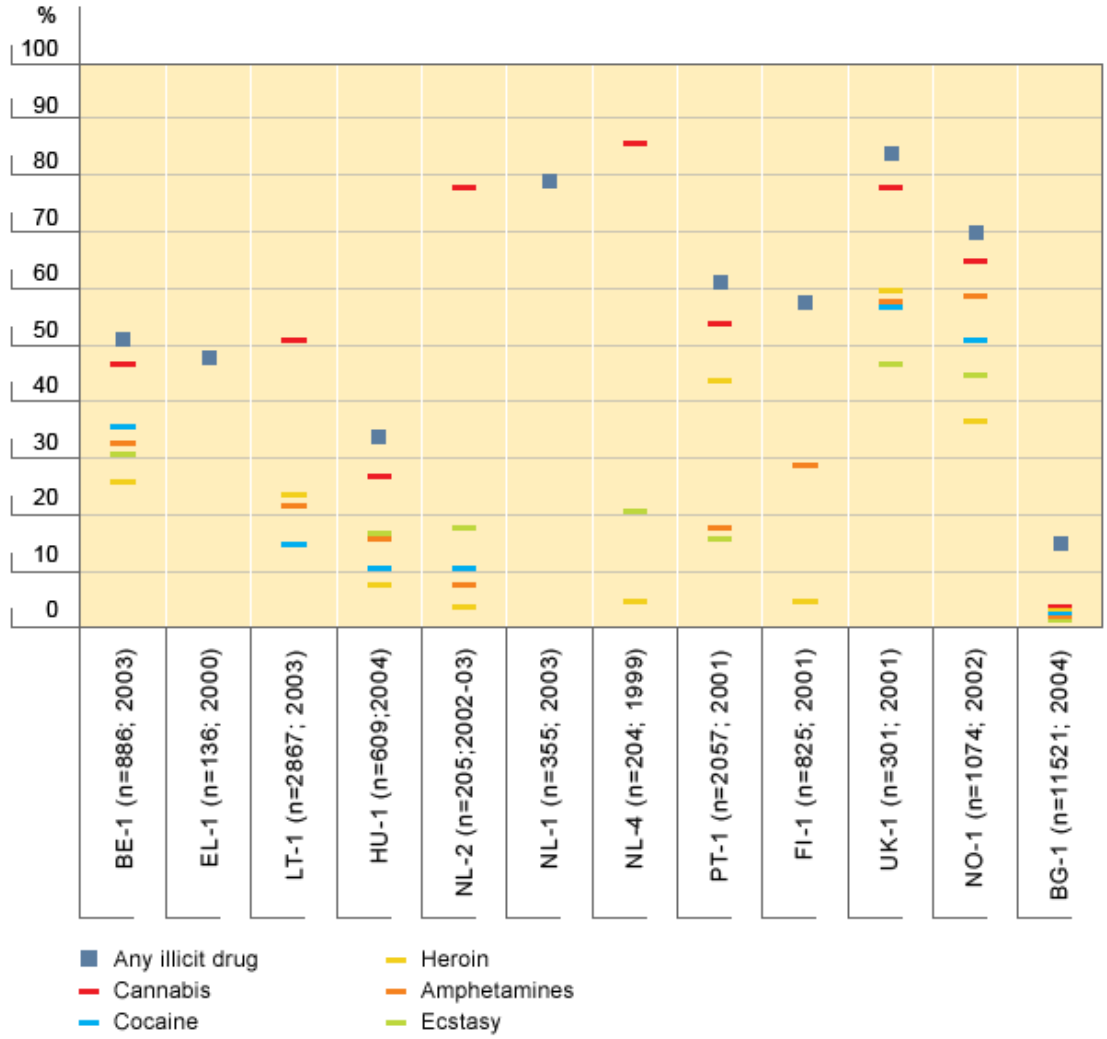
As described in the EMCDDA report 2006, there are further methodological issues, which limit both comparisons between countries and longitudinal analysis. The data come from a range of sources, which are often not comparable in terms of the methods used. Variations across countries and across surveys make comparisons between and within countries difficult and are related to issues such as sampling strategy, sample size, geographical coverage, population selection (for example convicted/remanded, male/female), and method of measurement of drug use (self-report, medical assessment). Moreover, studies in different countries use different measures of prevalence (lifetime or last year or month prevalence), and frequency of drug use. Consequently, the available information on drug use inside prison walls in the EU Member States is fragmentary, not up to date and with very limited comparability.

Figure 2 displays results from studies on lifetime prevalence, published between 1999 and 2004. It illustrates that only few Member States conducted studies on drug use inside prisons and/or report prevalence data to the EMCDDA.

[20] http://stats06.emcdda.europa.eu/en/page019-en.html), see tables DUP-1. Prevalence of lifetime drug use among prisoners, 1995 to 2004, DUP-2. Prevalence of lifetime injecting drug use among prisoners, 1995 to 2004, DUP-3. Prevalence of drug use within prison among prisoners, 1995 to 2004 and DUP-4. Prevalence of injecting drug use within prison among prisoners, 1995 to 2004

[21] EMCDDA Annual Report 2006, p 69, http://ar2006.emcdda.europa.eu/download/ar2006-en.pdf

Figure 2: Studies of lifetime prevalence of use of various drugs among prisoners, 1999 to 2004 in some EU countries



Notes:
For sources and bibliographic references, the numbering after the country name, refer to Table DUP-0.
Data between brackets refer to sample sizes and study years.
The Netherlands: The figure for ecstasy (21 %) refers to amphetamines or ecstasy; figures for heroin (4 % and 5 %) refers to heroin and opiates.
Finland: The figure for heroin (5 %) refers to opiates.
United Kingdom: The figure for cocaine (57 %) refers to cocaine and crack; the figure for heroin (60 %) refers to heroin and opiates.
For methodological details of studies, refer to Table DUP-1 in the 2006 statistical bulletin.
See also 'General notes for interpreting data' on the Explanatory notes and help page.
Sources:
Reitox National focal points. For detailed sources and bibliographic references, refer to Table DUP-0.

Source: EMCDDA Statistical Bulletin 2006, Figure DUP-1[22]

[22] http://stats06.emcdda.europa.eu/en/elements/dupfig01-en.html

On the basis of the available data, the EMCDDA estimates that at least half of the EU's prison population has a history of drug use, many with problematic and/or injecting drug use[23]. In the EMCDDA Annual report 2006 on the state of the drugs problem in Europe[24] it was stated that "*Data on drug use among the prison population in the last five years (1999–2004) were provided by most European countries[25]. They show that, compared with the general population, drug users are overrepresented in prison. The proportion of detainees who report ever having used an illicit drug varies among prisons and detention centres, but average rates range from one third or less in Hungary and Bulgaria to two thirds or more in the Netherlands, the United Kingdom and Norway, with most countries reporting lifetime prevalence rates of around 50 % (Belgium, Greece, Latvia, Portugal, Finland). Cannabis remains the most frequently used illicit drug, with lifetime prevalence rates among prisoners ranging between 4 % and 86 %, compared with lifetime prevalence rates of 3–57 % for cocaine, 2–59 % for amphetamines and 4–60 % for heroin[26]. Regular drug use or dependence prior to imprisonment is reported by 8–73 % of inmates, while the lifetime prevalence of drug injection among the prison population is 7–38 %[27]. Although the majority of drug users reduce or stop their drug use after incarceration, some detainees continue and others start using drugs (and/or injecting drugs) while in prison. According to available studies, 8–51 % of inmates have used drugs within prison, 10–42 % report regular drug use and 1–15 % have injected drugs while in prison[28]). This raises issues around the potential spread of infectious diseases, in particular in relation to access to sterile injection equipment and sharing practices among the prison population. Repeated surveys carried out in the Czech Republic (1996–2002), Denmark (1995–2002), Lithuania (2003/04), Hungary (1997–2004), Slovenia (2003/04) and Sweden (1997–2004) show an increase in the prevalence of various types of drug use among detainees, whereas France (1997– 2003) reports a significant decrease in the proportion of injectors among the prison population[29].*"

However, the extreme ranges of estimations respectively survey results (8–51 % of inmates report having used drugs within prison, 10–42 % report regular drug use, 1–15 % have injected drugs while in prison), the lack of target group specific data (prevalences among young offenders, female prisoners, migrants etc.) and the limited geographical coverage (most of the studies do not provide representative data for the prison population of a whole country) illustrate the lack of research carried out in prisons in the Member States and consequently the limitations in terms of usefulness of these data as reliable basis for policy makers to draw evidence based conclusions on prisoners' needs in terms of prevention and harm reduction.

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23 EMCDDA (2003): 'Treating drug users in prison - a critical area for health-promotion and crime-reduction policy'

24 http://ar2006.emcdda.europa.eu/en/home-en.html

25 Countries reporting studies carried out in the last five years (1999–2004) and providing data on drug use patterns in prison populations were Belgium, the Czech Republic, Denmark, Germany, Greece, France, Ireland, Italy, Latvia, Lithuania, Hungary, Malta, the Netherlands, Austria, Portugal, Slovenia, Slovakia, Finland, Sweden, the United Kingdom, Bulgaria and Norway.

26 See Table DUP-1 and Figure DUP-1 in the 2006 statistical bulletin.

27 See Tables DUP-2 and DUP-5 in the 2006 statistical bulletin.

28 See Tables DUP-3 and DUP-4 in the 2006 statistical bulletin.

29 See Table DUP-5 in the 2006 statistical bulletin.

In the EMCDDA Annual report 2007, the link between prison health and public health is clearly outlined: *Among prison populations, in particular, drug problems are often common and levels of infectious diseases relatively high. Moreover, drug use often continues or, sometimes, is initiated in prison; and in this setting, high-risk behaviours can be common. Prisons, therefore, have the potential to lead to elevated levels of infection of potential life-threatening diseases but may also provide an opportunity to intervene among a particularly important target group. With a few exceptions (France, the United Kingdom (England and Wales), Norway) prison health is generally an integral part of the judicial or security system rather than of the health system, thus risking isolating health in prisons from mainstream public health approaches and raising questions about the independence, quality, accessibility and level of health services provided. The poor health status of prisoners can have implications for wider public health, when drug users are released and resume contact with their family and others in the community.*[30]"

5. Monitoring of drug related infectious diseases among prisoners (disease monitoring)

The EMCDDA also collects data on the prevalence of infectious diseases and related risk behaviours in prison through a Standard Table 9 (ST9). However, this tool is not specific to prison populations, but used for any setting in which such studies have been conducted.

In the past, several epidemiological studies on the prevalence of blood borne infections were carried out inside prisons[31, 32, 33, 34, 35, 36, 37, 38]. Most of them are based on the so-called WASH surveillance methodology (willing anonymous salivary HIV surveys)[39]. For further details see chapter 7.

Studies from countries around the world demonstrate that blood borne infections (e.g. HIV, Hepatitis B and C) that are transmitted among drug users by unsafe injections, sexual prac-

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30 http://www.emcdda.europa.eu/html.cfm/index419EN.html, box on page 80

31 Taylor A et al.: Prevalence of hepatitis C virus infection among injecting drug users in Glasgow, 1990-1996: are current harm reduction strategies working? J Infect 2000; 40:176-83

32 Long J et al.: Prevalence of antibodies to hepatitis B, hepatitis C, and HIV and risk factors in entrants to Irish prisons: a national cross-sectional survey. BMJ 2001; 323:1209-13

33 Weild AR et al.: Prevalence of HIV, hepatitis B, and hepatitis C antibodies in prisoners in England and Wales: a national survey. Commun Dis Public Health 2000; 3:121-6

34 Rotily M et al.: Surveillance of HIV infection and related risk behaviour in European prisons. A multicentre pilot study. Europ J Pub Health 2001; 11:243–50

35 Bird SM, Rotily M: Inside Methodologies: For Counting Blood-Borne Viruses and Injector-Inmates' Behavioural Risks - Results From European Prisons. Howard J Criminal Justice 2002; 41 (2):123–136

36 Weilandt C et al.: Anonymous survey on infectious diseases and related risk behaviour among Armenian prisoners and prison staff. Int J Prisoner Health, 2007; 3(1):1-12

37 Meyer MF et al.: Prevalence of hepatitis C in a German prison for young men in relation to country of birth. Epidemiol Infect 2006; Jul 7:1-7

38 Stark K et al.: History of syringe sharing in prison and risk of hepatitis B virus, hepatitis C virus, and human immunodeficiency virus infection among injecting drug users in Berlin. Int J Epidemiol 1997; 26:1359–1366

39 Gore SM et al.: Prevalence of hepatitis C in prisons: WASH-C surveillance linked to self-reported risk behaviours. Q Med 1999; 92:25-32

tices, tattooing and piercing, are massively overrepresented in prisons compared to the community[40].

In addition to the extensive evidence of high risk behaviours among prisoners in many countries, there is documented evidence of the tranmission of HIV, as well as blood-borne infections such as HCV, within prisons[41].

Major differences in the epidemiology of infectious diseases like HIV, hepatitis and other sexually transmitted diseases in the general population have an impact on the epidemiological situation of these diseases in the respective prison settings. Due to several methodological problems, it is difficult to directly compare the prevalence or incidence data in the prison population and the general population. From the prison setting, only little epidemiological data is available and due to the different turn-over rates, incidence data from prison (if available) is not comparable with incidence data in the general population. Furthermore, the age- and gender-distribution of the prison population (mainly men in younger age groups) differs a lot from those in the general population so that direct comparisons of rates are even more problematic to interpret.

The main results of studies on HIV/AIDS and HCV carried out in prisons in Europe (as well as in other parts of the world) have been summarised in a selected annotated bibliography published in November 2005[42]. Despite the above mentioned methodological limitations, it has been shown that infectious diseases are overrepresented in the prison setting due to a high density of problematic drug users[43].

6. Monitoring of the availability and accessibility of prevention and harm reduction measures (response and policy monitoring)

The WHO/Regional Office for Europe (2005)[44] status paper on prisons and public health related to drugs and harm reduction defined harm reduction measures in prisons as: *"A concept aiming to prevent or reduce negative health effects associated with certain types of behaviour (such as drug injecting) and with imprisonment and overcrowding as well as adverse effects on mental health."*

Harm reduction acknowledges that many drug users cannot totally abstain from using drugs in the short term and aims to help them reduce the potential harm from drug use. In addition, the definition WHO adopted acknowledges the negative health effects imprisonment can have

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40 CEEHRN (2007): Hepatitis C prevention, treatment and care among injecting drug users in the new EU Member States and neighboring countries: situation, guidelines and recommendations; Lines, R. (2007): HIV infection in prisons; Laticevschi, D. (2007) Communicable diseases, both in: Møller, L., Stöver, H., Jürgens., R. & Gatherer, A. (ed.; 2007): Promoting health in prisons. The essentials. Copenhagen/Denmark

41 HIV/AIDS and HCV in Prisons: A Select Annotated Bibliography, Jürgens, R 2005, http://www.hc-sc.gc.ca/ahc-asc/alt_formats/hpb-dgps/pdf/intactiv/hiv-vih-aids-sida-prison-carceral_e.pdf

42 See reference 39

43 World Health Organization, UNAIDS, UNODC (2007): Effectiveness of Interventions to Manage HIV in Prisons – Needle and syringe programmes and bleach and decontamination strategies.

44 WHO Regional Office for Europe (2005): Status paper on prisons, drugs and harm reduction. Copenhagen, http://www.euro.who.int/eprise/main/WHO/Progs/SHA/prevention/20050622_

which include the impact on mental health, the risk of suicide and self-harm and the need to reduce the risk of drug overdose on release. It also emphasises the more general harm resulting from inappropriate imprisonment of people requiring facilities unavailable in prison[45].

The EMCDDA collects information on the current situation in European prisons including actual trends on responses and policies through the annual National Reports provided by the EMCDDA's National Focal points. The reporting guidelines for the description of the developments and trends on social correlates and consequences as well as responses to social correlates and consequences include the key topic "drug use and problem drug use amongst prison inmates" and "assistance to drug users in prison (prevention, harm reduction, treatment, social reintegration, community links etc.)". These national reports are available at the EMCDDA homepage[46].

The prison chapters of the national reports demonstrate that the implementation of harm reduction programmes is quite heterogeneous in European prisons. The Commission's report on the implementation of the Council Recommendation of 18 June 2003[47] on the prevention and reduction of health-related harm associated with drug dependence[48] said that a policy to provide drug users in prisons with services that are similar to those available to drug users outside prisons exists in 20 Member States and is about to be introduced in four countries (see Figure 3).

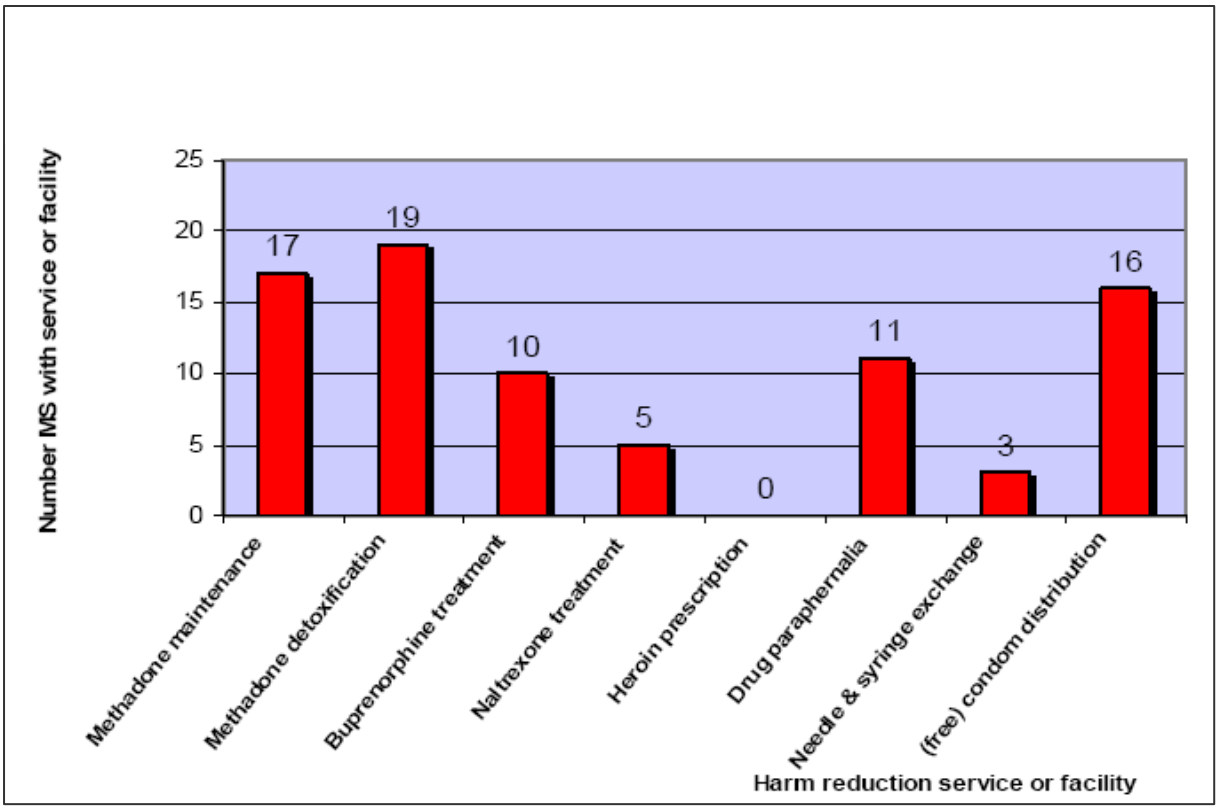
[45] Stöver, H.; MacDonald, M.; Atherton, S.: Harm Reduction for Drug Users in European Prisons. London/UK 2007

[46] http://www.emcdda.europa.eu/html.cfm/index435EN.html

[47] http://eur-lex.europa.eu/LexUriServ/site/en/com/2007/com2007_0199en01.pdf

[48] http://ec.europa.eu/health/ph_determinants/life_style/drug/drug_rec_en.htm

Figure 3: Availability of harm reduction services and facilities in prisons



Source: COM (2007) 199 final: Report from the Commission to the European Parliament and the Council

However, the coverage of these measures is often insufficient and fragmentary. When the availability of harm reduction or prevention measures in prisons is presented just on the basis of "available in the country: yes or no", this availability might be overestimated. Furthermore, information on the quality and accessibility of these services is lacking. In many of the EU Member States, the measures and services listed in figure 3 are only provided in a limited number of prisons.

It is also important to understand that in the prison context *availability* and *accessibility* are two different issues. Many prisoners will choose not to access HIV prevention services even when such services are provided due to stigma, lack of confidentiality and concerns about identifying themselves as either sexually active or using drugs within the institution. This means that *how* these programmes are implemented can be as important as *whether* they are implemented, and highlights the need for proper monitoring and evaluation of health interventions in the prison context. Some measures like vaccination against hepatitis A/B are often not pro-actively offered to the inmates due to the cost implications. In many countries education and information on drug use are reduced to the transfer of knowledge.

Information on the accessibility, level of availability, quality and the utilisation of such facilities, with a particular focus on at-risk populations, should be further improved in order to ob-

tain an overview of the situation in the different countries with clear indications on coverage as a core-element in policy evaluation.

Across the EU Member States, a wide range of different methodologies to assess, monitor and evaluate harm reduction services and facilities are in use. It is currently up to the Member States to discuss and exchange information on best practice with regard to such methods. In the future, it is strongly recommended to develop standardised approaches and tools for the collection of objective, reliable and comparable information.

7. Current monitoring initiatives: The WHO Health in Prison Database

There are some valuable starting points in gathering information on prevention and harm reduction and several health issues like prevalence of infectious diseases in European prison settings, which could support health planning and policy making. In 2006, the Health in Prison Project (HIPP) of the World Health Organization Regional Office for Europe[49] has launched a Prison Health Database, which was developed in collaboration with the EMCDDA and WIAD (Scientific Institute of the German Medical Association). The project development has been co-financed by the "Programme of Community action in the field of public health (2003-2008)".

The prison health database was developed in order to increase the knowledge of prison health, trends in prison health and their importance for public health. The system can be used to obtain an overview of the health situation in prisons and the organisation, practice and quality control of assistance to prisoners in Europe and to develop evidence-based guidance on cost-effective disease control and health promotion in prisons as part of national strategies for public health. This database includes a large number of relevant indicators on prison health.

The indicators of this database cover four subjects:

1. Penal Statistics
2. General Population Epidemiology
3. Interventions Monitoring
4. Penal Epidemiology.

[49] http://www.euro.who.int/prisons

The database includes the following information:

- statistics concerning the national penitentiary system,
- epidemiological data on infectious diseases (HIV, Hepatitis and TB),
- information about HIV/Hepatitis testing,
- drug substance use and mental disorders,
- prevention measures in prison,
- health care in prison,
- quality assurance in prison.

In connection to the database a tool for data presentation was developed[50]. The information in this database will be updated annually by national counterparts of the WHO Network on Prison and Health or a representative of the Ministry of Health. Countries are currently starting to provide penal statistics on the epidemiology of HIV/AIDS, hepatitis B and C, TB, STIs, violence/suicides, mental disorders and on specific interventions or preventive measures. Based on this information, it will be possible to develop indicators of "good" prison health and to use this database as an instrument for policy monitoring within European prison systems[51].

Information on drug use and penal epidemiology (cases of HIV/AIDS, hepatitis, syphilis, gonorrhoea, tuberculosis and on mental disorders) in this WHO prison health database is at present very scarce and if available, difficult to interpret. First of all, many data are missing in these tables, meaning that countries either do not have these data or did not report them to the WHO Prison Health Database. Moreover, comparisons between countries are very difficult to perform, because in order to be able to compare, rates (incidence or prevalence) are necessary, which can only be calculated on the basis of prevalence data for a given date. Most of the countries reported new cases for a period (mainly one year). Due to different turnover rates in these countries, it is not possible to calculate incidence data. Apart from these methodological problems, the different testing policies applied in prison and the differences in the reporting systems are more reasons making comparisons between countries very difficult.

Up to now the data reported from Member States to the WHO Health in prison database are quite limited. There are several possible explanations for this. Those Member States which have not reported, might not have had enough resources yet (time, financial) to enter the data. In many cases, data are not available at a national level but would first have to be collected at a regional level and then merged at a central level. Sometimes, the penal systems differ within one country, and for some questions (in particular qualitative), there would not be one aggregated answer but, for example, 16 different answers for the 16 Federal States in Germany.

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[50] http://data.euro.who.int/hip/

[51] World Health Organization. Status Paper on Prisons, Drugs and Harm Reduction. Copenhagen: World Health Organization Regional Office for Europe; 2005 (http://www.euro.who.int/document/e85877.pdf); WHO/ Europe 2001: "Prisons, Drugs and Society: A consensus statement on Principles, Policies and Practices, Copenhagen, 2001" (http://www.euro.who.int/document/E81559.pdf)

This aspect requires time and financial resources. Another plausible explanation is related to organisational aspects: WHO contacted the national counterparts of the WHO Network on Prison and Health or a representative of the Ministry of Health. Some countries, like Germany, do not nave a national representative for this network and the Ministry of Health is not responsible for health in prison and thus not able to report any information or data.

Therefore, the success of the WHO online database on health in prison does not only depend on the quality of the set of indicators´ conception in terms of medical science, but also on the social requirements of data collection. A well defined position in the structure of the respective national health system, for example in a department of the Ministry of Health or a national monitoring organisation, has to be made responsible for data collection and entry. WHO, possibly together with EMCDDA should insist on the institutionalisation of this task in each country to ensure high participation. Moreover, according to national particularities, the data entry system has to be open and flexible enough to introduce additional data and first of all qualitative information which are necessary to interpret the figures in the same way as it is possible on a paper copy.

8. Example of good practice: KABP studies

Currently, several studies on the prevalence of blood borne infections and related risk behaviours in prisons are being finalised in different European countries. They are based on the WASH (Willing Anonymous Salivary HIV/hepatitis C surveillance) method [52] and have been carried out under guidance of the EC funded ENDIPP Network. Prison staff were included in the surveys, since they represent a key element in all stages of prevention and harm reduction.

Surveys were carried out in Belgium[53] and Armenia[54] using saliva for blood borne virus detection, in Poland and Estonia using full blood samples, and in Germany[55] using dried blood spots. In a collaborative study in Azerbaijanian prisons a KABP study was carried out focussing solely on the knowledge, attitude and behaviour part; serostatus analysis were not permitted by the Ministry in charge[56]. Their outcomes will help determine recommendations for the responsible Ministries in order to improve prevention and care inside prisons. These studies comply with the technical specifications of “second generation surveillance”, as they merge information on prevalence with information on knowledge, attitudes, behaviour and practices of prisoners and prison staff.

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[52] Gore SM et al.: Prevalence of hepatitis C in prisons: WASH-C surveillance linked to self-reported risk behaviours. Q Med 1999; 92:25-32; Bird SM, Rotily M: Inside Methodologies: For Counting Blood-Borne Viruses and Injector-Inmates' Behavioural Risks - Results From European Prisons. Howard J Criminal Justice 2002; 41 (2): 123–136.

[53] Study not yet published

[54] Weilandt C et al.: Anonymous survey on infectious diseases and related risk behaviour among Armenian prisoners and prison staff. Int J Prisoner Health, 2007; 3(1): 1-12

[55] Publications expected in 2008

[56] Conducted by of the Penitentiary Department (PD), Main Medical Department (MMD), Ministry of Justice (MoJ),International Committee of the Red Cross (ICRC)

The aim of these surveys is to provide evidence on the epidemiology of infectious diseases among prisoners, and on the knowledge, attitude, behaviour and practice (KABP) both of prisoners and staff regarding health-related issues. The aim of the survey among prisoners is to determine the prevalence of hepatitis B, hepatitis C and HIV in a representative sample of the prison population as well as the prevalence of self-reported risk behaviour, to examine the association between the prevalence of these infections and related factors such as prison history and risk behaviour (in particular injecting drug use), and to compare self reported prevalence of blood-borne viral infections with actual prevalence. The aim of the survey among prison staff is to examine their knowledge, attitude and behaviour regarding infectious diseases, drug use, people who use drugs, people living with HIV/AIDS and/or hepatitis, and possible prevention measures in prison. It also seeks to compare knowledge, attitude and behaviour of different professional groups working in prison, and to compare prison staff's knowledge of infectious diseases with the information gathered from the prisoner's survey.

The results of these surveys will provide evidence based and comparable information on the prevalence of blood borne infections, related risk behaviour and reveal information gaps and prejudices both of prisoners and prison staff as regards drug use and infections.

9. Conclusions

Overall, there is an obvious lack of systematic monitoring and research on drugs and health issues in European prisons. There are some valuable starting points in gathering information (like the WHO Health in Prison Database) which could support health planning and policy making, but these systems have to be improved and need strong support from national authorities like Ministries of Health and/or Ministries of Justice.

As outlined above, the EMCDDA has developed a reporting tool for studies of drug use among prisoners, and collects information on prison-based responses to drug users (as far as this information is accessible to its Focal Points), but currently there is no specific tool available which could be used for the routine monitoring of the prevalence of infectious diseases and of drug use-related risk behaviours in prison populations in the EU. A general reporting tool for such data is however available (Reitox national reports, Standard Table 9) but it is not limited to the prison setting.

Furthermore, information on drug use and penal epidemiology (cases of HIV, hepatitis, syphilis, gonorrhoea, tuberculosis and on mental disorders) is scarce and comparisons between countries are difficult to perform due to several methodological problems (e.g. sampling strategy, sample size, geographical coverage, population selection, the different testing policies applied in prison for details see chapter 3). Testing policies as well as reporting systems differ between Member States and in many cases even within countries from one prison to the other.

10. Recommendations

Despite all valuable initiatives and approaches mainly taken by the EMCDDA and the WHO Regional Office for Europe, the information and data available on drug use and drug-related problems in European prisons are incomplete and insufficient. There is an obvious lack of systematic documentation and research on health issues in European prisons. Health reporting systems are not systematically applied; there are only few reliable data and information available on prevalence and incidence of infectious diseases, patterns and frequency of drug use, risk behaviour, accessibility of prevention and care efforts, and efficacy and efficiency of services used.

Existing monitoring tools such as the WHO-HIPP and EMCDDA databases should be ameliorated in the future in close collaboration with the EMCDDA and other experts. According to the experiences made so far with the WHO-HIPP database, some indicators might be revised or refined, and the data entry system can be made flexible enough to introduce additional data as well as qualitative information on national particularities like testing policies applied in prisons, the reporting system and possible limitations of available data. Furthermore, target group specific information on the accessibility, availability, quality and utilisation of harm reduction measures in prisons can be included.

The prison specific information collected by the EMCDDDA through different tools like standard tables and national reports can be further exploited (e.g. to generate prison specific tables on infectious diseases among drug users) and linked to the WHO HIPP database.

In order to obtain a European picture of, and trends in, drug use, infectious diseases, risk behaviours and responses in terms of harm reduction and prevention in prison populations, common EU instruments have to be developed which would allow collecting comparable and reliable data in several European countries.

Multi-country surveys in prisons, based on a common methodology, may be implemented but they ideally should be carried out simultaneously, which also means that funds have to be available at same period of time in the participating countries. The fact that multi-country studies are possible has been demonstrated by the experiences within the ENDIPP-Network. In the past, a few epidemiological multi-country studies have been carried out under the Umbrella of the EC funded ENDIPP-Network and the preceding project “European Network on HIV and Hepatitis Prevention in Prison”[57]. Since this Network does not exist any more, either other cofunding opportunities have to be made available by the European Union and/or national prison authorities have to be convinced to carry out research inside prisons which follows European standards.

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[57] Rotily M, Weilandt C, Bird SM, Käll K, Van Haastrecht HJ, Iandolo E, Rousseau S.: Surveillance of HIV infection and related risk behaviour in European prisons. A multicentre pilot study. Eur J Public Health. 2001 Sep;11(3):243-50.

In the future, it is necessary to develop and implement EU standard protocols to collect data on drug use, infectious diseases and risk behaviours in prison population which could then be used by countries to assess these issues in prison. It could be either a stand-alone protocol designed for a specific drug survey or study, or a protocol to be included as part of a prison survey on larger issues such as health or other matters. Such a protocol would have to include a standard questionnaire but also methodological and ethical recommendations about how to implement a prison survey on health and drug-related issues. It could be developed following the approach used for the five key indicators of the EMCDDA, i.e. carrying out the initial development within a steering group of experts from several countries and testing the draft protocol and then discussing it for implementation within a larger group of all EU countries.

These standard protocols for surveys, if applied, would also serve as excellent tools for monitoring the implementation and impacts of prevention, treatment and harm reduction services for people in prison and reintegration services for people on release from prison.

Apart from surveys which might be repeated from time to time in some EU Member states and provide comparable information on drug use and its consequences, much more has to be done to improve national and European prisoner health information in general. A standardized core set of information at each step of the imprisonment process (reception, custody, release) should be developed, agreed and established.

The significant health needs of prisoners as a vulnerable population group has been well documented. The need to develop statistics on the health of prisoners should be priority area in the European strategy and action planning. Although prisoner populations are recognised as priority groups in many National Strategy Plans (e.g. on Hepatitis C, HIV, Sexually Transmissible Infections Strategy etc.), no European strategy is in place to address gaps in the provision of health care and health needs. The association between prisoners' health and the health of the wider community means that a prisoner health information system is needed that will:

- monitor prisoners' health, and provide trends and country comparisons
- compare the health status of prisoners with the non-prison population and identify areas for improvement
- inform prisoner health service planning and funding
- assess and evaluate the provision of services
- assess differences in health care practices between prisons, providers and jurisdictions
- provide health performance indicators for correctional facilities
- measure health policy outcome among prisoners.