

Report on the current state of play of the 2003 Council Recommendation on the prevention and reduction of health-related harm, associated with drug dependence, in the EU and candidate countries

Final Report – Deliverable 2, 4, 5 and 6

On behalf of the European Commission



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I Executive summary (English)

1 Introduction

The **purpose** of the project was to produce a report on the current state of play of the 2003 Council Recommendation (CR) of 18 June 2003 on the prevention and reduction of health-related harm associated with drug dependence. The CR mentions the following main objectives:

- » Member States should, in order to provide for a high level of health protection, set as a public health objective the prevention of drug dependence and the reduction of related risks, and develop and implement comprehensive strategies accordingly.
- » Member States should, in order to reduce substantially the incidence of drug-related health damage (such as HIV, hepatitis B and C and tuberculosis) and the number of drug-induced deaths, make available, as an integral part of their overall drug prevention and treatment policies, a range of different services and facilities, particularly aiming at risk reduction; to this end, bearing in mind the general objective, in the first place, to prevent drug abuse.
- » Member States should consider measures, in order to develop appropriate evaluation to increase the effectiveness and efficiency of drug prevention and the reduction of drug-related health risks.

This report is the 2nd progress report on the implementation of the Council Recommendation on the prevention and reduction of health-related harm associated with drug dependence, and covers all 27 EU countries, the acceding country Croatia and the candidate countries: The former Yugoslav Republic of Macedonia, Iceland, Montenegro and Turkey. It consists of the updated overview of the implementation of the Council Recommendation, including country profiles, as well as analyses of regional and EU trends in epidemiology, and assesses the availability of, access to and coverage of harm reduction measures. It provides **country overviews** on harm reduction policies, services and facilities (country profiles). In addition, the available **scientific evidence** regarding interventions to prevent and reduce health-harms associated with drug dependence was analysed. The **epidemiological background data**, using data available at the EMCDDA, as well as other relevant information, and trends from 2003 to 2011 were analysed as well as main trends **in availability and coverage** of harm reduction measures introduced by the Council. The main output is a set of **conclusions** regarding the follow-up of the Council Recommendation, based on the application and combination of the scientific effectiveness of interventions and the availability and coverage.

The **general literature review** on harm reduction measures presented in the previous report has been updated using recent comprehensive reviews. Significant recent

studies have been added and the relevant websites have been searched for international guidelines. For areas not covered by recent reviews, **four systematic literature reviews** have been carried out (“peer naloxone programmes”, “needle exchange programmes in prison”, “prison release management” and “measures to influence the route of administration”). All **data available at the EMCDDA** (all standard tables and structured questionnaires collected by the EMCDDA, via the REITOX network), were scanned for relevant information related to description of the CR-implementation and then extracted. For the analysis of epidemiological trends, data presented in the EMCDDA Statistical Bulletin have been used, additionally. Data mainly refer to the time period 2003 to 2010/2011. **Country profiles focusing on drug-related harm (reduction)** were elaborated based on the analysis of the information available at the EMCDDA, the national reports on the drug situation from 2003 to 2011 and the EMCDDA country overviews for each country. They were sent out to the REITOX Focal Points to carry out a **gap-survey** in the course of which they were asked to add information, if necessary, and to comment on the information presented (response rate 26 of 32 countries). An **online-survey for policy makers** and a **consultation of stakeholders** were designed to gather further information on the implementation of harm reduction. The EC contacted the permanent representatives of each country asking for the nomination of one responsible person for the CR to fill in the survey for policy makers (response rate 31 of 32 countries). Based on a systematic selection strategy, a total of 123 institutions from 32 countries were contacted during the stakeholder survey (response rate 43 field organisations from 24 countries).

For the interpretation of this report’s results, the following **limitations** have to be taken into account: Data availability made a very good progress in the time-span from 2003 to 2010. Thanks to the continuous efforts of the EMCDDA for the harmonisation and expansion of the data collection, a lot of comparable data are available to describe the epidemiology of the drug situation and harm reduction measures. Unfortunately, data for time-series are not available for all countries; even basic data to analyse drug-related harm and availability of measures of harm reduction are missing in some countries. It has to be taken into account that absolute numbers (e. g. number of drug-induced deaths) are influenced by the quality of the respective monitoring system too. Therefore country-specific comparisons have to be made with caution and should be completely avoided for some countries. Another limitation of the present work is that the view of policy makers and stakeholders is based on the answers of single persons (answering often for a big country). This makes their statements subjective expert opinions. Therefore the data gathered are appropriate to give a general impression but not for direct country comparisons.

2 Evaluation of the Council Recommendation on harm reduction

Epidemiologic situation: Concerning drug-related harm it can be stated that a significant reduction of **HIV infections** among IDUs in most countries was achieved, but infection rates of **hepatitis C** are still high in many countries. Recent HIV-outbreaks in Greece and Romania show that HIV infection rates can increase rapidly under specific conditions, including low coverage of harm reduction measures. High rates of HCV infection can be seen as an indicator for the risk of a HIV-outbreak. It was not possible to reduce **drug-induced deaths** (deaths due to overdoses) since 2003 in most countries, although the coverage of OST increased. On one hand, measures to improve retention rates in OST and to avoid interruptions (e. g. prison, attempts to become drug free with no adequate indication) are necessary. On the other hand interventions focusing on overdose risk like drug consumption rooms and peer naloxone programmes should be considered. Prison release is a risk factor for drug-induced deaths and therefore adequate throughcare including prison release management and continuation of OST in prison and over the period of release is crucial.

Effectiveness of harm reduction measures: Strong scientific evidence exists for the effectiveness of **opioid substitution treatment (OST)** to reduce the infection risk in connection with drug-related infectious diseases (DRID) as well as mortality. Interruptions of OST are a risk factor for drug-induced deaths. Challenges for the future are to clarify how coverage can be increased further (e. g. avoid waiting lists), how interruptions can be avoided and how OST concerning substances and regimes can be diversified to meet the needs of different subgroups of opioid addicts. For **syringe provision through specialised programmes (NSP)** there is strong scientific evidence concerning the reduction of infection risk (e. g. HIV, HCV, HBV) too. Challenges are the improvement of coverage and dealing with other routes of administration than injecting. There is strong evidence concerning the effectiveness of **harm reduction (e. g. OST and NSP) in prison. Information, education and communication** are effective when the setting is appropriate and messages are provided in an adequate form by trustable persons. One possibility to assure the right setting is **outreach work**. Since peers are the most trustable persons in many aspects **peer involvement**, which has proven to be effective, is a good strategy. In the last decade evidence on **heroin assisted treatment** as a second line intervention, **drug consumption rooms** and **peer naloxone programmes** have increased significantly. Based on this evidence, it can be assumed that these interventions are effective, but that they should be further monitored and evaluated. **Vaccination for hepatitis B, treatment of HIV, HBV and HCV** in IDUs are effective measures. The treatment for HCV is a particularly effective instrument of infection prevention for others, too. **Drug Checking** is considered an integrated service that always combines chemical analysis with advice or counselling. Although there is no

new evidence on the effectiveness of Drug Checking programmes, it might be worth conducting new studies; on the one hand, because Drug Checking/counselling might be a reaction to the emergence of new psychoactive substances on the markets, on the other hand, because professionalisation took place concerning testing and counselling methods during the last few years. The possible benefit of measures to avoid shifting from other **routes of administration** to injecting drug use (IDU) and to foster shifting from IDU to other routes of administration is pointed out in scientific literature. However, there is hardly any evidence on concrete projects

Implementation of harm reduction measures and impact of the CR: The situation concerning harm reduction measures improved a lot in most countries. The Coverage of **OST and NSP** has considerably increased but especially NSP is still far away from full coverage in all countries. While OST is now available in many prisons, NSP is not. Therefore, **prisons are still a high risk environment for infections with HIV or HCV** and a driving factor for infectious diseases among injecting drug users (IDUs). Therefore, improvements in the prison setting are very urgent. **Heroin assisted treatment** as a second line intervention, **Drug Checking, peer naloxone programmes** and **drug consumption rooms** are implemented in a few countries, only. In times of economic crises, the financing of the status quo and the expansion of harm reduction is an important issue in all countries. In some EU 12 states (e. g. Bulgaria and Romania) harm reduction projects were initially funded by the “Global Fund to Fight AIDS, Tuberculosis, and Malaria”. There are now problems to ensure national funding.

The **impact of the CR** can be judged as substantial especially in the countries joining the EU in 2004 or later (EU 12). Further support from EU level is requested from organisations involved in harm reduction. A clear new statement on harm reduction can help to foster the expansion of harm reduction measures. These EU-recommendations should also include, in particular, new measures like drug consumption rooms and peer naloxone programmes related to the reduction of drug-induced death and give a special focus to prisons (OST, NSP and adequate throughcare). In addition, the new recommendations should cover new areas like housing, social re-integration and occupation because these are the main factors for stabilisation (or de-stabilisation if lacking). However, existing harm reduction measures, such as OSP and NSP as the backbone of any harm reduction strategy, need to be strengthened.

3 Conclusions and suggestions for follow up

Based on the literature review and the analysis of the situation concerning harm reduction, the following concrete recommendations and priorities have been elaborated. These recommendations implicate activities on different levels: EU-policy-level, national-policy-level and the level of practical implementation in the field:

The Council Recommendation (CR) helped foster harm reduction in the EU, but the coverage is still far from sufficient in most areas. This calls for political strengthening of harm reduction which can be achieved by a new or revised CR.

Priority A: reduction of drug-induced deaths

Reasoning: It was not possible to reduce the number of drug-induced deaths since 2003.

Target: Significant reduction of the number of drug-induced deaths in the next ten years.

Proposed measures: Improvement of the coverage (for specific subgroups of opioid addicts, low threshold access to opioid substitution treatment (OST), comprehensive health insurance covering OST) and organisation of opioid substitution treatment (avoid interruptions, avoid waiting lists), facilitate the use of emergency services, peer naloxone programmes, integration of services (especially prison and treatment release management), drug consumption rooms, outreach, peer involvement and family support.

Relevance for public health: drug-induced deaths remain one of the major causes of death among young adults which calls for immediate action. In particular, easy to adopt and cost-effective measures, such as facilitating the use of emergency services, should be addressed and supported on European level in order to save young lives.

Priority B: improvement of harm reduction in prison

Reasoning: The coverage of harm reduction measures in prison lies far behind the coverage outside prison. Therefore prison is a high risk environment for injecting drug users (IDUs) to get infected with drug-related infectious diseases. Prison release without adequate throughcare is one main risk factor for drug-induced deaths.

Target: Harm reduction measures in prison should be assured as a comprehensive response, equivalent to the community in the next ten years.

Proposed measures: Opioid substitution treatment (OST), syringe provision through specialised programmes (introduction in all prisons), release management, through-care into and out of prison (regarding OST continuity), housing for released prisoners, health assessments including infection prevention.

Relevance for public health: Harm reduction in prison is still very rare or limited in Europe leading to high infections rates and increased mortality after prison release. Around 15 percent of all drug related deaths could be avoided only with adequate prison release management (Frisher et al. 2012)¹. High infection rates (e. g. HIV, hepatitis) of the prisons' population threaten health of general population too: Good

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In 2005, 1.506 drug users died in England from 'overdose' or poisoning, drug abuse or drug dependence. Around 15% of these deaths occur in people after release from prison. Those fatalities might be avoided with adequate and coordinated prison release management (Department of Health 2007; Frisher et al. 2012).

prison health is good public health (WHO 2007). Action in this field promises instant results and can be implemented cost-effectively (e. g. syringe provision through specialised programmes).

Priority C: reduction of harm caused by drug-related infections

Reasoning: Existing harm reduction measures have been sufficient to decrease HIV prevalence in injecting drug users (IDUs) significantly in most countries covered with this research. Recent HIV outbreaks show that this situation can change very fast when harm reduction is not appropriate. Hepatitis C (HCV) rates are still on a high level and will lead – if the reaction is not adequate – to enormous individual (e. g. death due to consequences of HCV) and public costs.

Target: Significant reduction of HCV prevalence among IDUs in the next five years, significant reduction of HIV incidence in countries with high rates or increasing trends (Bulgaria, Estonia, Latvia, Lithuania, Greece, Portugal, Romania) in the next five years, treatment (especially HCV treatment) of infected IDUs shall reach full coverage in the next five years (treatment should be available for anyone in need of it), HBV vaccination of IDUs shall reach full coverage in the next five years.

Proposed measures: See priority B, improvement of the coverage of syringe provision through specialised programmes (NSP), HIV and HCV treatment programmes, improvement of HCV surveillance, hepatitis B vaccination programmes, outreach, peer involvement and family support.

Relevance for public health: Infection diseases are one of the major drug-related diseases and can be easily and cost-effectively influenced by widely available syringe provision through specialised programmes. It has been proven that OST is associated with a 50 percent reduction of HIV infection among IDUs (MacArthur et al. 2012). HIV and HCV treatment decrease the risk of infections for others and are therefore cost-effective interventions to avoid individual harm and prevent further infections, which could lead to a substantial health burden for drug users and the society as whole.

II Résumé analytique (Français)

1 Introduction

L'**objectif** de ce projet était de produire un rapport sur la situation actuelle de la Recommandation du Conseil (CR) du 18 Juin 2003 sur la prévention et la réduction des méfaits pour la santé liés à la toxicomanie. La CR mentionne les objectifs généraux suivants:

- » atteindre un haut niveau de protection de la santé, de faire de la prévention de la toxicomanie et de la réduction des risques annexes un objectif en matière de santé publique et d'élaborer et de mettre en oeuvre des stratégies globales en conséquence.
- » diminuer de façon significative l'incidence des effets nocifs de la drogue sur la santé (VIH, hépatite B et C, tuberculose, etc.) et le nombre de décès liés à la drogue, de prévoir, comme partie intégrante de leurs politiques globales de prévention et de traitement de la toxicomanie, un éventail d'interventions diverses, notamment en vue de réduire les risques et, par conséquent, sans perdre de vue l'objectif général qui est, avant tout, d'empêcher la toxicomanie.
- » élaborer une évaluation pertinente destinée à accroître l'efficacité et l'efficience de la prévention de la toxicomanie et de la réduction des risques pour la santé induits par les drogues.

Ce rapport est le 2^e sur l'état d'avancement concernant la mise en oeuvre de la Recommandation du Conseil sur la prévention et la réduction des méfaits pour la santé liés à la toxicomanie, et couvre tous les 27 pays de l'UE, la Croatie (pays en voie d'adhésion) et les pays candidats: l'ancienne République yougoslave de Macédoine, l'Islande, Le Monténégro et la Turquie. Il consiste en un **aperçu général** de la mise en oeuvre de la Recommandation du Conseil, incluant les profils de pays, ainsi que les analyses des tendances épidémiologiques des Régions et des Pays de l'UE, l'évaluation de la disponibilité, de l'accès ainsi que de la couverture des mesures de réduction des méfaits. Il fournit des aperçus des pays sur les politiques de réduction des méfaits, les services et les installations (Profil des pays). De plus, les **preuves scientifiques** disponibles concernant les interventions pour empêcher et diminuer les risques sanitaires liés à la toxicomanie ont été analysées. Les **données de base épidémiologiques**, qui utilisent les données disponibles de l'OEDT, ainsi que d'autres informations pertinentes, et les tendances de 2003 à 2011 ont été analysées, tout comme les principales tendances **de disponibilité et de couverture** des mesures de réduction des risques introduites par le Conseil.

Le principal résultat est une série de **conclusions** portant sur le suivi de la Recommandation du Conseil, basé sur l'application et la combinaison de l'efficacité scientifique des interventions ainsi que sur la disponibilité et la couverture.

La **documentation générale** sur les mesures de réduction des méfaits présentée dans le rapport précédent a été mise à jour en utilisant des études récentes. Des recherches sur les directives internationales ont aussi été effectuées sur des sites web pertinents. Pour les domaines non-couverts par les études récentes, **quatre analyses documentaires systématiques** ont été effectuées ("programmes de Naloxone administrée par les pairs", "programmes d'échange d'aiguille dans les prisons", "gestion des libérations", "mesures pour influencer le changement de voie d'administration"). Toutes **les données disponibles à l'OEDT** (tous les tableaux et les questionnaires structurés recueillis par l'OEDT, via le réseau REITOX), ont été scannées, afin de trouver des informations pertinentes pour la description de la mise en œuvre de la CR, puis extraites. Pour l'analyse des tendances épidémiologiques, les données présentées par le bulletin statistique de l'OEDT ont également été utilisées. Les données font principalement référence à la période 2003 à 2010/2011. **Les profils des pays se concentrant sur les dommages liés à la drogue (diminution)** ont été élaborés à partir de l'analyse des informations disponibles à l'OEDT, des rapports nationaux sur le problème de la drogue de 2003 à 2011 et des aperçus de chaque pays fait par l'OEDT. Ils ont été envoyés aux points focaux du REITOX afin de procéder à un **sondage** au cours duquel ils devaient ajouter de l'information, si nécessaire, et commenter les informations présentées. (Taux de réponse 26 pays sur 32). Un **questionnaire en ligne pour les décideurs** et une **consultation des parties prenantes** ont été conçus afin de rassembler des informations supplémentaires sur la mise en place de la diminution des risques. La CE a demandé aux représentants de chaque pays de nommer une personne responsable de la CR qui remplira le questionnaire pour les décideurs. (Taux de réponse de 31 pays sur 32). A partir d'une stratégie de sélection systématique, 123 institutions au total, sur les 32 pays, ont été contactées pendant l'enquête (Taux de réponse de 43 organisations sur le terrain sur 24 pays).

Pour l'interprétation des résultats de ce rapport, les **limites** suivantes doivent être prises en compte: La disponibilité des données a fait un progrès important sur la période 2003–2010. Grace aux efforts continus de l'OEDT pour l'harmonisation et l'expansion de la collecte de données, beaucoup de données comparables sont disponibles pour décrire la situation épidémiologique des drogues et les mesures de diminution des méfaits. Malheureusement, les données pour les séries temporelles ne sont pas disponibles pour tous les pays ; même certaines données de base pour l'analyse des risques liés à la drogue et pour les mesures de diminution des risques manquent pour certains pays. Il faut également prendre en compte le fait que les nombres absolus (par exemple le nombre de décès liés à la drogue) sont influencés par la qualité du système de suivi. C'est pourquoi les comparaisons spécifiques entre pays doivent être réalisées avec prudence et doivent même être évitées pour certains pays.

Une autre limite du présent ouvrage est que la perception des décideurs et des intervenants est basée sur les réponses d'une seule personne (qui répond souvent pour un grand pays). Cela fait, de leurs déclarations, des avis subjectifs d'experts. En conséquence, les données collectées sont appropriées pour donner une impression générale mais pas pour une comparaison directe entre pays.

2 Evaluation de la Recommandation du Conseil sur la réduction des méfaits

Situation épidémiologique: En ce qui concerne les risques liés à la drogue, on peut affirmer qu'une baisse significative du nombre d'**infection au VIH** parmi les UDI dans la plupart des pays a été réalisée, mais que les taux d'infections de l'**hépatite C** sont toujours très élevés dans beaucoup de pays. Les récentes épidémies de VIH en Grèce et Roumanie montrent que les taux d'infections au VIH peuvent augmenter rapidement sous certaines conditions spécifiques, incluant la faible couverture des mesures de réduction des méfaits. Les taux élevés de VHC peuvent être vus comme un indicateur de risque de déclenchement de VIH. Il n'était pas possible de réduire **les décès directement liés à la drogue** (décès dus à une overdose) depuis 2003 dans la plupart des pays, même si la couverture des TSO a augmenté. D'un côté, les mesures d'amélioration des taux de rétention et le fait d'éviter les interruptions dans les TSO (par exemple: dans les prisons, tentatives pour se libérer de la drogue sans indication adéquate) sont nécessaires. D'un autre côté, les interventions qui se concentrent sur les risques d'overdose comme les salles de consommation de drogues et les programmes de Naloxone administrée par les pairs, doivent être pris en considération. Les libérations constituent un facteur de risque pour les overdoses et de ce fait une prise en charge adéquate, incluant la gestion des libérations et la continuation des TSO en prison et tout au long de la période de libération, est cruciale.

Efficacité des mesures de réduction des méfaits: De solides preuves scientifiques existent pour l'efficacité des **traitements de substitution d'opioïdes (TSO)** afin de réduire le risque d'infection en relation avec les maladies infectieuses liées à la consommation de drogue (DRID) ainsi que la mortalité. Les interruptions des TSO sont un facteur à risque pour les décès directement liés à la drogue. Les défis pour l'avenir seront de clarifier comment la couverture peut être étendue d'avantage (par ex. en évitant les listes d'attente), comment les interruptions peuvent être évitées et comment les TSO concernant les substances et régimes peuvent être diversifiés afin de répondre aux besoins des différents sous-groupes dépendants aux opioïdes. **Pour la distribution des seringues par le biais de programmes spécialisés (NSP)** il y a également de solides preuves scientifiques concernant la réduction du risque d'infection (Par ex: VIH, VHC, VHB). Les défis sont l'amélioration de la couverture et le traitement par d'autres voies d'administration que l'injection. Il y a de solides preuves concernant l'efficacité de la

réduction des méfaits (par ex: TSO et NSP) **en prison**. **L'information, l'éducation et la communication** sont efficaces lorsque l'environnement est approprié and lorsque les messages sont fournis de manière adéquate par des personnes de confiance. Une possibilité d'assurer un bon environnement est le **travail de proximité**. Les pairs étant les personnes les plus dignes de confiance dans de multiples aspects, **l'implication de ces derniers**, qui s'est avéré être effective, est une bonne stratégie. Au cours de la dernière décennie, les preuves de **traitement avec prescription d'héroïne** comme traitement de deuxième ligne, les **salles de consommation de drogue** et les **programmes de Naloxone administrée par les pairs** ont considérablement augmentés. A partir de cela, nous pouvons en déduire que ces interventions sont efficaces, mais qu'elles devraient être surveillées et évaluées d'avantage. **La vaccination contre l'hépatite B, le traitement contre le VIH, VHC et VHB** dans les UDI sont des mesures efficaces. Le traitement pour le VHC est également un instrument particulièrement efficace pour la prévention des infections des autres maladies. Le **contrôle des drogues** est considéré comme un service intégré combinant une analyse chimique avec conseils et soutien. Bien qu'il n'y ait pas de nouvelles preuves sur l'efficacité des programmes de contrôle des drogues, cela vaudrait peut-être la peine de conduire de nouvelles études; d'une part, parce que le contrôle des drogues/consultations peuvent être une réaction aux substances psychoactives émergentes sur le marché, ou d'autre part, parce que la professionnalisation a eu lieu concernant les méthodes de test et de conseil au cours des dernières années. Les avantages possibles liés aux mesures mises en place pour éviter de passer d'**autres routes d'administration** à l'injection de drogue ou à celles mises en place pour favoriser le passage de l'UDI à d'autres routes d'administration sont soulignés dans la littérature scientifique. Toutefois, il n'y a guère de preuve provenant de projets concrets.

Mise en œuvre des mesures de réduction des risques et impact de la CR: La situation concernant les mesures de réduction des risques s'est beaucoup améliorée dans la plupart des pays. La couverture des **TSO et des NSP** a considérablement augmenté mais les NSP notamment sont encore loin d'une couverture totale dans tous les pays. Tandis que les TSO sont maintenant disponibles dans un grand nombre de prisons, nous ne pouvons pas en dire autant des NSP. Par conséquent, l'univers carcéral est toujours un **environnement présentant un risque élevé d'infection par le VIH ou VHC** et un facteur déterminant pour les maladies infectieuses parmi les utilisateurs de drogues injectables (UDI). C'est pourquoi les améliorations de l'environnement carcéral sont très urgentes. **Le traitement avec prescription d'héroïne** comme traitement secondaire, **le contrôle des drogues, le programme de Naloxone administrée par les pairs** et les **salles de consommation de drogues** ne sont qu'implantés dans peu de pays. En période de crise économique, le financement du statu quo et l'extension de la réduction des méfaits est un enjeu important dans tous les pays. Dans certains pays de l'UE 12 (la Bulgarie ou la Roumanie par exemple) les projets de réduction des méfaits étaient initialement financés par le "Global Fund to Fight AIDS, Tuberculosis, and Malaria". Il existe maintenant des problèmes concernant le financement national.

L'**impact de la CR** peut être jugé comme substantiel particulièrement pour les pays qui ont rejoint l'UE en 2004 ou plus tard (UE 12). Les organisations impliquées dans la réduction des risques demandent un soutien supplémentaire au niveau de l'UE. Un nouvel exposé précis sur la réduction des risques peut aider à favoriser l'épanouissement des mesures de réduction des risques. Ces recommandations de l'UE devront inclure en particulier les nouvelles mesures, comme les salles de consommation de drogues et les programmes de Naloxone administrée par les pairs, liées à la réduction des décès dus aux drogues et mettre un accent particulier sur les prisons (TSO, NSP et autres prises en charge adéquates). De plus, ces nouvelles recommandations devront couvrir de nouveaux domaines comme le logement, la réinsertion sociale et l'emploi car ce sont les facteurs principaux de stabilité. Toutefois, les mesures existantes, concernant la réduction des risques comme les TSO et NSP comme épine dorsale de toute stratégie de réduction des risques, devront être renforcées.

3 Conclusions et suggestions de suivi

A partir de la documentation existante et de l'analyse de la situation concernant la réduction des méfaits, les recommandations et priorités suivantes ont été élaborées. Ces recommandations impliquent des activités à différents niveaux: au niveau des politiques de l'UE, au niveau de la politique nationale et au niveau de la mise en œuvre pratique dans les domaines suivants:

La Recommandation du Conseil (CR) a aidé à favoriser la réduction des risques dans l'UE, mais la couverture demeure encore insuffisante dans la plupart des secteurs. Ceci exige un renforcement politique de réduction des méfaits qui peut être atteint par une nouvelle CR (ou révisée).

Priorité A: Réduction des décès liés à la drogue (surdose)

Raisonnement: Il n'était pas possible de réduire le nombre de décès liés à la drogue depuis 2003.

Objectif: Réduction significative du nombre de décès liés à la drogue dans les 10 prochaines années.

Mesures proposées: Amélioration de la couverture (pour des sous-groupes spécifiques de dépendants aux opioïdes, abaissement du seuil d'accès aux traitements des substituts d'opioïdes (TSO), un système d'assurance malade complet couvrant les TSO) et de l'organisation des traitements des substituts d'opioïdes (éviter les interruptions et les listes d'attente), faciliter l'utilisation des services d'urgences, des programmes de Naloxone administrée par les pairs, l'intégration de services (spécialement dans les prisons et gestion des libérations), les salles de consommation de drogue, la sensibilisation, l'implication des pairs et le support familial.

Intérêt pour la santé publique: Les décès dus à la drogue restent l'une des premières causes de décès parmi les jeunes adultes, ce qui exige des mesures immédiates. Les mesures faciles à adopter et avec une bonne rentabilité, comme l'utilisation d'urgence, devraient être ad+ressées tout particulièrement et supportées au niveau Européen afin de sauver de jeunes vies.

Priorité B: Amélioration de la réduction des méfaits en prison

Raisonnement: La couverture des mesures pour la réduction des méfaits en prison est très inférieure à celle en dehors des prisons. Par conséquent, la prison est un environnement à risque pour les utilisateurs de drogues d'injection (UDI) de se faire infecter par des maladies liées à la drogue. La libération sans prise en charge adéquate est un des facteurs de risques de décès liés à la drogue.

Objectif: Les mesures de réduction des méfaits en prison devront être assurées telle une réaction complète, équivalente à celles de la communauté dans les dix prochaines années.

Mesures proposées: Les traitements de substitution aux opioïdes (TSO), la distribution de seringues à travers des programmes spécialisés (introduction dans toutes les prisons), gestion des libérations, la prise en charge dans et en dehors de la prison (concernant la continuité des TSO), le logement pour les prisonniers libérés et les évaluations de santé incluant la prévention des infections.

Intérêt pour la santé publique: La réduction des méfaits en prison est toujours très rare, voir limitée en Europe, ce qui entraîne des taux d'infection élevés et une mortalité en augmentation après une libération. Environ 15 % de toutes les morts liées à la drogue pourraient être évitées seulement avec une gestion des libérations plus adéquate. (Fisher et al. 2012)². Les taux d'infection élevés (par exemple VIH, hépatite) de la population carcérale menacent également la santé de la population générale. Un système carcéral sain est bon pour la santé publique (WHO 2007). Des actions dans ce domaine promettent des résultats instantanés et peuvent être mis en place de manière rentable (par exemple: la distribution de seringues à travers un programme spécialisé).

Priorité C: réduction des méfaits causés par les maladies infectieuses liées à la drogue

Raisonnement: Les mesures existantes de réduction des méfaits ont été suffisantes pour diminuer la prévalence du VIH dans la catégorie des utilisateurs de drogues d'injection (UDI) de manière significative dans la plupart des pays couverts par cette recherche. Les récentes épidémies de VIH montrent que cette situation peut changer très rapidement lorsque la réduction des risques n'est pas appropriée. Les taux d'Hépatite C (VHC) sont toujours très élevés ce qui entraînera – si la réaction n'est pas

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En 2005 il y avait 1,506 consommateurs de drogues en Angleterre qui mouraient d'empoisonnement ou d'une surdose, d'abus de drogues ou la dépendance aux drogues. À peu près 15 pour cent de ces morts peuvent être attribués aux personnes récemment libérés de prison. Une gestion de la sortie de prison adéquatement appliquée et coordonnée pourrait contribuer à éviter ces décès (Department of Health 2007; Fisher et al. 2012).

adéquate – d'énormes coûts individuels (par exemple la mort du aux conséquences du VHC) et publics.

Objectif: Dans les cinq prochaines années: une réduction significative de la prévalence de VHC parmi les UDI, une réduction significative de l'incidence du VIH dans les pays aux taux élevés ou en augmentation (Bulgarie, Estonie, Lettonie, Lituanie, Grèce, Portugal, Roumanie), le traitement des UDI infectés (en particulier le traitement VHC) devra atteindre une couverture totale (le traitement devra être disponible à toute personne qui en aurait en besoin), la vaccination du VHB pour tous les UDI devra également atteindre une couverture totale.

Mesures proposées: Voir priorité B, amélioration de la couverture de la distribution de seringues à travers des programmes spécialisés (NSP), des programmes de traitement du VIH et VHC, l'amélioration de la surveillance du VHC, les programmes de vaccination de l'hépatite B, la sensibilisation, l'implication des pairs et le support familial.

Intérêt pour la santé publique: les maladies infectieuses font partie des principales maladies liées à la drogue et peuvent être influencées de manière facile et rentable par une distribution de seringue largement accessible à travers les programmes de seringues spécialisés. Il a été prouvé que les TSO sont associés à 50 % de réduction des infections de VIH parmi les UDI (MacArthur et al. 2012). Le traitement du VIH et du VHC diminue les risques d'infection pour les autres et par conséquent sont des interventions rentables pour éviter les risques individuels et pour prévenir d'autres infections, qui pourraient conduire à un lourd fardeau sanitaire pour les utilisateurs de drogues ainsi que pour la société dans son ensemble.

III Kurzfassung (Deutsch)

1 Einleitung

Ziel dieses Projektes war es, die aktuelle Situation hinsichtlich der Umsetzung der Empfehlung des Rates der Europäischen Union vom 18. Juni 2003 zu Prävention und Reduktion von Gesundheitsschäden im Zusammenhang mit Drogenabhängigkeit darzustellen. Die Empfehlung des Rates nennt folgende Hauptziele:

- » Die Mitgliedstaaten sollten zur Gewährleistung eines hohen Gesundheitsschutzniveaus die Prävention von Drogenabhängigkeit und die Verringerung damit verbundener Gefahren zum Ziel ihrer Gesundheitspolitik machen und dementsprechend umfassende Strategien ausarbeiten und umsetzen.
- » Die Mitgliedstaaten sollten zur Erreichung einer deutlichen Senkung der Inzidenz drogenbedingter Gesundheitsschäden (wie etwa HIV, Hepatitis B und C und Tuberkulose) sowie der Zahl drogenbedingter Todesfälle als integralen Bestandteil ihrer umfassenden Politiken zur Drogenbekämpfung und zur Drogenbehandlung verschiedene Dienstleistungen und Einrichtungen vorsehen, die insbesondere auf die Risikominderung ausgerichtet sind – eingedenk des allgemeinen Ziels, den Drogenmissbrauch von vornherein zu verhindern.
- » Die Mitgliedstaaten sollten spezifische Aktivitäten zur Entwicklung geeigneter Evaluierungsverfahren, die die Effizienz und Wirksamkeit der Drogenprävention sowie die Reduzierung drogenbedingter Gesundheitsrisiken erhöhen, in Erwägung ziehen.

Der vorliegende Bericht ist die zweite Bestandaufnahme zum Stand der Implementierung der Ratsempfehlung und umfasst alle 27 EU Mitgliedsstaaten, das Beitrittsland Kroatien und die Kandidatenländer: ehemalige jugoslawische Republik Mazedonien, Island, Montenegro und die Türkei. Der Bericht enthält einen aktualisierten Überblick über die Implementierung der Ratsempfehlung mit Länder-Profilen, regionale und EU-weite epidemiologische Trendanalysen und eine Beurteilung der Verfügbarkeit, des Zugangs und Deckungsgrads von Maßnahmen zur Schadensminimierung. Er bietet **Länderüberblicke** zu Schadensminimierungs-Strategien, Diensten und Einrichtungen (Länder-Profile). Darüber hinaus wurde die verfügbare **wissenschaftliche Evidenz** zu Maßnahmen zur Prävention und Verringerung von Gesundheitsschäden im Zusammenhang mit Drogenabhängigkeit analysiert. Anhand der bei der EBDD verfügbaren Daten aber auch anhand anderer relevanter Quellen wurden die **epidemiologischen Hintergrunddaten** und Entwicklungen zwischen den Jahren 2003 und 2010/2011 analysiert und die Entwicklungen in puncto **Verfügbarkeit und Deckungsgrad** von schadensminimierenden Maßnahmen gemäß der Ratsempfehlung dargestellt. Hauptergebnis ist eine

Reihe von **Schlussfolgerungen** für eine neue Ratsempfehlung auf Basis der wissenschaftlichen Evidenz zu den Maßnahmen, bzw. deren Verfügbarkeit und Deckungsgrad.

Die **allgemeine Literaturlauswertung** aus dem Vorgängerbericht wurde mit aktuellen Übersichtsarbeiten aktualisiert. Ergebnisse rezenter Studien wurden einbezogen und relevante Websites wurden nach internationalen Leitlinien zu schadensminimierenden Maßnahmen durchsucht. Zu Bereichen, die nicht durch die allgemeine Literaturlauswertung abgedeckt waren, wurden **vier systematische Literaturlauswertungen** durchgeführt („Peer-Naloxon-Programme“, „Spritzentauschprogramme in Haftanstalten“, „Haftentlassungsmanagement“, „Maßnahmen zur Beeinflussung der Applikationsform“). Alle **verfügbaren Daten der EBDD** (alle „standard tables“ und „structured questionnaires“ die von der EBDD über das REITOX-Netzwerk gesammelt werden) wurden nach Informationen durchsucht, die hinsichtlich der Implementierung der Empfehlung des Rates relevant sind. Für die Analyse der epidemiologischen Trends wurden darüber hinaus auch Daten des „Statistical Bulletins“ der EBDD herangezogen. Die Zahlen beziehen hauptsächlich auf den Zeitraum von 2003 bis 2010/2011.

Basierend auf den EBDD-Daten, den nationalen Berichten zur Drogensituation der Jahre 2003 bis 2011 und den Länderübersichten der EBDD wurden **Länder-Profile zu drogenbezogener Schadensminimierung** erstellt. Diese wurden in der Folge als sogenannter „**gap-survey**“ an die nationalen Knotenpunkte des REITOX Netzwerkes ausgesandt mit der Bitte gegebenenfalls Informationen hinzuzufügen oder die präsentierten Informationen zu ergänzen (Rücklauf: 26 von 32 Ländern). Um weitere Informationen bezüglich des Standes der Implementierung der Ratsempfehlung zu sammeln, wurden ein Online-**Fragebogen für politische Entscheidungsträger** und ein Online-**Fragebogen zur Befragung von Feldorganisationen** entwickelt. Die Europäische Kommission kontaktierte die ständigen Vertreter der einzelnen Länder mit der Bitte um die Nennung einer für die Ratsempfehlung zuständigen Person, die den Fragebogen für die politischen Entscheidungsträger ausfüllen sollte (Rücklauf: 31 von 32 Ländern). Zur Befragung der Feldorganisationen wurden anhand einer systematischen Auswahlstrategie insgesamt 123 Institutionen aus 32 Ländern identifiziert und kontaktiert (Rücklauf: 43 Institutionen aus 24 Ländern).

Bei der Interpretation der Ergebnisse des vorliegenden Berichtes sind folgende **Einschränkungen** zu berücksichtigen: Die Verfügbarkeit von Daten hat sich im Zeitraum von 2003 bis 2010 stark verbessert. Dank kontinuierlicher Bemühungen der EBDD in puncto Harmonisierung und Ausweitung der Datensammlung, ist eine beträchtliche Menge an vergleichbaren Daten zur Beschreibung der epidemiologischen Situation in Bezug auf die Drogenproblematik und schadensminimierende Maßnahmen vorhanden. Leider sind Zeitreihen-Daten nicht für alle Länder verfügbar; selbst grundlegende Daten zur Analyse von drogenbezogenem Schaden und zur Verfügbarkeit von schadensminimierenden Angeboten fehlen in manchen Ländern. Es ist weiters zu berücksichtigen, dass die Absolutzahlen (z. B. bei drogeninduzierten Todesfällen) auch von

der Qualität des jeweiligen Monitoring-Systems beeinflusst werden. Aus diesem Grund sollten länderspezifische Vergleiche nur mit äußerster Vorsicht angestellt bzw. für einzelne Länder gänzlich unterlassen werden. Eine weitere Einschränkung stellt die Tatsache dar, dass die Befragungsergebnisse der politischen Entscheidungsträger und der Feldorganisationen für ein ganzes Land stehen aber auf Aussagen von Einzelpersonen beruhen. Es ist zu berücksichtigen, dass es sich dabei um subjektive Expertenmeinungen handelt, weshalb sich die gesammelten Daten zwar dafür eignen einen Überblick über die Situation zu geben, nicht jedoch um direkte Ländervergleiche anzustellen.

2 Evaluierung der Empfehlung des Rates zu Schadensminimierung

Epidemiologische Situation: Bezüglich drogenassoziierter Infektionskrankheiten wurde eine signifikante Reduktion der **HIV Infektionen** unter Drogenkonsumierenden in den meisten Ländern erreicht, während Infektionsraten von **Hepatitis C** noch in vielen Ländern hoch sind. Rezente HIV-Ausbrüche in Griechenland und Rumänien zeigen, dass sich HIV Infektionsraten unter bestimmten Bedingungen schnell erhöhen, dazu zählt ein zu geringes Angebot an schadensminimierenden Maßnahmen. Hohe Raten an HCV Infektionen können als ein Indikator für das Risiko eines HIV-Ausbruchs gesehen werden. Es war in den meisten Ländern nicht möglich, die Anzahl der **drogeninduzierten Todesfälle** (Todesfälle aufgrund von Überdosierungen) seit dem 2003 zu reduzieren, obwohl sich die Anzahl der Personen in Substitutionsbehandlung erhöht hat. Einerseits sind Maßnahmen notwendig, um die Haltequoten in Substitutionsbehandlung zu verbessern und Unterbrechungen (z. B. durch Haft, Abstinenzbehandlungen ohne entsprechende Indikation) zu vermeiden. Andererseits sollten Interventionen zur Reduktion von Überdosierung, wie Konsumräume und Peer-Naloxon-Programme, in Betracht gezogen werden. Der Zeitpunkt der Haftentlassung (insbesondere bei fehlender Nachversorgung) ist ein Risikofaktor für Überdosierungen, daher ist eine Kontinuität der Versorgung (z. B. Fortführen der Substitutionsbehandlung im Gefängnis und bei Haftentlassung) essentiell.

Wirksamkeit von Maßnahmen zur Schadensminimierung: Es liegt starke wissenschaftliche Evidenz für die Wirksamkeit der **Substitutionsbehandlung**, zur Senkung des Infektionsrisikos im Zusammenhang mit Drogenkonsum sowie zur Senkung der Mortalität vor. Unterbrechungen von Substitutionsbehandlungen sind ein Risikofaktor für drogeninduzierter Todesfälle. Herausforderungen für die Zukunft sind die Erhöhung des Deckungsgrades (z. B. Vermeidung von Wartelisten) und das Vermeiden von Behandlungsunterbrechungen. Dazu sind differenzierte Behandlungsangebote notwendig, um die Bedürfnisse der verschiedenen Untergruppen von Opiatabhängigen zu erfüllen. Für **Spritzentauschprogramme** gibt es ebenfalls starke wissenschaftliche

Evidenz zur effektiven Reduktion des Infektionsrisikos (z. B. HIV, HCV, HBV). Herausforderungen sind das notwendige Erhöhen des Deckungsgrades und der Umgang mit anderen Applikationsformen. Es gibt starke Evidenz für die Wirksamkeit von **Schadensminderungsmaßnahmen** (z. B. Substitutionsbehandlung und Spritzentausch) in **Haftanstalten**. **Information, Aufklärung und Kommunikation** sind wirksam, wenn das Setting geeignet ist und die Informationen in angemessener Form durch vertrauenswürdige Personen zur Verfügung gestellt werden. Eine Möglichkeit, um das richtige Setting zu gewährleisten, ist die **aufsuchende Sozialarbeit**. Da Peers in vieler Hinsicht als vertrauenswürdige Personen angesehen werden, haben sich **Peer-Programme** als wirksam erwiesen. In den letzten zehn Jahren erhöhte sich die Evidenz für **heroingestützte Behandlung, Drogenkonsumräume** und **Peer-Naloxon-Programme** als weitere Ansätze der Schadensminimierung signifikant. Auf Grundlage der verfügbaren Evidenz kann davon ausgegangen werden, dass diese Interventionen wirksam sind, sie sollten aber begleitend beobachtet und evaluiert werden. Die **Impfung gegen Hepatitis B** und die **Behandlung von HIV, HBV und HCV** sind wirksame Maßnahmen bei intravenös Konsumierenden. Die Behandlung von HCV ist auch ein besonders wirksames Instrument der Infektionsprävention für andere. **Drug Checking** versteht sich als ein integratives Service, das chemische Analysen immer mit Beratung vereint. Es gibt derzeit keine neuen Erkenntnisse über die Wirksamkeit von Drug Checking-Programmen. Neue Studien dazu sollten sich aber lohnen, da Drug Cheking-Programme auf der einen Seite eine Reaktion auf neue psychoaktive Substanzen am Markt sein könnten, und andererseits, weil in den letzten Jahren in Bezug auf Testung und Beratung eine Professionalisierung stattgefunden hat. In der wissenschaftlichen Literatur wird auf einen möglichen Nutzen von Maßnahmen hingewiesen, die den Wechsel von **anderen Applikationsformen** auf intravenösen Konsum verhindern bzw. auf den Wechsel von intravenösem Konsum auf andere Applikationsformen abzielen. Allerdings gibt es kaum Evidenz zu konkreten Projekten.

Umsetzung von Maßnahmen zur Schadensminimierung und die Auswirkungen der Empfehlung des Rates: Die Situation betreffend Maßnahmen zur Schadensminimierung hat sich in den meisten Ländern deutlich verbessert. Der Deckungsgrad von **Substitutionsbehandlung und Spritzentauschprogrammen** hat sich merkbar erhöht, von einer ausreichenden Abdeckung ist man jedoch insbesondere in Bezug auf Spritzentausch in den meisten Ländern noch weit entfernt. Während Substitutionsbehandlungen mittlerweile in vielen Haftanstalten angeboten werden, sind Spritzentauschprogramme nach wie vor sehr selten. Daher sind **Haftanstalten immer noch eine Risikoumgebung für Infektionen mit HIV oder HCV** und ein treibender Faktor für Infektionskrankheiten unter Drogenkonsumierenden. Aus diesem Grund sind Verbesserungen in Haftanstalten dringend notwendig. Als weitere Maßnahmen zur Schadenminimierung werden **heroingestützte Behandlung, Drug Checking, Peer-Naloxon-Programme und Drogenkonsumräume** in einigen wenigen Ländern umgesetzt. In Zeiten wirtschaftlicher Krisen sind die Finanzierung des Status quo und der Ausbau der Schadensminderung wichtige Themen in allen Ländern. In einigen EU 12 Staaten (z. B. Bulgarien und Rumänien)

wurden Schadensminderungsmaßnahmen zunächst durch den "Globaler Fonds zur Bekämpfung von AIDS, Tuberkulose und Malaria" finanziert, nun gibt es aber Probleme nationale Finanzierungen zu sichern.

Der **Einfluss und die Auswirkung der Empfehlung des Rates** sind in allen EU-Ländern evident, insbesondere in jenen, die 2004 oder später (EU 12) beigetreten sind. Von Organisationen im Bereich der Schadensminimierung, wird um weitere EU-Unterstützung gebeten. Ein klares Bekenntnis zu Schadensminimierung kann helfen, den Ausbau der Maßnahmen zu fördern. Diese EU-Empfehlung sollte insbesondere auch neue Maßnahmen wie Drogenkonsumräume und Peer-Naloxon-Programme (im Zusammenhang mit der Reduktion drogeninduzierter Todesfälle) und einen besonderen Fokus auf Haftanstalten (Substitutionsbehandlung und Spritzentausch in Haft sowie eine Kontinuität der Behandlung) beinhalten. Darüber hinaus sollte die neue Empfehlung im Jahr 2003 nicht inkludierte Bereiche wie Wohnen, soziale Reintegration und Beruf beinhalten, da diese wichtige Faktoren für die Stabilisierung sind. Allerdings müssen auch die bestehenden Angebote der Schadensminimierung wie Substitutionsbehandlung und Spritzentausch als zentrale Bausteine jeder drogenbezogenen Schadensminimierungs-Strategie gestärkt werden.

3 Schlussfolgerungen und Vorschläge für weiteres Vorgehen

Die folgenden konkreten Empfehlungen und Prioritäten basieren auf wissenschaftlicher Evidenz und der Analyse des Ist-Stands hinsichtlich Schadensminimierung. Die Empfehlungen implizieren Aktivitäten auf unterschiedlichen Ebenen, das sind EU-Politik, nationale Politik der Mitgliedstaaten und praktische Implementierung.

Die Empfehlung des Rates unterstützte den Ausbau schadensminimierender Maßnahmen erfolgreich, dennoch ist die Versorgungslage in den meisten Bereichen noch nicht ausreichend. Dies macht eine weitere politische Stärkung von Schadensminimierung notwendig, die mit einer neuerlichen, überarbeiteten Empfehlung des Rates erreicht werden könnte.

Priorität A: Verringerung drogeninduzierter Todesfälle

Hintergrund: Es ist nicht gelungen die Zahl drogeninduzierter Todesfälle seit 2003 zu reduzieren.

Ziel: Deutliche Reduktion der Zahl der drogeninduzierten Todesfälle in den nächsten zehn Jahren.

Vorgeschlagene Maßnahmen: Verbesserung der Versorgungslage (für spezifische Zielgruppen von Opioidabhängigen, niederschwelliger Zugang zur Substitutionsbehandlung, Kostenübernahme der Substitutionsbehandlung durch die Sozialversiche-

zung) und Durchführung der Substitutionsbehandlung (Vermeidung von Behandlungsunterbrechungen, Vermeidung von Wartelisten), Erleichterung der Inanspruchnahme von Notfalldiensten, Peer-Naloxon-Programme, Vernetzung von Einrichtungen (insbesondere Haftentlassungsmanagement und Therapienachsorge), Drogenkonsumräume, aufsuchende Sozialarbeit, Peer-Programme und Unterstützung der Familien.

Relevanz für Public Health: Tödliche Überdosierungen sind eine der häufigsten Todesursachen bei jungen Erwachsenen, was Interventionen dringend notwendig macht. Insbesondere einfach zu realisierende und kosteneffektive Maßnahmen wie die erleichterte Inanspruchnahme von Notfalldiensten, sollten unverzüglich umgesetzt und auf europäischer Ebene unterstützt werden, um Leben zu retten.

Priorität B: Verbesserung der Versorgungslage bzgl. Schadensminderung in Haft

Hintergrund: Schadensminderung in Haftanstalten ist wesentlich seltener umgesetzt als außerhalb. Deswegen ist Haft eine Hochrisikosituation für intravenös Drogenkonsumierende, sich mit drogenassoziierten Infektionskrankheiten zu infizieren. Haftentlassung ohne entsprechende Nachsorge ist ein wesentlicher Risikofaktor für drogeninduzierte Todesfälle.

Ziel: Schadensminderung in Haft soll in den nächsten zehn Jahren als umfassendes Angebot im gleichen Ausmaß wie außerhalb der Haft sichergestellt werden.

Vorgeschlagene Maßnahmen: Substitutionsbehandlung, Spritzentauschprogramme (Implementierung in allen Haftanstalten), Haftentlassungsmanagement, durchgehende Betreuung von Haftbeginn bis nach der Enthaftung (hinsichtlich der Kontinuität der Substitutionsbehandlung), Wohnversorgung für Haftentlassene, Gesundheitsuntersuchungen inklusive Prävention von Infektionskrankheiten.

Relevanz für Public Health: Angebote der Schadensminderung in Haft sind immer noch selten in Europa. Hohen Infektionsraten und eine erhöhte Mortalität nach Haftentlassungen sind die Folgen. Etwa 15 Prozent aller drogenbezogenen Todesfälle könnten allein durch adäquates Haftentlassungsmanagement verhindert werden (Fisher et al. 2012)³. Hohe Infektionsraten (z. B. HIV, Hepatitis) von Personen in Haft sind auch ein Risiko für die Gesamtbevölkerung. Die Weltgesundheitsorganisation sieht Gesundheit in Haft als essentiell: „Good prison health is good public health“ (WHO 2007). Maßnahmen in diesem Bereich sind sehr erfolgsversprechend und können kosteneffektiv implementiert werden (z. B. Spritzentauschprogramme).

Priorität C: Verringerung des Schadens durch drogenassoziierte Infektionskrankheiten

Hintergrund: Die bereits existierenden Angebote zur Schadensminderung waren ausreichend, um die HIV Prävalenz unter intravenös Drogenkonsumierenden in den

3

2005 starben 1.506 Drogengebrauchende in England an einer Überdosierung, Drogenmissbrauch oder Drogenabhängigkeit. Etwa 15 Prozent dieser Todesfälle geschahen nach einer Haftentlassung. Diese Todesfälle hätten möglicherweise durch ein adäquates und koordiniertes Haftentlassungsmanagement verhindert werden können (Department of Health 2007; Fisher et al. 2012).

meisten in diesem Bericht berücksichtigten Ländern deutlich zu senken. Aktuelle HIV-Ausbrüche zeigen, dass sich diese Situation sehr schnell ändern kann, wenn Maßnahmen zur Schadensminimierung nicht ausreichend sind. Die Hepatitis C Infektionsraten bewegen sich immer noch auf hohem Niveau, was – wenn keine ausreichenden Maßnahmen getroffen werden – zu enormen individuellen (z. B. Tod durch Folgekrankheiten von Hepatitis C) und öffentlichen Kosten führen wird.

Ziel: Deutliche Verringerung der Hepatitis C Prävalenz unter intravenös Drogenkonsumierenden in den nächsten fünf Jahren, deutliche Verringerung der HIV Inzidenz in Ländern mit hohen oder steigenden Infektionsraten (Bulgarien, Estland, Griechenland, Lettland, Litauen, Portugal, Rumänien) in den nächsten fünf Jahren, die Behandlung (insbesondere die Hepatitis C Behandlung) von infizierten intravenös Drogenkonsumierenden soll in den nächsten fünf Jahren flächendeckend ausgebaut werden (Behandlung sollte für alle, die sie benötigen, möglich sein), und die Hepatitis B Impfung von intravenös Drogenkonsumierenden soll ebenfalls in den nächsten 5 Jahren flächendeckend ausgebaut werden.

Vorgeschlagene Maßnahmen: Siehe Priorität B, Verbesserung der Versorgungslage hinsichtlich Spritzentausch, HIV und Hepatitis C Behandlungsprogramme, Verbesserung der Hepatitis C Surveillance, Hepatitis B Impfprogramme, aufsuchende Sozialarbeit, Peer-Programme und Unterstützung der Familien.

Relevanz für Public Health: Infektionskrankheiten sind eine der schwerwiegenden Folgen von Drogensucht und können einfach und kosteneffektiv durch flächendeckende Spritzentauschprogramme verhindert werden. Es konnte nachgewiesen werden, dass Substitutionsbehandlung die HIV Infektionsrate von intravenös Drogenkonsumierenden um 50 Prozent senkt (MacArthur et al. 2012). Die Behandlung von HIV und Hepatitis C reduziert auch das Infektionsrisiko für andere Personen und ist daher eine kosteneffektive Intervention um Schaden zu vermeiden und um weitere Infektionen zu verhindern, die zu einer hohen Gesundheitsbelastung von Drogenabhängigen und der allgemeinen Bevölkerung führen würden.

IV Summary (Main report short version)

1 Objectives and methods

The purpose of the project was to produce a report on the current state of play of the 2003 Council Recommendation (CR) of 18 June 2003 on the prevention and reduction of health-related harm associated with drug dependence, which mentions the following main objectives:

- » Member States should, in order to provide for a high level of health protection, set as a public health objective the prevention of drug dependence and the reduction of related risks, and develop and implement comprehensive strategies accordingly.
- » Member States should, in order to reduce substantially the incidence of drug-related health damage (such as HIV, hepatitis B and C and tuberculosis) and the number of drug-related deaths, make available, as an integral part of their overall drug prevention and treatment policies, a range of different services and facilities, particularly aiming at risk reduction; to this end, bearing in mind the general objective, in the first place, to prevent drug abuse.
- » Member States should consider measures, in order to develop appropriate evaluation to increase the effectiveness and efficiency of drug prevention and the reduction of drug-related health risks.

This report is an extended update of a previous report (Trimbos 2006) and covers all 27 EU countries, the acceding country Croatia and the candidate countries: The former Yugoslav Republic of Macedonia, Iceland, Montenegro and Turkey. The report provides an overview on **recent developments in epidemiology** and on the **availability and coverage of harm reduction measures** in those countries. It further discusses the **evidence of the effectiveness** of harm reduction interventions implemented to prevent drug-related infectious diseases and drug-induced deaths.

The **general literature review** on harm reduction measures presented in the previous report has been updated using recent comprehensive reviews like the synthesis of literature concerning the prevention of infectious diseases conducted by the European Centre for Diseases Prevention and Control (ECDC) and the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) (ECDC and EMCDDA 2011a; ECDC and EMCDDA 2011b), the EMCDDA insights on new heroin assisted treatment (EMCDDA 2012b) and the systematic review on the effectiveness of opioid substitution treatment in prison settings (Hedrich et al. 2011). Significant recent studies, not covered by the above-mentioned reviews, have been added and the relevant websites have been searched for international guidelines. For areas not covered by recent reviews, **four systematic literature reviews** have been carried out (“peer naloxone programmes”,

“needle exchange programmes in prison”, “prison release management” and “measures to influence the route of administration”).

As a first step of **analysis of data available at the EMCDDA**, all standard tables and structured questionnaires collected by the EMCDDA, via the REITOX network, were scanned for information relevant for the description of the CR-implementation. In co-operation with the EMCDDA, a data extraction tool was developed and for each country the data were extracted in EXCEL-format. For the analysis of epidemiological trends, data presented in the EMCDDA Statistical Bulletin have been used, additionally. Data mainly refer to the time period 2003 to 2010 and have been updated for 2011 for countries with significant recent developments (HIV-outbreak in Greece and Romania). Based on the analysis of the information available at the EMCDDA, the national reports on the drug situation from 2003 to 2011 and the EMCDDA country overviews for each country, **country profiles focusing on drug-related harm (reduction)** were elaborated. They were sent out to the REITOX Focal Points to carry out a **gap-survey** in the course of which they were asked to add information, if necessary, and to comment on the information presented.

Based on the previous report (Trimbos 2006) and on the results of the discussion process with the Executive Agency for Health and Consumers (EAHC), EMCDDA, European Commission (EC) and leading experts from Austrian harm reduction organisations, an **online-survey for policy makers** and a **consultation of stakeholders** were designed. The EC contacted the permanent representatives of each country asking for the nomination of one responsible person for the Council Recommendation. This person was in charge of coordinating the answers to the policy maker survey. Based on a systematic selection strategy, a total of 123 institutions from 32 countries were contacted during the stakeholder survey. Table 1.1 gives an overview concerning data availability and responses to the surveys.

Table 1.1:
Data availability and responses to the surveys

Data sources/survey	Availability/responses
EMCDDA statistical tables and structured questionnaires	29 countries; not available for the former Yugoslav Republic of Macedonia, Iceland, Montenegro
EMCDDA country overviews	31 countries; not available for Iceland
National reports	29 countries; not available for the former Yugoslav Republic of Macedonia, Iceland, Montenegro
Gap-survey	26 countries; not possible for the former Yugoslav Republic of Macedonia, Iceland, Montenegro, Turkey (no REITOX FP), no answers from Bulgaria and Romania
Policy maker survey	31 countries; no answer from Slovakia
Stakeholder survey	24 countries; no response from Cyprus, Lithuania, Sweden, Poland, the former Yugoslav Republic of Macedonia, Iceland, Montenegro and Turkey

graphic representation: GÖ FP

For the interpretation of this report's results the following **limitations** have to be taken into account: Data availability made a very good progress in the time-span from 2003 to 2010. Thanks to the continuous efforts of the EMCDDA for the harmonisation and expansion of the data collection, a lot of comparable data are available to describe the epidemiology of the drug situation and harm reduction measures. Unfortunately, data for time-series are not available for all countries; even basic data to analyse drug-related harm and availability of measures of harm reduction are missing in some countries. It has to be taken into account that absolute numbers (e. g. number of drug-induced deaths) are influenced by the quality of the respective monitoring system too. Therefore country-specific comparisons have to be made with caution and should be completely avoided for some countries. Another limitation of the present work is that the view of policy makers and stakeholders is based on the answers of single persons (answering often for a big country). This makes their statements subjective expert opinions. Therefore the data gathered are appropriate to give a general impression but not for direct country comparisons.

2 Epidemiological situation

Epidemiological data on harm related to drug use were analysed (mainly based on EMCDDA data collections). Due to the efforts of the EMCDDA to standardise the data collection process and to improve data collection, a great number of good quality data are available; partly in long time series. However, work is still under progress and especially comparisons between countries should always be made carefully.

Problem drug use (PDU): Problem drug use is defined as “injecting drug use or long-duration/regular use of opioids, cocaine and/or amphetamines”. Recently the scope has been broadened to “high risk drug use”, which includes former problem drug use, but includes high risk and frequent cannabis use, high risk use of new drugs in addition and is open to other substances which may emerge in the future. The EMCDDA estimates that there were about 1,4 million of problem **opioid** users (mainly heroin, but also other opioids like fentanyl or buprenorphine) in the EU in 2010. The overall situation concerning prevalence of problem opioid use seems to be stable between 2004 and 2010. **Cocaine** plays an important role in problem drug use in the Netherlands, Italy, Spain and in the UK. Together these four countries account for around 85 % of all reported cocaine clients entering treatment. **Amphetamines** play an important role in Poland, Finland and Sweden, and **methamphetamines** in the Czech Republic and Slovakia (EMCDDA 2012d). Treatment data show a broad range of **rate of injecting** among opioid users (e. g. Belgium, Denmark, Spain, France, Netherlands and Portugal: below 25 %; Bulgaria, Czech Republic, Estonia, Latvia, Romania, Slovakia, Finland and Croatia: over 70 %). Due to the lack of data it is hard to make a statement about trends in injecting but there are indications of a decrease of injecting; at least for opioid injecting (EMCDDA 2012d). Looking at 2010 data, just 36 percent of clients entering treatment due to opioids state that they chose injecting as route of administration (EMCDDA 2012c). But there are also countries which show an increasing trend of injecting (e. g. Czech Republic). Within Europe and even more globally, **new drugs and new patterns of drug use** are increasingly attracting political, media and public attention (EMCDDA 2012). While in most of the countries the “legal highs” phenomenon is regarded as a matter of recreational use, in some countries or regions substances like mephedrone are also injected by those who have previously injected other substances like opioids (e. g. Hungary, Romania). This shift, which might be an effect of heroin shortages in the respective regions, seems to have contributed to HIV-outbreak in Romania (see below). Whether these new patterns of use will lead to a permanent change of the drug situation and therefore become relevant for harm reduction remains unclear at the moment.

Drug related infectious diseases (DRID): In the European Union the number of new **human immunodeficiency virus (HIV)** infections among injecting drug users is rather low compared to the United States and other European countries. In the year 2010, the

average rate of newly diagnosed HIV cases among injecting drug users (IDUs) was 2,54 per million (1.192 cases) (EMCDDA 2012a). Comparisons between countries are difficult due to differences in the study methodology and coverage. The rates of newly diagnosed HIV infections among injecting drug users vary significantly between countries. Very high rates are reported for the Baltic States (Estonia, Latvia and Lithuania) with up to 46,3 cases per million inhabitants and very low rates (less than one new infection per million inhabitants) in the Czech Republic, Cyprus, Hungary, Malta, Netherlands and Croatia.

Twelve countries (Austria, Belgium, Estonia, France, Germany, Ireland, Italy, Latvia, Netherland, Poland, Portugal, Spain) report a significant **decrease** in the number of HIV infections via IDU from 2003/2004 to 2009/2010. **Only four countries** (Bulgaria, Greece, Lithuania and Romania) report a significant **increase**.

Local HIV-outbreaks have been observed in Greece and Romania. Until 2010 (2005 – 2010) in Greece, 9 to 16 cases of newly diagnosed drug injectors with HIV were reported per annum. This rate increased to 256 cases in 2011 and 314 cases in 2012 (January till August). In Romania, the numbers of newly diagnosed drug injectors with HIV increased from 0-14 per year until 2010 (2005–2010) to 129 cases in 2011 and 102 cases in 2012 (January till June).

Hepatitis C virus (HCV) infection is highly prevalent among IDUs in most EU countries. Since high prevalence is found among young and new injectors it can be assumed that the transmission rate is very high. Due to the lack of data an overall picture concerning trends is not available.

From 2005 to 2010 **declining HCV prevalences** in injecting drug users have been observed at national or regional level in **six countries** while **five others** showed an **increase** (Austria, Bulgaria, Cyprus, Greece and Romania).

For **hepatitis B virus (HBV)** the situation concerning the availability of data is worse than for HCV. However, an analysis based on data from some countries and on registry data shows that 6 % of all HBV cases and 12 % of the notified acute cases are due to IDU (EMCDDA 2012a). This leads to the conclusion that IDUs still are a high risk group for HBV infection.

Drug-induced deaths /overdoses: Fatalities due to overdoses (drug-induced deaths) including illegal drugs belong to the main causes of mortality among young people in Europe (EMCDDA 2012a). Country comparison in Europe should be made with caution, since there are still some differences between countries in the capacity to ascertain the drug-induced death cases. Another major limitation is the remaining differences in coding, recording and extracting cases. Most national reporting systems have been stable over time, which allows, in the majority of countries, an analysis of the trend

over time. Nonetheless, caution is needed here as well, as some countries have changed over time (e.g. upgrade of monitoring system).

In 2010, the average EU mortality rate of drug-induced deaths is estimated to be about 20 deaths per million inhabitants aged 15–64 years. Around 7.000 drug-induced deaths (overdoses) occurred in the EU Member States in 2010. Estonia reports more than 110 drug-induced deaths per million inhabitants aged 15–64 years followed by Ireland and Denmark. Drug-induced deaths in the EU are **mainly caused by opioids** (in particular heroin). 11 % of the drug-induced deaths in Europe are reported among people aged under 25 years, 32 % from 25 to 35 years and 57 % aged 35 years or older (EMCDDA 2012c). By far, most of the drug-induced deaths are male (80 %), and the majority of cases are related to the use of several drugs – in most cases opioids in combination with other drugs (EMCDDA 2012c).

The number of reported drug-induced deaths in the EU slightly increased in the 2004–09 period from about 6.450 in 2004 to about 7.300 in 2009/2010 (EMCDDA 2012c; EMCDDA 2012d).

3 Effectiveness of interventions

Starting from the evidence collected in the previous report (Trimbos 2006), the present review gives an overview of recent scientific evidence on the prevention of infectious diseases among drug users, the prevention of drug-induced deaths and harm reduction in prison settings (details see chapter 10). The previous report was based on reviews and studies which followed the “classical approach” of evidence based on randomised controlled trials (RCT) and controlled studies. Since this approach is not adequate for many aspects of harm reduction, it was extended using the Interactive Domain Model (IDM) developed in the field of health promotion. This approach defines *“Best practices in health promotion are those sets of processes and actions that are consistent with health promotion values, theories, evidence, and understanding of the environment, and that are most likely to achieve health promotion goals in a given situation”* (Kahan/Goodstadt 2001, 47) and was transposed to the field of harm reduction (details see chapter 10.1).

Prevention of drug-related infectious diseases (DRID): Concerning the prevention of risk behaviour (e. g. needle sharing) related to DRID (e. g. HIV, hepatitis), **opioid substitution treatment (OST)** and syringe provision through specialised programmes (**needle exchange programmes – NSP**) have proven their effectiveness in a range of high quality studies. This factor leads to the conclusion that these two interventions should be the central part of any strategy to reduce prevalence of DRIDs. Recent literature points out the necessity of a high coverage of both interventions to reduce hepatitis C infection rate. In addition, **heroin assisted treatment** has shown effectiveness as second line intervention. **Information, education and communication** are effective when the setting is appropriate and messages are provided in an adequate form by trustable persons. One possibility to assure the right setting is **outreach work**. Since peers are the most trustable persons in many aspects **peer involvement** which has proven to be effective is a good strategy. The possible benefit of measures to avoid shifting from other **routes of administration** to injecting drug use (IDU) and to foster shifting from IDU to other routes of administration is pointed out in scientific literature. However, there is hardly any evidence on concrete projects. Thus, action is needed in this area. A good starting point is existing measures targeting mainly IDUs which might be used for promoting other routes of administration (e. g. syringe provision through specialised programmes where in addition foil and counselling concerning heroin chasing are offered – see annex 2). **Vaccination for hepatitis B, treatment of HIV, HBV and HCV** in IDUs are effective measures. The treatment for HCV is a particularly effective instrument of infection prevention for others, too.

Prevention of drug-induced deaths: Based on consistent evidence from one meta-analysis and multiple robust studies in supplementary reviews, there is sufficient review-level evidence to support the effectiveness of **opioid substitution treatment**

(OST) in reducing opioid-induced death. The first weeks after starting OST and the time immediately after the termination of OST are phases of increased mortality. **Prison and treatment release management** are important to avoid interruptions in OST (see annex 2). The quality of primary studies concerning **peer naloxone programmes** is low to medium and the size of the study groups is usually small. Based on the results from the evaluation studies, on the recommendations from experts and on the analysis of the objections against naloxone, the authors come to the conclusion that naloxone is a safe drug to use. In combination with emergency training, naloxone distribution programmes to peers should be expanded in Europe (see annex 2). A comprehensive overview concerning studies on **drug consumption rooms** shows that if the coverage and the capacity are sufficient and opening hours are appropriate, drug consumption rooms can attribute to reducing drug-induced deaths at city level. A systematic review of eight randomised control trials comes to the conclusion that **heroin plus methadone prescription**, for maintenance treatment in adult chronic opioid users who failed previous methadone treatment attempts, is effective in increasing treatment retention and probably in reducing the risk of death. **Drug Checking** is considered an integrated service that always combines chemical analysis with advice or counselling. Although there is no new evidence on the effectiveness of Drug Checking programmes, it might be worth to conduct new studies; on the one hand, because Drug Checking/counselling might be a reaction to the emerging of new psychoactive substances on the markets, on the other hand, because professionalisation took place concerning testing and counselling methods during the last few years.

Harm reduction in prison: There is evidence that harm reduction measures, which proved their effectiveness outside prison, are also effective inside prison. The broad range of benefits from **opioid substitution treatment (OST) in prison** (among others: reduction of needle-sharing and injecting drug use) has been observed to be similar to the benefits outside prison. Concerning mortality, the situation is less clear due to the lack of adequate studies (Hedrich et al. 2012). The fact that the first weeks after starting OST and the time immediately after the termination of OST are phases of increased mortality, has to be considered especially in the prison setting. Adequate possibilities to continue OST in prison and after prison release (throughcare) are essential. Almost all studies on **needle exchange programmes (NSP) in prison** show a dramatic decrease in needle sharing and no or very low seroconversion rates concerning HIV, HCV and HBV. Although the study designs are not the best (no control group) – which may lie in the nature of the topic (ethical or ideological constraints to serve as a comparison prison with no NSP) – the firm conclusion can be drawn that NSP in prison is an effective method to reduce risk behaviour concerning infections with HIV, HBV and HCV. Although, the number of countries that have implemented needle and syringe exchange in prison is limited, these programmes have been established successfully in different settings and diverse environments. The concern regarding possible negative consequences of NSP in prison has been proven to be unfounded (see annex 2).

4 Implementation of CR 1

The EU drug strategy aims at making *“a contribution to the attainment of a high level of health protection, well-being and social cohesion by complementing the Member States’ action in preventing and reducing drug use, dependence and drug-related harm to health and society”* and at *“ensuring a high level of security for the general public”* (Council of the European Union 2004, 5). For more than one decade harm reduction has been an integral part of the EU drug action plans giving priority to preventing transmission of infectious diseases and to reducing drug-induced deaths among IDUs (Rhodes/Hedrich 2010). The Lisbon Treaty article 168 on high level protection of human health strengthens the harm reduction approach as well as the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 26 October 2009 – Combating HIV/AIDS in the European Union and neighbouring countries, 2009–2013.

One general problem concerning funding is that in some EU 12 states (countries which joined the EU in 2004 or later) harm reduction projects were initially financed by the Fund to Fight AIDS, Tuberculosis, and Malaria. There are currently problems to ensure national funding. This problem was expressed by policy makers and stakeholders.

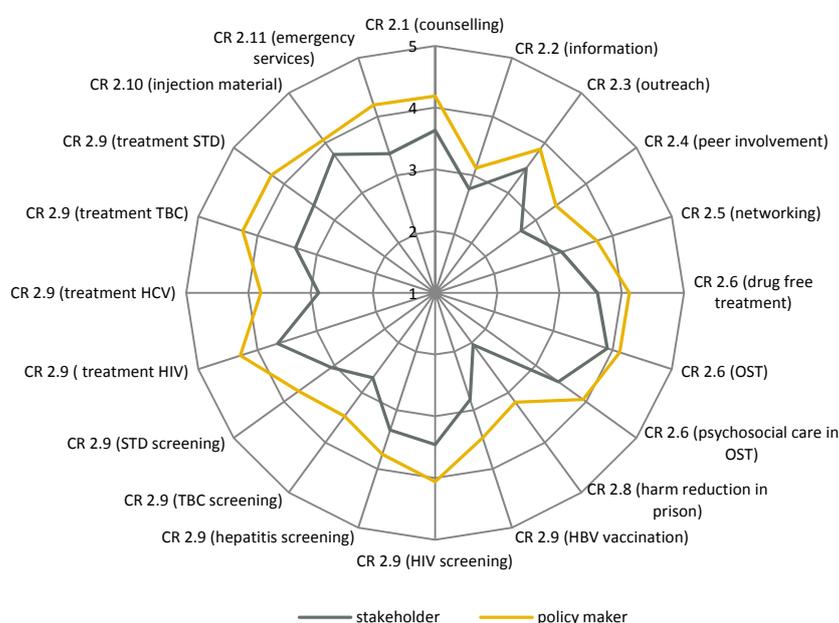
All EU Member States, Croatia, Montenegro and the former Yugoslav Republic of Macedonia have adopted (public health) policy objectives that aim to prevent and reduce health-related harm associated with drug dependence. In Turkey and Iceland policies regarding some key elements of harm reduction do not exist yet. In Turkey there is no policy for the provision of appropriate access to injection materials. Furthermore the provision of drug-free treatment as well as appropriate opioid substitution treatment (OST) in accordance with the individual needs of the drug abuser is not provided. For the latter, a respective policy is waiting for approval; OST has been available in Turkey since 2010. In Iceland an official policy for the provision of appropriate access to injection materials does not exist either but in practice, these services are available to some extent.

Regarding the influence of the Council Recommendation 1 (CR 1) on these policies, more than half of the investigated countries confirm at least a medium impact. **The rate of the impact of the CR is higher in the EU 12 than in the EU 15 (countries which joined the EU before 2004).**

5 Implementation of CR 2

The **policies** defined in **CR 2** are **implemented in almost all countries investigated**; exceptions are: Iceland concerning all policies, Croatia for CR 2.2 (information), CR 2.4 (peer involvement), CR 2.5 (networking); Slovakia for CR 2.4 (peer involvement), CR 2.5 (networking); Hungary for CR 2.4 (peer involvement), Greece for CR 2.5 (networking); Latvia for CR 2.5 (networking); Turkey for CR 2.6 (drug treatment), CR 2.10 (prevent DRID), CR 2.12 (integration of services) and Bulgaria for CR 2.12 (integration of services) The full wording of all CRs can be found in section 15.

Figure 5.1:
Coverage of harm reduction measures, estimated by stakeholders and policy makers



HBV=hepatitis B virus, HCV=hepatitis C virus, HIV=human immunodeficiency virus, OST=opioid substitution treatment, STD=sexually transmitted diseases, TBC=tuberculosis

Remark: data refer to Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Luxembourg, Malta, Netherlands, Portugal, Romania, Slovakia, Slovenia, Spain, United Kingdom; The full wording of all CRs can be found in section 15.

Coverage: 1=not available, 2=rare, 3=limited, 4=extensive, 5=full coverage

Source: GÖ FP, stakeholder survey, policy maker survey; graphic representation: GÖ FP

The **stakeholders' estimation of the coverage of harm reduction measures related to CR 2** is lower than the estimation of policy makers. Since data from stakeholders are available for 24 countries only, direct comparisons between stakeholders and policy makers is only possible for these countries. Although, the estimated coverage differs, the patterns of estimations of policy makers and stakeholders are quite similar (see

e. g. measures with lowest coverage Figure 5.1). Major differences can be observed for harm reduction in prison. The coverage of harm reduction in prison is stated to be “rare” by stakeholders whereas policy maker perceive it as “limited”.

Table 5.1 gives an overview concerning the implementation of the CR 2, the coverage of measures related to CR 2 estimated by policy makers and stakeholders as well as the change of coverage and the impact of the CR perceived from policy makers.

Table 5.1:
Implementation of CR 2 – policy makers’ and stakeholders’ estimation

CR	Policy exists number of countries; (policy maker)	Intervention	Estimated coverage of intervention			Impact of CR medium or stronger (policy maker)
			Full or extensive (policy maker)	Full or extensive (stakeholder)	Coverage increase since 2003 (policy maker)	
2.1	31 of 32	Information and counselling	26 of 31 (84%)	56%	27 of 31 (87%)	17 of 29 (57%)
2.2	31 of 32	Information for families and communities	12 of 31 (39%)	19%	20 of 30 (67%)	12 of 28 (43%)
2.3	29 of 31	Outreach work	17 of 31 (55%)	42%	24 of 31 (77%)	16 of 26 (62%)
2.4	27 of 31	Peer involvement in ORW	10 of 30 (33%)	19%	20 of 30 (67%)	12 of 26 (62%)
2.5	26 of 31	Networking and cooperation between agencies involved in ORW	15 of 30 (50%)	33%	20 of 30 (67%)	12 of 28 (43%)
2.6	30 of 31	Drug free treatment	21 of 31 (68%)	60%	20 of 31 (67%)	14 of 26 (54%)
		OST	26 of 31 (84%)	74%	28 of 31 (90%)	
		Psychosocial care and rehabilitation supporting OST	22 of 31 (71%)	50%	21 of 30 (70%)	
	No data	Heroin assisted treatment	No data	7%	No data	No data
2.7	29 of 30	Measures to prevent diversion of substitution substances	25 of 29 (86%)	No data	19 of 28 (68%)	12 of 27 (44%)
2.8	30 of 31	Harm reduction in prison	10 of 29 (34%)	2%	22 of 30 (73%)	13 of 25 (52%)
2.9	30 of 31	HBV vaccination	15 of 30 (50%)	30%	19 of 27 (70%)	15 of 25 (60%)
		HIV screening	25 of 31 (81%)	42%		
		HBV/HCV screening	18 of 31 (58%)	40%		
		TBC screening	15 of 30 (50%)	18%		
		STD screening	16 of 29 (55%)	34%		
		HIV/AIDS treatment	25 of 28 (89%)	58%		
		HCV treatment	17 of 28 (61%)	26%		
		TBC treatment	24 of 26 (92%)	42%		
STD treatment	21 of 24 (88%)	42%				
2.10	29 of 31	Condom distribution	19 of 28 (68%)	No data	21 of 27 (78%)	14 of 25 (56%)
		Distribution of injection material	20 of 31 (65%)	see below	27 of 31 (87%)	17 of 29 (59%)
		Needle and syringe exchange	see above	64%	see above	see above
		Paraphernalia distribution for IDUs	see above	50%	see above	see above
	No data	Drug consumption rooms	No data	5%	No data	No data

Continued next page

Table 5.1, continued

CR	Policy exists number of countries; (policy maker)	Intervention	Estimated coverage of intervention			Impact of CR medium or stronger (policy maker)
			Full or extensive (policy maker)	Full or extensive (stakeholder)	Coverage increase since 2003 (policy maker)	
2.11	30 of 31	Emergency services adequately prepared to deal with overdoses	26 of 29 (90%)	48%	15 of 28 (54%)	11 of 25 (44%)
		Naloxone in ambulances	see above	51%		
		Training of emergency staff to deal with overdoses	No data	27%		
	No data	Peer naloxone programmes	No data	2%	No data	No data
2.12	28 of 31	Integration between health services, social care and specialised risk reduction	17 of 31 (55%)	No data	22 of 28 (79%)	14 of 25 (56%)
2.13	30 of 31	Professional training on harm reduction	21 of 31 (68%)	No data	26 of 29 (90%)	11 of 23 (48%)
new	No data	Night shelters	No data	24%	No data	No data
new	No data	Assisted living	No data	16%	No data	No data
new	No data	Housing first	No data	10%	No data	No data
new	No data	Drug Checking	No data	7%	No data	No data

Remarks: The respective information is not available for all countries. For the policy maker survey the availability of data is shown for each indicator (e. g. in column 2 30 of 31 means that for 31 of the 32 countries covered with the survey, data are available and that in 30 of the 31 countries the respective policy exists). Since Slovakia did not take part in the policy maker survey, data concerning implementation of policies from the Trimbos report (Trimbos 2006) have been used. The stakeholder survey covers 24 countries; details for coverage of the surveys see section 1

Rates over 80 percent are marked in green, rates below 50 percent are highlighted in red.

The full wording of all CRs can be found in section 15.

Source: GÖ FP, stakeholder survey, policy maker survey; graphic representation: GÖ FP

The coverage of **OST** and **information/counselling** is estimated to be extensive or full in over 70 percent of the countries by both policy makers and stakeholders. Concerning **NSPs**, the estimations are quite lower (two thirds of the countries). Although proven to be effective (see section 3), very low coverage is reported for **harm reduction in prison** and **peer involvement**, especially peer involvement within outreach work. **Involvement of communities and families** is also estimated to be low. In the field of **screening** and **treating drug-related infectious diseases**, a need for improvement exists in more than half of the countries according to the opinions of the stakeholders. Although 90 percent of the policymakers state full or extensive coverage for **emergency services to be well prepared to deal with overdoses**, only half of the stakeholders express this opinion. In addition, the coverage of **training of emergency staff to be able to deal with overdoses** is estimated to be 'low' by the stakeholders. For some measures like **drug consumption rooms**, **heroin assisted treatment** and **peer naloxone programmes** the coverage is estimated to be 'very low' by the stakeholders.

For **almost all areas** of harm reduction, except HBV vaccination and emergency services, being adequately prepared to deal with overdoses, policy makers see an **increase**

of coverage since 2003 in over two thirds of the countries. The biggest increase is seen in information and counselling, OST, distribution of injection materials and professional training on harm reduction (see Table 5.1). At least a **medium impact of the Council Recommendation** on the implementation of harm reduction measures is detected by about half of the policy makers. The impact was rated strongest for outreach work and peer involvement in outreach work (see Table 5.1).

Whereas, most of the harm reduction measures according to CR 2 are available in almost all of the countries, **some measures are available in just a few ones** (see Table 5.2).

Table 5.2:
Harm reduction measures available in just a few countries

Harm reduction measure	Availability
Drug consumption room (1)	Germany, Luxembourg, Netherlands, Spain, Denmark
Peer naloxone programme (2)	Italy, Germany, Spain, Lithuania, United Kingdom (England, Wales, Scotland), Bulgaria, Denmark, Portugal
Heroin assisted treatment (3)	Belgium, Denmark, Germany, Netherlands, Spain, UK
NSP in prison (4)	Germany, Spain, Luxembourg, Portugal, Romania
Pill testing (5)	Austria, Belgium, France, Netherlands, Portugal, Spain

Remark: Data from NFPs have been amended by other information. The data partly refer to (pilot-) projects which are very small and which might be closed again. There may well be other, local, un-official initiatives in some countries.

Source: (1) IDPC – Drug consumption rooms evidence and practice + country profile Denmark – see annex 1; (2) Special review on peer naloxone programmes – see annex 2; (3) EMCDDA Statistical Bulletin 2012, Table HSR-1; (4) Special review on NSP in prison – see annex 2; (5) TEDI 2011; graphic representation: GÖ FP

Table 5.3 puts the two most important measures, OST and NSP, in relation to epidemiological data and trends. Country comparison in Europe should be made with caution (see chapter 11). However in order to analyse the reported coverage and drug-related harm, the trends for HIV and drug-induced deaths were modelled. This analysis is limited by possible changes in the monitoring systems in some countries.

Table 5.3:

Trends in DRD, HIV, NSP, OST (Significant differences 2003/2004 and 2009/2010 data)

Country	DRD trend (1)	DRD rate (2)	HIV trend (3)	HIV rate (4)	NSP trend (5)	IDU % (6)	OST trend (7)	POU % OST (8)
Austria	↔	3,0	↓	0,3	n.a.	35	↑	58
Belgium	n.a.	1,4	↓	0,1	↑	21	↑	n.a.
Bulgaria	↑	0,7	↑	0,7	↑	82	↑	n.a.
Cyprus	↔	1,9	n.a.	0,0	↑	64	n.a.	45
Czech Rep.	↔	0,7	↔	0,0	↑	79	↑	54
Denmark	↓	5,5	↔	0,1	n.a.	16	↑	n.a.
Estonia	↑	11,1	↓	4,6	↑	87	↑	n.a.
Finland	↑	4,7	↔	0,2	↑	75	↑	43
France	↑	0,8	↓	0,1	↑	23	↑	n.a.
Germany	↔	2,3	↓	0,1	n.a.	36	↑	49
Greece	↔	2,1	↑	2,2	↑	38	↑	28
Hungary	↔	0,2	n.a.	0,0	↑	69	↑	33
Ireland	↑	6,5	↓	0,5	n.a.	32	↑	42
Italy	↓	0,9	↓	0,3	n.a.	53	↑	47
Latvia	↔	0,5	↓	3,8	↑	94	↑	2
Lithuania	↑	2,2	↑	3,1	↓	n.a.	n.a.	17
Luxembourg	↔	3,5	n.a.	0,2	↓	68	↔	66
Malta	↔	2,1	n.a.	0,0	↑	61	↑	64
Netherlands	↔	0,8	↓	0,0	n.a.	7	↓	57
Poland	↑	0,7	↓	0,1	↓	66	↑	8
Portugal	n.a.	0,7	↓	1,1	↓	15	↑	n.a.
Romania	↑	0,2	↑	0,5	↑	91	↑	n.a.
Slovakia	↔	0,5	n.a.	0,0	↑	78	↑	12
Slovenia	↔	1,8	n.a.	0,0	n.a.	52	n.a.	n.a.
Spain	↓	1,4	↓	0,5	↓	16	↓	n.a.
Sweden	↑	4,1	↔	0,3	↓	59	n.a.	n.a.
United Kingdom	↑	5,4	↔	0,2	n.a.	34	n.a.	n.a.
Croatia	↔	2,5	↔	0,0	↑	n.a.	↑	n.a.
The former Yugoslav Republic of Macedonia	n.a.	n.a.	n.a.	n.a.	n.a.	73	n.a.	n.a.
Iceland	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Montenegro	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Turkey	↑	0,3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Remarks: n.a.=no data available (1) Significant change of number of drug-induced death 2003–2010 [↑=significant increase, ↔=no change, ↓=significant decrease]; (2) Number of drug-induced death per 100.000 inhabitants aged 15 to 64. Country comparison should be made with caution, since there are still some differences between countries in the capacity to ascertain the drug-induced death cases. For example Ireland has a thorough and extensive monitoring system for drug-induced deaths which might be one reason for the high rate (see chapter 13). (3) Significant change of HIV infections (AIDS) newly diagnosed IDUs 2003–2010 – for Greece and Romania 2003–2011 [see (1) + ↔=no change and HIV rates (4) < 0,2]; (4) Number of HIV-infections (AIDS) via injecting drug use newly diagnosed in 2010 per 100.000 population – for Greece and Romania 2011 [rates > 1]; Country comparison should be made with caution, since there are still some differences between countries in the monitoring systems. (5) Significant change of number of needles/syringes distributed through specialised programmes 2003–2010 [see (1)]; (6) % of IDU as main route of administration of opioids among clients starting outpatient treatment [rates below 30, rates 30 to 60, rates > 60]; (7) significant change of numbers of clients in opioid substitution treatment 2003–2010 [see (1)]; (8) Rate of problem opioid users in opioid substitution treatment [rates below 30, rates 30 to 50, rates > 50] – for calculation of trends see chapter 13

Source: (1) EMCDDA Statistical Bulletin 2012, Table DRD–2, (2) EMCDDA Statistical Bulletin 2012, Table DRD–7, (3) ECDC/WHO, 2011 data collection, (4) EMCDDA Statistical Bulletin 2012, Table INF–104; (5) EMCDDA Statistical Bulletin 2012, Table HSR–3; (6) EMCDDA Statistical Bulletin 2012, Table TDI–17 part II; (7) EMCDDA Statistical Bulletin 2012, Table HSR–3; (8) EMCDDA Statistical Bulletin 2012, Figure HSR–1; graphic representation: GÖ FP

An analysis of the estimated coverage/availability of harm reduction measures⁴ according to trends in drug-induced deaths shows, that **countries that have experienced a significant decrease in drug-induced deaths** (Denmark, Spain, Italy) report the **broadest coverage/availability of harm reduction measures in the EU**. The pattern is less consistent comparing stable and increasing trends to the coverage/availability of harm reduction measures. But countries with an increase in the numbers of drug-induced deaths (Bulgaria, Estonia, Ireland, France, Lithuania, Poland, Romania, Finland, Sweden, UK and Turkey) from 2003/2004 to 2009/2010 tend to have a slightly lower coverage/availability than those with stable trends (Czech Republic, Germany, Greece, Cyprus, Latvia, Luxembourg, Hungary, Malta, Netherlands, Austria, Slovenia, Slovakia, Croatia). Looking at the differences in the coverage, in particular “integration of services” (CR 2.12), the availability of “drug treatment” (CR 2.6) and “harm reduction in prison” (CR 2.8) indicate the largest gaps. A direct causal association between a high coverage of harm reduction measures in these fields and a decrease in the number of drug-induced deaths cannot be deducted; however, it gives a clear hint for the direction of further research and analysis (details see chapter 13).

Countries with increasing drug-induced deaths rates should analyse their coverage concerning “integration of services”, the availability of “drug treatment” and “harm reduction in prison”.

The coverage/availability of harm reduction measures in the EU was also analysed according to increasing, decreasing or stable trends of newly diagnosed HIV infections with IDU as way of infection. The picture is less clear than the one for drug-induced deaths trends. **Countries with a significant increase of newly diagnosed HIV** (Bulgaria, Lithuania, Greece, Romania) **report lower coverage/availability of most harm reduction measures than countries with stable or decreasing rates**. Again, “integration of services” (CR 2.12) shows the greatest differences, with the highest coverage reported in countries showing a stable trend. It is important to note that harm reduction measures associated with infectious diseases – in particular (e. g. screening) in Council Recommendation 2.9 – show higher coverage for countries with stable or decreasing trends than for countries with HIV increase; however, differences are rather slim.

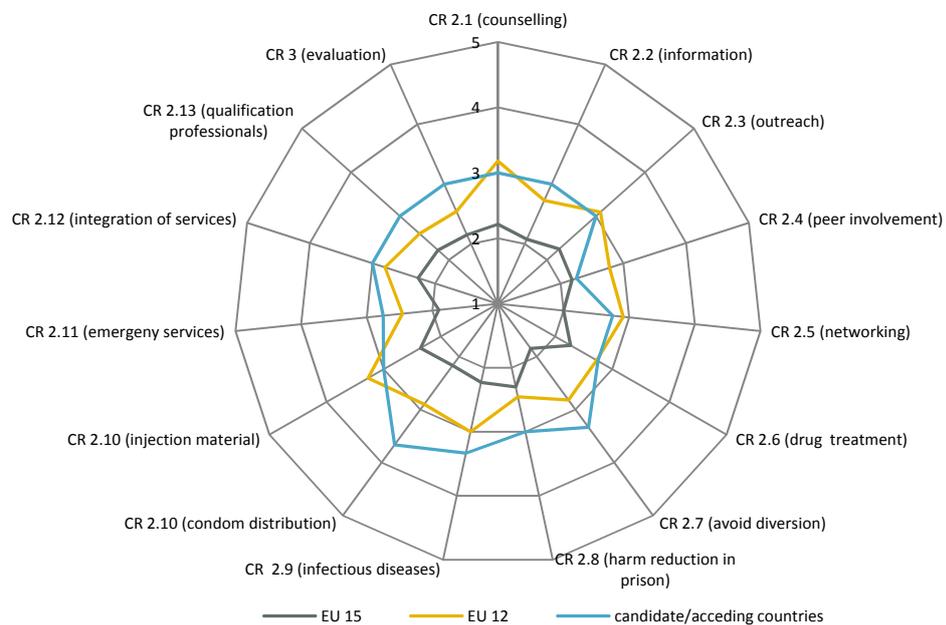
Concerning the impact of the CR on implementation of harm reduction, a clear pattern can be observed (see Figure 5.2). **The impact of the Council Recommendation on the coverage/availability of harm reduction measures was higher in the EU 12 than in the EU 15**. It is important to keep in mind, that the EU 15 report a higher coverage of harm reduction measures and have a higher “starting point”, for example for syringe provision through specialised programmes and OST. The improvement of the coverage in

4

Based upon policy maker survey

the last few years (see Table 5.1) was probably influenced by the Council Recommendation in particular in the EU 12. The highest impact of the Council Recommendation was measured on the coverage of “condom distribution” in the candidate and acceding countries and in “counselling” and “distribution of injection material” in the EU 12. The impact of the Council Recommendation in the EU 15 was on average “little”; for instance almost no impact on the prevention of diversion of substitution medications to the black market and availability of naloxone in emergency services was reported.

Figure 5.2:
Impact of the Council Recommendation on the coverage of harm reduction measures in the EU and candidate countries



Remark: data refer to: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, the former Yugoslav Republic of Macedonia, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom, Croatia, Island, Montenegro, Turkey;

Impact: 1=no impact, 5=very strong impact

The full wording of all CRs can be found in section 15.

Source: GÖ FP, policy maker survey; graphic representation: GÖ FP

Based on Table 5.3, the results from the statistical modelling using the policy maker survey (see chapter 13) and epidemiological data countries with specific needs can be defined.

Countries with increasing drug-induced deaths rates should set priorities regarding the prevention of drug-induced deaths: e. g. improving the coverage of opioid substitution treatment (OST), peer naloxone programmes, prison release management, drug consumption rooms; **Countries with very low drug-induced deaths rates** should discuss if the rates reflect the real situation or are due to underreporting – especially Hungary, Romania, and Turkey.

Countries with increasing or high HIV rates should set priorities regarding the prevention of drug-related infectious diseases: e. g. improving the coverage of OST, syringe provision through specialised programmes (in prison) – especially Bulgaria, Estonia, Greece, Latvia, Lithuania, Portugal and Romania. In **Bulgaria, Lithuania and Romania** the numbers of HIV infections via injecting drug use and the numbers of drug-induced deaths have increased significantly, indicating urgent needs for interventions.

Asked for harm reduction measures, whose implementation/expansion would show the biggest effect in the reduction of prevalence of **drug-related infectious diseases** among injecting drug users in the respective country/region, civil society organisations (stakeholder survey) quoted **needle and syringe exchange** and **harm reduction measures in prison** most often followed by **paraphernalia distribution for injecting drug users** and **safer injection training**. Asked for measures, whose implementation/expansion would have the biggest effect in the reduction of drug-induced deaths (overdoses) in the respective country/region, **first aid training for drug users** and **naloxone “take-home” programmes** were quoted most often followed by **information and counselling services to drug users focusing on harm reduction** and **prison release management** (details see section 12.14 and annex 3).

6 Implementation of CR 3

Council Recommendation 3 focuses on scientific evidence, monitoring and evaluation. Questions concerning CR 3 were not included in the stakeholder survey. All referred data originate from the policy maker survey.

Table 6.1 gives an overview of the existence of the respective policies in the countries investigated. **Most common** is the policy according CR 3.5 (organising **standardised data-collection** and information dissemination according to the EMCDDA recommendations through the REITOX national focal points) that exists in 30 countries but not in Iceland (Romania no information). **Least common** are policies according CR 3.3 (developing and implementing **adequate evaluation protocols** for all drug prevention and risk reduction programmes) and CR 3.8 (integrating innovative methods that enable **all actors and stakeholders to be involved in evaluation**, in order to increase acceptance of evaluation) that exist in only 21 of 31 countries (Romania no information).

Differences can be observed in the **estimated level of implementation** of the various sub-recommendations by the policy makers. CR 3.5 (standardised data collection according to the EMCDDA recommendations) is estimated to be implemented to a large extent by 26 of 31 countries, which is the best ranking. Using scientific evidence of effectiveness as a main basis to select the appropriate intervention, CR 3.1 is estimated to be implemented to a large extent by 18 countries (2nd highest rating concerning implementation). Only five countries estimate a high rate of implementation for the involvement of actor and stakeholders in evaluation (CR 3.8). For all sub recommendations of CR 3, more than half of policy makers estimate an **increase** or a **strong increase in the level implementation since 2005**.

Table 6.1:
Recommendation 3 – overview of existence

CR	3.1		3.2		3.3		3.4		3.5		3.6		3.7		3.8		3.9		total
	exists	based on CR																	
Austria	1		1		0	NT	0	NT	1		0	OT	1		0	NT	0	NP	4
Belgium	1		1	1	1		1		1	1	1	DIV	1		1		1		9
Bulgaria	0		0	PA	0	OT	1	1	1	1	0	PA	0		0	PA	1	1	3
Croatia	1		1		1		0		1		1		0		0		1		6
Cyprus	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	9
Czech Republic	1		1	1	1	1	1	1	1		1		1		1	1	1		9
Denmark	1		1		1		1		1		1		1		1		1		9
Estonia	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	9
Finland	1		1		1	1	1		1		1		1		1		1		9
France	1		1			OT	0	OT	1		1				0	OT	1		5
The former Yugoslav Republic of Macedonia	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	9
Germany	1	1	1		1	1	1	1	1	1	1		1		1		1	1	9
Greece	1		1		1		1		1		1		1		1		1		9
Hungary	0	NT	0	NT	0	NT	0	NT	1		0	NT	0	NT	0	NT	1		2
Ireland	1		1		1		1		1		1		1		1				8
Iceland	1		1		0	OT			0	OT	2								
Italy	1		1	NT	1	NT	1		1		1	NT	1	1	1	1	1		9
Latvia	0	NT	1	1	0	NT	1	1	1	1	1	1	0	NT	0	NT	1	1	5
Lithuania	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	9
Luxembourg	1		1		1	OT	1		1		1		1		1		1	1	9
Malta	1		1		0	PA	0	OT	1		1		0	OT	1	1	1		6
Montenegro	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	9
Netherlands	1		0	NT	0	OT	0	NT	1		1		1		0	OT	1		5
Poland	1		1		1		1		1		1		1		1		1		9
Portugal	1		1		1		1		1		1		1		1		1		9
Romania																			
Slovakia	1	1	0	PA	0	PA	0	PA	1	1	1	NP	0	NP	0	NP	1	1	4
Slovenia	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	9
Spain	1		1		1		1		1		1		1		1		1		9
Sweden	1		1		1		1		1		1		1		1		1		9
Turkey	1	1	1		0	OT	0	OT	1	1	1	1					1	1	5
UK	1		1		1	1	1	1	1		1		1	1	1	1	1		9
Total	28		27		21		22		30		27		22		21		28		

Remarks: 0=no; 1=yes; blank=no information

Reasons why not based on Council Recommendation: OT=other reason | NP=not a priority | NT=not task of national government | PA=pending for approval | NA=not available | DIV=diverging answers.

The full wording of all CRs can be found in section 15.

Source: GÖ FP, policy maker survey; graphic representation: GÖ FP

7 Conclusions and recommendations

This report provides an overview of the availability and coverage of harm reduction measures in the EU, Croatia, the former Yugoslav Republic of Macedonia, Iceland, Montenegro and Turkey and discusses the evidence of their effectiveness. A special focus was put on the impact of the Council Recommendations and on developing recommendations for improvements in the field of harm reduction. The following conclusions and recommendations are based on the literature review, the analysis of the current situation and the recommendations of the stakeholders for future interventions. First, general conclusion on the effectiveness of the interventions are presented and discussed. In a second step, concrete recommendations have been elaborated, addressing the EU level, the national level and the harm reduction sites.

Strong **scientific evidence** exists for the effectiveness of opioid substitution treatment (OST) to reduce the infection risk in connection with drug-related infectious diseases as well as mortality. Interruptions of OST are a risk factor for drug-induced deaths. Challenges for the future are to clarify how coverage can be increased further (e. g. avoid waiting lists), how interruptions can be avoided and how OST concerning substances and regimes can be diversified to meet the needs of different subgroups of opioid addicts. For syringe provision through specialised programmes there is strong scientific evidence concerning the reduction of infection risk, too. Challenges are the improvement of coverage and dealing with other routes of administration. On one hand it has to be clarified if and how needle exchange programmes (NSPs) can be used to promote other ways of administration than IDU. On the other hand, there are signs that injecting as route of administration is decreasing and delivering of safer use materials and information for other routes of administration gets more relevance. In the last decade evidence on heroin assisted treatment as a second line intervention, drug consumption rooms and peer naloxone programmes have increased significantly. Based on this evidence it can be assumed that these interventions are effective, but they should be further monitored and evaluated. There is strong evidence concerning the effectiveness of harm reduction in prison.

To summarise the **epidemiologic situation** concerning **drug-related harm** it can be stated that a significant reduction of HIV infections among IDUs in most countries was achieved, but infection rates of hepatitis C are still high in many countries. Recent HIV-outbreaks in Greece and Romania show that HIV infection rates can increase rapidly under specific conditions including low coverage of harm reduction measures. High rates of HCV infection can be seen as an indicator for the risk of a HIV-outbreak. It was not possible to reduce drug-induced deaths since 2003 in most countries, although the coverage of OST increased. On one hand measures to improve retention rates in OST and to avoid interruptions (e. g. prison, attempts to become drug free with no adequate indication) are necessary. On the other hand interventions focusing on

overdose risk like drug consumption rooms and peer naloxone programmes should be considered. Prison release is a risk factor for drug-induced deaths and therefore adequate throughcare including prison release management and continuation of OST in prison and over the period of release is crucial.

The situation concerning **harm reduction measures** improved a lot in most countries. The **Coverage** of OST and NSP considerably increased but especially NSP is still far away from full coverage in all countries. While OST is now available in many prisons, NSP is not. Therefore, prisons are still a high risk environment for infections with HIV or HCV and a driving factor for infectious diseases among injecting drug users (IDUs). Therefore, improvements in the prison setting are very urgent. Heroin assisted treatment as a second line intervention, Drug Checking, peer naloxone programmes and drug consumption rooms are implemented in a few countries, only. In times of economic crises, the financing of the status quo and the expansion of harm reduction is an important issue in all countries. In some EU 12 states (e. g. Bulgaria and Romania) harm reduction projects were initially funded by the “Global Fund to Fight AIDS, Tuberculosis, and Malaria”. There are now problems to ensure national funding.

The **role of the Council Recommendation on harm reduction** can be judged as important especially in the countries joining the EU in 2004 or later (EU 12). From organisations involved in harm reduction, further support from EU level is requested. A clear new statement on harm reduction can help to foster expansion of harm reduction measures. These EU-recommendations should include in particular also new measures like drug consumption rooms and peer naloxone programmes related to the reduction of drug-induced death and give a special focus to prisons (OST, NSP and adequate throughcare). In addition, the new recommendations should cover new areas like housing, social re-integration and occupation because these are the main factors for stabilisation (or de-stabilisation if lacking). However, existing harm reduction measures such as OSP and NSP as the backbone of any harm reduction strategy need to be strengthened.

Data availability made a very good progress in the time-span from 2003 to 2010. Thanks to the continuous efforts of the EMCDDA for harmonisation and expansion of data collection, a lot of comparable data are available to describe the epidemiology of the drug situation and harm reduction measures. Unfortunately, data for time-series are not available for all countries; even basic data to analyse drug-related harm and availability of measures of harm reduction are missing in some countries. It has to be taken into account that absolute numbers (e. g. number of drug-induced deaths) are also influenced by the quality of the respective monitoring system. Therefore country-specific comparisons have to be made with caution and should be totally avoided for some countries. The implementation of **adequate evaluation protocols** for all drug prevention and risk reduction programmes as well as the **involvement of all actors and stakeholders in evaluation** could be improved.

Based on the literature review and the analysis of the situation concerning harm reduction, the following concrete recommendations have been elaborated (see also chapter 14): These recommendations implicate activities on different levels: EU-policy-level, national-policy-level and the level of practical implementation in the field.

Political strengthening of harm reduction: Harm reduction is still politically not undisputed. While in many countries harm reduction measures became well implemented in the last decade, in some countries steps backwards can be observed or are feared. Moral barriers and the prioritisation of abstinence orientated services by some decision makers remain major obstacles for harm reduction services (stakeholder survey). Many stakeholders express concerns regarding the financing of harm reduction measures in the future due to the financial crisis. But there are also objections by uninformed or despondent decision makers. The harm reduction approach should further be strengthened in follow-up policy work at EU level.

Syringe provision through specialised programmes: Syringe exchange for injecting drug users (IDUs) is an integral part of drug policies in all EU Member States and candidate countries, with the exception of Turkey. But nearly all countries where respective data are available miss the WHO, UNODC, UNAIDS criteria of 200 syringes per IDU per year for good coverage concerning HIV prevention. This is a major obstacle taking into account that the levels required for the prevention of hepatitis C (HCV) are likely to be much higher. Activities to improve the coverage of the availability of sterile needles and syringes especially in rural areas are needed. Especially countries with an increase of HCV prevalence (Austria, Bulgaria, Cyprus, Greece and Romania) or of newly diagnosed HIV or high HIV rates among IDUs (Bulgaria, Estonia, Latvia, Lithuania, Greece, Portugal, Romania) are called upon to take some actions.

Opioid substitution treatment (OST) improvement of coverage and organisation: The coverage of OST has increased significantly since 2003. However, coverage is not regarded as full or extensive in all countries, and waiting lists for OST are common. Other challenges for practice and research are the diversification of OST according to substances used, routes of administration and regimes (e. g. OST via drug treatment centres versus OST via general practitioners) to meet the needs of different groups of clients. The main purpose should be to avoid interruptions which are a risk factor, especially concerning drug-induced deaths. In this connection, clear indications for the change from OST to drug-free treatment are needed because failed attempts to become drug free might increase the risk of drug-induced deaths. Another factor in avoiding interruptions is that parallel consumption of other drugs should not be a reason to suspend someone from OST. Only Spain, Italy and Denmark experienced a significant decrease in drug-induced deaths during the last decade. Thus, in almost all countries improvements in this field seem to be necessary. In addition heroin assisted treatment should be expanded as a second line intervention.

Harm reduction in prison: While OST is now available in many prisons, syringe provision through specialised programmes (NSP) is not. The coverage of harm reduction in

prison is estimated to be very low in general. Therefore, prisons are still a high risk environment for infection with HIV or HCV and a driving factor for infectious diseases among IDUs. There is a high risk of fatal overdoses (drug-induced deaths) after prison release which points out the importance of adequate prison release management (throughcare). The conclusion is that a lot has to be done in this area. The implementation of NSP which is possible and effective (see Spain for example), the improvement of OST coverage and adequate throughcare including prison release management (assuring continuation of OST in prison and after prison release) are necessary. To speed up the full implementation of harm reduction measures in prison, this issue should be especially highlighted in follow-up policy work at EU level.

Naloxone “take-home” programmes: Asked which implementation/expansion of harm reduction measures would have the biggest effect on reducing the numbers of drug-induced deaths (overdoses) in the respective country/region, first aid training for drug users and naloxone “take-home” programmes were quoted most often by civil society organisations. Based on the results from the evaluation studies, the recommendations from experts and the analysis of the objections against naloxone, it can be concluded that naloxone is a safe drug to use and peer naloxone programmes – in combination with emergency training – should be expanded in Europe to decrease the number of drug-induced deaths.

Facilitate the use of emergency-services: The use of emergency services is an important aspect in preventing drug-induced deaths. However, the use of emergency services and its impact on harm reduction is hardly studied. One major aspect is the (perceived) risks of police arrests associated with calling emergency services or the fear of violating conditions of probation. As a possible measure in this field, for example in Luxembourg, a law exempts drug users who call for assistance in case another user is in need of medical help, from prison sentences and from fines in certain circumstances. In general, witnesses meeting these conditions are not prosecuted. As an accompanying measure, an information flyer has been elaborated jointly with field agencies and the Ministry of Health and broadly distributed. The flyer contains useful information on safer injection and advice in case of overdose events (NFP-Luxembourg 2011). More research is needed to identify and overcome obstacles (e. g. legal implications) when calling ambulance services during an overdose in Europe. Furthermore it is important that expenses for the hospital stay as well as for the rescue effort are paid by the health insurance and not by the patient.

Drug consumption rooms: It was not possible to reduce the number of drug-induced deaths in most of the countries from 2003 to 2009 (see section 11.3). Additional measures focusing on preventing drug-induced deaths are necessary. According to the stakeholders, the implementation of drug consumption rooms would be the second most effective measure to reduce drug-induced deaths after peer naloxone programmes. Based on evidence from recent literature on the effectiveness to reduce mortality and on the absence of negative consequences of consumption rooms, this

measure can be recommended. Implementation should be accompanied by adequate monitoring and evaluation to strengthen the scientific base.

Counselling, outreach and peer involvement: Counselling and outreach are mainly part of other interventions and proved to be effective when the setting is appropriate and messages are provided by trustable persons. Especially peer delivered counselling including outreach fulfils these criteria (see section 10.2.3). The coverage of outreach is estimated to be at least extensive in roughly half of the countries and peer involvement in just one third of the countries (see section 12.6). The coverage of outreach and peer involvement in counselling should be improved.

Access to HCV treatment: Only 31 % of the countries in the stakeholder survey rate the coverage of medical treatment of HCV for injecting drug users as full or extensive. Many stakeholders state that nowadays, increasing the coverage of HCV screening and treatment is a great challenge. Scientific studies show that an integrated approach using needle exchange as well as HCV treatment is needed to reduce the prevalence of HCV, especially in high prevalence countries. The expansion of the coverage of HCV screening and treatment should be improved.

HBV vaccination: HBV vaccination is effective for IDUs and especially important if there is already a HCV infection, as this leads to additional complications (see section 10.2.6). Taking into account the high rates of HCV infections among IDUs in most countries (see section 11.2.2) the low coverage of HBV vaccination (only 7 countries report full coverage; see section 12.7) is very critical. Measures to improve the HBV vaccination coverage are necessary.

Housing: Housing was not covered by the Council Recommendation but is a relevant issue for improving the quality of life and stabilisation. Housing seems to be a field of harm reduction where still a lot of improvement is necessary, as all measures (night shelters, assisted living, “housing first” approach) are described to have a rather low coverage (stakeholder survey). For night shelters, which is the measure with the highest coverage only 24 % report full or extensive coverage. The problem of housing should be considered in follow-up policy work.

Integration of services: The integration of services between health, social care and risk reduction is reported to be fully or extensively covered in most countries. However, countries that have experienced significant increases in drug-induced deaths report limited or less coverage. Integration of services such as hospital release management (integrating health and social care) and treatment release management should be considered a priority to reduce the number of drug-induced deaths. Throughcare and prison release management are also very important issues (see above).

Research and Evaluation: The following priority areas, where measures for improvement and targeted research related to harm reduction are necessary, have been identified:

- » Improvement of the coverage of estimates for prevalence of problem drug use, especially injecting drug use
- » The mortality rates directly related to overdoses (drug-induced deaths) differ to a large extent between countries. Research is needed to get insight if these differences are real (important information for policy evaluation) or due to different quality of data collection systems
- » More standardised data and longitudinal research to follow the development of HCV epidemics are needed
- » The proportion of injecting as route of administration of opioids differs a lot between countries. Research is needed to get insight into the reasons behind this and based on the results measures to shift away from injection or to avoid shifting to injection from other routes of administration should be developed – if possible
- » Implementation of adequate evaluation protocols for all drug prevention and risk reduction programmes that involve all actors and stakeholders in evaluation is needed

These recommendations implicate activities on different levels: EU-policy-level, national-policy-level and the level of practical implementation in the field.

Priorities and proposed activities on EU level:

The Council Recommendation (CR) helped foster harm reduction in the EU, but the coverage is still far from sufficient in most areas. This calls for political strengthening of harm reduction which can be achieved by a new or revised CR. Based on the analysis of the situation and scientific evidence the following priorities shall be addressed:

Priority A: reduction of drug-induced deaths

Reasoning: It was not possible to reduce the number of drug-induced deaths since 2003.

Target: Significant reduction of the number of drug-induced deaths in the next ten years.

Proposed measures: Improvement of the coverage (for specific subgroups of opioid addicts, low threshold access to OST, comprehensive health insurance covering OST) and organisation of opioid substitution treatment (avoid interruptions, avoid waiting lists), facilitate the use of emergency services, peer naloxone programmes, integration of services (especially prison and treatment release management), drug consumption rooms, outreach, peer involvement and family support.

Relevance for public health: Drug-induced deaths remain one of the major causes of death among young adults which calls for immediate action. In particular, easy to adopt and cost-effective measures such as facilitating the use of emergency services should be addressed and supported on European level in order to save young lives.

Priority B: improvement of harm reduction in prison

Reasoning: The coverage of harm reduction measures in prison lies far behind the coverage outside prison. Therefore prison is a high risk environment for injecting drug users (IDUs) to get infected with drug-related infectious diseases. Prison release without adequate throughcare is one main risk factor for drug-induced deaths.

Target: Harm reduction measures in prison should be assured as a comprehensive response, equivalent to the community in the next ten years.

Proposed measures: Opioid substitution treatment (OST), syringe provision through specialised programmes (introduction in all prisons), release management, through-care into and out from prison (regarding OST continuity), housing for released prisoners, health assessments including infection prevention.

Relevance for public health: Harm reduction in prison is still very rare or limited in Europe leading to high infections rates and increased mortality after prison release. Around 15 percent of all drug related deaths could be avoided with adequate prison release management only (Friser et al. 2012)⁵. High infection rates (e. g. HIV, hepatitis) of the prisons' population threaten health of general population too. Good prison health is good public health (WHO 2007). Action in this field promises instant results and can be implemented cost-effectively (e. g. syringe provision through specialised programmes).

Priority C: reduction of harm caused by drug-related infections

Reasoning: Existing harm reduction measures have been sufficient to decrease HIV prevalence in injecting drug users (IDUs) significantly in most countries covered with this research. Recent HIV outbreaks show that this situation can change very fast when harm reduction is not appropriate. Hepatitis C (HCV) rates are still on a high level and will lead – if the reaction is not adequate – to enormous individual (e. g. death due to consequences of HCV) and public costs.

Target: Significant reduction of HCV prevalence among IDUs in the next five years, significant reduction of HIV incidence in countries with high rates or increasing trends (Bulgaria, Estonia, Latvia, Lithuania, Greece, Portugal, Romania) in the next five years, treatment (especially HCV treatment) of infected IDUs shall reach full coverage in the next five years (treatment should be available for anyone in need of it), HBV vaccination of IDUs shall reach full coverage in the next five years.

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In 2005, 1.506 drug users died in England from 'overdose' or poisoning, drug abuse or drug dependence. Around 15% of these deaths occur in people after release from prison. Those fatalities might be avoided with adequate and coordinated prison release management (Department of Health 2007; Frisher et al. 2012).

Proposed measures: See priority B, improvement of the coverage of syringe provision through specialised programmes (NSP), HIV and HCV treatment programmes, improvement of HCV surveillance, hepatitis B vaccination programmes, outreach, peer involvement and family support.

Relevance for public health: Infection diseases are one of the major drug-related diseases and can be easily and cost-effectively influenced by widely available syringe provision through specialised programmes. It has been proven that OST is associated with a 50 percent reduction of HIV infection among IDUs (MacArthur et al. 2012). HIV and HCV treatment decrease the risk of infections for others and are therefore cost-effective interventions to avoid individual harm and prevent further infections, which could lead to a substantial health burden for drug users and the society as whole.

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VI Main Report – long version

8 Introduction

The European Union is committed to achieving a high level of health protection for its citizens. Under Article 168 of the Lisbon Treaty, the EU action shall be directed towards improving public health, preventing physical and mental illness and diseases, and obviating sources of danger to physical and mental health. In relation to the drug prevention, the Union shall complement the Member States' action in reducing drug-related health damage, including information and prevention.

Accordingly, the EU is taking initiatives to reduce health inequalities in and between EU Member States and regions, and to build capacity for development and implementation of effective public health policies with a particular focus on the Health in All Policies approach.

Living a life free from addictions and their related harmful effects on health is an important element in a comprehensive public health strategy that promotes good health for all EU citizens.

The Council Recommendation of 18 June 2003 on the prevention and reduction of health-related harm associated with drug dependence formulates the following main objectives:

- » Member States should, in order to provide for a high level of health protection, set as a public health objective the prevention of drug dependence and the reduction of related risks, and develop and implement comprehensive strategies accordingly.
- » Member States should, in order to reduce substantially the incidence of drug-related health damage (such as HIV, hepatitis B and C and tuberculosis) and the number of drug-related deaths, make available, as an integral part of their overall drug prevention and treatment policies, a range of different services and facilities, particularly aiming at risk reduction; to this end, bearing in mind the general objective, in the first place, to prevent drug abuse.
- » Member States should consider measures, in order to develop appropriate evaluation to increase the effectiveness and efficiency of drug prevention and the reduction of drug-related health risks.
- » Member States should report to the Commission on the implementation of this Recommendation within two years of its adoption and subsequently on request by the Commission with a view to contributing to the follow-up of this recommendation at Community level and acting as appropriate in the context of the European Union Action Plan on Drugs.

For main objectives 2 and 3, a list of concrete sub-targets is formulated (for details see section 15).

Following the adoption of the 2005–2012 EU Drugs Strategy and its corresponding EU Drugs Action Plan for 2008–2013, the European Commission submitted in 2006 a first report on the implementation of the Recommendation, accompanied by a detailed background document (Trimbos 2006). This report is an extended follow up.

8.1 Project objectives

The purpose of the project was to produce a (progress) report on the current state of play of the 2003 Council Recommendation. The aforementioned report from the year 2006 served as a baseline (Trimbos 2006). The recent report focuses on:

- » Recent developments in **epidemiology** in the field of drug-related harm: epidemiological key indicators like drug-related infectious diseases, drug-induced deaths as well as drug consumption patterns and new challenges (e. g. rise of consumption of new substances, local outbreak of HIV epidemics)
- » **Supply of harm reduction measures in Member States** and candidate/acceding countries and recent developments: the expert opinion of relevant stakeholders and policy makers working in the field of harm reduction
- » **Statistical analysis of changes** in the epidemiological situation and the supply of harm reduction, using modelling methods to get insight in the complex interaction of both, where possible
- » **Effectiveness of harm reduction interventions** to prevent drug-related infectious diseases and drug-induced deaths based on a systematic literature review with special focus on questions which are relevant for further recommendations by the Commission
- » **Conclusions and Recommendations** based on the evidence

The report covers all 27 EU countries, the acceding country Croatia and the candidate countries the former Yugoslav Republic of Macedonia, Iceland, Montenegro and Turkey.

In addition to this main report, an extensive annex including country profiles on harm reduction in all EU Member States and candidate/acceding countries (annex 1), a literature review on selected topics (“measures to influence route of administration”, “peer naloxone programmes”, “needle exchange programmes in prison” and “prison release management”; annex 2) and an in-depth analysis of the stakeholder survey (annex 3) is provided. For some overview tables see annex 4 and the questionnaires used for the policy maker survey and the stakeholder survey see annex 5.

9 Methods

9.1 Analysis of data available at the EMCDDA

In a first step all standard tables and structured questionnaires which are collected from EMCDDA via the REITOX network were scanned for information relevant for the description of the implementation of the Council Recommendation (CR). A data extraction tool was elaborated in co-operation with EMCDDA and the data were extracted in EXCEL-format for each country. Based on this extraction the data are presented in the country profiles (see annex 1). In addition for the analysis of epidemiological trends the data presented in the EMCDDA Statistical Bulletin have been used. Data mainly refer to the time period 2003 to 2010 and have partly been updated to 2011 for countries with important recent developments (HIV-outbreak in Greece and Romania).

9.2 Gap-survey

Based on the analysis of information available at EMCDDA (National Reports, Standard Questionnaire (SQ) 23, 27, 28 and 29, European Legal database, Best Practice Portal, Standard Table (ST) 10; Statistical Bulletin, Best practice portal) for each country, a country profile was elaborated, covering epidemiologic situation concerning drug-induced death and drug related infectious diseases and information on the coverage and implementation of services related to the Council Recommendation.

The country profiles were sent out to the REITOX network focal points as a gap-survey in the course of which REITOX Focal points should add information where necessary and also make comments on the information presented (epidemiological data, data already extracted from ST, SQs, national reports, etc.). Concerning epidemiological data, it was asked whether time series can be interpreted as a trend or if they are influenced by e. g. changes in data collection. Several rounds of reminders had to be sent out to get the gap-survey filled in. Croatia and all EU Member States with the exception of Bulgaria and Romania contributed to the gap-survey.

9.3 Policy maker survey

Based on the Trimbos report and the results of the discussion process with EAHC, EMCDDA and EC, the questionnaire was designed. The questionnaire was programmed

using the GlobalPark software. This software is a dynamic tool that allows to provide items according to previous questions and helps to avoid irrelevant questions (questionnaire see annex 5).

The EC contacted the permanent representatives of each country (also the candidate countries) asking for the nomination of one responsible person for the Council Recommendation. This person should coordinate the answers to the survey. The secretary from DG SANCO sent the country specific link, the password (both were provided by GÖG to DG SANCO for each country) and the filled questionnaire from 2005 (Trimbos 2006) to this person. GÖG sent an overview of the response rate regularly. Based on this the secretary of DG SANCO sent out several reminders. Data collection started on April 27th 2012 the deadline that was originally planned for end of May was expanded several times, finally all countries except Slovakia filled the questionnaire; the last one was finalised on November 23rd 2012.

9.4 Consultation of stakeholders

Based on the previous report (Trimbos 2006) and the results of the discussion process with EAHC, EMCDDA and EC, and after the consultation of leading experts from Austrian harm reduction organisations, the questionnaire was designed. The questionnaire was programmed using the GlobalPark software (see 9.3) and pre-tested by a field organisation (questionnaire see annex 5).

A selection strategy that consisted of two phases of consultation was elaborated. The first phase covered organisations organised in international and national networks (e. g. EuroHRN, civil society forum on drugs) and was conducted from March 2012 to end of June 2012. The second phase (“snowballing”) covered organisations that were recommended by respondents in phase one and was conducted from July 2012 to November 2012. The deadline provided was expanded for several times. Overall, five reminding emails were sent out; moreover, stakeholders and members of national focal points were asked for their support at four expert meetings in Lisbon. In the final phase of data collection, GÖG contacted institutions from countries that had not responded till then individually. Overall, 123 institutions from 32 countries were contacted, 43 civil society organisations from 24 countries completed the questionnaire (response rate: 35 %). As for some Member States, more than one civil society organisation completed the questionnaire data were weighted in the analysis (details see annex 3).

9.5 Review of literature

This literature review is an update of the review done by Trimbos (Trimbos 2006) for the previous report in the year 2005. The time span for the systematic literature search in that report was 1990 to 2005. Since then a synthesis of relevant literature on most important aspects of prevention of infectious diseases covering the years 2000 to mid-2011 was done by ECDC and EMCDDA in 2011 (technical background documents of the ECDC and EMCDDA guidance “Prevention and control of infectious diseases among people who inject drugs (ECDC and EMCDDA 2011a; ECDC and EMCDDA 2011b). These documents are used for the update in this area. For the area not covered by the ECDC and EMCDDA guidance and the respective background documents recent reviews like the EMCDDA harm reduction monograph (EMCDDA 2010a), the EMCDDA insights on new heroin assisted treatment (EMCDDA 2012b) and the systematic review on the effectiveness of opioid substitution treatment in prison settings (Hedrich et al. 2011) have been used. For area not covered by recent reviews special literature reviews have been carried out (see below). In addition the relevant websites have been searched for international guidelines.

For the previous report Medline, PsycInfo, Embase and Toxline were screened with database-specific strings of key terms to identify and select relevant studies. The key terms used focussed on several indicators for effectiveness, (users of) illicit drugs and harm reduction. The indices of several journals and websites in this domain for more recent publications were checked further. Reference lists in selected publications were screened on relevant additional publications and some experts were contacted. Predominantly, English publications were selected. In many of the review studies however, publications in other languages were included. More recent publications were added based on tips from experts and screening websites of scientific databases and websites, for instance from the Cochrane Library, the World Health Organisation or governmental organisations (Trimbos 2006).

The Technical Report “Evidence for the effectiveness of interventions to prevent infections among people who inject drugs” mentioned above is mainly based on the “review of reviews” method. Reviews are considered high-level evidence because they summarise and collate findings from primary literature. Based on a list of search terms the following electronic databases were searched:

- » The Cochrane Library
- » EMBASE
- » MEDLINE
- » CINAHL
- » PsycINFO
- » IBSS

Based on the discussion on effectiveness in chapter 10.1 theoretical modelling studies have been used in addition.

For the **special literature reviews** a systematic literature research was performed in Medline, Eric, Psycinfo, Embase and Cochrance with predefined keywords. The selection of abstracts and full-text versions was performed according to predefined selection criteria. To determine the quality of the studies, internal validity (risk for biases) and external validity (application of study-results for persons beyond the study-populations) were both evaluated with predefined criteria. Contents of primary and secondary studies were displayed in table format. An additional hand-search was conducted and guidelines and general remarks were included and discussed following theory-based validity (details see annex 2).

9.6 Limitations

For the interpretation of the results of this report, the following limitations have to be taken into account: Data availability made a very good progress in the time-span from 2003 to 2010. Thanks to the continuous efforts of the EMCDDA for harmonisation and expansion of data collection, a lot of comparable data are available to describe the epidemiology of the drug situation and harm reduction measures. Unfortunately, data for time-series are not available for all countries; even basic data to analyse drug-related harm and availability of measures of harm reduction are missing in some countries. It has to be taken into account that absolute numbers (e. g. number of drug-induced deaths) are influenced by the quality of the respective monitoring system too. Therefore country-specific comparisons have to be made with caution and should be avoided for some countries at all. Another limitation of the present work is that the view of policy makers and stakeholders is based on the answers of single persons (answering often for a big country). This makes their statements subjective expert opinions. Therefore the data gathered are appropriate to give a general impression but not for direct country comparisons.

10 Effectiveness of interventions

This chapter presents evidence on the effectiveness of harm reduction measures on the prevention and treatment of drug-related infectious diseases among drug users, the prevention of drug-induced deaths and harm reduction in prison settings. In a first step, the evaluation criteria of evidence are discussed. To assess the effectiveness of harm reduction measures an update of the review done by Trimbos for the previous report in the year 2005 was conducted. Since there is an actual synthesis of relevant literature on the most important aspects of prevention of infectious diseases covering the years 2000 to mid-2011 done by ECDC and EMCDDA dating to 2011 (technical background documents of the ECDC and EMCDDA guidance “Prevention and control of infectious diseases among people who inject drugs (ECDC and EMCDDA 2011a; ECDC and EMCDDA 2011b) these documents are mainly used for updates in this area. For the selected research areas “measures to influence route of administration”, “peer naloxone programmes”, “needle exchange programmes in prison” and “prison release management” special PICO-questions have been designed and systematic literature reviews have been conducted. The detailed results are included in annex 2 and short versions can be found in the respective sections of this chapter.

10.1 Evaluation criteria and different levels of evidence

The previous report as well as the technical reports on evidence for the effectiveness of interventions to prevent infections among people who inject drugs (ECDC and EMCDDA 2011a; ECDC and EMCDDA 2011b) are more or less based on the “classical approach” of evidence which sticks to the paradigm that randomised controlled trials (RCTs) are the gold standard to evaluate effectiveness of interventions. A lot of literature can be found where the need of extending this approach is addressed. (Uhl 2010) stated:

“Whenever the effects of interventions lie in the far future, whenever it is hard to measure effects objectively, whenever competing influences cannot be adequately controlled experimentally or statistically, and whenever the available sample sizes in practical applications are too small to expect any statistically significant results, we have to accept research strategies that are miles away from the ideal approach for investigating causal relationships, i.e. randomized, controlled trials (RCTs).” (Uhl 2010, 26). Also, the previous report states that there is an ongoing debate about the best methodology to be used in determining effectiveness of interventions in public health.

Especially in the field of harm reduction, it is very hard to follow a strict RCT approach. Since most interventions are low threshold activities the setting per se is a contradiction to the need of controlled conditions as well as the strict distinction into control and experimental groups. Ethical reasons contradict RCTs in this field as well. Since

harm reduction measures often aim to avoid life threatening damages it would be ethically very problematic to build a control-group with no intervention. It can be stated that many harm reduction measures – caused by their nature – will never reach the status of evidence based on the classical RCT-paradigm. However, this does not mean that they are not effective.

But the critical debate of the RCT-paradigm leaves open the question on how to decide on the effectiveness of interventions. The previous report states that in a strict scientific sense, alternative designs are not optimal to prove effectiveness. Thus, the methodological debate on the study design, suitable to produce evidence of effectiveness in public health, currently remains unsolved (Trimbos 2006).

On the other hand it can be postulated that many harm reduction activities have **theory based validity**. For example, the risk of being infected with HIV using the injection equipment of another person becomes inexistent when a new sterile syringe is used. There is no need to evaluate this. The same occurs for drug consumption, without medical supervision it is dangerous due to many reasons, but these risks are reduced in medical supervised consumption rooms. There is just one argument against this “theory based validity” approach: when the availability of harm reduction measures has the consequence that the problematic behaviour is increasing (e. g. if there are needle exchange programmes more people inject more often) negative effects could occur. One possible approach to reverse the burden of proof could be to stick to measures with theory based validity, as long as no proof of negative effects or failure is found. Studies which deal with theory based validity in a scientific sense are mathematical modelling studies which build mathematical models on plausible assumptions to predict effects on a theoretical base. If available, studies of this kind are used in the discussion on theory based validity in this report.

The Interactive Domain Model (IDM) offers a good possibility to broaden the scope of view, developed in the field of health promotion which defines: *“Best practices in health promotion are those sets of processes and actions that are consistent with health promotion values, theories, evidence, and understanding of the environment, and that are most likely to achieve health promotion goals in a given situation.”* (Kahan/Goodstadt 2001, 47).

Another aspect which has to be considered in the discussion of effectiveness is that the investigation of single interventions does not fit to reality where interventions always happen in specific contexts and interact with other interventions. Harm reduction measures can be considered as “complex interventions” (Petticrew 2011) For example, it can be assumed that counselling on safer injection does not make much sense when there is a lack of possibilities to get sterile injection equipment. Another example for interactions of interventions is that it has been recently proved that high coverage of needle exchange programmes, in combination with adequately dosed opioid substitution treatment, is statistically significantly associated with reduced transmission of hepatitis C (Turner et al. 2011).

10.1.1 Levels of evidence in the Trimbos report

The previous report followed the conservative methodological rules of experiment, as applied in medical and psychological research, at the time as it was written in line with well-known scientific networks such as the Cochrane Collaboration and the Campbell Collaboration. The methodological scope was expanded a little by including studies deviating from the RCT design (e. g. time-series or prospective cohort studies, preferably combined with a multivariate analysis, including factors that may also influence the outcomes). Finally, the results of some systematic reviews that used an adapted methodology for grading evidence were also included. This was done because the methodology used, added value to the well-known methods for grading scientific evidence that were used in the literature review (Trimbos 2006).

In the previous report, a rough grading procedure was used, i. e. without systematically specifying quantity and quality of the studies.

Effective interventions: When a systematic review or a meta-analysis of at least three RCTs was available, with equally directed significant outcomes or three separately published RCTs with outcomes that were alike and significant, the evidence is considered “sufficient”. Thus, the intervention is considered *effective*.

Probably effective interventions: An amount of two RCTs or one RCT combined with at least two studies of lesser quality (i. e. well-done time-series or prospective cohort studies) was considered to give valuable indications for effectiveness. In these cases the intervention is *probably effective*.

Possibly effective interventions: In case of a doubt, i. e. only one RCT (with or without one study of lesser quality) or merely one or two studies that are all of lesser quality but with positive findings, the evidence is in fact still insufficient.

No evidence: For some interventions no studies were found or studies showed no consistent positive findings (Trimbos 2006).

10.1.2 Levels of evidence in the report “Effectiveness of interventions to prevent infections among people who inject drugs”

The Technical Report “Evidence for the effectiveness of interventions to prevent infections among people who inject drugs” (ECDC and EMCDDA 2011b) used the following evidence criteria: The reviews selected were critically appraised using a checklist and it was distinguished between “core reviews” (the whole or only a part of the review is judged to be of high quality) and “supplementary reviews”. Four levels of evidence were defined:

Sufficient review–level evidence to either support or discount the effectiveness of an intervention

- » Clear and consistent statement from one or more core reviews based on multiple robust studies, or
- » consistent evidence across multiple robust studies within one or more core reviews, in the absence of a clear and consistent statement in the review(s);

Tentative review–level evidence to either support or discount the effectiveness of an intervention

- » A tentative statement from one or more core reviews based on consistent evidence from a small number of robust studies or multiple weaker studies, or
- » consistent evidence from a small number of robust studies or multiple weaker studies within one or more core reviews, in the absence of a clear and consistent statement in the review(s), or
- » conflicting evidence from one or more core reviews, with the stronger evidence weighted towards one side (either supporting or discounting effectiveness) and a plausible reason for the conflict, or
- » consistent evidence from multiple robust studies within one or more supplementary reviews, in the absence of a core review;

Insufficient review–level evidence to either support or discount the effectiveness of an intervention

- » A statement of insufficient evidence from a core review, or
- » insufficient evidence to either support or discount the effectiveness of an intervention (either because there is too little evidence or the evidence is too weak), in the absence of a clear and consistent statement of evidence from (a) core review(s), or
- » anything less than consistent evidence from multiple robust studies within one or more supplementary reviews;

No review–level evidence

- » No core or supplementary reviews of the topic identified, possibly due to a lack of primary studies;

10.1.3 Level of evidence used for the present report

The present review tries to give an overview about recent scientific work starting from the evidence collected in the previous report. It is based on reviews which followed the “classical approach” of evidence (see above) but in addition some comments on “theory based validity” are made. Interventions are classified as effective even when effectivity was not proven by RCT (e. g no RCT has been done, RCT–design is inappropriate) and a lot of studies including control groups, epidemiological studies, pre–post–design

studies or statistical modelling based on plausible assumptions and theoretical considerations come to the conclusion that effectivity can be assumed. One important factor in this respect is the absence of negative consequences in the scientific evidence of some measures which often are used as counter-arguments (e. g. consumption rooms increase drug consumption).

10.2 Prevention and treatment of drug-related infectious diseases (DRID) among drug users

Drug-related infectious diseases (DRID) can cause serious health problems among drug users that may lead to chronic complications and possibly death. Injecting drug use increases the risk of hepatitis C infection considerably. Together with unsafe sexual behaviours, injecting drug use increases the risks of HIV and hepatitis B infections. Drug-related infectious diseases exert a high financial and social burden on society (Trimbos 2006).

Prevention of injecting drug use or risky injecting drug use (e. g. needle sharing) could be one of the most effective strategies to reduce drug-related infectious diseases (DRID). However, these diseases are not solely related to injecting drug use but also to unsafe sexual contacts and unsafe life style in general (Trimbos 2006). To describe the effectiveness of measures for the prevention of DRID the following outcome measures are used:

- » Reduction of transmission of DRID
- » Reduction of injecting (risk behaviour) among people who inject drugs

10.2.1 Needle and syringe exchange

Sharing injecting equipment is a main risk factor for the transmission of drug-related infectious diseases. In general, the incidence of these diseases among injecting drug users is highest compared to non-injecting drug users. Needle and syringe exchange programmes are meant to reduce the spread of infectious diseases among injecting drug users (Trimbos 2006).

The goal of needle and syringe provision is to reduce the sharing and reuse of needles/syringes and the transmission of blood-borne viruses among IDUs by increasing access to sterile needles/syringes and removing potentially contaminated ones from circulation. Needle and syringe exchange can be done in different settings: in low threshold facilities which offer a range of support to drug users, in accident and emergency departments, genito-urinary medicine clinics, or primary care settings.

Alternative means of providing needles/syringes are pharmacies, vending machines, and outreach (ECDC and EMCDDA 2011b).

The **theory based validity** of this kind of approach is based on the rationale that the risk of being infected with blood borne diseases like HIV or hepatitis C using a sterile syringe is zero, while there is a considerable risk for being infected when injecting with a syringe already used by an infected person.

The previous report came to the conclusion that needle and syringe exchange programmes are easily applicable effective and possibly also cost effective in reducing risk behaviours and the transmission of infectious diseases (Trimbos 2006).

The review of reviews “Effectiveness of interventions to prevent infections among people who inject drugs” supports the results of the previous report and comes to the conclusion that there is **sufficient review-level evidence** to support the effectiveness of needle and syringe exchange programmes in reducing self-reported risk behaviour and **tentative review-level evidence** to support the effectiveness of needle and syringe exchange programmes in reducing HIV transmission among IDUs (ECDC and EMCDDA 2011b). For the reduction of HCV transmission there is not sufficient evidence to come to a final conclusion at the moment. In general epidemiological data show that in most EU countries it was possible to reduce HIV prevalence to a large extent, but in many countries the rate of hepatitis C prevalence is still high. One possible interpretation of this situation might be that the harm reduction measures provided have been sufficient for the reduction of HIV infections but not for the prevention of HCV infections. One interesting robust study dealing with this problem came to the conclusion that high coverage of needle exchange programmes in combination with adequately dosed opioid substitution treatment is statistically significantly associated with the reduced transmission of hepatitis C (Turner et al. 2011).

10.2.2 Opioid substitution treatment (OST) of opiate dependence for preventing DRID

Drug treatment encompasses a range of strategies to manage injecting drug use, including pharmacological maintenance treatment or opioid substitution treatment (OST), pharmacological detoxification treatment, pharmacotherapy combined with psychosocial approaches such as counselling or contingency management and residential rehabilitation. The strongest strategy in relation to the impact of OST in opioid-dependent injecting drug users (IDUs) is the evidence regarding the effectiveness of drug treatment in preventing DRID-associated harm. At present, there are comparatively few studies regarding the effectiveness of drug treatment for stimulant or

cocaine-dependent persons, although evidence suggests that this is a growing problem in some parts of Europe (ECDC and EMCDDA 2011a).

Pharmacotherapy for opioid dependence involves the use of agonist and antagonist agents. Opioid agonist treatments, such as methadone and the partial agonist buprenorphine, can be used either for detoxification or longer-term maintenance treatment. Methadone maintenance treatment (MMT) and buprenorphine maintenance treatment are the most commonly prescribed forms of OST and these treatments prevent withdrawal symptoms, reduce cravings associated with opioid use, and reduce the effects of illicit opiates. Such therapy is most effective when it is continuous and is providing adequate doses (ECDC and EMCDDA 2011a).

OST can be provided in conjunction with psychosocial treatments such as individual counselling, family or couple therapy; cognitive behavioural therapy, motivational interviewing or contingency management, which involves the provision of rewards for individuals that remain abstinent from drugs or who meet specific objectives of treatment (ECDC and EMCDDA 2011a).

Theory based validity of this kind of approach is based on the rationale that the risk of being infected with blood-borne diseases like HIV or hepatitis C is lower when the frequency of injection is decreased or injecting drug use is stopped at all.

OST is one of the best studied interventions in the drug field. The previous report came to the conclusion that OST is effective in reducing injecting drug use. According to the report “Effectiveness of interventions to prevent infections among people who inject drugs” there is **sufficient review level evidence** to support the effectiveness of OST in reducing the frequency of injection, the sharing of injecting equipment and the injecting risk behaviour. Concerning the reduction of HIV seroconversion there is also **sufficient review level evidence**, especially for those in continuous treatment. To reduce HCV incidence, a recent meta-analysis of UK studies taken together with primary studies show **tentative review level evidence** although consistent evidence from multiple longitudinal studies within supplementary reviews shows weak or absent association between OST and the reduction of HCV incidence. Since opioid addiction is a chronic disease and people in OST relapse to intravenous drug use in many cases, it is interesting to look at the combination of needle and syringe exchange programmes and OST. Evidence from one meta-analysis and two cohort studies indicates that the participation in full harm reduction programmes involving opioid substitution treatment and high coverage of needle and syringe exchange programmes are associated with reductions in HIV and HCV incidence and reduced injecting risk behaviour (ECDC and EMCDDA 2011a) – see also section 10.2.1).

OST is well implemented in many EU countries but an in-depth view shows that there are huge differences how OST is provided. In different countries different substances

are used (see also section 12.4). Even on regional level there are differences in the substances prescribed. Another difference can be detected when OST is included in routine medical supply by general practitioners or offered in specialised drug treatment centres only. OST and drug treatment in general should be targeted to the individual needs of the client. It is a challenge of future research to build an evidence base for which kind of clients in which phase of the drug-related illness which substances and which regime of OST is most appropriate. Another important question is which other measures, besides medication, should be included in OST. For example there is **tentative review level evidence** of a beneficial impact of any psychosocial treatment provided alongside OST with respect to compliance, completion of treatment and abstinence at follow up (ECDC and EMCDDA 2011a). Due to different reasons a long time OST and abstinence orientated treatment have been seen as some kind of “hostile” approaches. Fortunately, this has changed to a large extent. But research for the combination of both approaches is still very scarce; e. g. concerning indications which approach is most effective in which situation (Busch et al. 2007).

10.2.3 Information, education and communication (IEC)

Many types of *information, education and communication* (IEC) are being used in preventing injecting drug use. IEC-messages may be spread via leaflets, booklets, audio-visual media or advocacy. IEC may be part of other interventions, e. g. mass media campaigns, outreach and other harm reduction interventions, treatment, HIV-testing and counselling, or harm reduction counselling (Trimbos 2006).

Theory based validity of this kind of approach is based on the rationale that, first of all, you need knowledge about risks to avoid them. But there is a lot of evidence that knowledge alone is not sufficient to change behaviour in many cases.

Few high-quality studies can currently be found in the international literature on IEC, and the evidence of effectiveness of IEC is weak. IEC may at best be short-term effective in raising awareness and in more specific variants in changing knowledge and understanding, not in changing behaviour. These interventions are widely used as part of more extensive prevention or treatment packages. In general it is assumed that these interventions are more effective when combined with other prevention strategies (Trimbos 2006).

The review of reviews supports the findings of the previous report. But the report found **tentative review level evidence** to support the effectiveness of outreach, which includes IEC in reducing risk behaviour among IDUs (ECDC and EMCDDA 2011b). This statement is based on three reviews. One of these reviews provides a clear statement

on the effectiveness of peer-delivered IEC. Other factors of IEC which are associated with reduction of HIV risk behaviour are: interventions delivered later in the course of treatment, separate sessions for men and women, the use of didactic lectures, the provision of training in self-control and coping skills, and the conduct of peer group counselling and discussion (ECDC and EMCDDA 2011b). This leads to the conclusion that IEC is effective when the setting is appropriate and the messages are provided in an adequate form by trustable persons.

10.2.4 Community-outreach programmes

Community-based outreach programmes are considered another component of preventing drug-related infectious diseases among risk groups i. e. those exposing sexual risk behaviour or injecting drug use. These outreach programmes aim to create access to hidden populations in their daily environment for targeted action against high-risk behaviours. Outreach activities are matched to the individual needs of members of the target group. Activities include increasing risk awareness, demonstrating skills to avoid or reduce risks, behavioural counselling, distributing injecting equipment (see 2.1.3), or providing referral to regular treatment (Trimbos 2006).

The **Theory based validity** of this approach is based on the rationale that you have to get into contact first when you want to give information or other kind of support. For many reasons hidden or marginalised populations will not come to you so you have to reach them in their environment.

These programmes serve to access (partly) hidden populations of drug users in their natural surroundings and enable them to reduce drug-related risk-behaviours. Desired outcomes are an increase in programme coverage, programme participation, and a reduction of both risk behaviour and infection rates (Trimbos 2006).

The previous reports states that the results of more than 40 published studies, including multi-country, multi-site studies and meta-analyses (**sufficient evidence**), reveal that community outreach programmes are effective on several outcomes. Injecting drug users (IDUs) reached by these programmes and who are offered access to harm reduction services, report reducing their risk behaviour and lowering their exposure to HIV. IDUs referred by outreach workers to available, accessible and acceptable services (e. g. voluntary testing, counselling, and drug dependence treatment) increasingly use these services and reduce their injecting drug use. In general, drug users who participated in a community-based outreach intervention were also slightly more likely to reduce their sexual risk behaviour, compared to those who followed another (unspecified) intervention strategy. In studies focussing on sex behaviours, there were indications that treatment compliance increased and drug use reduced considerably when

the intervention-group was compared to a group that had no intervention at all. Most findings were consistently reported in different places, under different circumstances and at different times during HIV epidemics. Besides being effective on several outcomes, outreach programmes are relatively inexpensive interventions for preventing HIV and other drug-related infections among IDUs. Empirical studies of outreach programmes that also include preventing HIV infections (seroincidence) are rare and of minor quality, but the outcomes suggest that outreach work may substantially reduce HIV infections among injecting drug users (Trimbos 2006).

The review of reviews examined IEC together with outreach work as IEC is often provided via outreach. The report found **tentative review level evidence** to support the effectiveness of outreach, which includes IEC in reducing risk behaviour among IDUs. The conclusion of the previous report about the usefulness of outreach to bring IDUs (especially hard to reach groups) in contact with other services (e. g. treatment programmes, needle exchange) is strongly supported (ECDC and EMCDDA 2011b).

10.2.5 Measures to avoid shifting from other routes of administration to IDU and to foster shifting from IDU to other routes of administration

Epidemiological data show that there are huge differences in the route of administration of opioids between countries (see section 11.1.2). For example, in the Netherlands, for just seven percent of the clients in outpatient treatment, injection was the main route of administration of opioids while in Estonia 87 percent used that form of administration. In general, it seems that the proportion of opioid users who inject the drug is decreasing (see section 11.1.2).

Looking at the literature since almost 20 years several authors strike out the necessity of interventions to influence route of administration – e. g. (Des Jarlais et al. 1992) (Vlahov et al. 2004) and recently (Malekinejad/Vazirian 2012). Despite this fact literature on interventions and evaluation of interventions is scarce.

One intervention, where some evidence is available, is the distribution of foils for chasing heroin instead of injecting at syringe provision through specialised programmes (NSP). A study was conducted in the North-West of England where foil packs were provided at NSP. Out of 320 attendees, 54 % took the foil packs when they became available. Over the period of the evaluation, NSP transactions increased by 32,5 % from 1.672 to 2.216. Additionally, 32 new clients (non-injecting heroin users) started attending the service to obtain the foil packs. This group would otherwise not have been in contact with the treatment service. More detailed data from one site are reported for 48 recent injectors who took foil within the NSP where the piloting first

started. Prior to the introduction of the foil packs, 46 % of this sub-group reported chasing heroin in the previous four weeks. At follow up, 85 % reported using the foil to chase heroin on occasions when they would otherwise have injected (Pizzey/Hunt 2008). For more details see annex 2.

10.2.6 Vaccination for hepatitis A and B and TB

Series of vaccination are effective in preventing hepatitis B infections which may ultimately end in serious liver diseases (cirrhosis or cancer). The use of vaccination is several decades old and has proven to be effective for protection against clinical hepatitis B infection and chronic carriage of this disease for those who responded to complete hepatitis B primary vaccination series (three vaccinations). Follow-up studies showed that from ten to fifteen years after completed vaccination, no infections occurred and the development of a chronic infection was very rare (Trimbos 2006).

Due to unstable life conditions of drug users it might be difficult to ensure that the client gets all three doses of hepatitis B vaccination. One possibility to improve vaccination completion rates is contingency management or choosing a stable setting for vaccination (e. g. prison). When the completion of vaccination is not reached, a first dose only provides partial immunity (ECDC and EMCDDA 2011d). Vaccination for hepatitis A and B is also successful in the specific target population of IDUs (Baral et al. 2007). Since some IDUs are hard to reach for vaccination through traditional means, a link to other drug-related support (e. g. NSP, treatment, testing) makes sense. IDUs should be defined as a target group for hepatitis A and B vaccination, especially taking into account the high prevalence of hepatitis C (ECDC and EMCDDA 2011d).

Vaccination against TB is usually recommended for infants living in areas where TB is highly endemic and for infants and children at particular risk of TB exposure in low incidence areas only (ECDC and EMCDDA 2011d).

10.2.7 Treatment of HIV/ AIDS, hepatitis B and C and of tuberculosis

Recent studies have demonstrated clear benefits of antiviral treatment against HIV, HBV and HCV among persons using drugs and there is strong evidence for the benefits of TB treatment on individual and population-level (ECDC and EMCDDA 2011d). The **theory based validity** of this approach is that drug use per se is no contraindication for medical treatment of infectious diseases. Some studies show higher rates of premature treatment discontinuation (for HCV treatment) which points out to the importance of

an adequate setting and need for measures to ensure compliance. Multiple studies have confirmed that those who are HIV positive or HIV and HCV co-infected and receive opioid substitution treatment are more likely to adhere to the treatment regimen of their infection(s) (ECDC and EMCDDA 2011d).

Treatment of HIV/AIDS, hepatitis B and C and of tuberculosis among IDUs can also be seen as prevention of transmission of these diseases because a lower (HIV) or terminated (HCV) virus load decreases the risk of transmission. Modelling studies show that HCV antiviral treatment of IDUs at achievable rate may be an effective primary prevention tool for substantially reducing the prevalence of HCV infection (Martin et al. 2011).

10.2.8 Remarks from general guidelines

The recent ECDC and EMCDDA Guidance for prevention and control of infectious diseases among people who inject drugs recommend the following key interventions components:

Injection equipment: Provision of, and legal access to, clean drug injection equipment, including sufficient supply of sterile needles and syringes free of charge, as part of a combined multi-component approach, implemented through harm-reduction, counselling and treatment programmes (see section 10.2.1).

Vaccination: Hepatitis A and B, tetanus, influenza vaccines, and, in particular for HIV-positive individuals, pneumococcal vaccine (see section 10.2.6).

Drug dependence treatment: Opioid substitution treatment and other effective forms of drug dependence treatment (see section 10.2.2).

Testing: Voluntary and confidential testing with informed consent for HIV, HCV (HBV for unvaccinated) and other infections including TB should be routinely offered and linked to referral to treatment.

Infectious disease treatment: Antiviral treatment based on clinical indications for those who are HIV, HBV or HCV infected; anti-tuberculosis treatment for active TB cases; TB prophylactic therapy should be considered for latent TB cases. Treatment for other infectious diseases should be offered as clinically indicated.

Health promotion: Health promotion focused on safer injecting behaviour; sexual health, including condom use; and disease prevention, testing and treatment.

Targeted delivery of services: Services should be combined, organised and delivered according to user needs and local conditions; this includes the provision of services through outreach and fixed site settings offering drug treatment, harm reduction,

counselling and testing, and referrals to general primary health and specialist medical services.

In addition to this The “Global Fund to fight AIDS, Tuberculosis and Malaria” considers drug injecting as major driver of the HIV epidemic and therefore provides recommendations on harm reduction for people who use drugs (The Global Fund to Fight AIDS 2011). It is based on the WHO and UNAIDS “comprehensive package”:

- » Needle and syringe programmes
- » Opioid substitution therapy and other drug dependence treatment
- » HIV testing and counselling
- » Antiretroviral therapy
- » Prevention and treatment of sexually transmitted infections
- » Condom distribution programmes for people who inject drugs and their sexual partners
- » Targeted information, education and communication for people which inject drugs and their sexual partners
- » Vaccination, diagnosis and treatment of viral hepatitis
- » Prevention, diagnosis and treatment of tuberculosis

In addition to these recommendations the “Global Fund to fight against AIDS, TB and Malaria” also recommends a range of complementary interventions that should be considered: Community involvement and user-oriented services (involve drug-users in planning, delivery and evaluation of HIV response programmes); Community system strengthening (include the community, its resources and capacity building in setting up harm reduction measures); gender-sensitive programmes, prisons and pre-trial detention (continuity of antiretroviral therapy, NSP and OST in prison); drug detention centres (close drug detention centres and identify and include more effective and human rights-based alternatives); ensuring supportive environments and human rights (advocacy for harm reduction); fatal overdose prevention (e. g. naloxone); monitoring and evaluation.

10.2.9 Conclusions

Concerning the prevention of risk behaviour (e. g. needle sharing) related to DRID (e. g. HIV, hepatitis), **opioid substitution treatment (OST)** and syringe provision through specialised programmes (**needle exchange programmes – NSP**) have proven their effectiveness in a range of high quality studies. This factor leads to the conclusion that these two interventions should be the central part of any strategy to reduce prevalence of DRIDs. Recent literature points out the necessity of high coverage of both interventions to reduce hepatitis C infection rate. **Information, education and communication** are effective when the setting is appropriate and messages are provided in an ade-

quate form by trustable persons. One possibility to assure the right setting is **outreach work**. Since peers are the most trustable persons in many aspects, **peer involvement** which has proven to be effective is a good strategy. The possible benefit of measures to avoid shifting from other **routes of administration** to injecting drug use (IDU) and to foster shifting from IDU to other routes of administration is pointed out in scientific literature. However, there is hardly any evidence on concrete projects. Thus, action is needed in this area. A good starting point are existing measures targeting mainly IDUs which might be used for promoting other routes of administration (e. g. syringe provision through specialised programmes where in addition foil and counselling concerning heroin chasing are offered – see annex 2). **Vaccination for hepatitis B, treatment of HIV, HBV and HCV** in IDUs are effective measures. Especially the treatment for HCV is an effective instrument of infection prevention for others, too.

10.3 Prevention of drug-induced deaths

10.3.1 Opioid substitution treatment for preventing drug-induced deaths

The previous report concludes that several studies show a relationship between maintenance treatment of opiate users and a reduction of drug-induced death. Most studies address methadone programmes. Though there are hardly any randomised controlled trials on this subject, some studies show that maintenance treatment is still a promising alternative in reducing drug-induced deaths (Trimbos 2006).

Theory based validity concerning the relationship between opioid substitution treatment (OST) and reduction of mortality is the fact that the risk of overdose is much lower when opioids with unknown concentration consumed in unsecure and often stressful conditions are substituted by opioids with known concentration under medical supervision accompanied with a general stabilisation of the client.

Beneath a meta-analysis of one RCT and five cohort studies identified in the previous report done by Caplehorn which showed that the risk of dying from overdose is just one quarter for opioid addicts in substitution, compared to those of former substitution clients, opioid addicts on waiting lists for substitution treatment or IDUs visiting a clinic due to psychiatric or general health problems another meta-analysis of eleven RCTs found no significant relation between reduced mortality and substitution treatment (Mattick et al. 2009). One reason for the missing evidence found in RCTs might be short observation periods (Busch et al. 2007). A recent study shows that the risk of drug-induced death at the beginning of the substitution treatment and in the period

after termination, is higher but in general is reduced when the duration of substitution treatment exceeds one year (Cornish et al. 2010).

In addition a lot of cohort studies e. g. (Fugelstad et al. 1998; Risser et al. 2001; Scherbaum et al. 2002) show a significant reduction of mortality for patients in OST. For example a high-quality Spanish cohort study among more than 5.000 opioid dependent persons strongly supports a causal relationship between not attending low threshold methadone programmes and death rate. All heroin dependents seeking treatment in Barcelona between 1992 and 1997 were (on average) assessed every nine months until the end of 1999. The death rate among this population was some twenty percent (N=1.005). Thirty-five percent of those who died in this period died from overdose, 38 % from AIDS and 27 % from other factors. Approximately half of this population participated in methadone programmes. Methadone most probably contributed to a reduction in mortality rates or HIV infections. The total death rate reduced from 5,9 per 100 person years in 1992 to 1,6 in 1999. The most important factor associated with mortality was “not participating in a methadone programme” (Brugal et al. 2005; Trimbos 2006).

The review on scientific studies in the EMCDDA harm reduction monograph comes to the conclusion that based on consistent evidence from one meta-analysis and multiple robust studies in supplementary reviews, there is **sufficient review-level evidence** to support the effectiveness of OST in reducing opioid-induced death (Kimber et al. 2010)

10.3.2 Preventing opiate-induced death with peer naloxone programmes

Naloxone is a non-selective opioid-antagonist which can be administered intravenous, intramuscular or subcutaneous (Baca/Grant 2005). Naloxone is readily transported across the blood-brain barrier and quickly reverses the opioid effects (e. g. respiratory depression). As naloxone rapidly (but temporarily) inhibits the effects of opioids it can induce severe withdrawal syndromes such as vomiting. It is important to note that naloxone has a short half-life of about 60 to 90 minutes whereas most opioids have longer half-lives (Advisory Council on the Misuse of Drugs 2012; Darke/Hall 1997). Therefore it is vital to monitor the patient after administering naloxone as the symptoms of the overdose may return. There is no recent evidence for life-threatening side effects such as cardiac arrests and therefore it is considered a drug which can be used more or less safely.

The previous report concludes (based on a narrative review of Baca and Grant (Baca/Grant 2005)) that naloxone programmes are effective for the prevention of

drug-induced deaths, but additional measures such as training in rescue breathing should be taken (Trimbos 2006).

In a systematic literature review and by hand-search for the present report (details see annex 2), 13 studies were identified on “take-home” naloxone programmes to actively injecting opioid users and peer based. All but one of these studies lack control groups and the main outcomes are narrative prescriptions from opioid users and their experience with naloxone. All of the studies conclude that naloxone is a safe drug to use and that negative consequences (e. g. severe withdrawal symptoms) are rare. All studies focus on peer training and peer distribution of naloxone. Most peer training programmes include didactic and interactive components (e. g. practicing with a resuscitation dummy), opioid symptom recognition and response training (administration of naloxone, rescue breathing, etc.) and contacting emergency medical service. Most persons were recruited at needle exchange sites. The measured outcomes are usually self-reported use of naloxone at peer-overdose. The duration of the training varies significantly: 10 to 30 minutes in New York (Piper et al. 2008) 25 minutes in Pittsburgh (Bennett et al. 2011) and eight hours in New York (Seal et al. 2005).

The quality of the primary studies is low to medium and the size of the study groups is usually small. One of the main problems is the lack of control groups and changes in drug-induced deaths or behaviour could be influenced by other factors (e. g. heroin availability). In particular at the follow-up there is a bias, of those who return at the drug services sites and most studies report a very low follow-up rate. It is therefore unclear what happened to all the other trained persons and how they experienced or used naloxone.

Theory-based validity and results: The discussion and recommendations on naloxone-use often takes place at a theoretical level. One of the main objections against naloxone distribution is the fear that the availability of naloxone as a “safety net” would encourage more risky patterns of drug use. One study looking at this risk found, that injecting drug users would not use more heroin when naloxone is available. One small scale study showed a decrease of heroin use after an intensive overdose prevention training including naloxone distribution (Seal et al. 2005). The provided training associated with naloxone prescription could increase self-efficacy and awareness and therefore reduce risky patterns (Advisory Council on the Misuse of Drugs 2012). There is not enough evidence to prove that “take-home” naloxone will increase riskier use, the same was shown by Dettmer (Dettmer et al. 2001). Among the main arguments for the distribution of naloxone among drug users is the fact that naloxone has no pharmacological effects in the absence of opioids and therefore imposes no risk for non-opioid users such as children of heroin users (Baca/Grant 2005; Darke/Hall 1997) and that naloxone has no abuse potentials (Darke/Hall 1997). It is not possible to overdose on naloxone (Darke/Hall 1997; Drug Policy Alliance). Therefore from a medical perspective the “current opinion is that naloxone is a safe drug to use” (van

Dorp et al. 2007, 90). Research on drug overdoses suggest that bystanders are present during most cases of overdoses (Advisory Council on the Misuse of Drugs 2012; Darke/Hall 1997; Strang et al. 1999) and peers are willing to administer naloxone if necessary (Bennett/Holloway 2012; Strang 1999). Many overdoses occur at home, where naloxone can be stored (Darke/Hall 1997) and overdoses do not occur instantaneously, but over a course of one to three hours giving a lot of opportunity for interventions such a naloxone administration (Sherman et al. 2008).

None of the identified discussions and recommendations concludes that naloxone is unsafe. The general conclusion is that the potential benefits of naloxone programmes outweigh the potential risks (Bazazi et al. 2010; Kim et al. 2009).

Based on the results from the evaluation studies, the recommendations from experts and the analysis of the objections against naloxone, the authors come to the conclusion that naloxone is a safe drug to use and that naloxone distribution programmes, in combination with emergency training, should be expanded in Europe (see 14.5 for more details see annex 2).

10.3.3 Drug consumption rooms

Drug consumption rooms are professionally supervised healthcare facilities where drug users can use drugs in safer and more hygienic conditions (Hedrich et al. 2010). The previous report came to the conclusion that drug consumption rooms may reduce needle sharing and drug-induced deaths but more studies are needed to draw firm conclusions (Trimbos 2006).

Theory based validity of consumption rooms is that medically supervised drug consumption in a safe and hygienic environment is less risky than consuming in the street or in private housing. In addition it can be a first contact to the drug-help system.

In the meantime a comprehensive overview concerning studies on consumption rooms is available (Hedrich et al. 2010). Based on evidence concerning emergencies which happened in drug consumption rooms, modelling studies and ecologically based time series analyses, it comes to the conclusion that where the coverage and capacity are sufficient and opening hours are appropriate, drug consumption rooms may attribute to reducing drug-induced deaths at city level.

10.3.4 Medical heroin (co)prescription

Medical heroin (co)prescription is exclusively meant for a subgroup of chronic, treatment resistant or treatment refractory patients that did not fare well with other treatment options during their drug taking career. Frequently mentioned aims of medical heroin (co)prescription for this group are improving the physical and psychosocial health situation of opiate dependent persons, a reduction in drug-related criminality, an increase in several beneficial effects on society i. e. a reduction of public nuisance and lower costs of addiction in general (Trimbos 2006).

The **theory based validity** of this approach is that if heroin is prescribed there is no necessity to consume street heroin with unknown concentration and contaminations and to engage in criminal activities. This decreases the risk of overdoses.

In 2012 an “EMCDDA insights”-publication compiled the available evidence (EMCDDA 2012b) and in 2011 a Cochrane Library review entitled “Heroin maintenance for chronic heroin dependents” was published (Ferri et al. 2011). The review comes to the conclusion that heroin plus methadone prescription, for maintenance treatments of adult chronic opioid users who failed previous methadone treatment attempts, is effective in a systematic review of eight randomised control trials (N=2.007) remaining in treatment until the end of the study (RR 1,44, 95 % CI 1,19 to 1,75) and probably reducing the risk of death (RR 0,65, 95 % CI 0,25 to 1,69). The lack of significance concerning the effect on the reduction of mortality (just a tendency was observed) might be due, on one hand, to the short duration of some of the studies and on the other hand, to the fact that heroin treatment was tested against other forms of opioid substitution treatment (e. g. methadone maintenance) which also have an protective effect concerning mortality (see section 10.3.1). Looking at the increased retention rate, heroin assisted treatments can be considered as an important supplement of OST for hard to reach patients who repeatedly fail other forms of treatment and who are able and willing to accept the strict regulations of most heroin prescription programmes (second line treatment).

Most heroin prescription programmes are based on injecting heroin. Further research should also take into account other routes of administration of heroin [such as: smoking (van den Brink et al. 2003), sniffing (Mitchell et al. 2006) or oral (Frick et al. 2010)] – one hand, due to changing route of administration patterns (see section 11.1.2) and on the other hand because these programmes might also be used as measures to foster shifting away from injection. For opioid addicts who stick to injection in addition substitution injection of other substances than heroin (e. g. hydromorphone) should be investigated.

10.3.5 Preventing drug-induced death with information, education and communication

Research on the effectiveness of information, education and communication (IEC) for injecting drug users was already evaluated in section 10.2.3. The conclusion was that IEC is effective if the setting is appropriate and the messages are provided in an adequate form by trustable persons.

10.3.6 Preventing drug-induced death with promotion of other routes of administration than IDU

See section 10.2.5

10.3.7 Pill Testing / Drug Checking programmes

There is still only one evaluation study on effectiveness of pill testing interventions dating back to 2002 (Benshop et al. 2002) which was already described in the previous report. This study brought some evidence that:

- » Health warnings about dangerous substances are received with greater trust and acceptance when delivered in the context of pill-testing programmes
- » Pill-testing programmes result in better-informed drug users and increasingly health-conscious behaviour
- » Pill-testing programmes do not stimulate the use of ecstasy and most likely will not extend the circle of ecstasy users
- » Pill testing programmes lead potential ecstasy users to postpone or abstain from an initial use of the drug

The previous report (Trimbos 2006) states that pill testing programmes have several disadvantages like:

- » Testing methods are not standardised
- » Limited information by simple tests like colour tests
- » Pill testing is only one factor influencing drug use in recreational settings and probably not the most important one

Theory based validity of drug-checking interventions is that the consumption of a tested substance is safer than the consumption of a mixture of unknown compounds. Furthermore on-site interventions give access to a group of persons that cannot be

reached by “traditional” drug care institutions (especially when combined with the confidence-building measure of drug-checking).

Although no new studies are available, except for a smaller evaluation from Switzerland (Bücheli et al. 2010) and (Quinteros-Hungerbühler et al. 2011) which shows that “party drug users” are not a homogenous group, some important developments can be reported in this field:

Due to the fact that the projects do not only focus on ecstasy tablets any more but also on other substances like cocaine and new psychoactive substances (e. g. so called “research chemicals”) the term “Drug Checking” is now more common. Drug Checking programmes are currently available in more European countries than in 2006 namely in Austria, Belgium, France, the Netherlands, Portugal, Spain and Switzerland. Drug Checking is seen as an integrated service that always combines the chemical analysis with advice or counselling (TEDI 2011). In their self-perception (VWS 2012) Drug Checking programmes often define themselves as information and counselling programmes that also provide drug-checking (in this order of importance).

Simple colour reaction tests and the use of pill-lists are not common anymore; the programmes use at least thin layer chromatography but many use also laboratory analysis, which helps not only with identifying more substances but also gives a better input for early warning and monitoring systems. In many programmes peers are involved, partially high standards for professional counsellors like advanced education in motivational interviewing are reported. Drug Checking programmes regard themselves being cost effective as they reach drug users at an early stage which gives the possibility of early interventions. Moreover, the analyses can provide beneficial results to general public health (TEDI 2011). Through the use of modern social media Drug Checking projects are able to gain a broader but nevertheless targeted public than some ten years ago.

In the course of the EU-financed project Nightlife Empowerment & Well-being Implementation Project (NEWIP) all European Drug-Checking programmes work together in the TEDI (Trans European Drug Information) workgroup on a common database and focus on:

- » Standardising the various processes related to Drug Checking
- » Making recommendations to help improve first-line project field interventions
- » Monitoring the evolution of new substances and new trends throughout Europe (<http://www.safernightlife.org>)

Although there is no new evidence on the effectiveness of Drug Checking programmes, it might be worth to conduct new studies – on one hand especially because of the challenge to react to the emerging of new psychoactive substances on the markets (see also 11.4.2.). On the other hand one can assume that the fact that Drug Checking

programmes are financed by some countries now for 15 or more years indicates that good experiences with this kind of intervention exist.

10.3.8 Pre-release counselling – prison and drug free treatment

The first weeks after prison release are an extremely critical period regarding fatal overdoses for drug users. A meta-analysis of studies concerning drug-induced deaths soon after prison release shows that six out of ten deaths in the first twelve weeks after prison release are drug-induced. A three-to eightfold increased risk was found comparing weeks 1 and 2 with weeks 3 to 12 (Merrall et al. 2010). Beside the decreased tolerance after a period of relative abstinence, the concurrent use of multiple drugs, the lack of pre-release counselling, post-release follow-up and failure to identify those at risk are reasons for the overdoses (WHO 2010).

Various possible measures are described in the literature to prevent fatalities due to overdoses like throughcare (continuity of treatment before, during and after prison), opioid substitution treatment (including start of OST before release), Naltrexone treatment, naloxone “take-home” programmes, pre-release counselling on overdose risks (including risk assessments, overdose prevention training and/or training in first aid and overdose management), optimising referral to aftercare services and into community treatment. A term like “prison release management” for a bundle of measures does not exist in literature yet, hence a short overview on evidence concerning the single measures is provided here.

Throughcare means the uninterrupted professional healthcare throughout the criminal justice system and the subsequent amalgamation with community interventions. Regarding **theory based validity** it makes sense to provide healthcare from the very beginning of imprisonment until reintegration in society (“throughcare”). Many various factors may contribute to the effectiveness of throughcare; so it is impossible to investigate it as a whole, nevertheless the possibility of continuity of care and treatment stability is one of the key recommendations of WHO (2010) concerning the prevention of drug-related mortality.

OST in prison was investigated in a systematic review by Hedrich et al. (2011) and concludes that evidence concerning the influence on post release fatalities is (still?) weak and states that the lack of research in this field is somewhat surprising. The results of Kinlock et al. (2009) and McKenzie et al. (2012) indicate at least that OST, in combination with counselling and active referral, might be more effective than counselling only.

Opioid substitution treatment with the opioid antagonist Naltrexone seems to be problematic due to its poor acceptance by the patients (Coviello et al. 2010; Trimbos 2006).

Evidence on naloxone “take-home” programmes is described in chapter 10.3.2 and annex 2, Wakeman et al. (2009) conclude, that a pre-release overdose prevention education programme including naloxone prescription would likely prevent many overdose deaths among (former) prisoners.

Studies on the effectiveness of pre-release counselling and different ways of referral to community based treatment are scarcely to find, as in studies these measures are often combined with other measures like OST and/or the content of counselling and the circumstances of referral are not described in detail (e. g. (Kinlock et al. 2009; Lee et al. 2012; Magura et al. 2009). Reliable data about the availability of pre-release measures are scarce (EMCDDA 2012h). Good models of practice in pre-release counselling on overdose risks or overdose prevention training were identified in Belgium (Flemish prisons) and Portugal (EMCDDA 2012h).

Binswanger et al. (2012; 2011) describe in a qualitative study the transitional challenges for released inmates and barriers like access to housing, job and physical and mental healthcare, and problematic conditions of parole. Further cognitive and emotional responses during the transitional period are discussed. For the future it might be useful to conduct both: more studies on the problems and challenges of released prisoners and studies on the effectiveness of various interventions. More details see annex 2.

Finally it has to be indicated that there is also an elevated risk of overdose related to mortality among drug users after discharge from (abstinence orientated) inpatient treatment (Ravndal/Amundsen 2010). Also in this case the low drug tolerance is the main explanation. The conclusion of the authors fits well into the following presented bundle of measures:

“Preventive strategies must be planned and carried out in treatment and community settings alike, and in continuous cooperation between active users of heroin, clients in treatment, the families of heroin users, and healthcare and social service authorities. Only broad cooperation between all involved parties can help ensure that fewer heroin users, old and young alike, die from accidental or planned overdoses.” (Ravndal/Amundsen 2010, 68)

10.3.9 Remarks from general guidelines

There are no international guidelines directly addressing the prevention of drug-induced deaths. There is a guideline for the psychosocially assisted pharmacological treatment of opioid dependence (WHO 2009); other measures are not topic of international guidelines. Concerning prison see 10.4.3.

10.3.10 Conclusions

Based on consistent evidence from one meta-analysis and multiple robust studies in supplementary reviews, there is sufficient review-level evidence to support the effectiveness of **opioid substitution treatment (OST)** in reducing opioid overdose death. The first weeks after starting OST and the time directly following the termination of OST are phases of increased mortality. **Prison and treatment release management** are important to avoid interruptions in OST (see annex 2). The quality of primary studies concerning **peer naloxone programmes** is low to medium and the size of the study groups is usually small. Based on the results from the evaluation studies, on the recommendations from experts and on the analysis of the objections against naloxone, the authors come to the conclusion that naloxone is a safe drug to use. In combination with emergency training, naloxone distribution programmes to peers should be expanded in Europe (see annex 2). A comprehensive overview concerning studies on **drug consumption rooms** shows that if the coverage and capacity are sufficient and opening hours are appropriate, drug consumption rooms can contribute to reducing drug-induced deaths at city level. A systematic review of eight randomised control trials comes to the conclusion that **heroin plus methadone prescription** for maintenance treatments of adult chronic opioid users who failed previous methadone treatment attempts is effective in increasing treatment retention and probably in reducing the risk of death. **Drug Checking** is considered as an integrated service that always combines chemical analysis with advice or counselling. Although, there is no new evidence on the effectiveness of Drug Checking programmes, it might be worth, on the one hand, to conduct new studies; because Drug Checking/counselling might be a reaction to the emerging of new psychoactive substances on the markets, and on the other hand because professionalisation took place concerning testing and counselling methods during the last few years.

10.4 Harm reduction in prison

Between 2001 and 2010 the prison population in the 27 EU Member States increased from 582.000 to 635.000. Offences related to use, possession or supply of illicit drugs

are one main reasons for imprisonment (10 % and 25 % of all sentenced prisoners). For the interpretation of these numbers it has to be taken into account that on one hand, not all of these prisoners necessarily have experience or problems with drug use. On the other hand, not all prisoners with problem drug use have been imprisoned for a drug law offence (e. g. imprisonment for other leading offences like burglary, shoplifting, etc.) (EMCDDA 2012h). Estimations suggest that about 50 percent of prisoners in the EU have a history of drug use and a high proportion of them have one with problem drug use (WHO 2007). Concerning injecting drug use (IDU), there is evidence that on one side, in prison, some IDUs reduce the frequency of injection but on the other side it has also been described that, due to the low availability of heroin in prison, some drug users switch to injecting from other routes of administration (e. g. smoking) (EMCDDA 2010b; Peña-Orellana et al. 2011). The scarcity of injecting equipment fosters sharing networks more intensively than outside prison. Additionally, inadequate cleaning practices of the equipment used for injecting and the rent of needles and syringes in exchange for the drugs are promoted (Long et al. 2004). In addition, some prisoners start (IDU-) drug use in prison. A recent study in 31 German prisons (14.537 inmates) shows that 22 % of all prisoners are IDUs (Schulte et al. 2009). It is not surprising that various studies have shown that prison is a risk factor for HIV, HBV and HCV infections (Judd et al. 2005; Lines et al. 2006; Stark et al. 2006). Due to these facts it is consequent to introduce in the prison setting harm reduction measures that have proven to be effective outside prison. According to the **theory based validity** the main question is: Are there any reasons why harm reduction measures with proven effectivity outside prison do not function inside prison?

10.4.1 Opioid substitution treatment in prison

A recent review on opioid substitution treatment (OST) in prison comes to the conclusion that the effects are similar as outside prison. Based on five studies, OST was associated with reduced heroin injecting and self-reported needle sharing. Concerning mortality the situation is less clear due to a lack of adequate studies (Hedrich et al. 2012). The fact that the first weeks after starting OST and the time directly following the termination of OST are phases of increased mortality has to be especially considered in the prison setting. Adequate possibilities to continue OST in and after prison-release (throughcare) are essential (see also 10.3.8 and annex 2).

10.4.2 Needle exchange programmes (NSP)

Almost all studies on NSP in prison show a dramatic decrease in needle sharing and no or very low seroconversion rates concerning HIV, HCV and HBV. Although the study designs are not the best (no comparison) – which may lie in the nature of the topic

(ethical or ideological constraints to serve as a comparison prison with no NSP) – the firm conclusion can be drawn that NSP in prison is an effective method to reduce risk behaviour concerning infection with HIV, HBV and HCV.

The fear that the syringes distributed will be used as weapons or lead to staff injuries when they are carrying out their routine duties (e. g. cell searches) has to be rejected. No such event has been reported in the literature on NSP in prison reviewed. On the contrary NSP can be seen as a prevention measure of the latter when the NSP includes the possibility to store the syringe safely and there is no reason to hide it because hiding of syringes is one of the reasons for needle stick injuries of prison staff (Larney/Dolan 2008).

Since no increase of (injecting) drug use after the implementation of NSP has been found in the evaluations, the fear on fostering drug use via NSP has to be rejected, too. There is only one qualitative study which dates back to 1998 which found out, that some prisoners who had stopped using drugs, started drug use in prison again and others changed from other routes of administration to IDU. In the study it was suggested that the presence of anonymous syringe dispensing machines might serve as temptation Gross (1998) cited from (Lines et al. 2005). For single cases, a change of the route of administration to IDU was also reported by (Stark et al. 2006). These concerns have been intensively discussed in scientific literature. On one hand, these phenomena have been observed in two studies for single cases only and there is no quantitative study reporting an increase of (injecting) drug use after the implementation of NSP in prison. On the other hand, relapse to drug use and change of other routes of administration to IDU happen in prison without NSP, too (Long et al. 2004; Stark et al. 2006) .

The hypothetical argument that prison needle exchange would undermine abstinence-based messages and programmes by condoning drug use can be objected. In most cases, NSP is part of a wider range of interventions and – like outside prison – NSP sometimes constitutes the first health-related contact with IDUs. After the introduction of NSP an increase of treatment referrals has been observed in some prisons. NSP in prison has successfully cohabited in prisons with other drug addiction prevention and treatment programmes (Stöver et al. 2008).

Contradictory to the statement against full coverage of NSP in prison that the successful implementation of prison needle exchange programmes in one prison does not mean that it will be possible to implement NSP in other prisons (since existing programmes are based on specific and unique institutional environments evidence) the fact is that in different countries, in different settings, NSP has been implemented successfully. The best possible example for offering NSP in prison is Spain, where NSP is implemented nationwide in 41 prisons with good coverage (for more details see annex 2).

10.4.3 Remarks from general guidelines

There is a consensus in European policy that prisoners should have the same health support as the general population e. g. the Dublin declaration on HIV/AIDS in prisons in Europe and Central Asia (WHO 2007). Article 1 of the Dublin declaration on HIV/AIDS in prisons in Europe and Central Asia states: *“Prisoners have a right to protect themselves against HIV infection. Prisoners living with HIV/AIDS have a right to protect themselves from re-infection and/or co-infection with hepatitis C and/or TB. Therefore, States have a responsibility to: Ensure that HIV prevention measures available in the outside community are also available in prisons. This includes providing prisoners with free access to HIV prevention and harm-reduction measures including, but not limited to, sterile syringes and injecting paraphernalia [...]”* (Lines et al. 2004)

The WHO guide to the essentials in prison health (WHO 2007) addresses (among others) communicable diseases, HIV infection, tuberculosis control, drug use and substitution treatment in prison.

Measures to prevent the transmission of infectious diseases among drug users include:

- » Communicating face to face: counselling, personal assistance, assistance from and integration of outside AIDS-help agencies and safer-use training for drug users
- » Providing leaflets
- » Implementing vaccination programmes against hepatitis A and B and tuberculosis
- » Making condoms available
- » Making bleach or other decontaminants available
- » Making sterile injecting equipment available

Prison drug policy should allow for:

- » Screening, counselling and treatment on a voluntary basis
- » Keeping a distance from the drug-using subculture, since drug users who are motivated to undergo a treatment programme have to be able to do so in an environment that allows them to keep their distance from the drug scene in prison, a protected environment, which is difficult to reach for many prisons due to overcrowding
- » Throughcare and aftercare, which are essential elements of efforts to reduce relapse and re-offence
- » Providing the diversity of measures that are offered outside prisons: social services, drug-care units, drug counselling and treatment services (including harm reduction)
- » Discouraging drug import and traffic within the prison system

Recently, the UNODC policy brief “HIV prevention, treatment and care in prisons and other closed settings: a comprehensive package of interventions” (UNODC 2012) lists 15 key interventions:

- » Information, education and communication
- » HIV testing and counselling
- » Treatment, care and support
- » Prevention, diagnosis and treatment of tuberculosis
- » Prevention of mother-to-child transmission of HIV
- » Condom programmes
- » Prevention and treatment of sexually transmitted infections
- » Prevention of sexual violence
- » Drug dependence treatment
- » Needle and syringe programmes
- » Vaccination, diagnosis and treatment of viral hepatitis
- » Post-exposure prophylaxis
- » Prevention of transmission through medical or dental services
- » Prevention of transmission through tattooing, piercing and other forms of skin penetration
- » Protecting staff from occupational hazards

10.4.4 Conclusions

There is evidence that harm reduction measures, which proved their effectiveness outside prison, are also effective inside prison. The broad range of benefits from **opioid substitution treatment (OST) in prison** (among others: reduction of needle-sharing and injecting drug use) has been observed to be similar to the benefits outside prison. Concerning mortality, the situation is less clear due to the lack of adequate studies (Hedrich et al. 2012). The fact, that the first weeks after starting OST and the time directly following the termination of OST are phases of increased mortality has to be considered especially in the prison setting. Adequate possibilities to continue OST in prison and after prison release (throughcare) are essential. Almost all studies on **needle exchange programmes (NSP) in prison** show a dramatic decrease in needle sharing and no or very low seroconversion rates concerning HIV, HCV and HBV. Although the study designs are not the best (no control group) – which may lie in the nature of the topic (ethical or ideological constraints to serve as a comparison prison with no NSP) – the firm conclusion can be drawn that NSP in prison is an effective method to reduce risk behaviour concerning infections with HIV, HBV and HCV. Although, the number of countries that have implemented needle and syringe exchange in prison is limited, these programmes have been established successfully in different settings and diverse environments. The concern regarding possible negative consequences of NSP in prison has been proven to be unfounded (see annex 2).

11 Epidemiological situation concerning drug-related harm in the EU and candidate/acceding countries

This chapter provides an overview of the epidemiological situation in relation to drug-related harm in the EU. Most of the analysis is based on EMCDDA standard tables and publications in the Statistical Bulletin. Data on the prevalence of drug use and routes of administration as well as drug-related harm such as drug-related infectious diseases (DRID) and drug-induced deaths are presented. Due to the efforts of EMCDDA to standardise the data collection process and to improve data collection, a lot of good quality data partly in long time series are available. But work is still under progress and especially comparisons between countries should always be made with care. Therefore data quality issues are also addressed in the following analysis.

11.1 Problem drug use (PDU)

Problem drug use is defined by the EMCDDA as “injecting drug use or long duration or regular use of opioids, cocaine or amphetamines”. Problem drug users are mostly polydrug users, and prevalence figures are much higher in urban areas and among marginalised groups. Given the relatively low prevalence and the hidden nature of problem drug use, statistical extrapolations are required to obtain prevalence estimates from the available data sources – mainly drug treatment data and law enforcement data (EMCDDA 2012a). Currently, EMCDDA is working on ways to adapt the indicator to new challenges in problem drug use like monitoring: higher share of problem stimulant use, new, previously unseen groups of problem users and intensive, long-term and dependent use of other drugs, e. g. cannabis⁶. Recently, the scope has been broadened to “high risk drug use”, which includes former problem drug use, but includes high risk and frequent cannabis use, high risk use of new drugs in addition and is open to other substances which may emerge in the future).

6

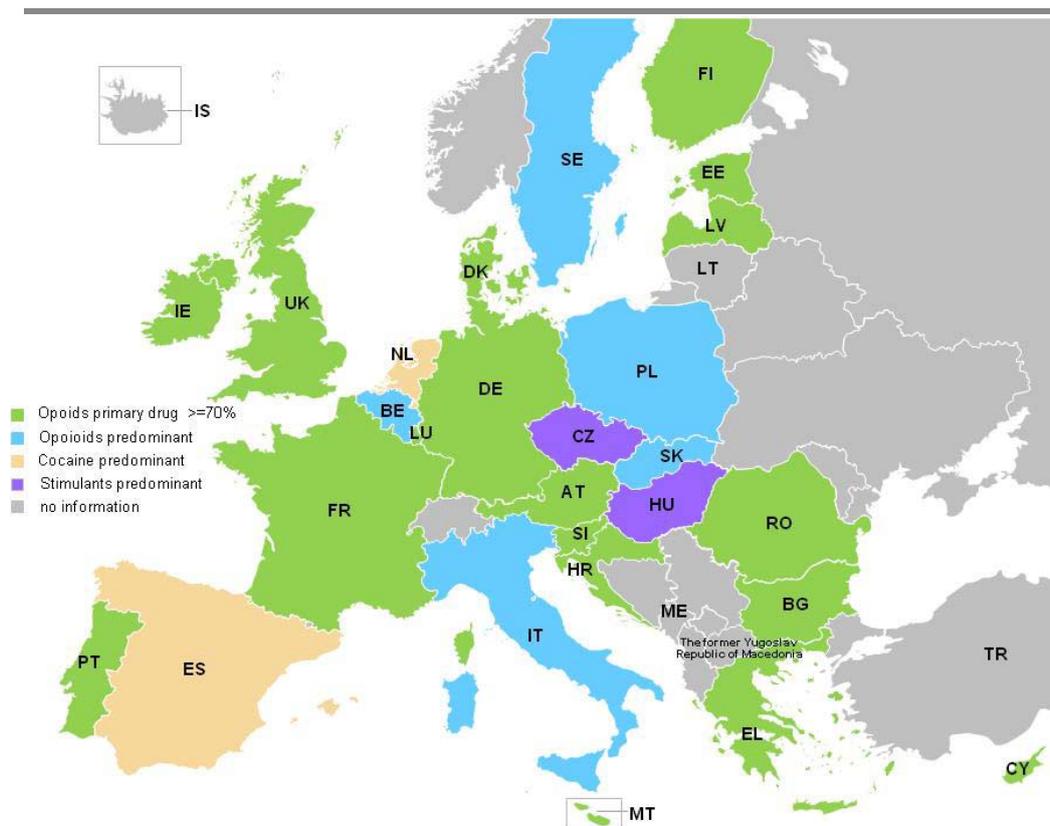
Currently, EMCDDA is working on ways to adapt the indicator to new challenges in problem drug use monitoring: higher share of problem stimulant use, new, previously unseen groups of problem users and intensive, long-term and dependent use of other drugs, e.g. cannabis.

<http://www.emcdda.europa.eu/themes/key-indicators/pdu> (3.1.2013)

11.1.1 Regional differences in PDU and substance use

Injecting drug use and the use of opioids form the greater part of problem drug use in Europe although, in a few countries, users of amphetamines or cocaine form an important part (EMCDDA 2012a).

Figure 11.1:
Primary drugs opioids, stimulants and cocaine in the EU and candidate countries
(clients starting outpatient treatment 2010 or most recent year)



Remark: For this overview, only treatment demands for the primary drugs mentioned in the definition of PDU (opioids, stimulants and cocaine) are used (clients starting treatment due to opioids, stimulants or cocaine = 100 %). Predominant means that the respective drug is mentioned most frequently.

Source: EMCDDA Statistical Bulletin 2012, Table TDI-19 part II – GÖ FP own calculations;
graphic representation: GÖ FP

One possibility to give a comprehensive overview about regional differences is to look at the primary drug of treatment demands. For this overview, only treatment demands for the primary drugs mentioned in the definition of PDU (opioids, stimulants and cocaine) are used (clients starting treatment due to opioids, stimulants or cocaine = 100 %). Figure 11.1 shows that in all but four countries (where this information is

available) opioids predominate. The exceptions are Spain and the Netherlands where cocaine predominates and the Czech Republic and Hungary where stimulants predominate. In Poland, Slovakia and Sweden opioids play a dominant role but stimulants are also of relevance. In Italy beside opioids cocaine is also relevant. In Belgium opioids dominate but also cocaine and stimulants are relevant. It has to be taken into account that this description is based on treatment data only and different access to treatment for different drugs might have an influence on the picture presented. Another factor is, that in many countries (a part of) opioid substitution treatment (OST) is not included in outpatient treatment data which might lead to the underestimation of the relevance of opioids in PDU.

Apart from treatment data, in the framework of the key indicator prevalence of problem drug use indirect estimation methods give an impression about the overall situation of problem drug use. Unfortunately good quality estimates are not available for all countries (long term time series of).

The EMCDDA estimates that there were about 1,4 million of problem **opioid** users in the EU and Norway in 2010. The overall situation concerning prevalence of problem opioid use seems to be stable between 2004 and 2010. Besides heroin in some countries other opioids like fentanyl or buprenorphine are relevant (EMCDDA 2012d). It has to be noted that problem opioid use happens in most cases in the framework of polydrug use which means that together with opioids other illegal substances (e. g. cocaine, cannabis) or legal substances (e. g. alcohol) are consumed in a problematic way. **Cocaine** plays an important role in problem drug use in the Netherlands, Italy, Spain and in the UK. Together these four countries account for around 85 % of all reported cocaine clients entering treatment. Trend data on estimates of problem cocaine use are available only for Italy, and show a gradual increase between 2005 and 2010. **Crack cocaine** use has been a cause of concern in Europe for some years. Despite worrying reports usually based on local studies, analysis of EU-wide treatment entry data indicates that the crack problem remains limited to the United Kingdom and to a lesser extent the Netherlands. **Amphetamines** play an important role in Poland, Finland and Sweden, and **methamphetamines** in the Czech Republic and Slovakia (EMCDDA 2012d).

11.1.2 Route of administration

Data on route of administration of opioids are collected by EMCDDA in the framework of the Treatment Demand Indicator (TDI) and partly through the Problem Drug Use Indicator (PDU).

Table 11.1:

Route of administration of clients entering treatment by primary drug, 2010 or most recent year available – All opioid outpatient clients by country and usual route of administration (%)

Country	Route of administration of opioids				
	Inject	Smoke/inhale	Eat/drink ¹¹	Sniff	Others
Austria	34,7	6,5	17,9	40,8	0,0
Belgium ¹	20,6	63,7	12,8	2,7	0,2
Bulgaria	81,8	4,6	0,9	7,4	5,2
Cyprus	64,1	29,9	3,2	2,8	0,0
Czech Republic	79,3	7,4	8,9	4,2	0,1
Denmark	15,6	19,5	58,8	6,1	0,0
Estonia ²	86,5	11,4	1,3	0,8	0,0
Finland	74,7	0,5	16,7	8,1	0,0
France	22,8	14,1	9,3	52,9	0,9
Germany	35,8	17,0	39,7	6,6	1,0
Greece	38,0	10,5	0,9	50,5	0,0
Hungary	69,3	15,2	11,7	3,9	0,0
Ireland	32,0	60,9	7,0	0,1	0,0
Italy ³	53,3	35,3	1,9	8,7	0,8
Latvia ⁴	93,5	0,3	5,5	0,7	0,0
Lithuania	:	:	:	:	:
Luxembourg	68,4	30,5	0,0	0,0	1,1
Malta ⁵	61,2	30,9	0,4	5,8	1,7
Netherlands ⁶	7,0	77,3	13,4	2,4	0,0
Poland ⁷	66,2	29,2	4,2	0,4	0,0
Portugal ⁸	14,5	84,1	0,9	0,4	0,1
Romania	91,4	6,9	1,0	0,8	0,0
Slovakia	78,0	12,4	3,5	6,0	0,0
Slovenia	51,9	35,0	2,5	10,6	0,0
Spain ⁹	16,4	71,1	5,1	6,0	1,4
Sweden	58,5	11,3	27,6	2,3	0,3
UK ¹⁰	33,5	54,9	10,0	0,9	0,7
Croatia	73,4	5,2	1,5	19,9	0,0

Notes:

1 – In Belgium if the exact primary drug is not known, the generic category is recorded. In 2010 there were 198 opiates, 7 cocaine, 7 stimulants, 2 hypnotics and sedatives and 1 hallucinogens clients with the exact primary drug unknown. Of which 24 and 5 were new clients for respectively opiates and stimulants. 2 – Data are from outpatient, inpatient treatment centres and prisons (aggregated data). 3 – In 2010 around 29 % of all clients and 30 % of new clients were registered as not known / missing for the primary drug category. Caution should be made when comparing data over time. 4 – In 2010 Latvia submitted a new dataset with a more precise TDI EMCDDA definition. Caution should be made when comparing data with previous years. 5 – Data refer to outpatient and inpatient treatment centres, low-threshold services and prisons (aggregated data). 6 – Data are from outpatient, inpatient treatment centres and low-threshold services (aggregated data). 7 – Data are from 2009. Double counting is not eliminated in data from outpatient centres. Caution should be made when interpreting the data. Heroin includes both heroin and so called "kompot" (heroin gained from the poppy straws). 8 – In 2010 came into implementation a new national information system implying methodological changes particularly in the registration criteria. 9 – Data are from 2009. Data are from outpatient treatment centres and some treatment units in prison (aggregated data). 10 – Data are from 1st of April 2009 to 31st of March 2010. 11 – data on eat/drink as route of administration has to be interpreted very cautiously because sometimes clients name substances prescribed for substitution treatment as their primary drug (e.g. if a client, being 10 years in stable substitution treatment with no use of any other opioids in this time-span, starts a new outpatient treatment episode).

Source: EMCDDA Statistical Bulletin 2012 – TDI-17/2

The data from TDI refer to the period before starting treatment (30 days before the beginning of treatment) and concern two types of patterns of drug use: the route of administration of the primary drug and the current/ever injection behaviour for any drug. This may result in quite different pictures and provide additional information on risk behaviours. Methodological limitations may originate from data validity problems in the phase of recording the client's information and the lack of information on past drug use behaviours (TDI reports if a person has been an injector but the type of drug remains unknown). The new TDI-protocol 3.0 is tackling with these problems.

A look at the data leads to the following conclusions:

- » The three main routes of illegal administration of opioids in Europe are injection, smoking/inhaling ("chasing the dragon") and sniffing/snorting.
- » There are significant differences in the proportion of injecting, smoking and sniffing of opioids.

Due to the lack of data it is hard to present injecting trends but there are some indications of a decrease of injecting; at least for opioid injecting (EMCDDA 2012d). Looking at 2010 data just 36 percent of clients entering treatment due to opioids, state that their route of administration was injecting (EMCDDA 2012c). But there are also countries with an increasing trend of injecting (e. g. Czech Republic).

11.2 Infectious diseases

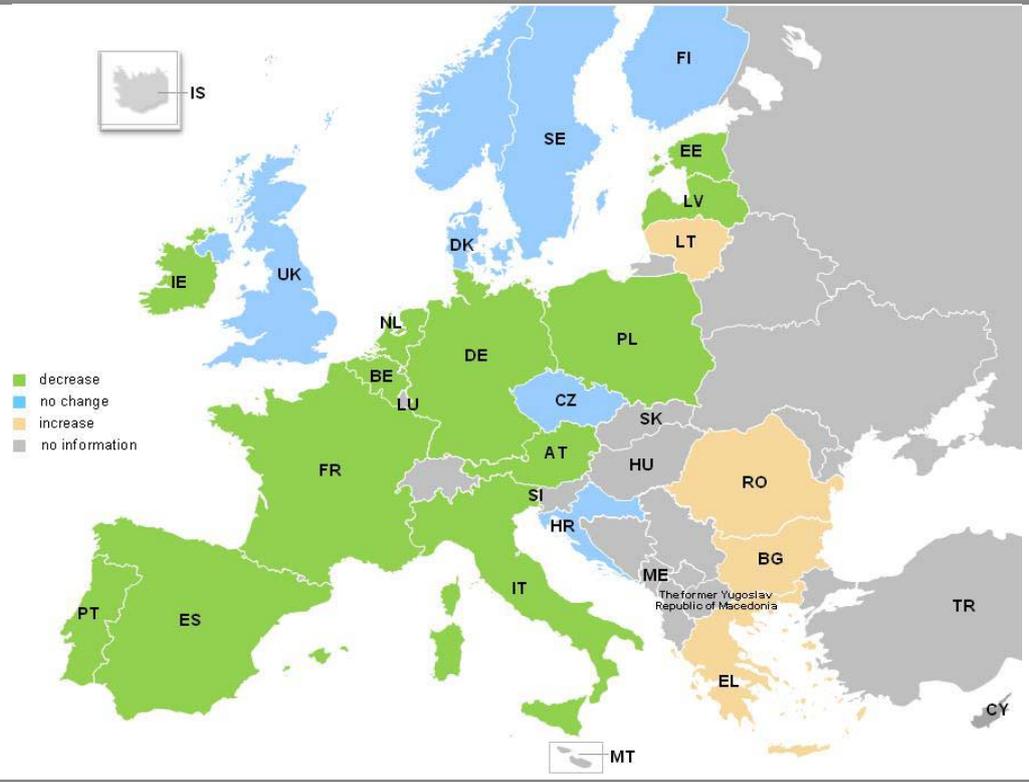
Infectious diseases are among the main negative health consequences associated with drug abuse in particular among injecting drug users. The EMCDDA monitors the main infectious diseases associated with drug use; in particular HIV, hepatitis B and hepatitis C infections among injecting drug users.

11.2.1 HIV

The rate of new HIV infections among injecting drug users is rather low in the European Union compared to the US and other European countries. The average rate of newly diagnosed cases with HIV among injecting drug users in 2010 was 2,54 per million (1.192 cases) (EMCDDA 2012a). Comparisons between countries are difficult due to differences in study methodology and coverage. Newly diagnosed HIV infections among injecting drug users vary significantly between the countries. Very high rates are reported in the Baltic States (Estonia, Latvia and Lithuania) with up to 46,3 cases per million population and very low rates of less than one new infection per million

population in Austria, Czech Republic, Cyprus, Hungary, Malta, Netherlands, Poland, Slovakia, Slovenia and Croatia (ECDC 2012).

Figure 11.2:
Significant changes of HIV infections via IDU 2003–2010 in the EU



Source: Table 13.1; graphic representation: GÖ FP

Twelve countries report a significant decrease in the number of newly diagnosed HIV infection among injecting drug users from 2003/2004 to 2009/2010. Only four countries (Bulgaria, Greece, Lithuania and Romania) report a significant increase in the number of newly diagnosed HIV. For Greece and Romania 2011 data were included because in both countries in 2011 there were local outbreaks of HIV transmission (ECDC 2010) –see section 11.4.1.

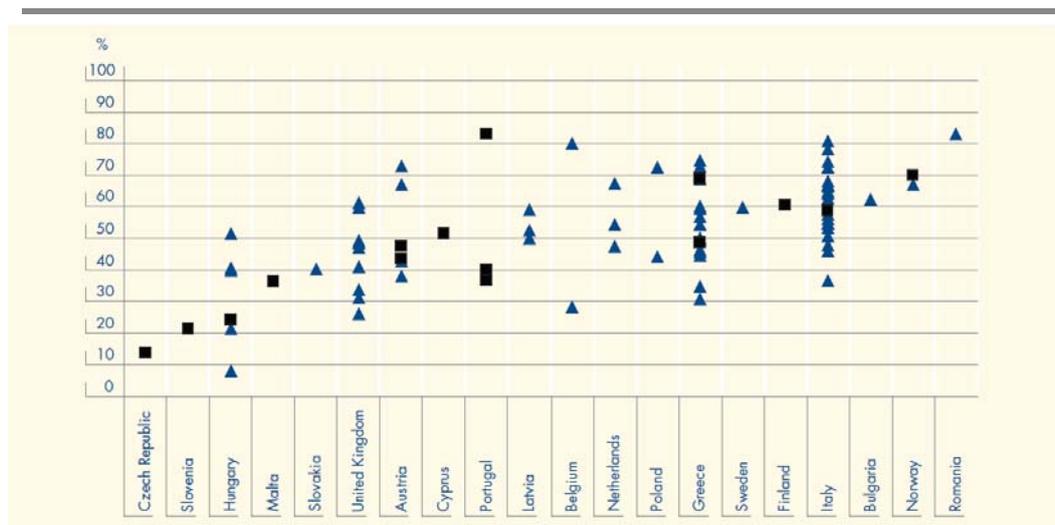
Looking at Figure 11.2 it can be concluded that in most EU–countries a significant reduction of HIV infection via IDU has been reached. Although it is difficult to prove a direct link to harm reduction on this global level it can be assumed that this reduction has occurred partly due to the introduction and expansion of harm reduction measures. This conclusion is supported by an analysis of trends in newly diagnosed HIV cases among IDUs in the WHO European region which showed big differences in trends – increasing trends in eastern countries outside EU with low coverage of (harm reduc-

tion) interventions versus decreasing trends in the EU-region with a higher coverage of interventions (EMCDDA 2012d). More details concerning trends see section 13.

11.2.2 Hepatitis C and B

Hepatitis C (HCV) infection is highly prevalent among IDUs in most EU countries (see Figure 11.3). Since high prevalence is found among young and new injectors (ECDC and EMCDDA 2011c) it can be assumed that the transmission rate is very high. Concerning trends due to lack of data an overall picture is not available. Between 2005 and 2010 declining HCV prevalence in injecting drug users at national or regional level have been observed in six countries while five others observed an increase (Austria, Bulgaria, Cyprus, Greece and Romania). Italy reported a decline at national level between 2005 and 2009 with increases in three of 21 regions (EMCDDA 2012a). It is important to note that it seems that there are huge regional differences in infection rates between countries as well as inside countries.

Figure 11.3:
Prevalence of HCV antibodies among injecting drug users



Remarks: Data for the years 2009 and 2010. Black squares are samples with national coverage; blue triangles are samples with sub-national (local or regional) coverage. Differences between countries have to be interpreted with caution owing to differences in types of settings and study methods; national sampling strategies vary. Countries are presented in order of increasing prevalence, based on the average of national data or, if not available, of sub-national data.

Source: EMCDDA Annual Report 2012, page 82

For hepatitis B the situation concerning availability of data is worse than for HCV. But data from some countries showing that 6 % of all HBV cases and 12 % of the notified

acute cases are due to IDU (EMCDDA 2012a) lead to the conclusion that IDU still are a high risk group for HBV infection. Given the high HCV prevalence this fact is very alarming because there is increased risk of health damage when a person infected with HCV gets co-infected with HBV on one hand and on the other hand HBV infections could be avoided via HBV vaccination (see 10.2.6).

11.3 Drug-induced deaths

One of the key epidemiological indicators developed by the EMCDDA to monitor the situation is 'drug-related death (DRD) and mortality among drug users'. The first component of the indicator focuses on drug-induced deaths called as well 'overdoses' or 'poisonings'. The term 'drug-induced death' has been introduced in a general form in the EMCDDA 2008 Annual report. It is more specific of deaths included in the EMCDDA definition than the broader term 'drug related deaths'. The second component focuses on mortality – of all causes – among drug users, studied through mortality cohort studies (EMCDDA 2012a; EMCDDA 2012g). The EMCDDA case definition of drug-induced deaths includes the 'deaths happening shortly after consumption of one or more illicit psychoactive drugs, and directly related to this consumption' although they often may happen in combination with other substances such as alcohol or psychoactive medicines. The EMCDDA Standard protocol transforms this conceptual definition in practical codes and criteria to extract and report cases in a similar way across countries and over time, producing the closest possible set of cases to the conceptual definition (EMCDDA 2009).

In 2010 the average EU mortality rate of drug-induced deaths was estimated to be about 20 deaths per million population aged 15–64 years. Around 7.000 drug-induced deaths occurred in the EU Member States and Norway in 2010⁷. This indicates a slight decrease when compared to 2009. There are differences between countries and the estimates are conservative and the numbers are likely to be higher, as some national-data are affected by under-reporting (EMCDDA 2012a). Estonia reports more than 110 drug-induced deaths per million population aged 15–64 years followed by Ireland and Denmark.

Drug-induced deaths in the EU are mainly caused by opioids (in particular heroin). 11 % of the overdoses in Europe are reported among people aged under 25 years, 32 % 25 to 35 years and 57 % aged 35 and older (EMCDDA 2012c). By far most of the drug-

7

In the EMCDDA Annual Report on the state of the drugs problem in Europe 2012 Norway is included.

induced deaths are male (80 %), and the majority are related to the use of several drugs, the most common background of which is opioids (EMCDDA 2012c).

Figure 11.4 presents the index of the number of drug-induced deaths starting from 1995/1996. Country comparisons in Europe should be made with caution, although most countries provide now robust and comparable data, following the EMCDDA protocol. Nonetheless there are still some differences between countries in the capacity to ascertain the drug-induced death cases (e.g. the coverage of autopsies and of toxicological examinations of 'suspect' deaths may vary). Furthermore, in some countries the capacity to ascertain the cases has changed over time i.e. the proportion and numbers of 'suspect' deaths who undergo these examinations have changed. The other reason for being cautious when comparing countries, are some remaining differences in coding, recording and extracting the drug-induced deaths cases. In addition, some countries are not able to cross check and therefore to validate the results derived from their general mortality register, with the results derived from alternative sources (i.e. special mortality registries like police or forensic sources). Finally some countries report that their reported numbers of cases might be an underestimate.

Most national reporting systems have been stable over time, which allows, in the majority of countries, an analysis of the trends over time. Nonetheless, caution is needed here as well, as some countries have changed over time e.g. some upgraded their monitoring capacity of drug-induced deaths. Some have improved the collaboration between the different national sources of information, and thus have improved the completeness of their reporting. Finally, many countries have 'gap' years, with no data reported, for some years. This is the case for about a third of the countries, for which at least one year data is missing. Bearing in mind these limitations, in some cases, of the reported data, it can be noted that the number of reported drug-induced deaths slightly increased in the 2004–09 period from around 6.450 in 2004 to around 7.000 in 2009/2010 (EMCDDA 2012c; EMCDDA 2012d). Figure 11.4 shows that the increasing trend in reported cases was mainly in the EU 12⁸. This part of Europe has still a relatively small contribution in numbers though compared to the EU 15⁹ (around one in ten drug-induced deaths reported in all EU Member States plus Norway is accounted for by the EU 12. Nevertheless it has to be stated that also in the EU 15 a significant reduction of reported drug-induced deaths was not observed.

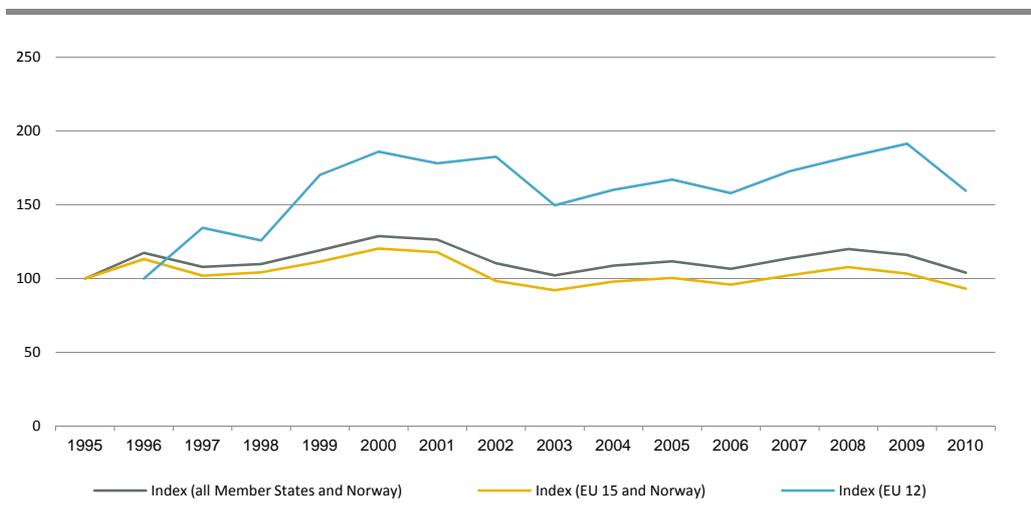
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EU 12=Countries which joined the EU in 2004 or later

9

EU 15=Countries which joined the EU before 2004

Figure 11.4:
Indexed number of drug-induced deaths in EU Member States and Norway according to national definitions



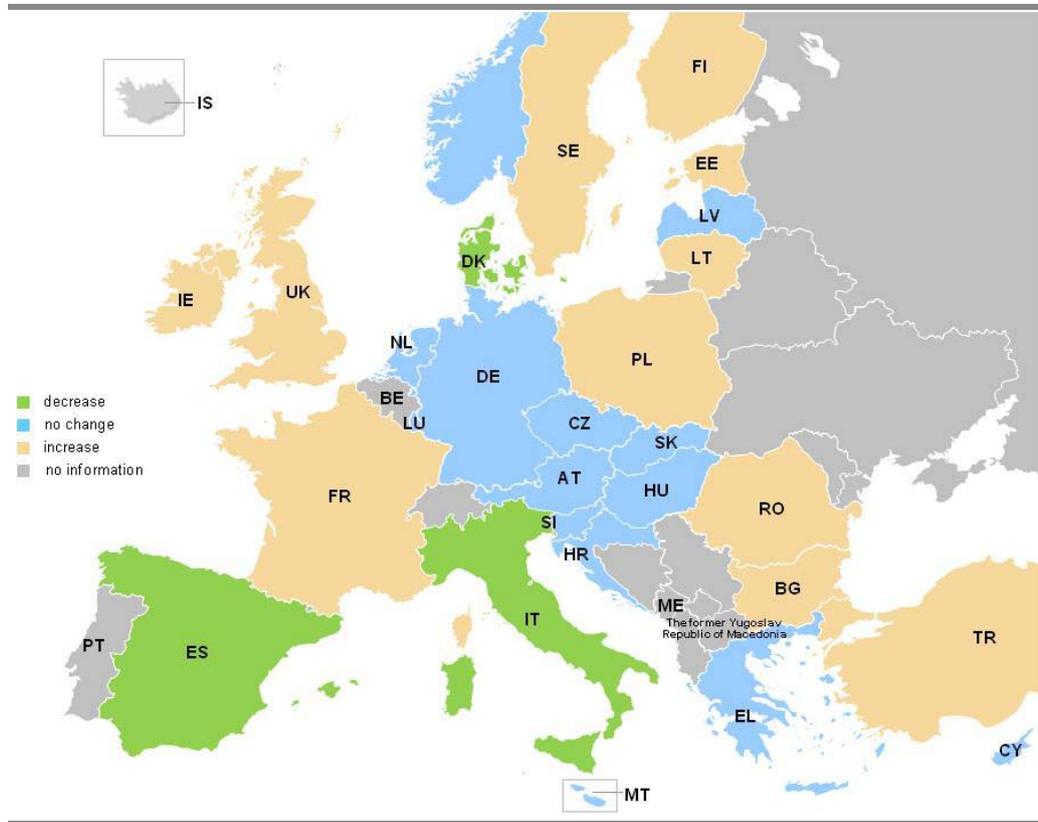
Source: EMCDDA Statistical Bulletin 2012, Table DRD-02 part V – GÖ FP own calculations;
graphic representation: GÖ FP

Due to the limitations stated above the trend of drug-induced deaths are analysed instead of rates¹⁰. Only Spain, Italy and Denmark experienced a significant decrease of drug-induced deaths from 2003/2004 to 2009/2010. 13 of the Member States and candidates countries didn't experience significant changes; eleven countries reported a significant increase in the number of drug-induced death. This may partly be due to the rather low starting points 2003/2004 in some countries (see Figure 11.5).

¹⁰

Due to national differences it is recommended to refer to the Member States before drawing conclusions on reliable national trends.

Figure 11.5:
Significant changes of mortality rated due to direct drug-induced deaths 2003/2004–
2009/2010 in the EU¹¹



Source: Table 13.1; graphic representation: GÖ FP

11.4 New challenges

11.4.1 Recent HIV-outbreaks

In Greece the numbers of newly diagnosed drug injectors infected with HIV increased from 9–16 per year until 2010 (2005–2010) to 256 cases in 2011 and 314 cases in 2012 – January till August (ECDC 2012; EMCDDA 2012e). The percentage of IDU as

¹¹

Due to national differences it is recommended to refer to the Member States before drawing conclusions on reliable national trends.

route of infection increased from 2 to 3 % in 2010 up to 41 % in 2012. As possible hypothesis for the reasons behind this outbreak increasing risk behaviour among IDUs in Athens (changing from sniffing to injecting heroin) and low coverage of prevention services and low uptake of antiretroviral therapy are discussed (EMCDDA 2012e).

In Romania the numbers of newly diagnosed drug injectors infected with HIV increased from 0–14 per year until 2010 (2005–2010) to 129 cases in 2011 and 102 cases in 2012 (January till June). The percentage of IDU as way of infection increased from two to three percent to approximately on third in 2012 (ECDC 2012; EMCDDA 2012f). As possible hypothesis for the reasons behind this outbreak, increasing changes in drug use patterns (legal highs – new stimulants which lead to increased injection frequency) and low harm reduction service provision (EMCDDA 2012f) are discussed.

Since HCV infection rates have been stated to be an indirect indicator for risky injection behaviour and 30 % of HCV infection rate seems to be the threshold for an increasing risk of HIV–outbreaks (Vickerman et al. 2010) a lot of European countries are in danger of similar outbreaks.

11.4.2 New substances

Within Europe, and globally, new drugs and new patterns of drug use are attracting increasing political, media and public attention (EMCDDA 2012a). Between 2005 and 2011, 164 new psychoactive substances were formally notified through the early warning system of the EMCDDA. In 2012 it was over 60 substances. Most of these substances are sold in smart or head shops or via internet as “legal highs”. The term “legal highs” covers a wide range of synthetic and plant–derived substances that aim to imitate the effect of controlled substances like ecstasy, cocaine or cannabis. The term “legal highs” might be misleading as some substances are controlled by drugs legislation, medicines or food or consumer safety laws or by new, special laws for those new psychoactive substances.

Prevalence data on new psychoactive substances are scarce and often suffer methodological limitations, including lack of common definitions, and use of self–selected or non–representative samples (EMCDDA 2012a). In the course of the EUROBAROMETER more than 12.000 young persons (15–24) were interviewed, about 5 % of young Europeans reported that they had used “legal highs” at least once. The highest estimates were reported by Ireland (16 %) followed by Latvia, Poland and the United Kingdom – all at nearly 10 % (The Gallup Organization 2011).

Across Europe, measures are beginning to be developed to reduce both the demand for, and the supply of, new psychoactive substances. Individual Member States have taken initiatives to improve and accelerate their legal responses to new psychoactive substances, products and the establishments selling them (EMCDDA 2012a).

While in most of the countries the “legal highs” phenomenon is regarded a matter of recreational use and thus is actively addressed by prevention programmes for recreational drug users and also Drug Checking projects (see also chapter 10.3.7), in some countries or regions substances like mephedrone are also injected by people who used to inject other substances like opiates (e. g. Hungary, Romania – see stakeholder survey, annex 3). This shift, which might be an effect of heroin shortage in the respective regions, seems to contribute to the HIV-outbreak in Romania (see also 11.4.1). Whether these new patterns of use will lead to a permanent change of the drug situation and therefore become relevant for harm reduction remains unclear at the moment.

12 Situation concerning supply of harm reduction in the EU and candidate/acceding countries

Harm reduction programmes for persons who inject drugs (IDUs) emerged during the 1980s in Europe in response to the HIV epidemics. The first step was needle and syringe exchange programmes (NSP) and opioid substitution treatment (OST) which spread rapidly across Europe and gained broad acceptance to finally become an integral component of the EU's drug strategy (EUROHRN 2012). Other harm reduction measures, like peer naloxone programmes or drug consumption rooms, are still under discussion or still only implemented in some European countries. Although there is a consensus in European policy that prisoners should have the same health support as the general population – e. g. Dublin declaration on HIV/AIDS in prisons in Europe and Central Asia, (WHO 2007) – the situation concerning harm reduction measures in prison is worse than outside prison.

That is why the sections on needle exchange (see 12.3) and opioid substitution treatment (see 12.4) are more detailed due to the central importance of these measures. In section 12.12 a special focus is given to harm reduction in prison.

12.1 Methodical issues

The following analysis covers all 27 EU Member States as well as the acceding country Croatia and the candidate countries the former Yugoslav Republic of Macedonia, Iceland, Montenegro and Turkey. Where relevant, a distinction between the EU 15 and the EU 12 is made. This distinction is made on one hand because the drug issue was a special focus of EU-funded projects in the EU 12 states (PHARE, CARDS, IPA) in the negotiation process to become a member, which might have strengthened the influence of EU-drug's policy. On the other hand most of the EU 12 states (especially those behind the former iron curtain) faced the drug problem later (but then rapidly increasing) than the EU 15 states and therefore the coverage of harm reduction measures had to be improved quickly.

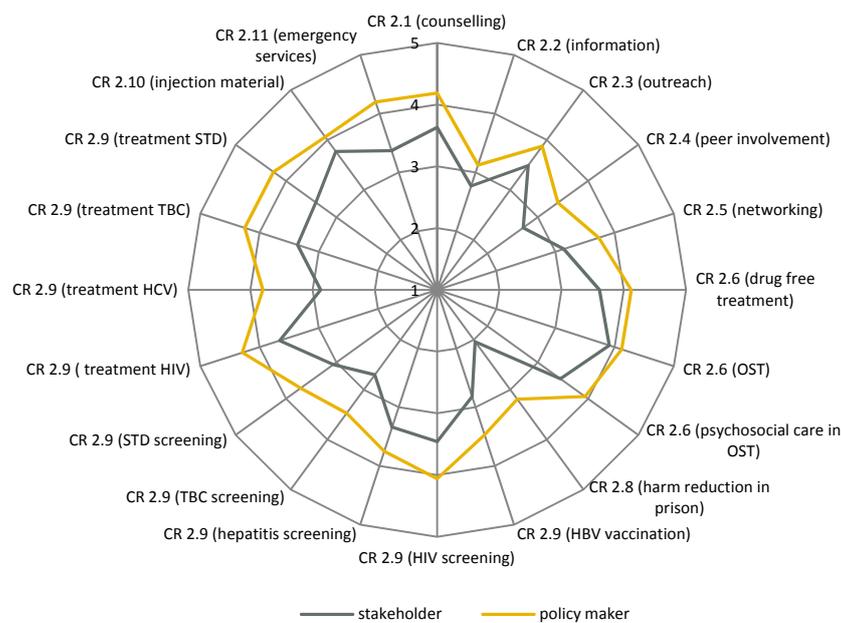
The following section is based on data from the previous report (Trimbos 2006), the policy maker survey (see section 9.3), the stakeholder survey (see section 9.4), the country profiles and data available at the EMCDDA (see section 9.1), from the gap-survey (see section 9.2) and scientific literature. To properly understand the following graphs on data from the stakeholder survey, it has to be noted that the description of

the results is possible in percentages only, due to the weighting procedure (details see annex 3).

The coverage of measures was asked on a Likert scale (full coverage, extensive coverage, limited coverage, rare coverage, not available and do not know). The change of coverage was measured with the following categories: strong increase, increase, no change, decrease, strong decrease and do not know.

The main limitation of the data from the policy maker survey and the stakeholder survey is that they are based on subjective estimations of coverage and changes from one person or institution. Therefore, wherever possible, the assessment of the policy makers and the assessment of the stakeholders are supplemented with data from other sources.

Figure 12.1:
Coverage, estimated by stakeholders and policy makers



HBV=hepatitis B virus, HCV=hepatitis C virus, HIV=human immunodeficiency virus, OST=opioid substitution treatment, STD=sexually transmitted diseases, TBC=tuberculosis

Remark: data refer to Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Luxembourg, Malta, Netherlands, Portugal, Romania, Slovakia, Slovenia, Spain, United Kingdom; The full wording of all CRs can be found in section 15.

Coverage: 1=not available, 2=rare, 3=limited, 4=extensive, 5=full coverage

Source: GÖ FP, stakeholder survey, policy maker survey; graphic representation: GÖ FP

Generally speaking the policy makers tend to report higher coverage and availability of harm reduction measures than the stakeholders. However, the same pattern can be

seen among both groups, but on different levels (see Figure 12.1). Major differences can be observed for harm reduction in prison. The coverage of harm reduction in prison is stated to be “rare” by stakeholders whereas policy maker perceive it as “limited”.

To interpret the results, it has to be taken into account that data from the policy maker survey refer to 31 of the 32 countries (Slovakia is missing)¹² and that data from the stakeholders are available for 24 countries only (Austria, Belgium, Bulgaria, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia Luxembourg, Malta, Netherlands, Portugal, Romania, Slovakia, Slovenia, Spain, United Kingdom, Croatia). In the graphs below, missing data are only mentioned when data are missing from the 31 countries covered by the policy survey respectively from the 24 countries covered by the stakeholder consultation. Six countries out of the 24 covered by the stakeholder questionnaires provide data at regional level only.

12.2 Harm reduction as a public health objective (CR 1)

The EU drug strategy aims at making *“a contribution to the attainment of a high level of health protection, well-being and social cohesion by complementing the Member States’ action in preventing and reducing drug use, dependence and drug-related harm to health and society”* and at *“ensuring a high level of security for the general public”* (Council of the European Union 2004, 5). For over a decade harm reduction has been an integral part of the EU drug action plans, giving priority to preventing transmission of infectious diseases and reducing drug-induced deaths among IDUs (Rhodes/Hedrich 2010). The Lisbon Treaty article 168 on high level protection of human health strengthens the harm reduction approach, as well as the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 26 October 2009 – Combating HIV/AIDS in the European Union and neighbouring countries, 2009–2013.

Several European networks or projects have been supporting the implementation of harm reduction, like Correlation network¹³ (development on several guidance docu-

¹²

Slovakia did not complete the policy maker survey, for information on existence of policies the previous report is used.

¹³

www.correlation-net.org

ments on harm reduction) Connections network¹⁴ (assessed and build capacities for harm reduction in prisons), WHO–project “Scaling up access to high–quality harm reduction, treatment and care for injecting drug users in the WHO European Region”¹⁵, Psychonaut¹⁶ and REDNET¹⁷ (established a monitoring system for new substances) and NEWIP¹⁸ (guidance documents for safer nightlife and Drug Checking).

One general problem concerning funding is that in some EU 12 states harm reduction projects were initially financed by the Fund to Fight AIDS, Tuberculosis, and Malaria. There are now problems to ensure national funding. This problem was expressed by policy makers and stakeholders.

All EU Member States, Croatia, Montenegro and the former Yugoslav Republic of Macedonia have adopted (public health) policy objectives that aim to prevent and reduce health–related harm associated with drug dependence. In Turkey and Iceland, policies regarding some key elements of harm reduction do not exist yet. In Turkey no policy for the provision of appropriate access to injection materials exists. Furthermore the provision of drug–free treatment as well as appropriate opioid substitution treatment (OST) in accordance with the individual needs of the drug abuser is not provided. For the latter, a respective policy is waiting for approval; OST has been available in Turkey since 2010. In Iceland, an official policy for the provision of appropriate access to injection material does not exist either, but in practice, these services are available to some extent.

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www.connections.accessproject.eu

15

www.euro.who.int/en/what-we-do/health-topics/communicable-diseases/hiv-aids/activities/ec-who-project-scaling-up-access-to-high-quality-harm-reduction

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www.psychonautproject.eu

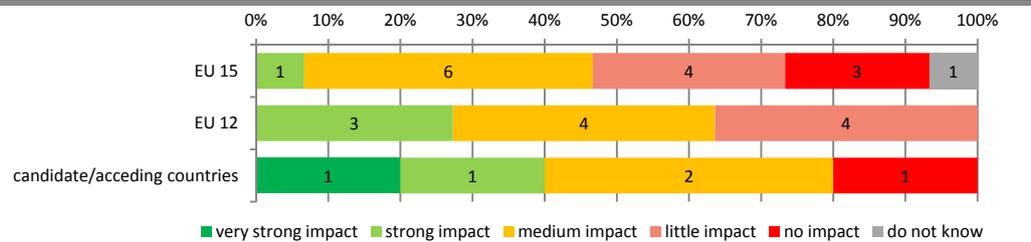
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www.rednetproject.eu

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www.safernightlife.org

Figure 12.2:
 Estimations of the impact of the CR on the relevance of the prevention of health-related harm associated with drug dependence as a public objective in the respective countries



Remark: data refer to all 31 countries from the policy maker survey

Source: GÖ FP, policy maker survey; graphic representation: GÖ FP

Regarding the influence of the Council Recommendation 1 (CR 1) on these policies, more than half of the investigated countries confirm at least a medium impact. The rate of the impact of the CR is higher in the EU 12 than in the EU 15 (see Figure 12.2).

12.3 Needle and injection equipment exchange (NSP)

CR 2.10 focuses on needle exchange: *“provide where appropriate access to distribution of condoms and injection materials, and also to programmes and points for their exchange.”* This policy exists in all EU Member States and candidate countries with the exception of Turkey and Iceland. In ten countries this policy is based on the CR (see Figure 12.3).

NSPs were introduced in the EU-countries in the late 1980ies or in the 1990ies of the last century. In most countries, specialised agency sites play a dominant role in this field of harm reduction. Vending machines are available in a few countries only (see Table 12.1).

Table 12.1:

Year of introduction of needle and syringe programmes (NSPs), types of programmes available in 2010 and number of sites

Country	Year first NSP	No. of specialist agency sites with NSP	No. of vending machines	No. of Pharmacy-based NSP sites	No. of prison-based NSP sites
Austria	1990	15	15	nd	0
Belgium (Flem Com.)	2001	20	0	25	0
Belgium (French Com.)	1994	16	0	nd	0
Bulgaria	1995	98	0	0	0
Cyprus	2007	1	0	0	0
Czech Republic	1986	55	1	0	0
Germany	1984	185	165	nd	1
Denmark	1986	nd	nd	nd	0
Estonia	1997	13	0	0	0
Greece	1998	4	0	0	0
Spain	1985	1222	nd	912	70
Finland	1997	40	0	0	0
France	1989	116	276	29	0
Hungary	1994	21	5	0	0
Ireland	1989	28	0	0	0
Italy	1990	nd	nd	nd	0
Lithuania	1997	11	0	0	0
Luxembourg	1993	4	4	0	1
Latvia	1997	18	0	0	0
Malta	1987	7	0	0	0
Netherlands	1984	150	nd	25	0
Poland	1989	24	0	0	0
Portugal	1993	14	0	1336	2
Romania	2000	4	0	0	3
Sweden	1986	2	0	0	0
Slovenia	1992	9	0	5	0
Slovakia	1994	5	0	0	0
UK- England	1986	nd	1	nd	0
UK - Wales	nd	30	1	192	0
UK-Northern Ireland	2001	1	0	14	0
UK-Scotland	1987	55	nd	200	0
The former Yugoslav Republic of Macedonia	nd	nd	nd	nd	nd
Croatia	nd	6	0	nd	0
Iceland	nd	nd	nd	nd	nd
Montenegro	nd	nd	nd	nd	nd
Turkey	na	0	0	0	0

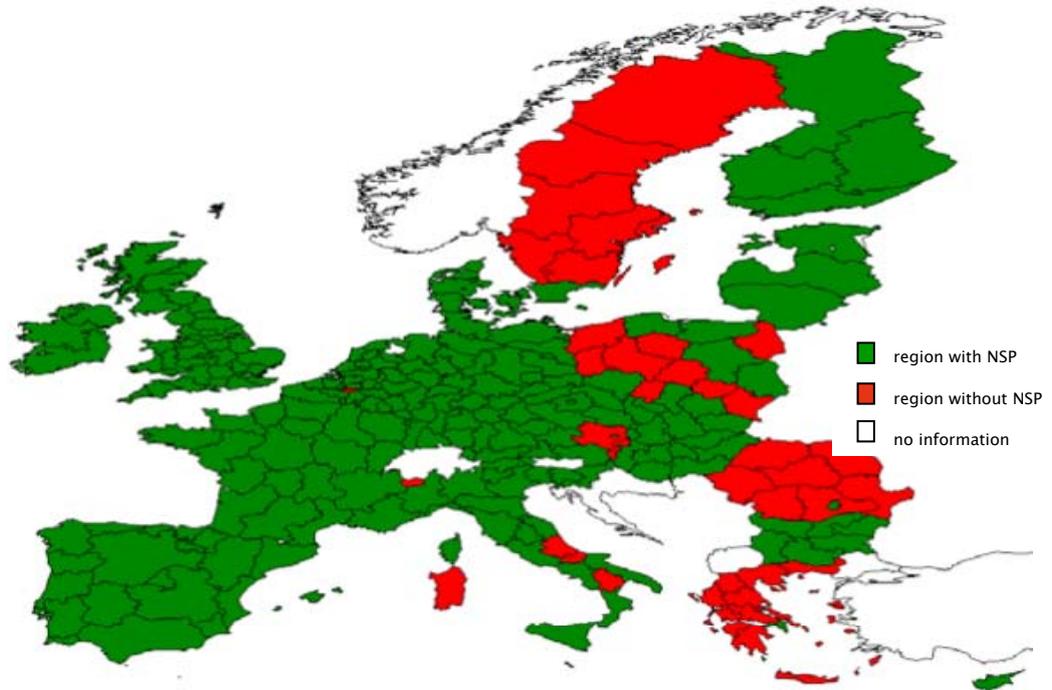
Remark: nd=no data

Source: EMCDDA Statistical Bulletin 2012, Table HSR-4

12.3.1 Coverage and availability of needle and equipment exchange

Figure 12.4 shows a more differentiated picture concerning the regional availability of NSP by breaking down the availability of at least one NSP to NUTS–2 regions.

Figure 12.4:
Needle and syringe programmes, geographical coverage at regional level



Remark: The acronym NUTS stands for nomenclature of territorial units for statistics, following the European classification of territorial units for statistics defined in the Regulation (EC) No 1059/2003 of 26 May 2003. The current NUTS classification lists 97 regions at NUTS 1, 271 regions at NUTS 2 and 1.303 regions at NUTS 3 level. The geographical units displayed on this graph represent NUTS level 2 regions, corresponding to larger administrative units or regions in the countries ('comunidades', 'oblasti', 'Bundesländer', etc). Six small Member States have no NUTS level 2 units but only the smaller level 3–regions (Cyprus, Estonia, Latvia, Lithuania, Luxembourg and Malta).

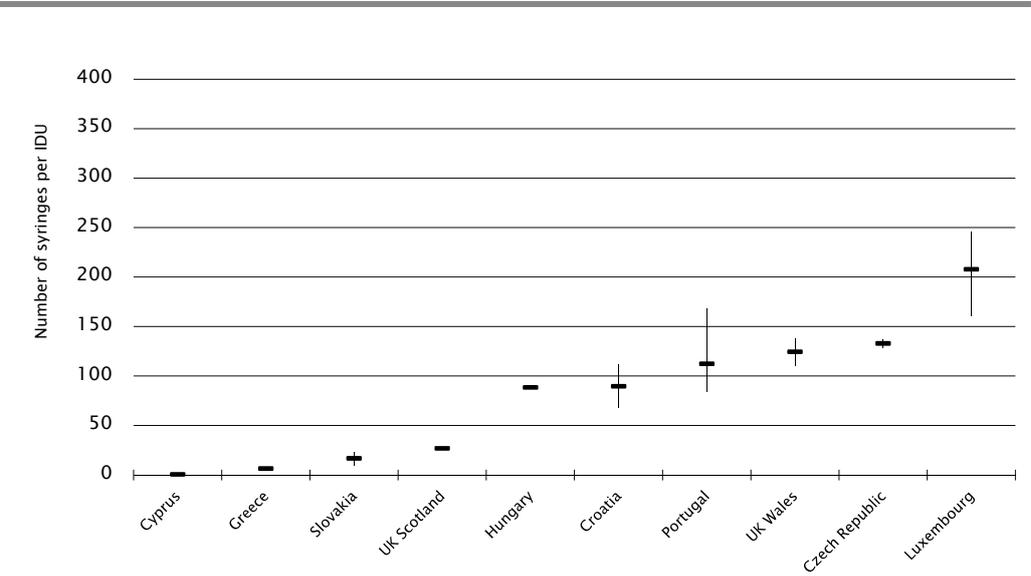
Source: EMCDDA trend report for the evaluation of the 2005–12 EU drugs strategy

It has to be noted that Romania and Greece, where recent HIV–outbreaks have been observed, are among the countries with the highest numbers of NUTS–2 regions without NSP.

Coverage in the sense of syringes distributed per IDU differs between the countries. Figure 12.5 shows that the numbers of needles distributed through specialised programmes in 2010, per estimated IDU, range from nearly zero to over 200. The WHO,

UNODC, UNAIDS criteria (WHO 2009) of 200 syringes per IDU per year for good coverage concerning HIV prevention is not reached by every country where respective data are available. This is a major obstacle, taking into account that the levels required for the prevention of HCV are likely to be much higher. But it has to be further taken into account, that EMCDDA data include needle exchange from specialised NSP only and it can be assumed that some IDUs also get syringes from pharmacies. Only few data are available about the extent of pharmacy based needle acquirement.

Figure 12.5:
Syringes distributed through specialised programmes in 2010 per estimated injecting drug user

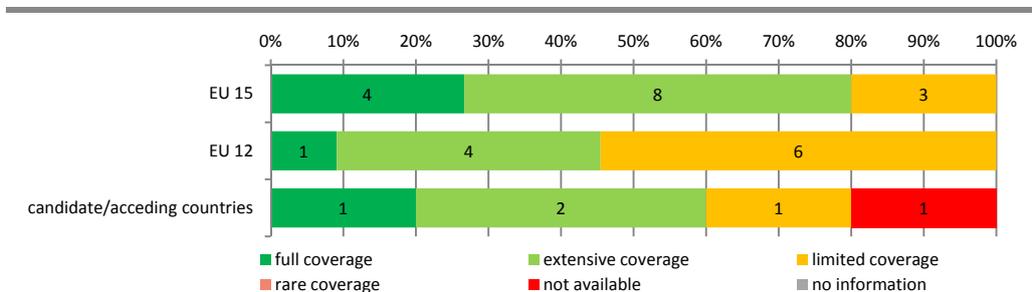


Remark: Syringes provided through fixed and mobile NSP points in the community and in prisons: at specialist drugs agencies, including through outreach work and peer-distribution, through vending machines and pharmacy-based NSP points

Source: EMCDDA Statistical Bulletin 2012, Figure HSR-3

This impression of different coverage rates in the countries converges to the estimation of coverage of needle exchange from policy makers (see Figure 12.6). In addition the coverage in the EU 15 is estimated a bit higher than in the EU 12 and candidate countries see Figure 12.7.

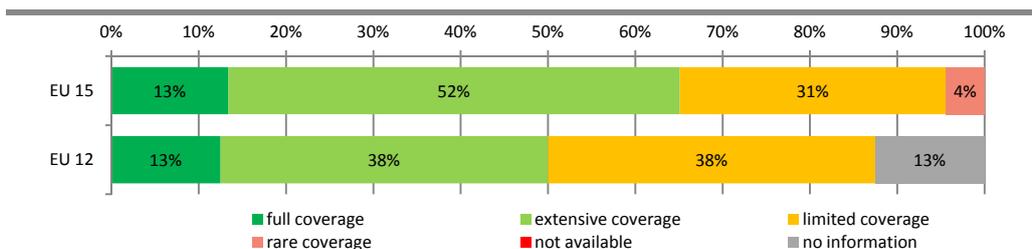
Figure 12.6:
 Estimation of the coverage of distribution of injection materials for IDUs by EU membership status from policy makers



Remark: data refer to all 31 countries from the policy maker survey

Source: GÖ FP, policy maker survey; graphic representation: GÖ FP

Figure 12.7:
 Estimation of the coverage of needle and syringe exchange for IDUs by EU membership status from stakeholders (civil society organisations)



Remark: data refer to all 24 countries from the stakeholder survey

Source: GÖ FP, stakeholder survey; graphic representation: GÖ FP

Estimations of the stakeholders' needle and syringe exchange coverage are available for Austria, Belgium, Bulgaria, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, Malta, Netherlands, Portugal, Romania, Slovakia, Slovenia, Spain, United Kingdom. The estimates show different coverage rates, too.

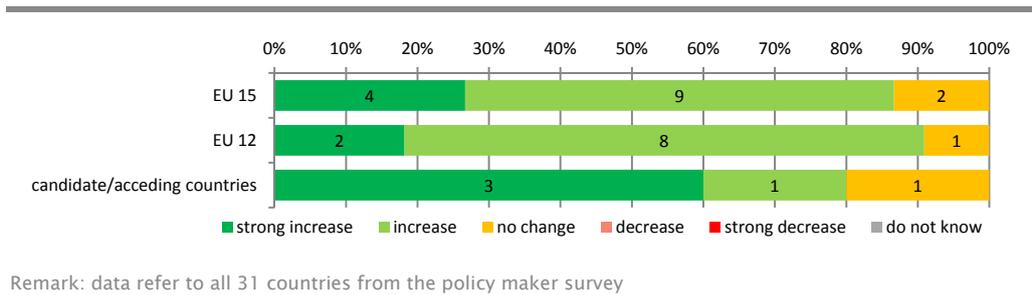
Example: In Portugal several programmes provide support to drug users with the objective to reduce the risk of infections and to minimise harm of drug use. This support ranges from the exchange of syringes and the distribution of aseptic material to therapeutic support and guidance to health and treatment units (e.g. Reunion and Solutions Outreach II, EDDRA)

Example: Since 2011 Ireland provides a pharmacy needle exchange programme with corresponding training for pharmacy staff (country profile Ireland – see annex 1).

12.3.2 Change of coverage and availability of needle and equipment exchange

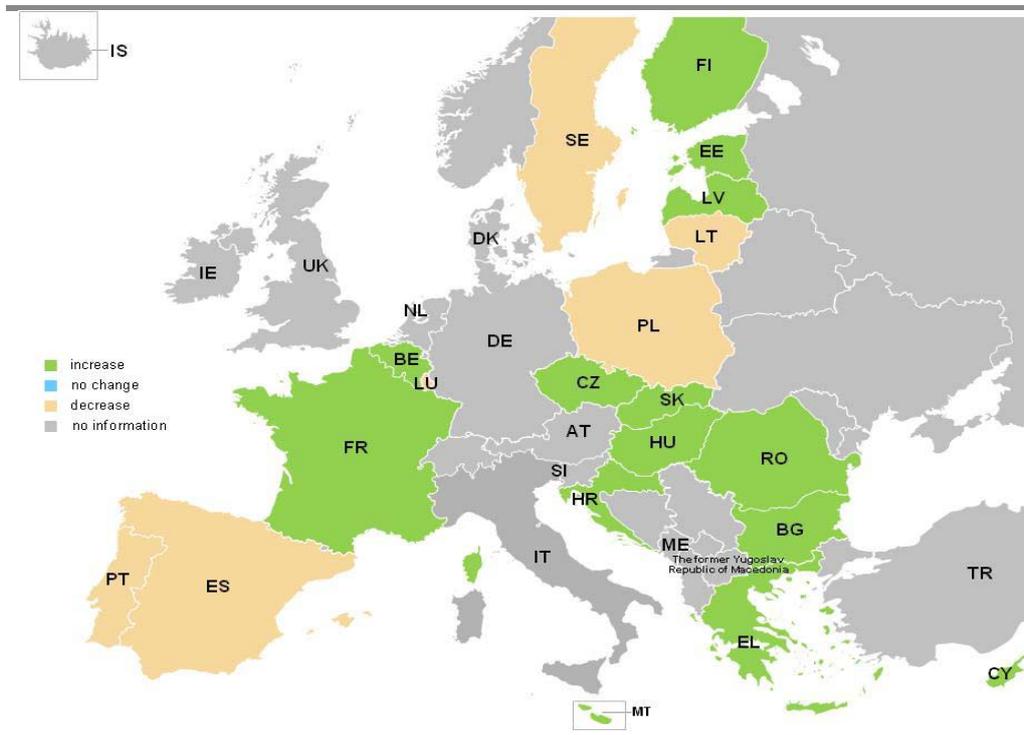
According to the policy makers the availability/coverage increased since 2003 in most countries (see Figure 12.8).

Figure 12.8:
Estimation of the change of availability/coverage of injection materials for IDUs by EU membership status from policy makers



Source: GÖ FP, policy maker survey; graphic representation: GÖ FP

Figure 12.9:
Change of the numbers of syringes distributed by specialised NSP facilities



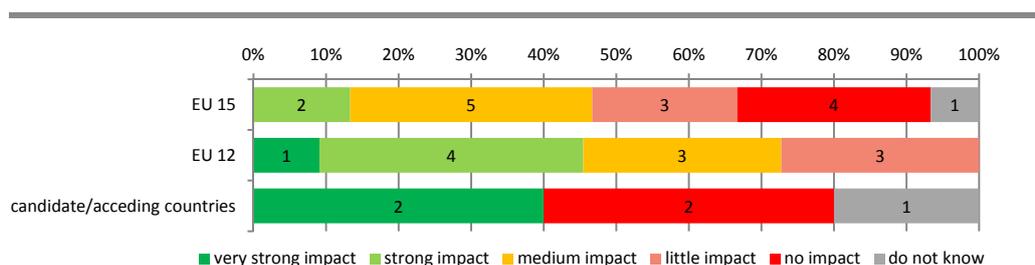
Source: Table 13.1; graphic representation: GÖ FP

For countries where sufficient data are available to judge the increase or decrease of syringes exchanged in the time span 2003 to 2010 a significant increase can be observed in two thirds of these countries while in other countries the numbers are decreasing (see Figure 12.9 and Table 13.1).

12.3.3 Influence of the CR on the change of coverage and availability of needle and equipment exchange

The estimated influence of the CR on the development of the distribution of injection materials is different in the EU 12 and in the EU 15. While policy makers of half of the EU 15 states estimate that there was little or no impact of the CR on the coverage of the distribution of injection materials, over 40 percent of policy makers in the EU 12 see a strong or very strong impact (see Figure 12.10).

Figure 12.10:
Estimation of the impact of the CR on the development of the distribution of injection materials



Remark: data refer to all 31 countries from the policy maker survey

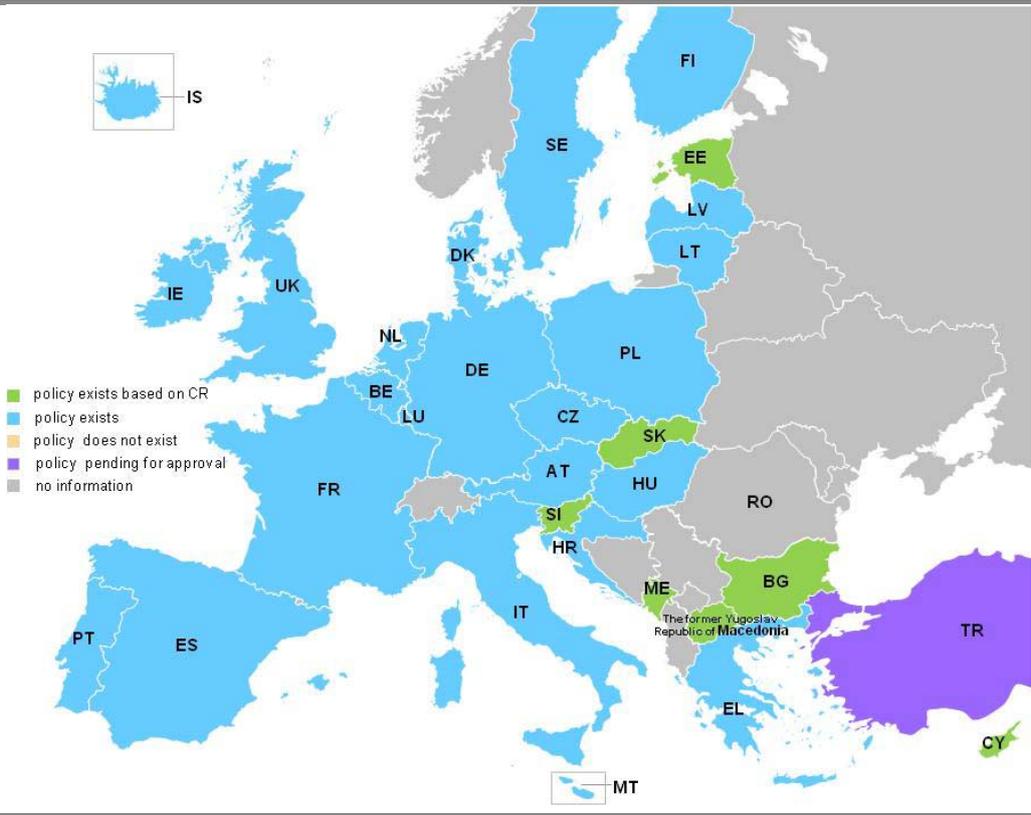
Source: GÖ FP, policy maker survey; graphic representation: GÖ FP

12.4 Opioid substitution treatment (OST) and drug free treatment (CR 2.6, CR 2.7)

CR 2.6 focuses on treatment provision: *“provide, in accordance with the individual needs of the drug abuser, drug-free treatment as well as appropriate substitution treatment supported by adequate psychosocial care and rehabilitation taking into account the fact that a wide variety of different treatment options should be provided for the drug-abuser”* and CR 2.7 focuses on one special aspect of OST *“establish measures to prevent diversion of substitution substances while ensuring appropriate access to treatment”*.

A policy, according to CR 2.6, exists in all EU Member States and candidate countries with the exception of Turkey where this policy is pending for approval (no information for Romania). In seven countries this policy is based on the CR (see Figure 12.11). A policy, according to CR 2.7, exists in all countries investigated with the exception of Iceland (no information for Romania and Slovakia) and in eight countries this policy is based on the CR.

Figure 12.11:
Existence of policy concerning CR 2.6 “provide in accordance with the individual needs of the drug abuser, drug-free treatment as well as appropriate substitution treatment”



Source: GÖ FP, policy maker survey; graphic representation: GÖ FP

Opioid substitution treatment has been implemented in most EU Member States in the 80s or 90s, in the form of methadone maintenance therapy (MMT). The Netherlands and the UK have been the first countries in Europe implementing this form of treatment. Later, in many countries, the opioids used for substitution treatment has diversified (e. g. buprenorphine). Slow release morphine substitution, as well as heroin assisted treatment, is available just in a few Member States (see Table 12.2).

Table 12.2:

Year of introduction of methadone maintenance treatment (MMT), high-dosage buprenorphine treatment (HDBT), buprenorphine/naloxone combination, heroin assisted treatment and slow-release morphine

Country	MMT	HDBT	Buprenorphine/ naloxone combination	Heroin assisted treatment (including pilots)	Slow-release morphine
Austria	1987	1999	2008	n.a.	1998
Belgium ¹	1994	2003	n.a.	2011	n.a.
Bulgaria	1996	n.a.	(2008)	n.a.	2006
Cyprus	:	2007	2008	n.a.	n.a.
Czech Republic ²	1998	2000	2008	n.a.	n.a.
Germany ³	1992	2000	n.a.	2003	n.a.
Denmark	1970	1999	:	2008	n.a.
Estonia	2001	(2003)	n.a.	n.a.	n.a.
Greece	1993	2002	2006	n.a.	n.a.
Spain ^{4,5,6}	1990	(1996)	:	2003	n.a.
Finland	1974	1997	2004	n.a.	n.a.
France	1995	1996	n.a.	n.a.	:
Hungary	1995	n.a.	2007	n.a.	n.a.
Ireland	1992	(2002)	(2007)	n.a.	n.a.
Italy	1975	1999	2007	n.a.	:
Lithuania	1995	2002		n.a.	n.a.
Luxembourg	1989	2002		n.a.	2006
Latvia	1996	2005		n.a.	n.a.
Malta	1987	2006		n.a.	:
Netherlands ⁷	1968	1999		1998	:
Poland	1993	n.a.	(2008)	n.a.	n.a.
Portugal	1977	1999	:	n.a.	n.a.
Romania	1998	(2007)	2008	n.a.	n.a.
Sweden ⁸	1967	1999	n.a.	n.a.	n.a.
Slovenia	1990	2005	2007	n.a.	2005
Slovakia	1997	(1999)	2008	n.a.	2005
United Kingdom ⁹	1968	1999	2006	1920s	n.a.
The former Yugoslav Republic of Macedonia					
Croatia ¹⁰	1991	2004	2009	n.a.	:
Iceland					
Montenegro					
Turkey	n.a.	n.a.	2009	n.a.	n.a.

Remarks: n.a. indicates that the treatment is not available in the country; (...) indicates that the treatment substance is legally available in the country but there are no reported clients.

When data are not available for a country, the table entry is left empty. Buprenorphine/naloxone combination date of issue of marketing authorisation valid throughout the European Union: 26 September 2006 (EMA).

(1) A heroin assisted treatment pilot project has started in 2011 in the city of Liège (Belgium). (2) A first unofficial substitution programme was already implemented in 1992, see Czech Republic National Report 2000. (3) First methadone maintenance trial in Germany took place in the mid-1970s in Hannover, but only in 1987

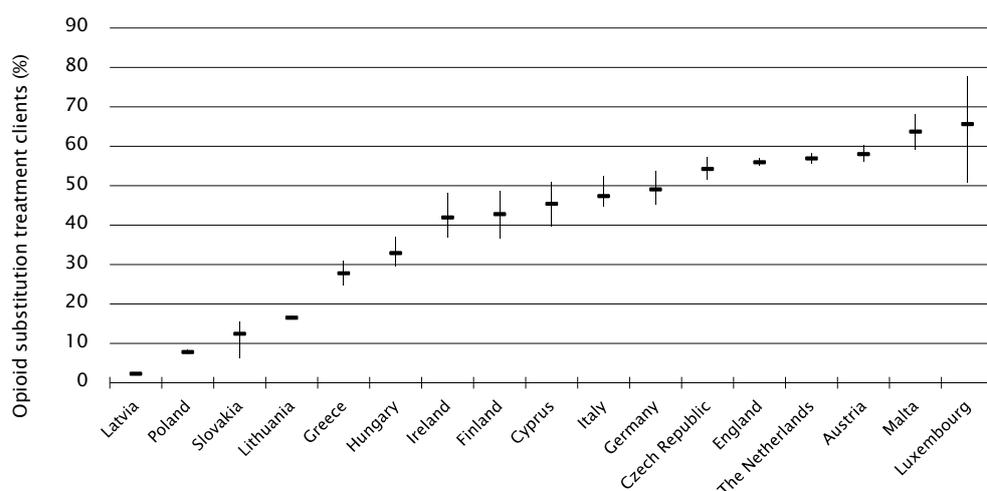
did the first large-scale pilot project in North Rhine Westphalia begin. Official introduction of MMT through change in narcotics law in 1992 (4) After its introduction in 1983, methadone substitution was prohibited again between 1985 and 1990. Heroin assisted clinical trials are ongoing in Catalonia and Andalusia. (5) HDB is a legally recognised medication for opioid substitution treatment in Spain, yet it is not commercially available. (6) Buprenorphine-naloxone is commercially available in Spain although it is not financed by the national drug funding system. (7) The Central Committee on the Treatment of Heroin Addicts was already established in December 1996 and preparations for the heroin pilot in the NL started in 1997. Clients were admitted from July 1998 onwards. Heroin prescription became a regular scheme in the Netherlands in 2006. (8) Methadone maintenance treatment began on trial basis in 1967 and was introduced on a permanent basis in 1981 in Sweden. (9) In the UK, slow release morphine has been used for a long time for the management of pain but is not licensed for the treatment of opiate dependence. (10) Buprenorphine substitution therapy was introduced in 2004 while the financing of treatment costs has been legally regulated in 2006. In 2009 buprenorphine was replaced by the buprenorphine/naloxone pharmacotherapy.

Source: EMCDDA Statistical Bulletin 2012, Table HSR-1

12.4.1 Coverage and availability of opioid substitution treatment and drug free treatment

Figure 12.12:

Opioid substitution treatment clients as a percentage of the estimated number of problem opioid users, 2010 or most recent year available



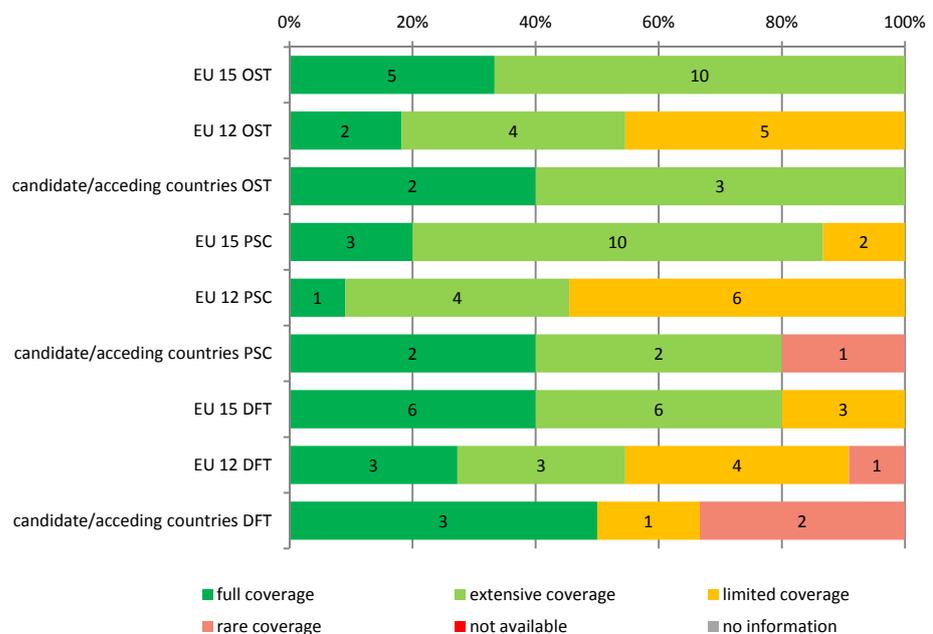
Remark: The graphic shows the estimated or reported number of opioid maintenance clients as a proportion of the number of problem opioid users, estimated by various methods, in each country with available data. The symbol indicates a point estimate, a bar indicates an uncertainty interval. Based on countries' estimates of problem opiate use (POU), estimates or estimates of problem drug use and injecting drug use, where case definitions in the country's estimates correspond to POU. Finland, Poland: data on POU estimates are for 2005 and the latest available estimates of OST clients data are from 2009 for Finland and 2010 for Poland. Ireland: data on POU estimates are for 2006 and the latest available estimates of OST clients data are from 2010. Luxembourg, Lithuania: data on POU estimates are for 2007 and the latest available estimates of OST clients data are from 2010. Netherlands, Hungary, Norway: data on POU estimates are for 2008 and the latest available estimates of OST clients data are from 2010. Germany, Austria, Spain: data on POU estimates are for 2009 and the latest available estimates of OST clients data are from 2010.

Source: EMCDDA Statistical Bulletin 2012, Figure HSR-1 part I

The coverage of OST differs between the countries. Figure 12.2 shows that the percentage of problem opioid users in OST in countries, when the respective data are available, ranges from below 20 percent to over 60 percent.

According to policy makers, OST, psychosocial care and rehabilitation supporting substitution treatment and drug free treatment is available in all countries investigated. Coverage for all three interventions seems to be slightly higher in the EU 15. Generally, coverage of psychosocial care supporting OST is estimated to be lower than coverage of OST.

Figure 12.13:
Estimation of OST coverage, psychosocial care and rehabilitation supporting substitution treatment (PSC) and drug free treatment (DFT) by EU membership status from policy makers



OST=opioid substitution treatment, PSC=psychosocial care and rehabilitation supporting OST, DFT=drug free treatment

Remark: data refer to all 31 countries from the policy maker survey

Source: GÖ FP, policy maker survey; graphic representation: GÖ FP

Example: In Austria, OST is offered throughout the country by general practitioners (GPs) as well as special services, mainly outpatient but increasingly also inpatient services. Methadone, buprenorphine as well as slow release morphine is available for maintenance therapy. GPs who want to provide OST have to participate in a special education programme. Over 50 % of problem opioid users receive OST in Austria, which is regarded as a success concerning the prevention of DRID and drug-induced deaths (NFP–Austria 2012).

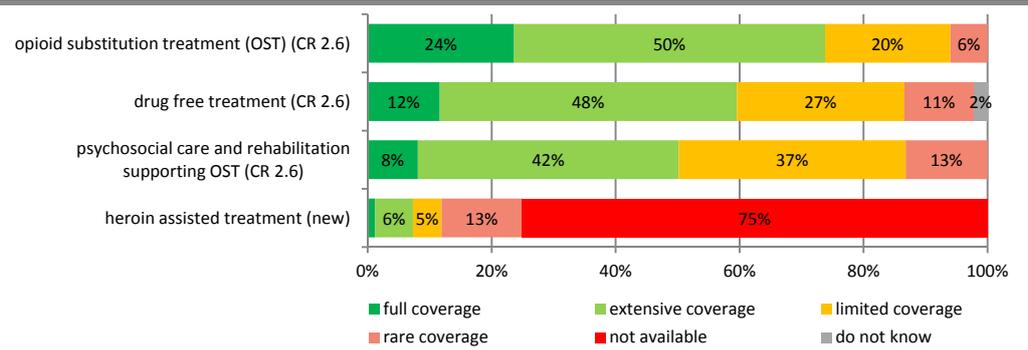
Example: In Germany a special relapse prevention training programme is provided, to teach effective coping strategies for situations with acute danger of relapse (EDDRA).

Example: In Slovakia, a methadone maintenance programme is part of the complex Multimodal Centre for Treatment of Drug Dependencies (CTDD), which provides several interconnected programmes. Clients can choose and change the programme according to their needs. They can also participate in several programmes at the same time, for example methadone maintenance and detoxification/treatment for methamphetamine dependence (EDDRA).

Example: A study in the Netherlands on the effects of high doses of methadone maintenance treatment showed more favourable outcomes in the high dosage group than in the lower dosage group (EDDRA).

Example: In the Czech Republic, especially in the capital city Prague, there is also a low-threshold methadone programme. This programme does not have such strict rules for clients entering treatment as other OST programmes, but it also does not provide “take-home” doses (country profile Czech Republic – see annex 1).

Figure 12.14:
Estimation of coverage of OST, psychosocial care and rehabilitation supporting OST, drug free treatment and heroin assisted treatment from stakeholders (civil society organisations)



Remark: data refer to all 24 countries from the stakeholder survey

Source: GÖ FP, stakeholder survey; graphic representation: GÖ FP

According to stakeholders, OST, psychosocial care and rehabilitation supporting substitution treatment and drug free treatment is available in all countries investigated. Similar to the policy makers, stakeholder estimate the coverage of psychosocial care and rehabilitation supporting OST lower than the coverage of OST (see Figure 12.14). In addition to the questions above, civil society organisations were asked about the coverage of heroin assisted treatment (see Figure 12.14). Heroin assisted treatment is available in very few countries (see also Table 12.2).

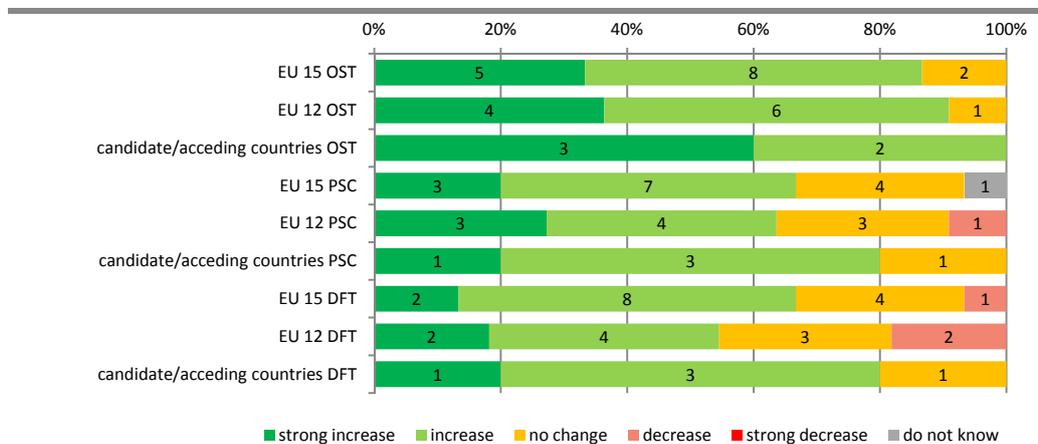
Example: In Germany diamorphine-assisted therapy is provided for heavily dependent opioid users. It is defined over the disorder-relevant main substance, but is linked to a series of psychosocial & health interventions (country profile Germany – see annex 1).

12.4.2 Change of coverage and availability of OST and drug free treatment

According to the policy makers in almost all countries, the availability/coverage of OST increased since 2003. Psychosocial care and rehabilitation supporting OST increased in two thirds of the countries.

Figure 12.15:

Estimation of change of coverage of opioid substitution treatment (OST), psychosocial care (PSC) and rehabilitation supporting OST and drug free treatment (DFT) by EU membership status from policy makers



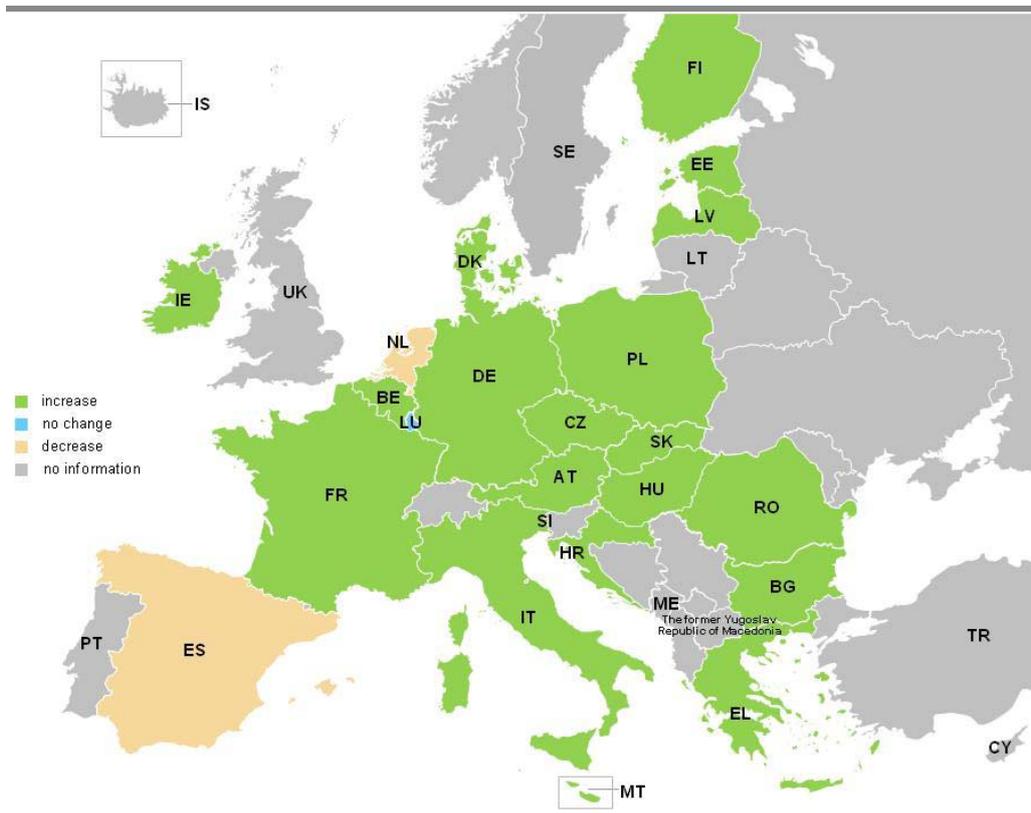
OST=opioid substitution treatment, PSC=psychosocial care and rehabilitation supporting OST, DFT=drug free treatment

Remark: data refer to all 31 countries from the policy maker survey

Source: GÖ FP, policy maker survey; graphic representation: GÖ FP

The picture of improved coverage of OSTs painted by the policy makers corresponds to the epidemiological data on the numbers of clients in substitution treatment, where an increase can be observed in almost all countries (see Figure 12.16).

Figure 12.16:
Change of the numbers of clients in opioid substitution treatment from 2003 to 2010



Source: Table 13.1; graphic representation: GÖ FP

12.4.3 Influence of the CR on the overall development of treatment, care and rehabilitation services for drug users

The estimated influence of the CR on the development of the overall development of treatment, care and rehabilitation services for drug users in the EU 15 is slightly lower than in the EU 12. 40 % of the policymakers in the EU 15 see a medium impact while over half of the policymakers in the EU 12 estimate a medium or strong impact (see Figure 12.17).

Figure 12.17:
 Estimation of the impact of the CR on the overall development of treatment, care and rehabilitation services for drug users



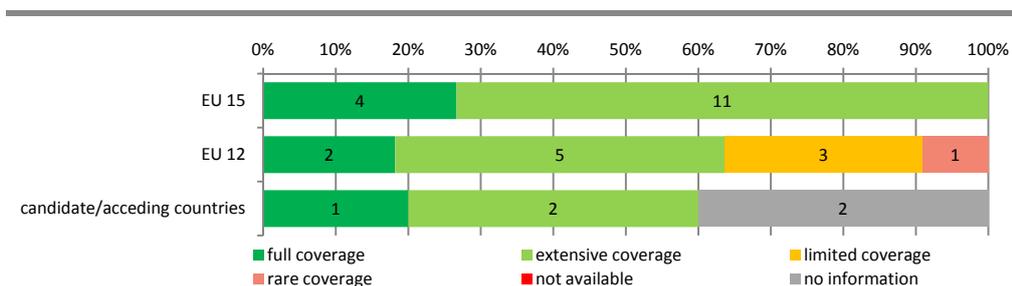
Remark: data refer to all 31 countries from the policy maker survey

Source: GÖ FP, policy maker survey; graphic representation: GÖ FP

12.4.4 Measures to prevent diversion of substitution substances (CR 2.7)

A policy, according to CR 2.7, which focuses on avoidance of distribution of substitution treatment medications to the black market, exists in 29 of the investigated countries but not in Iceland (no information for Romania and Slovakia). In eight countries the policy is based on the CR. While in all EU 15 at least extensive coverage is estimated, in one third of the EU 12 countries the coverage is estimated to be limited or rare (see Figure 12.18).

Figure 12.18:
 Estimation of coverage of measures to prevent diversion of substitution substances (CR 2.7)



Remark: data refer to all 31 countries from the policy maker survey

Source: GÖ FP, policy maker survey; graphic representation: GÖ FP

Example: In Austria, a cooperation project to control the abuse of substitution medicines exists in the capital Vienna and involves police and public health services of the city as well as the Institute for Addiction Diagnostics. A special procedure was established for the cases of reports to the police because of suspected trafficking of substitution medicines (NFP–Austria 2010).

In the opinion of policy makers, the coverage of more than half of the countries increased in the time span from 2003 to 2010 (see Figure 12.19).

Figure 12.19:
Estimation of change of coverage of measures to prevent diversion of substitution substances (CR 2.7)



Remark: data refer to all 31 countries from the policy maker survey

Source: GÖ FP, policy maker survey; graphic representation: GÖ FP

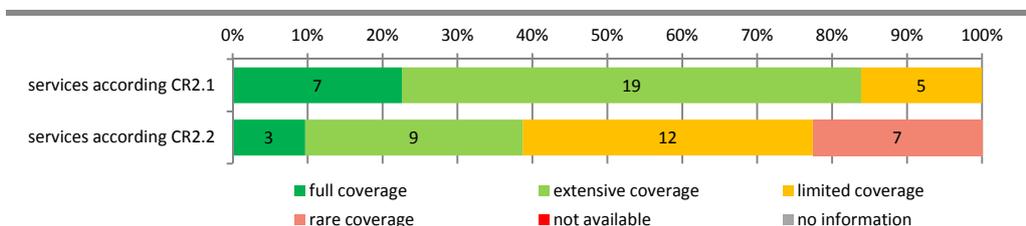
12.5 Prevention of risk behaviour – Information, education and communication (CR 2.1; CR 2.2.)

CR 2.1 “provide information and counselling to drug users to promote risk reduction and to facilitate their access to appropriate services” and CR 2.2 “inform communities and families and enable them to be involved in the prevention and reduction of health risks associated with drug dependence” are related to this topic. A policy, according to CR 2.1, exists in 31 investigated countries but not in Iceland. In nine countries the policy is based on the CR. A policy, according to CR 2.2, exists in 31 of the investigated countries but not in Iceland; in ten countries it is based on the CR (details for both CRs see annex 4).

Services according to CR 2.1 and CR 2.2 exist in all of the investigated countries. Extensive coverage of information and counselling of drug users related to harm reduction is reached in over 80 percent. Extensive coverage of information to families and communities related to harm reduction is reached just in 39 % of the countries (see Figure 12.20).

Figure 12.20:

Estimation of coverage of information and counselling services to drug users related to harm reduction (CR 2.1) and information measures targeted to families and communities related to harm reduction (CR 2.2)



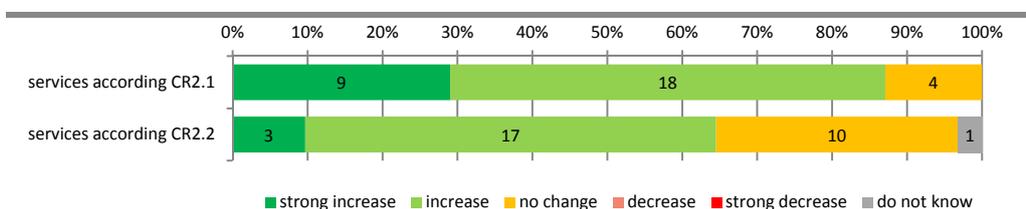
Remark: data refer to all 31 countries from the policy maker survey

Source: GÖ FP, policy maker survey; graphic representation: GÖ FP

In the opinion of policy makers the coverage of information and counselling services for drug users related to harm reduction increased in the time span from 2003 to 2010 in almost 90 % of the countries; for information measures targeted to families and communities related to harm reduction in over half of the investigated countries (see Figure 12.21).

Figure 12.21:

Estimation of change of the coverage of information and counselling services to drug users related to harm reduction (CR 2.1) and information measures targeted to families and communities related to harm reduction (CR 2.2)



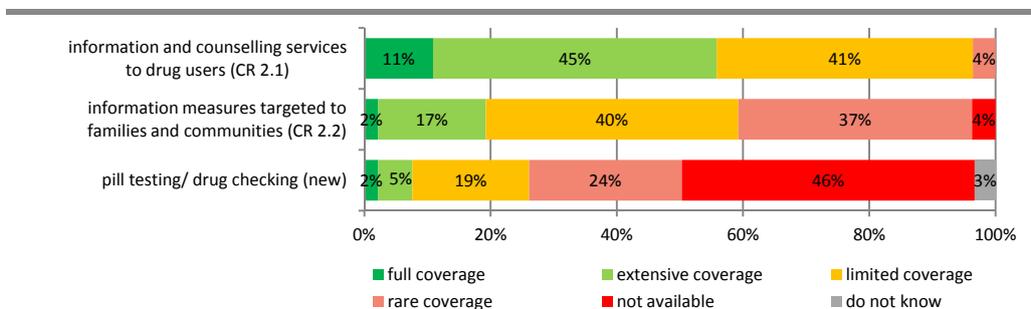
Remark: data refer to all 31 countries from the policy maker survey

Source: GÖ FP, policy maker survey; graphic representation: GÖ FP

In addition to the general questions above, one special question on Pill Testing / Drug Checking has been implemented in the investigation of the stakeholders.

Figure 12.22:

Estimation of availability/coverage of services for information, education and communication in the field of harm reduction in percent (n=24)



Remark: data refer to all 24 countries from the stakeholder survey

Source: GÖ FP, stakeholder survey; graphic representation: GÖ FP

According to the opinion of stakeholders, information and counselling services for drug users are widely available in their countries but still far away from full coverage. Similar to policy makers, stakeholders estimate the coverage of information measures targeted to families and communities lower than for counselling of drug users. Drug Checking is still very rare (see Figure 12.22).

Example: In Ireland outreach workers assess each individual's current situation with respect to injecting use, and provide appropriate advice. Each contact with clients is used to provide information to increase the safety of the individual's current injecting practices. In addition, safer injecting classes are operated. These activities are supported by booklets, which were developed partly together with the target group and adapted to the clients' needs (country profile Ireland – see annex 1).

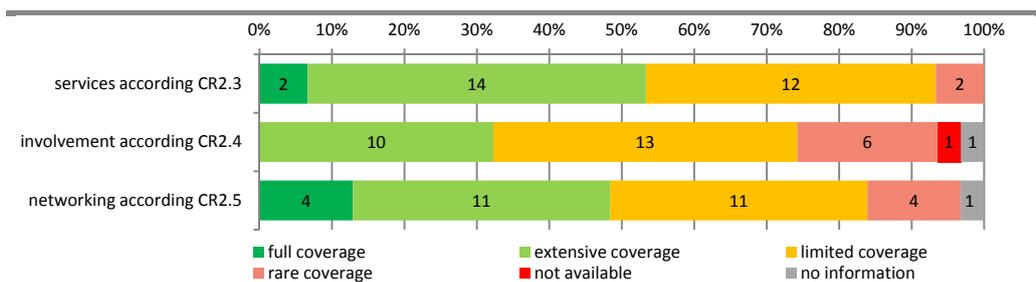
Example: In Belgium, the project “Drugs, risk less (DR-)” wants to raise the awareness among drug users concerning the risks related to the use of psychotropic substances. It is based on a health promotion approach by promoting knowledge together with individual and social skills (EDDRA).

12.6 Drug-related outreach work and peer involvement (CR 2.3; CR 2.4; CR 2.5)

CR 2.3 “include outreach work methodologies within the national health and social drug policies, and support appropriate outreach work training and the development of working standards and methods; outreach work is defined as a community-oriented activity undertaken in order to contact individuals or groups from particular target populations, who are not effectively contacted or reached by existing services or

through traditional health education channels”, CR 2.4 “encourage, when appropriate, the involvement of, and promote training for, peers and volunteers in outreach work, including measures to reduce drug-related deaths, first aid and early involvement of the emergency” and CR 2.5 “promote networking and cooperation between agencies involved in outreach work, to permit continuity of services and better users’ accessibility” are related to this topic. A policy, according to CR 2.3, exists in 29 countries but not in Croatia and Iceland (no information for Romania). In nine countries the policy is based on the CR. A policy, according to CR 2.4, exists in 27 of the investigated countries but not in Croatia, Slovakia (it is not a priority task for the national government of these two countries), Hungary and Iceland (no information for Romania). In seven countries, the policy is based on the CR. A policy, according to CR 2.5, exists in 26 of the investigated countries but not in Greece, Croatia, Iceland, Latvia and Slovakia (no information for Romania). In nine countries the policy is based on the CR (details see annex 4).

Figure 12.23:
Estimation of coverage of outreach work targeted to drug users (CR 2.3), peer involvement in outreach work (CR 2.4) and networking and cooperation between agencies involved in outreach work (CR 2.5)

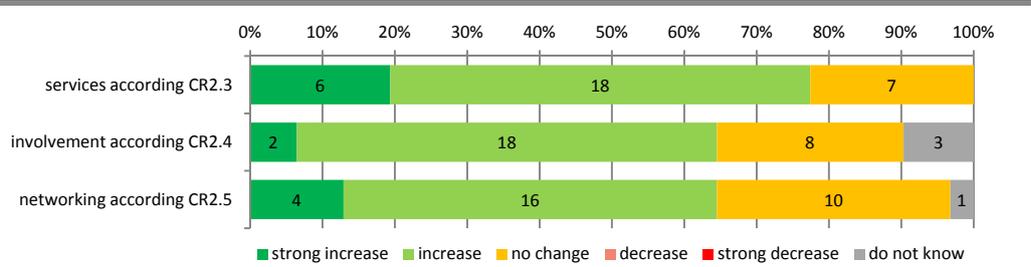


Remark: data refer to all 31 countries from the policy maker survey

Source: GÖ FP, policy maker survey; graphic representation: GÖ FP

Outreach work (CR 2.3) and networking and cooperation between agencies involved in outreach work (CR 2.5) are available in all of the investigated countries, and peer involvement in outreach work (CR 2.4) in all countries but one. The coverage of outreach work (CR 2.3) and of networking and cooperation between agencies involved in outreach work (CR 2.5) is estimated to be extensive in half of the countries investigated; involvement of peers (CR 2.4) in outreach work is estimated to be extensive in just one third (see Figure 12.23). Policymakers of two thirds of the countries investigated report an increase in services/activities related to CR 2.3, CR 2.4 and CR 2.5 (see Figure 12.24).

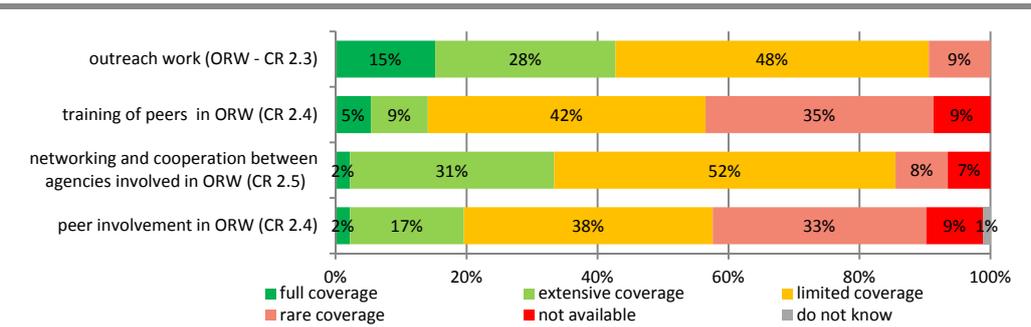
Figure 12.24:
 Estimation of change of coverage of outreach work targeted to drug users (CR 2.3),
 peer involvement in outreach work (CR 2.4) and networking and cooperation between
 agencies involved in outreach work (CR 2.5)



Remark: data refer to all 31 countries from the policy maker survey

Source: GÖ FP, policy maker survey; graphic representation: GÖ FP

Figure 12.25:
 Estimation of availability/coverage of services of drug-related outreach work in the
 field of harm reduction in percent



ORW=outreach work

Remark data refer to all 24 countries from the stakeholder survey

Source: GÖ FP, stakeholder survey; graphic representation: GÖ FP

In the stakeholders' view, the coverage of outreach work (ORW) is lower compared to services for information, education and communication (see Figure 12.25 and Figure 12.22); this may be due to the fact that outreach work is more often implemented in urban areas where the target group might be easier to reach by this form of intervention. As the coverage of outreach work is rather low, networking and cooperation between organisations involved in outreach work might be low as those organisations might be active in different regions. Peer involvement in outreach work is not very common.

Example: In Belgium, peers are trained within the snowball operations project to provide information and harm reduction material among injecting drug users and other drug users with rare contacts to drug help services. The training is carried out in six sessions of approximately two hours. The peers are asked to contact around ten drug users and recruit new volunteers among them (EDDRA).

Example: In Finland active participation of substance abusers is seen as crucial to reach the most excluded and most concealed client groups and to provide access to services with a low threshold. This approach is used for example by the project Osis, a centre of excellence in peer support for drug users in the Greater Helsinki area (country profile Finland – see annex 1).

12.7 Screening and treatment of drug-related infectious diseases, HBV vaccination, condom distribution, safer injection training and paraphernalia distribution (CR 2.9, CR 2.10)

CR 2.9 “*promote adequate hepatitis B vaccination coverage and prophylactic measures against HIV, hepatitis B and C, tuberculosis and sexually transmitted diseases, as well as screening for all the aforementioned diseases among injection drug users and their immediate social networks, and take the appropriate medical actions*” is related to this topic. A policy, according to CR 2.9, exists in 30 countries but not in Iceland (no information for Romania). In ten countries, the policy is based on the CR (details see annex 4). For CR 2.10 (condom distribution and paraphernalia distribution are relevant for this section) see chapter 12.3.

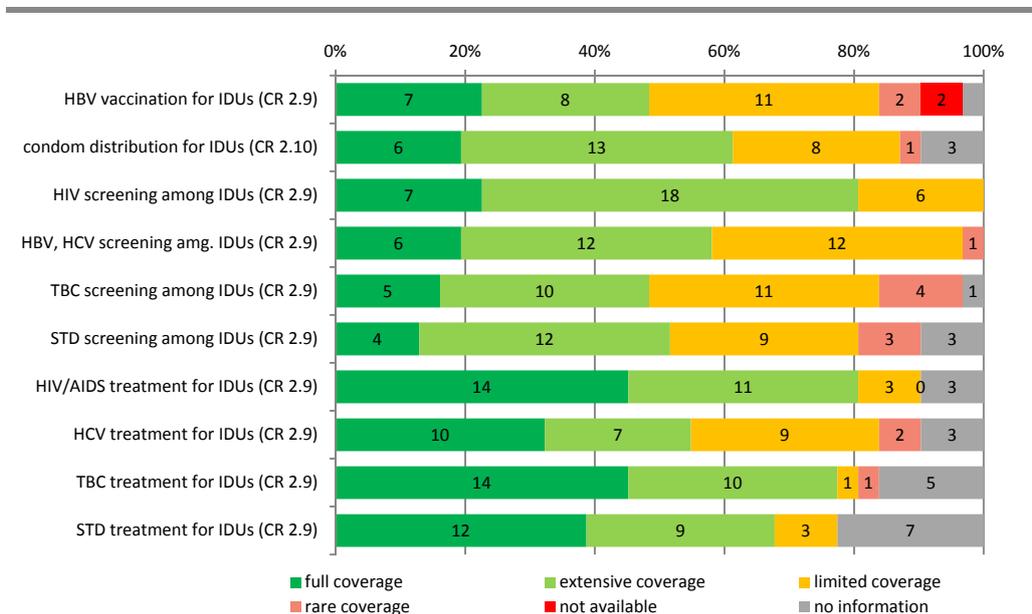
Coverage of HBV vaccination for IDUs is estimated to be at least extensive in just half of the countries and for condom distribution in two thirds of the countries.

Screening and treatment of drug-related infectious diseases are available in all of the countries providing information on the topic. Coverage for HIV screening of IDUs (81 % at least extensive) and medical treatment of HIV/AIDS of IDUs (80 % at least extensive) is higher than for HCV (58 % and 55 % – see Figure 12.26).

With the exception of vaccination of HBV for IDUs in around two thirds of the countries policymakers see an increase of activities in this area (see Figure 12.27).

Figure 12.26:

Screening and treatment of drug-related infectious diseases, HBV vaccination and condom distribution (CR 2.9 and CR 2.10)



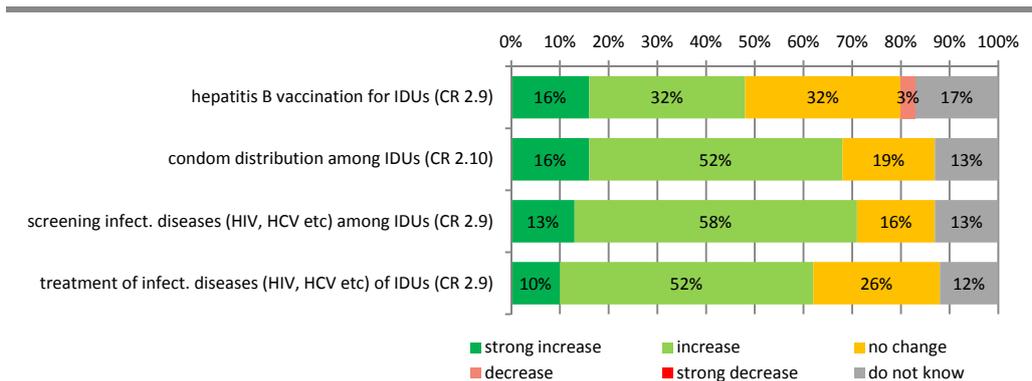
HBV=hepatitis B virus, HCV=hepatitis C virus, HIV=human immunodeficiency virus, IDU=injecting drug users, STD=sexually transmitted diseases, TBC=tuberculosis

Remark: data refer to all 31 countries from the policy maker survey

Source: GÖ FP, policy maker survey; graphic representation: GÖ FP

Figure 12.27:

Estimation of change of the coverage of screening and treatment of drug-related infectious diseases, HBV vaccination and condom distribution (CR 2.9 and CR 2.10)



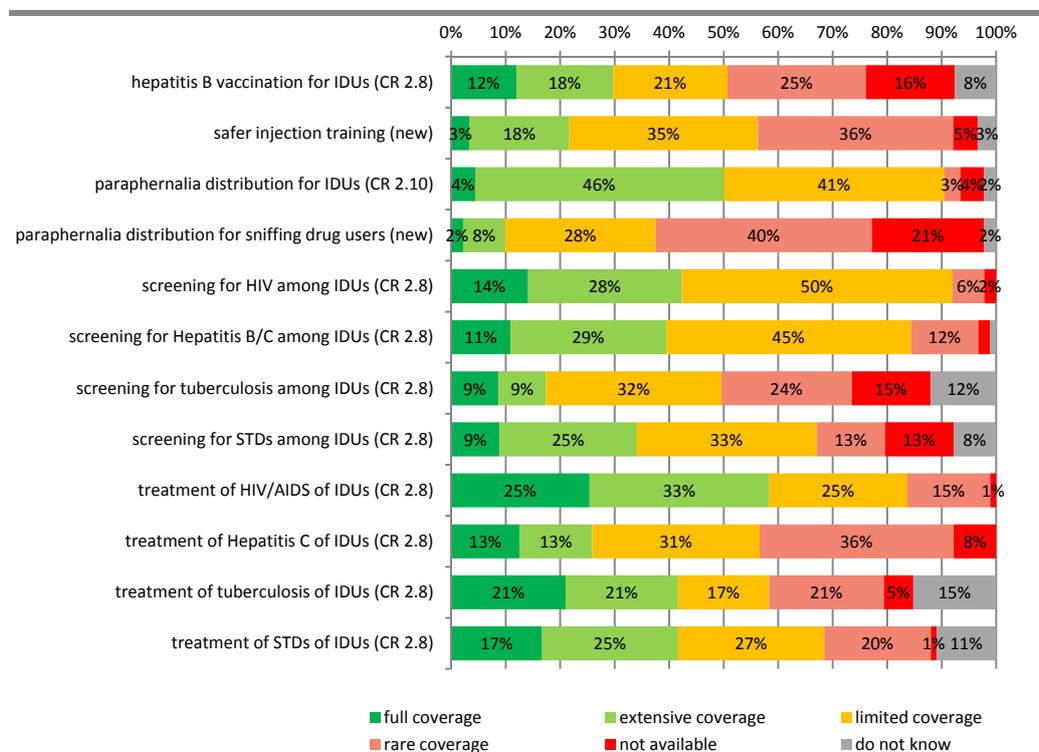
HCV hepatitis C virus, HIV=human immunodeficiency virus, IDU=injecting drug user

Remark: data refer to all 31 countries from the policy maker survey

Source: GÖ FP, policy maker survey; graphic representation: GÖ FP

Just one third of the stakeholders estimate the coverage of HBV vaccination of IDUs to be at least extensive. Also coverage of screening for drug-related infectious diseases is quite low in their opinion (e. g. HIV: 32 %, HCV: 26 % – coverage at least extensive). In accordance with policy makers, the coverage of medical treatment of HIV/AIDS of IDUs (58 % at least extensive) is higher than for HCV (26 %). Concerning prevention measures, the coverage of safer injection training (21 % at least extensive) and paraphernalia distribution for sniffing (10 % at least extensive) is very low (see Figure 12.28).

Figure 12.28:
Estimation of coverage of prophylactic measures other than NSP, screening and treatment of drug-related infectious diseases (CR 2.9) of stakeholders (n=24)



HCV=hepatitis C virus, HIV=human immunodeficiency virus, IDU=injecting drug user, STD=sexually transmitted diseases

Remark: data refer to all 24 countries from the stakeholder survey

Source: GÖ FP, stakeholder survey; graphic representation: GÖ FP

Example: In Portugal, a national network of harm and risk reduction structures (RRMD) was established in 2001, which provides alternative paths leading to stabilisation and treatment. One element is early identification and prevention of HIV/AIDS among drug users (Program Klotho), which should be finally integrated in local healthcare struc-

tures. Meanwhile this programme is incorporated in all RRMD structures (country profile Portugal – see annex 1).

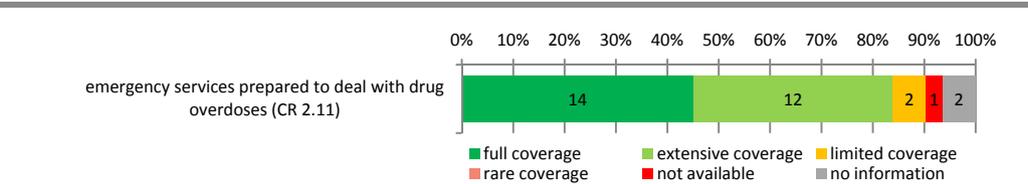
Example: In France, screening for DRID is provided free of charge and anonymously by specific centres. While screening for HIV and hepatitis C is covered by the French health insurance, screening for hepatitis B is covered to some extent only. Systematic activities in all services visited by drug users shall improve the awareness of the importance of screening and the efficacy of treatments – especially among unstable and migrant drug users (country profile France – see annex 1).

Example: In Denmark free vaccination against hepatitis A and B is offered to drug abusers (country profile Denmark – see annex 1).

12.8 Prevention of drug-induced deaths other than OST (CR 2.11, CR 2.10)

CR 2.11 “ensure that emergency services are trained and equipped to deal with overdoses” is related to this topic. A policy, according to CR 2.11, exists in 30 countries but not in Iceland (no information for Romania). In eleven countries the policy is based on the CR (details see annex 4). For CR 2.10 (drug consumption rooms are relevant for this section) see chapter 12.3

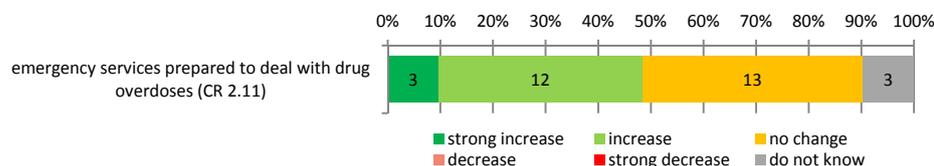
Figure 12.29:
Estimation of the coverage of emergency services are trained and equipped to deal with overdoses (CR 2.11)



Remark: data refer to all 31 countries from the policy maker survey

Source: GÖ FP, policy maker survey; graphic representation: GÖ FP

Figure 12.30:
 Estimation of change of the coverage of emergency services are trained and equipped to deal with overdoses (CR 2.11)

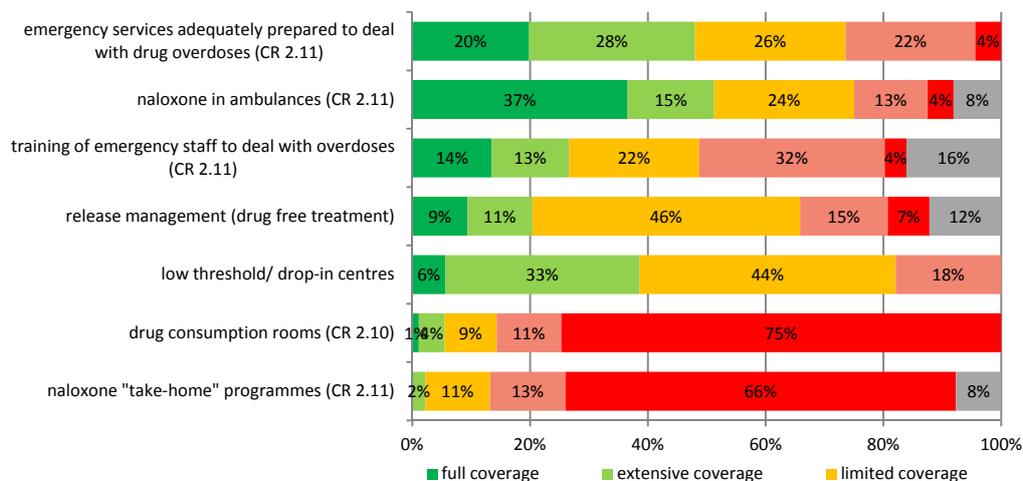


Remark: data refer to all 31 countries from the policy maker survey

Source: GÖ FP, policy maker survey; graphic representation: GÖ FP

Policy makers of 85 % of the countries estimated the coverage of this measure to be at least extensive (see Figure 12.29); in half of the countries they see an increase (see Figure 12.30).

Figure 12.31:
 Estimation of the availability/coverage of services other than opioid substitution treatment for the prevention of drug-induced deaths in percent



Remark: data refer to all 24 countries from the stakeholder survey

Source: GÖ FP, stakeholder survey; graphic representation: GÖ FP

The questions concerning measures targeted to prevent drug-induced deaths, which were asked to the stakeholders, also included some other concrete measures. According to stakeholders, ambulances are not equipped with naloxone in all countries or regions, and the coverage of emergency staff's training to deal with overdoses is astonishingly low (27 % at least extensive). Full or extensive coverage of release

management in the context of drug free treatment is reported by 20 % only. Naloxone “take home” programmes are still extremely rare (see Figure 12.31).

Only a small number of European countries report the existence of community-based programmes that prescribe naloxone to drug users at risk of opioid overdose, according to the EMCDDA (EMCDDA 2012a). Naloxone prescribing is accompanied by compulsory training in recognising overdoses and providing basic life-support techniques in most countries (see Chapter 10.3.2). Programmes for the distribution of naloxone are reported by Italy (where 40 % of drugs agencies provide the substance), Germany and the United Kingdom (England and Wales). New initiatives are reported by Bulgaria, Denmark and Portugal. In Scotland, provision of 'take-home-naloxone' to all at-risk individuals leaving prison was introduced nationally in 2010, and the government is supporting a national “take-home” naloxone programme for those deemed to be at risk of opioid overdose and those who may come in contact with them (EMCDDA 2012a).

Drug consumption rooms are available in 77 cities in five Member States (Denmark, Germany, Luxembourg, Netherlands and Spain) (EMCDDA 2012d) but also in Switzerland and Norway.

Example: In Germany, 28 drug consumption rooms exist with the objective to secure survival and stabilisation of the health conditions of drug users as well as to reach those drug users, who are not in contact with the drug help system otherwise. Drugs are brought along to the drug consumption rooms by the drug users, infection prophylaxis is systematically provided by the staff. Minimum standards are defined in the Narcotics Act (NFP-Germany 2011).

Example: In Belgium, emergency departments provide crisis beds for the treatment of substance-related disorders. During a maximum stay of five days a range of interventions are carried out, including assessment of the acute somatic situation and intensive treatment. Continuity of care afterwards is guaranteed, which lies in the responsibility of a case manager (country profile Belgium – see annex 1).

Example: In the UK, the project “Take Home Naloxone” (THN) provides training on the administration of naloxone and first-aid in case of an overdose event. After the training is completed, THN kits are issued to opiate users and their carers (EDDRA).

Example: In Slovakia, a new system of first aid emergency was created, which increased the availability of healthcare for urgent drug-related health threats. Throughout the country a network of emergency healthcare stations was established. In this context medical education of drug users became an important part of prevention and protection of health for this target group (NFP-Slovakia 2010).

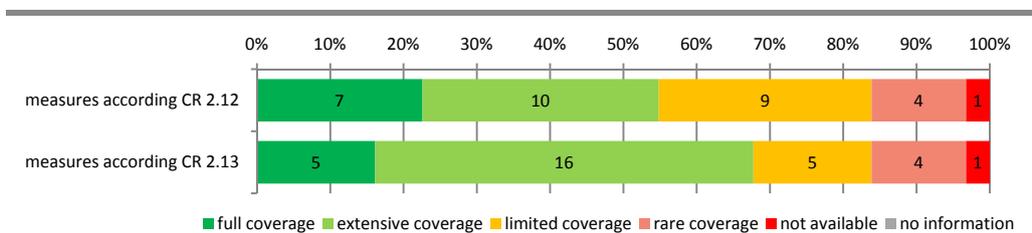
12.9 Co-operation, training and education of staff (CR 2.12, CR 2.13)

CR 2.12 “promote appropriate integration between health, including mental health, and social care, and specialised approaches in risk reduction” and CR 2.13 “support training leading to a recognised qualification for professionals responsible for the prevention and reduction of health-related risks associated with drug dependence” are related to this topic. A policy, according to CR 2.12, exists in 28 countries but not in Bulgaria, Iceland and Turkey (no information for Romania). In Turkey this policy is pending for approval. In six countries the policy is based on the CR (details see annex 4).

A Policy, according to CR 2.13, exists in 30 countries but not in Iceland (no information for). In ten countries the policy is based on the CR (details see annex 4).

The coverage of appropriate integration between health, including mental health, and social care, and specialised approaches in risk reduction is estimated in half of the countries to be at least extensive: Training leading to a recognised qualification for professionals responsible for the prevention and reduction of health-related risks associated with drug dependence exists in over two thirds of the countries (see Figure 12.32). Over 70 percent of policymakers see improvements in both fields of action.

Figure 12.32:
Estimation of the coverage of measures according to CR 2.12 and CR 2.13

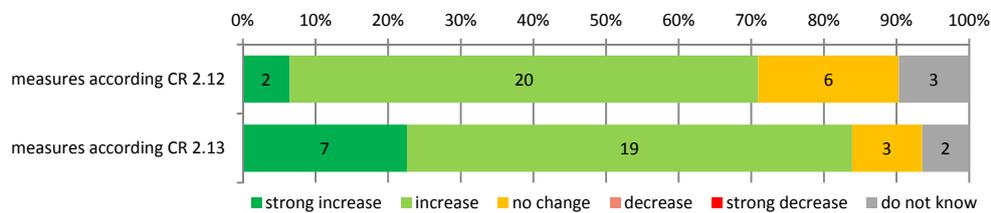


Remark: data refer to all 31 countries from the policy maker survey

Source: GÖ FP, policy maker survey; graphic representation: GÖ FP

Figure 12.33:
Estimation of change of the coverage of measures according to CR 2.12 and CR 2.13

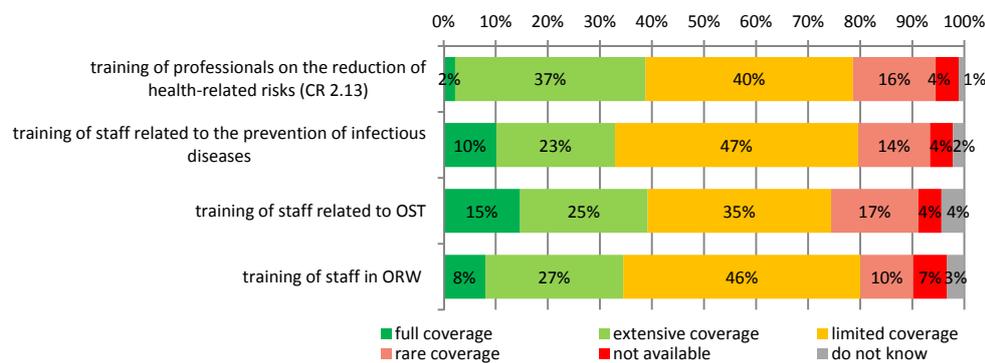
Remark: data refer to all 31 countries from the policy maker survey



Source: GÖ FP, policy maker survey; graphic representation: GÖ FP

The picture drawn by the stakeholders, who were asked for their estimate of the coverage of training in several areas, shows strong indication for improvement in one fifth of the countries covered (The coverage is estimated as lower than “limited” – see Figure 12.34).

Figure 12.34:
Estimation of availability/coverage of training in different areas of harm reduction



OST=opioid substitution treatment, ORW=outreach work

Remark: data refer to all 24 countries from the stakeholder survey

Source: GÖ FP, stakeholder survey; graphic representation: GÖ FP

Example: In Austria, the cooperation between the healthcare system and the drug help system is strengthened by CONTACT, a liaison service for hospitals. This service is provided in Vienna with the objective to stabilise drug users, who are in hospital care after non-fatal overdoses, by connecting them with a suitable service of the drug help system (EDDRA).

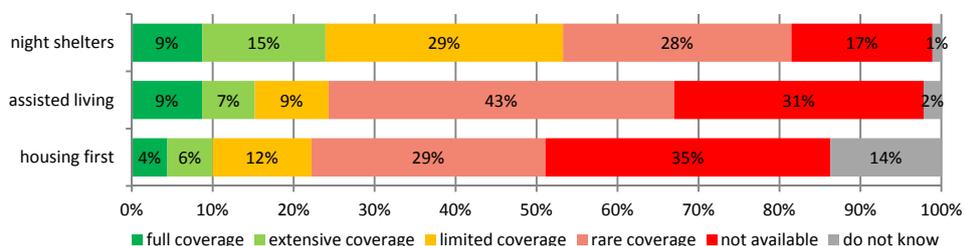
12.10 Housing (not included in CR)

Housing seems to be a field of harm reduction where still a lot of improvement is necessary as all measures are described to have a rather low coverage (stakeholder consultation). For night shelters – the measure with the highest coverage – only 24 % report full or extensive coverage (see Figure 12.35).

Example: In Austria, supervised housing provides accommodation for persons with drug-related problems. Clients targeted are those who are homeless but relatively stable in their drug use and live in Vienna. This includes also couples and people with children. After a maximum of two years within this programme clients are able to move into their own accommodation (EDDRA).

Example: In Ireland, the Dublin Simon Emergency Hostel offers short term emergency accommodation for homeless people, including heroin using persons. Within a pilot project of the Safetynet Service, a methadone programme was implemented in the hostel, to reduce heroin use and the high-level of hospital admissions among this specific target group (EDDRA).

Figure 12.35:
Estimation of the availability/coverage of services for housing in percent



Remark: data refer to all 24 countries from the stakeholder survey

Source: GÖ FP, stakeholder survey; graphic representation: GÖ FP

12.11 Pill Testing / Drug Checking (not included in CR)

Although no new studies are available, except for a smaller evaluation from Switzerland (Bücheli et al. 2010 and Hungerbuehler et al. 2011) which shows that “party drug users” are not a homogenous group, some important developments can be reported in this field:

Due to the fact that the projects not only focus on ecstasy tablets any longer but also on other substances like cocaine and new psychoactive substances (e. g. so called “research chemicals”) the term “Drug Checking” is now more common. Drug Checking programmes are today available in more European countries than in 2006 namely in Austria, Belgium, France, the Netherlands, Portugal, Spain and Switzerland. Drug Checking is seen as an integrated service that always combines the chemical analysis with advice or counselling (TEDI 2011). In their self-perception (VWS 2012) Drug Checking programmes often define themselves as information and counselling programmes that also provide drug-checking (in this order of importance).

Example: In Austria counselling and Drug Checking has been implemented by *checkit!* at large music festivals in Vienna and the surrounding areas for many years. Bits of tablets or powders are analysed by the *checkit!* staff in a mobile laboratory (using high-performance liquid chromatography and liquid chromatography-mass spectrometry). In the year 2011 only a third of the analysed samples contained the expected psychoactive substance without additional pharmacological active ingredients (country profile Austria – see annex 1).

Simple colour reaction tests and the use of pill-lists are not common anymore; the programmes use at least thin layer chromatography but many use also laboratory analysis, which helps not only with identifying more substances but also gives a better input for early warning and monitoring systems. In many programmes peers are involved, partially high standards for professional counsellors like advanced education in motivational interviewing are reported. Drug Checking programmes regard themselves being cost effective as they reach drug users at an early stage which gives the possibility of early interventions. Moreover, the analyses can provide beneficial results to general public health (TEDI 2011). Through the use of modern social media Drug Checking projects are able to gain a broader but nevertheless targeted public than some ten years ago.

In the course of the EU-financed project Nightlife Empowerment & Well-being Implementation Project (NEWIP) all European Drug-Checking programmes work together in the TEDI (Trans European Drug Information) workgroup on a common database and focus on:

- » Standardising the various processes related to Drug Checking
- » Making recommendations to help improve first-line project field interventions
- » Monitoring the evolution of new substances and new trends throughout Europe (<http://www.safernightlife.org>)

12.12 Prison – a special setting for harm reduction (CR 2.8)

The selected issue “prisons and drugs in Europe” (EMCDDA 2012h) demonstrates that harm reduction of harm related to drug use in prison is a very relevant issue. Between 2001 and 2010 the prison population increased from 582.000 to 635.000 in the 27 EU Member States. Offences related to the use, possession or supply of illicit drugs are the main reasons for the imprisonment of between 10 % and 25 % of all sentenced prisoners. To interpret these numbers, it has to be taken into account that on one hand, not all of them necessarily have experience of or problem with drug use. But on the other hand not all prisoners with problem drug use have been imprisoned for a drug law offence (e. g. imprisonment for other leading offences like burglary, shoplifting, etc.). Estimates suggest that around 50 % of the prisoners in the EU have a history of drug use and a high proportion of them with problem drug use (WHO 2007) – see also chapter 10.4).

12.12.1 Coverage and availability of harm reduction measures provided to drug users in prison

Although a consensus exists in European policy that prisoners should have the same health support as the general population – e. g. Dublin declaration on HIV/AIDS in prisons in Europe and Central Asia, (WHO 2007) the situation concerning harm reduction measures in prison is worse than outside prison.

OST was introduced in prison later (see Figure 12.36) and needle exchange is available in prison in only five of the investigated countries (see Table 12.1 in section 12.3.1).

Figure 12.36:

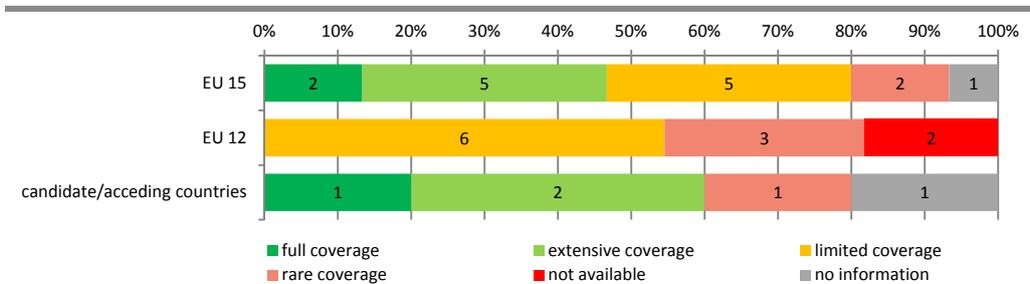
Cumulative number of European countries that had officially launched OST as a recognised method of treatment in community and prison settings



Source: EMCDDA Selected issue 2012 – prisons and drugs in Europe, page 22

Figure 12.37:

Estimation of the coverage of harm reduction measures provided to drug users in prison



Remark: data refer to all 31 countries from the policy maker survey

Source: GÖ FP, policy maker survey; graphic representation: GÖ FP

A policy, according to CR 2.8, exists in 31 countries with the exception of Iceland (no information for Romania). In Lithuania this policy is pending for approval. In eleven countries the policy is based on the CR (details see annex 4).

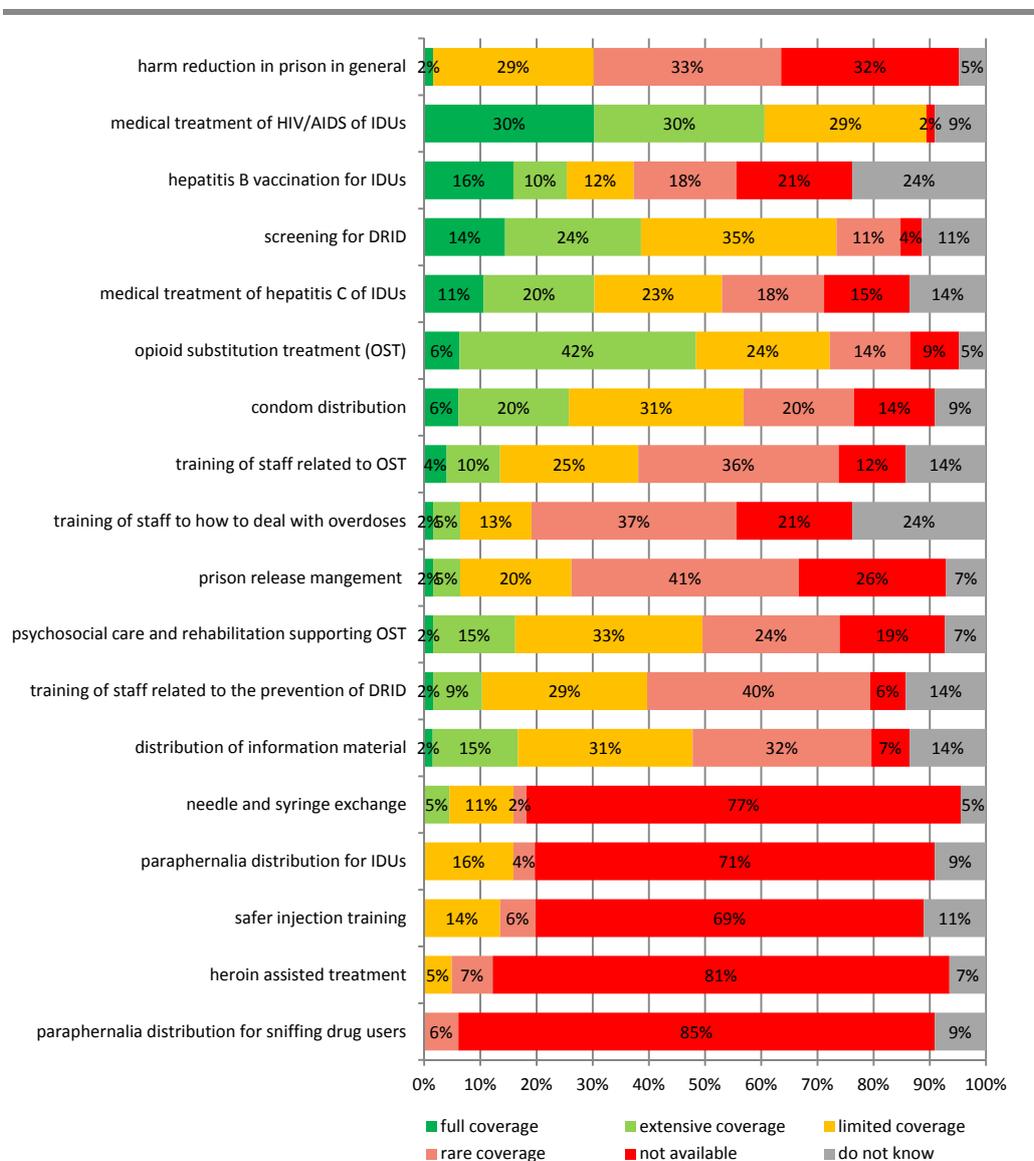
Coverage of harm reduction measures in prison is estimated to be limited or worse in many countries, especially in the EU 12 (see Figure 12.37).

In addition to the questions above, civil society organisations were asked more details about the coverage of different harm reduction measures in prison. According to the opinion of stakeholders, harm reduction measures for prisoners reach limited coverage in less than one third of the countries covered. OST and medical treatment of HIV/AIDS are the only measures which are at least extensively available in half of the countries (see Figure 12.38).

Example: In Spain needle exchange programmes are running in 41 prisons and the majority of prisoners who need syringes are covered by the programmes (EMCDDA 2012h). HIV prevalence among prisoners decreased from 24 % in 1992 to 7 % in 2009 (Arroyo-Cobo 2010).

Example: In France, a national programme (Departmental (sub-regional) Justice and Health conventions of objectives, CDO) was initiated and re-launched in the late 1990s, with the purpose of offering the same level of treatment and prevention services to drug users within the criminal justice system as in the community. As a result of this programme and the better identification of health problems, the number of drug users in contact with care services increased from 9.000 in 1999 to 36.000 in 2002 (EDDRA).

Figure 12.38:
Estimation of the coverage of several harm reduction measures in prison



DRID=drug-related infectious diseases, HCV=hepatitis C virus, HIV=human immunodeficiency virus, IDU=injecting drug user, OST=opioid substitution treatment, STD=sexually transmitted diseases

Remark: data refer to 22 countries of the 24 countries covered by the stakeholder survey. Malta and Slovakia are missing.

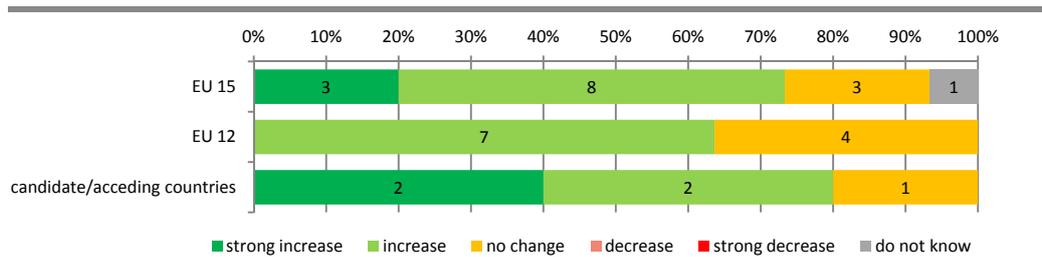
Source: GÖ FP, stakeholder survey; graphic representation: GÖ FP

12.12.2 Change of coverage of harm reduction measures in prison

According to the policy makers, in more than two thirds of the EU 15 and candidate countries and in two thirds of the EU 12 the availability/coverage of harm reduction measures in prison increased since 2003.

Figure 12.39:

Estimation of change of the coverage of harm reduction measures in prison



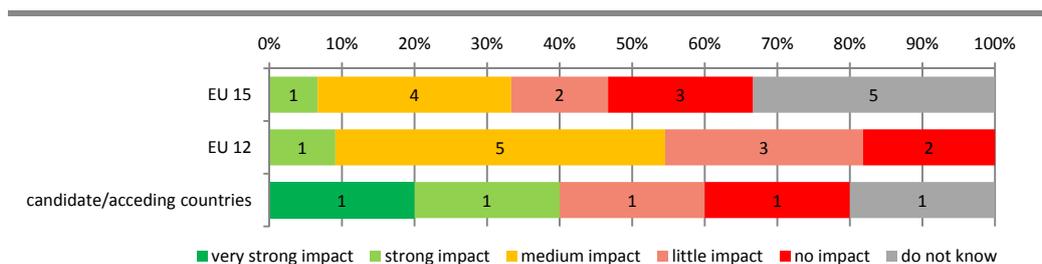
Remark: data refer to all 31 countries from the policy maker survey

Source: GÖ FP, policy maker survey; graphic representation: GÖ FP

12.12.3 Influence of the CR on the change of coverage and availability of harm reduction measures in prison

Figure 12.40:

Estimation of the impact of the CR on the change of coverage and availability of harm reduction measures in prison



Remark: data refer to all 31 countries from the policy maker survey

Source: GÖ FP, policy maker survey; graphic representation: GÖ FP

The estimated influence of the CR on the development of the change of coverage and availability of harm reduction measures in prison in the EU 15 is slightly lower than in

the EU 12. One third of policy makers in the EU 15 see at least a medium impact while over half of the policy makers in the EU 12 see this impact (see Figure 12.40).

12.13 Harm reduction and scientific evidence, monitoring & evaluation and (CR 3)¹⁹

Council Recommendation 3 focuses on scientific evidence, monitoring and evaluation. Questions concerning CR 3 were not included in the stakeholder survey. All referred data originate from the policy maker survey.

CR 3: Member States should consider, in order to develop appropriate evaluation to increase the effectiveness and efficiency of drug prevention and the reduction of drug-related health risks:

CR 3.1: using scientific evidence of effectiveness as a main basis to select the appropriate intervention;

A policy, according to CR 3.1, exists in 28 countries but not in Bulgaria, Hungary and Latvia (no information for Romania). In Hungary and Latvia this policy does not exist because this topic is not a task of the national government.

Still, scientific evidence is widely used as basis for the development of guidelines and standards in Europe. While many countries have guidelines and standards for drug treatment, they are less available for the area of harm reduction (see Best Practice Portal; <http://www.emcdda.europa.eu/themes/best-practice/standards>).

Example: In the UK, quality standards for drug use disorders, which are based on scientific evidence, are provided by the National Health Service (NHS). According to the NHS, these quality standards describe markers of high-quality, cost-effective care that, when delivered collectively, should contribute to improving the effectiveness, safety and experience of care for people with drug use disorders. The NHS recommends though, to consider also national and local guidelines on training and competencies, for example competencies set out in the Drugs and Alcohol National Occupational Standards (DANOS) (NHS; <http://publications.nice.org.uk/quality-standard-for-drug-use-disorders-qs23/introduction-and-overview>).

Example: In the Czech Republic, a certification system was developed and implemented, which includes certification standards and a defined certification process. These standards refer to professional competencies for facilities and programmes

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All information concerning Slovakia in this chapter is based on the previous report (Trimbos 2006)

providing professional services to problem substances users and persons with a substance addiction. To consider scientific evidence, the standards were based on WHO guidelines and guidelines from the UK (NFP–Czech–Republic 2009).

CR 3.2: supporting the inclusion of needs assessments at the initial stage of any programme;

A policy, according to CR 3.2, exists in 27 countries but not in Bulgaria, Hungary, the Netherlands (no information for Romania). In Bulgaria and Slovakia it is pending for approval, in Hungary and the Netherlands this policy does not exist because this topic is not a task of the national government.

CR 3.3: developing and implementing adequate evaluation protocols for all drug prevention and risk reduction programmes;

A policy, according to CR 3.3, exists in 21 countries but not in Austria, Bulgaria, Hungary, Latvia, Malta, the Netherlands, Slovakia, Iceland and Turkey (no information for Romania and Slovakia). In Malta and Slovakia it is pending for approval, in the other countries this policy does not exist because this topic is not a task of the national government or because of other undisclosed reasons.

CR 3.4: establishing and implementing evaluation quality criteria, taking into account the recommendations of the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA);

A policy, according to CR 3.4, exists in 22 countries but not in Austria, Croatia, France, Hungary, Malta, the Netherlands, Slovakia and Turkey (no information for Romania and Iceland). In Slovakia it is pending for approval, in the other countries this policy does not exist because this topic is not a task of the national government or because of other undisclosed reasons.

CR 3.5: organising standardised data-collection and information dissemination according to the EMCDDA recommendations through the REITOX national focal points;

A policy, according to CR 3.5, exists in 30 countries but not in Iceland (no information for Romania). In Iceland this policy does not exist because of undisclosed reasons.

In all EU Member States as well as in the acceding resp. candidate countries, a national REITOX Focal Point was established to organise and ensure standardised data-collection and information dissemination according to the EMCDDA recommendations (see EMCDDA; <http://www.emcdda.europa.eu/about/partners/reitox-network>).

CR 3.6: making effective use of evaluation results for the refining and development of drug prevention policies;

A policy, according to CR 3.6, exists in 27 countries but not in Austria, Bulgaria, Hungary and Iceland (no information for Romania). In Bulgaria it is pending for approval, in Hungary this policy does not exist because this topic is not a task of the national government. In Austria and Iceland this policy does not exist because of undisclosed reasons.

Several countries evaluate (regularly) their national drug strategies or plans to refine and develop drug prevention policies.

Example: In Denmark, on the basis of a national action plan 19 specific and new initiatives were launched in October 2010, including initiatives in the area of harm reduction. These initiatives are monitored on an ongoing basis and evaluated with the purpose to adjust the national drug policy (NFP-Denmark 2011).

CR 3.7: setting up evaluation training programmes for different levels and audiences;

A policy, according to CR 3.7, exists in 22 countries but not in Bulgaria, Croatia, Hungary, Iceland, Latvia, Malta, and Slovakia (no information for Romania, Turkey and France). In Hungary and Latvia this policy does not exist because this topic is not a task of the national government, in Slovakia because it is not a priority and in the other countries because of other undisclosed reasons.

CR 3.8: integrating innovative methods that enable all actors and stakeholders to be involved in evaluation, in order to increase acceptance of evaluation;

A policy, according to CR 3.8, exists in 21 countries but not in Austria, Bulgaria, Croatia, France, Hungary, Iceland, Latvia, the Netherlands, and Slovakia (no information for Romania and Turkey). In Bulgaria this policy is pending for approval. In Austria, Hungary and Latvia this policy does not exist because this topic is not a task of the national government, in Slovakia because it is not a priority and in France, Iceland and the Netherlands it does not exist because of other undisclosed reasons.

CR 3.9: encouraging, in collaboration with the Commission, the exchange of programme results, skills and experience within the European Union and with third countries, especially the applicant countries.

A policy, according to CR 3.9, exists in 28 countries but not in Austria and Iceland (no information for Romania and Ireland). In Austria this policy does not exist because this topic is not a task of the national government. In Iceland this policy does not exist because of other undisclosed reasons.

Many countries support the initiatives of the Commission to exchange programme results, skills and experiences by participating in various programmes for candidate countries (e. g. NFPs as REITOX coaches within the IPA programme) or in EU funded projects or conferences – e. g. conference on European Minimum Quality Standards (EQUS) in Brussels.

Table 12.3 gives an overview about the existence of the respective policies in the countries investigated (for more details see annex 4).

Concerning the implementation of Council Recommendation 3 standardised data collection CR 3.5 is estimated to be implemented to a large extent by 26 of 31 countries. Using scientific evidence of effectiveness as a main basis to select the appropriate intervention CR 3.1 is estimated to be implemented to a large extent by 18 countries (2nd highest rating concerning implementation). Only five countries estimate a high rate of implementation for the involvement of actors and stakeholders in evaluation (CR 3.8). Figure 12.41 shows the policy makers' estimation of the level of implementation concerning CR 3.1 to CR 3.9 For all sub recommendations of CR 3 more than half of the policy makers estimate an increase or a strong increase in the level implementation since 2005 (Figure 12.42).

Table 12.3:
Council Recommendation 3 – overview of existence

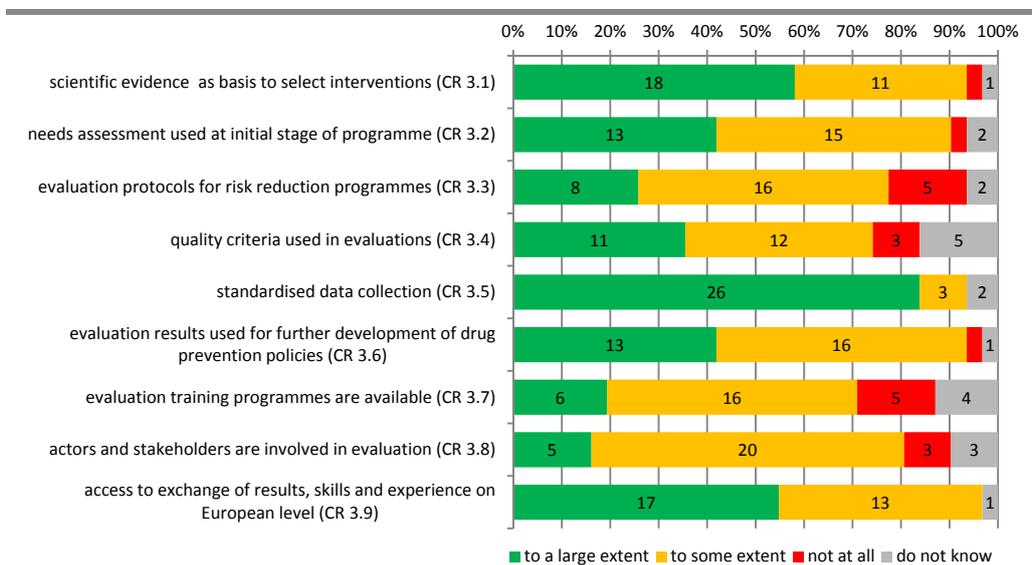
Recommendation	3.1		3.2		3.3		3.4		3.5		3.6		3.7		3.8		3.9		total
	exists	based on CR																	
Austria	1		1		0	NT	0	NT	1		0	OT	1		0	NT	0	NP	4
Belgium	1		1	1	1		1		1	1	1	DIV	1		1		1		9
Bulgaria	0		0	PA	0	OT	1	1	1	1	0	PA	0		0	PA	1	1	3
Croatia	1		1		1		0		1		1		0		0		1		6
Cyprus	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	9
Czech Republic	1		1	1	1	1	1	1	1		1		1		1	1	1		9
Denmark	1		1		1		1		1		1		1		1		1		9
Estonia	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	9
Finland	1		1		1	1	1		1		1		1		1		1		9
France	1		1			OT	0	OT	1		1				0	OT	1		5
The former Yugoslav Republic of Macedonia	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	9
Germany	1	1	1		1	1	1	1	1	1	1		1		1		1	1	9
Greece	1		1		1		1		1		1		1		1		1		9
Hungary	0	NT	0	NT	0	NT	0	NT	1		0	NT	0	NT	0	NT	1		2
Ireland	1		1		1		1		1		1		1		1				8
Iceland	1		1		0	OT			0	OT	2								
Italy	1		1	NT	1	NT	1		1		1	NT	1	1	1	1	1		9
Latvia	0	NT	1	1	0	NT	1	1	1	1	1	1	0	NT	0	NT	1	1	5
Lithuania	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	9
Luxembourg	1		1		1	OT	1		1		1		1		1		1	1	9
Malta	1		1		0	PA	0	OT	1		1		0	OT	1	1	1		6
Montenegro	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	9
Netherlands	1		0	NT	0	OT	0	NT	1		1		1		0	OT	1		5
Poland	1		1		1		1		1		1		1		1		1		9
Portugal	1		1		1		1		1		1		1		1		1		9
Romania																			
Slovakia	1	1	0	PA	0	PA	0	PA	1	1	1	NP	0	NP	0	NP	1	1	4
Slovenia	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	9
Spain	1		1		1		1		1		1		1		1		1		9
Sweden	1		1		1		1		1		1		1		1		1		9
Turkey	1	1	1		0	OT	0	OT	1	1	1	1					1	1	5
UK	1		1		1	1	1	1	1		1		1	1	1	1	1		9
Total	28		27		21		22		30		27		22		21		28		

Remarks: 0=no; 1=yes; blank=no information

Reasons why not based on Council Recommendation: OT=other reason | NP=not a priority | NT=not task national government | PA=pending for approval | NA=not available | DIV=diverging answers.

Source: GÖ FP, policy maker survey; graphic representation: GÖ FP

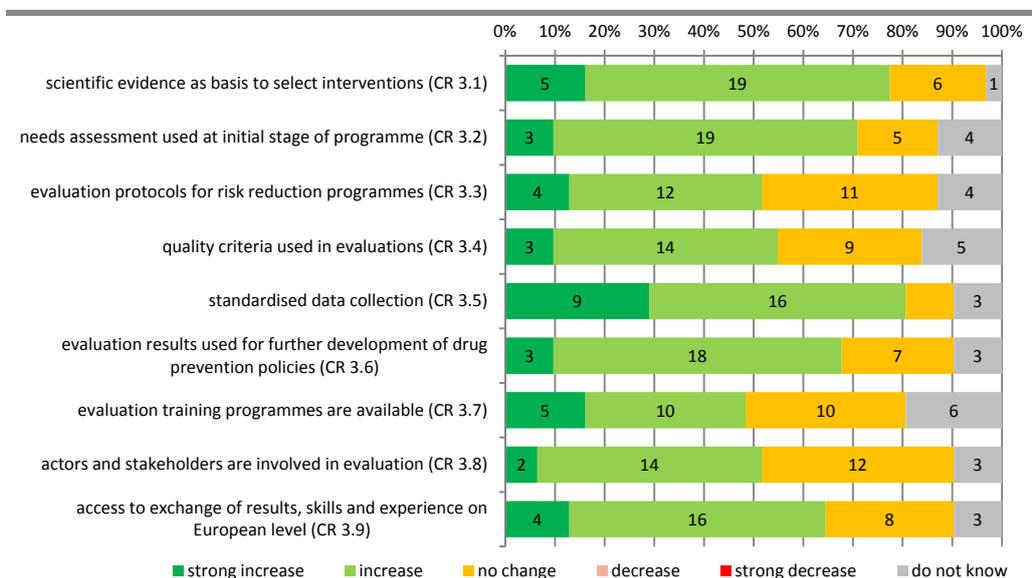
Figure 12.41:
Council Recommendation 3 – estimation of implementation



Remark: data refer to all 31 countries from the policy maker survey

Source: GÖ FP, policy maker survey; graphic representation: GÖ FP

Figure 12.42:
Council Recommendation 3 – estimation of change of implementation



Remark: data refer to all 31 countries from the policy maker survey

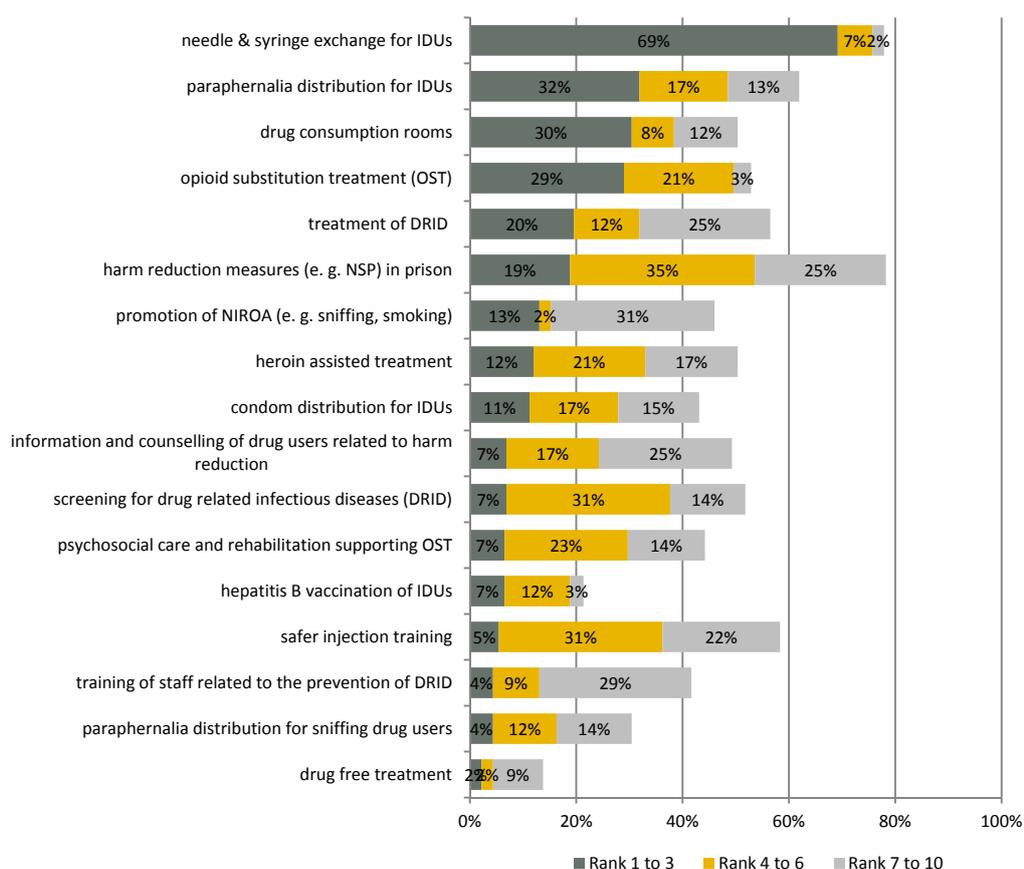
Source: GÖ FP, policy maker survey; graphic representation: GÖ FP

12.14 Most efficient measures to reduce drug-related harm according to the opinion of stakeholders

12.14.1 Prevention of drug-related infectious diseases

Figure 12.43:

Harm reduction measures whose implementation / expansion would have the biggest effect in reduction of prevalence of DRID among IDUs (opinion of stakeholders)



DRID=drug-related infectious diseases, IDU=injecting drug user, NIROA=non injecting route of administration, NSP=needle and syringe exchange programme, OST=opioid substitution treatment, STD=sexually transmitted diseases;

The exact formulation of the question was: "Please indicate the harm reduction measures whose implementation / expansion – to your opinion – would have the biggest effect in reduction of prevalence of infectious diseases among injecting drug users in your country/region. Please indicate 10 measures at maximum!"

Remark: data refer to 23 countries from the 24 countries covered by the stakeholder survey. Latvia is missing.

Source: GÖ FP, stakeholder survey; graphic representation: GÖ FP

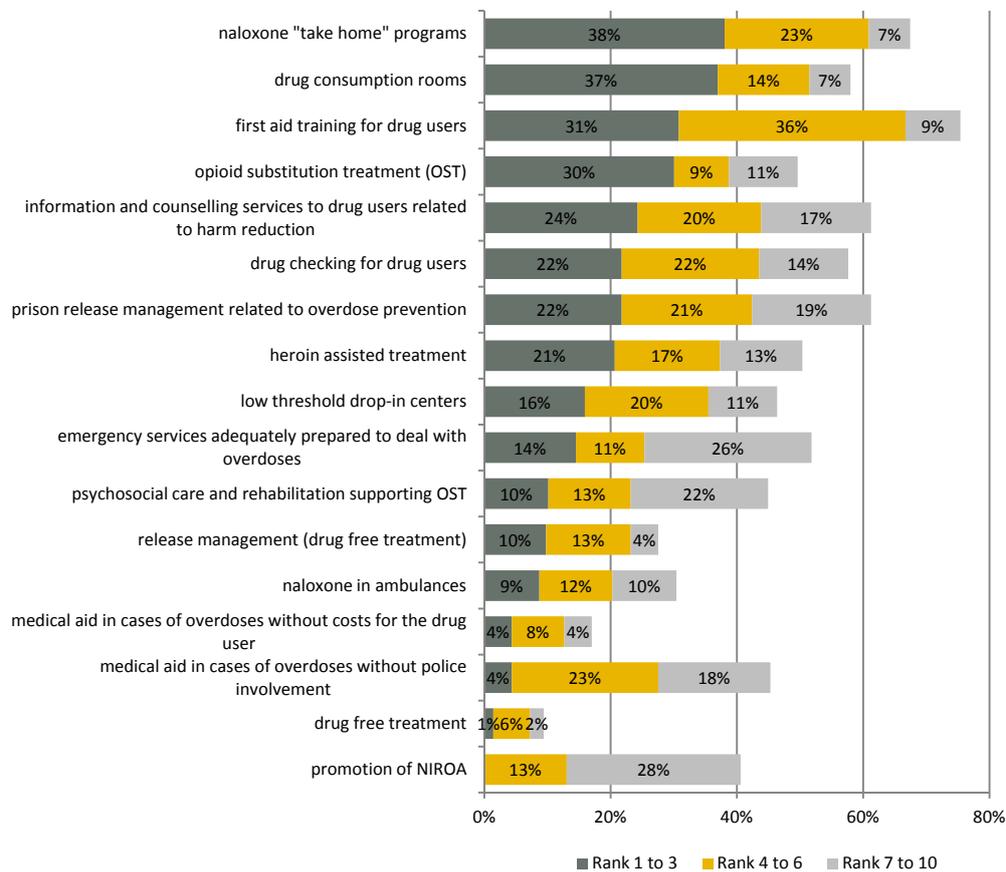
Asked for harm reduction measures whose implementation/expansion would have the biggest effect in reduction of prevalence of infectious diseases among injecting drug users (IDUs) in the respective country/region, needle and syringe exchange and harm reduction measures in prison were the most often quoted, followed by paraphernalia distribution for injecting drug users and safer injection training. Taking into account the rank given to the measures needle and syringe exchange for injecting drug users, paraphernalia distribution for injecting drug users and drug consumption rooms were quoted most often on rank 1 to 3 (see Figure 12.43, more details see annex 3).

12.14.2 Prevention of drug-induced deaths

Asked for measures whose implementation/expansion would have the biggest effect in reducing drug-related deaths (due to overdoses) in the respective country/region, first aid training for drug users and naloxone “take-home” programmes are quoted most often followed by information and counselling services to drug users focusing on harm reduction and prison release management. The measures naloxone “take-home” programmes, drug consumption rooms and first aid training for drug users were quoted most often on rank 1 to 3 (see Figure 12.43, more details see annex 3).

Figure 12.44:

Harm reduction measures whose implementation / expansion would have the biggest effect in reduction of drug-induced deaths according the opinion of stakeholders



OST=opioid substitution treatment, NIROA=non injecting route of administration;

The exact text of the question was: "Please indicate the harm reduction measures whose implementation / expansion – to your opinion – would have the biggest effect in reduction of drug-related deaths (deaths due to overdoses) in your country/region. Please indicate 10 measures at maximum!"

Remark: data refer to 23 countries from the 24 countries covered by the stakeholder survey. Latvia is missing.

Source: GÖ FP, stakeholder survey; graphic representation: GÖ FP

13 Modelling the relation between harm reduction measures and drug-related harm in the EU and candidate/acceding countries

The aim of this chapter is to provide a comprehensive overview of the available epidemiological data and the information on the coverage of harm reduction measures in the EU and candidate countries deriving from the policy questionnaires. This chapter brings together epidemiological data (see chapter 11), the effectiveness of harm reduction measures (see chapter 10) and the coverage/availability as reported by the policy makers (see chapter 12). Since the stakeholder survey only provides national data for 16 countries, the stakeholder data are not included (see chapter 12.1 and annex 3).

The aim of this chapter is to get some insight into the complex relationships between the supply of harm reduction measures and the treatment availability on the one side and the indicators for drug-related harm (epidemiological data) on the other. The leading questions were:

- » Did the Council Recommendation have an impact on the coverage/availability of harm reduction measures in the countries investigated?
- » What is the impact of the coverage/availability of harm reduction measures on drug-related harm (indicated by drug-induced deaths) and HIV infections via injecting drug use (IDU)?

In the **first step**, the main epidemiological and harm reduction data available from the EMCDDA standard tables were analysed regarding the trends from 2003 (the year of the Council Recommendation) till the most recent year (generally 2010 – for some data 2011).

In the **second step**, the association between two key indicators for drug-related harm (HIV infection rates via IDU and drug-induced deaths rates) is discussed.

In the **third step**, the different coverage reported in the policy questionnaire is comprehensively analysed according to the already introduced differentiation between EU 15 and EU 12 as well as candidate/acceding countries. In addition to the already introduced way of analysing the data, the data are looked at in the context of epidemiological trends. This provides first insights into the association of harm reduction measures and harm related to drug use.

In the **fourth step**, the association between the impact of the Council Recommendation and the Member States is discussed.

The **final step** brings together the information from the policy questionnaire on the impact of the Council Recommendation and the coverage of harm reduction measures and drug-related harm. For this purpose, a structural equation modelling approach (SEM) using AMOS was used. The use of multivariate analysis tools such as SEM or Logistic Regression allows identifying relevant aspects in a model holding other factors (covariates) on a constant level. This is essential to level out the effects of subpopulations and to identify the influence of the implementation.

Data remarks

There are several limitations and data remarks that must be kept in mind when conducting the analysis and interpreting the data.

The coverage/availability of harm reduction measures is a subjective assessment made by the policy makers. In chapter 12.1, the reliability of the data compared to stakeholder answers is discussed and the same pattern but different estimates concerning coverage were attributed.

The quality of epidemiological data varies dramatically among the countries. For example the rate of drug-induced deaths in the UK is more than six times higher than in France, which cannot be fully explained by harm reduction measures or low prevalence rates. It can be assumed that the data collection process varies significantly and the interpretation of the data should be made with caution. Apart from the raw data limitations, the correlation needs to be interpreted with caution. For example high coverage of needle exchange programmes can reduce the numbers of HIV infections via IDU (negative correlation), but high HIV rates could also cause an expansion of the needle exchange programmes (positive correlation).

Due to the concerns regarding the coverage of the available data, the focus was put on trend analysis. However, there are several limitations to this approach as well. The comparison of 2009/2010 data and 2003/2004 data within the same countries ignores the variability between the analysed countries. Furthermore, the very low absolute numbers (in particular among drug-induced deaths) hinders significant changes. Another important limitation about the association of coverage and significant changes is that it combines single-point measures (the coverage estimated in 2012) and trend data (from 2003 to 2010).

13.1 Comprehensive overview of the changes in drug-related harm and harm reduction measures 2003–2010

The country comparison in Europe should be made with caution, since there are still some differences between countries in their capacity to ascertain the drug-induced death cases (see chapter 11). Another major limitation is the remaining differences in coding, recording and extracting the drug-induced death cases. Ireland, for instance, has implemented a procedure of checking a special register, which probably partly explains the high rate of drug-induced deaths. Most national reporting systems have been stable over time, which allows, in the majority of countries, an analysis of the trend over time. Nonetheless, caution is needed here as well, as some countries have changed over time (e.g. the upgrade of the monitoring system).

Table 13.1 provides an overview of the trends of HIV (HIV infections newly diagnosed and AIDS diagnosed among injecting drug users according to ECDC), the number of drug-induced deaths, the needle exchange rates and the number of patients in opioid substitution treatment. A statistical test for significant differences between pooled 2003/2004 data and pooled 2009/2010 data was performed²⁰. The aim was to see if the Council Recommendation resulted in a decrease in drug-related harm (drug-induced death and HIV) and increases in harm reduction measures. The table should also provide clear patterns of countries (e. g. showing a decrease in drug-related harm and an increase in harm reduction measures) that could be used for further analysis. For example Lithuania has experienced an increase of HIV infections among IDUs and an increase in drug-induced deaths and at the same time the needle exchange declined. In Romania, the situation concerning HIV and drug-induced death has also worsened but the numbers of needle exchange and numbers of OST have increased. It is important to note that significant changes in drug-induced deaths and changes in HIV rates do not follow the same trends in most of the countries. Only seven countries (Bulgaria, Czech Republic, Italy, Lithuania, Romania, Spain, Croatia) report the same trends (or no significant changes) for HIV and drug-induced deaths.

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After a consultation with the EMCDDA, a Poisson distribution for the incidence and symmetric confidence intervals were assumed. A 5 % alpha error confidence interval for 2003/2004 data was calculated.

Table 13.1:

Trends in DRD, HIV, Needle Exchange, OST (significant differences between 2003/2004 and 2009/2010 data)

Country	DRD	HIV drug users	Needle Exchange ^e	OST
Austria	↔	↓ ⁱⁱ	n.a.	↑
Belgium	n.a.	↓	↑	↑ ⁱⁱⁱ
Bulgaria	↑	↑	↑	↑
Cyprus	↔ ^{iv}	n.a.	↑	n.a.
Czech Republic	↔	↔	↑	↑ ^v
Denmark	↓ ^{vi}	↔	n.a.	↑
Estonia	↑	↓	↑	↑
Finland	↑	↔	↑	↑ ^{vii}
France	↑ ^{viii}	↓	↑ ^{ix}	↑ ^x
Germany	↔	↓	n.a.	↑
Greece	↔	↑ ^{xi}	↑	↑ ^{xii}
Hungary	↔	n.a.	↑	↑ ^{xiii}
Ireland	↑ ^{xiv}	↓	n.a.	↑
Italy	↓	↓ ^{xv}	n.a.	↑
Latvia	↔	↓	↑	↑
Lithuania	↑	↑	↓	n.a.
Luxembourg	↔	n.a.	↓	↔ ^{xvi}
Malta	↔	n.a.	↑	↑
Netherlands	↔	↓	n.a.	↓ ^{xvii}
Poland	↑ ^{xviii}	↓ ^{xix}	↓	↑ ^{xx}
Portugal	n.a. ^{xxi}	↓	↓	↑ ^{xxii}
Romania	↑	↑ ^{xxiii}	↑ ^{xxiv}	↑ ^{xxv}
Slovakia	↔ ^{xxvi}	n.a.	↑	↑ ^{xxvii}
Slovenia	↔	n.a.	n.a.	n.a.
Spain	↓ ^{xxviii}	↓ ^{xxix}	↓	↓ ^{xxx}
Sweden	↑ ^{xxxi}	↔	↓ ^{xxxii}	n.a.
United Kingdom	↑	↔	n.a.	n.a.
Croatia	↔	↔ ^{xxxiii}	↑	↑
The former Yugoslav Republic of Macedonia	n.a.	n.a.	n.a.	n.a.
Iceland	n.a.	n.a.	n.a.	n.a.
Montenegro	n.a.	n.a.	n.a.	n.a.
Turkey	↑ ^{xxxiv}	n.a.	n.a.	n.a.

Remarks: ↔=no significant change, ↑=significant increase, ↓=significant decrease, n.a.=data not available (or only partial data), DRD=drug-induced deaths, HIV=human immunodeficiency virus, OST=opioid substitution treatment

Source: EMCDDA Statistical Bulletin 2012, Table DRD-2; ECDC/WHO 2011 data collection, EMCDDA Statistical Bulletin 2012, Table HSR-3; EMCDDA Statistical Bulletin 2012, Table HSR-5; GÖ FP=own calculation graphic representation: GÖ FP

For more methodological and data remarks, please refer to the EMCDDA Tables in annex 4.

- i No data collection 2004
- ii No 2003 data, 2004/2005 data used
- iii No data 2004 and 2010 available, only 2003 and 2009 data used
- iv No data for 2003, data 2004/2005 used
- v No data for 2004, only 2003 data used
- vi No data for 2003/2004 available, data 2005/2006 used, no data for 2010 available, 2008/2009 data used, due to a change in the national definition in 2006, earlier data are not strictly comparable with more recent data
- vii No data for 2010 available, only 2009 data used
- viii No data for 2010 available, 2008/2009 data used
- ix No data for 2005 and 2009 available, only 2003 and 2010 used
- x No data for 2004, only 2003 data used
- xi In order to cover the drastic increase of HIV infections, data for 2010 and 2011 used
- xii No data for 2004, only 2003 data used
- xiii No data for 2004, only 2003 data used
- xiv No data for 2010 available, 2008/2009 data used
- xv Regional data, no data for 2003, 2004/2005 data used
- xvi No data for 2004, only 2003 data used
- xvii No data 2004 and 2010 available, only 2003 and 2009 data used
- xviii No data for 2010 available, 2008/2009 data used
- xix No 2003 data, 2004/2005 used
- xx No data for 2004 available, only 2003 data used
- xxi Data starting 2008
- xxii No data for 2004, only 2003 data used
- xxiii In order to cover the drastic increase of HIV infections, data for 2010 and 2011 used
- xxiv No data for 2003, only 2005 data used
- xxv No data for 2004, only 2003 data used
- xxvi No 2003 data, 2004/2005 used
- xxvii No data for 2004, only 2003 data used
- xxviii No data for 2010 available, 2008/2009 data used
- xxix Regional data
- xxx No 2004 and 2010 data available, only 2003 and 2009 data used
- xxxi No data for 2010 available, 2008/2009 data used
- xxxii No 2003 and 2010 data available, only 2005 and 2009 data used
- xxxiii No 2009 data, 2008/2010 data used
- xxxiv No 2003/2004 data, 2005/2006 data used

Table 13.1 shows that most of the countries have either experienced an increase in drug-induced deaths or not recorded any significant changes. Only Denmark, Spain and Italy have experienced a significant decrease comparing 2009/2010 to 2003/2004. Looking at the HIV data, there seems to be a more positive trend and most countries have experienced a decrease or no significant changes. Only Bulgaria, Greece, Lithuania and Romania show a significant increase in HIV infections among injecting drug users.

13.1.1 Association of HIV and drug-induced deaths

As already indicated in Table 13.1, an increase (or decrease) in HIV infections among injecting drug users is not associated with an increase (or decrease) of drug-induced deaths in most countries (only Bulgaria, Romania and Lithuania show an increasing trend in drug-induced death and HIV rates). This does not come as a surprise, as the literature review reveals (see chapter 10) that infectious diseases among injecting drug users and drug-induced deaths are influenced partly by different harm reduction measures. Only OST is found to be effective in reducing HIV infection rate and in reducing the numbers of drug-induced deaths.

The correlation of the numbers of drug-induced deaths per 100.000 inhabitants in the EU countries with the available data and the numbers of HIV infections acquired via IDU per 100.000 inhabitants in EU countries with the available data is low. The association between HIV rates and drug-induced deaths rates varies between 2003 and 2010 from 0,265 in 2004 to 0,567 in 2007 (Spearman-correlation). Generally speaking, it is difficult to identify countries, where low HIV rates are accompanied by low drug-induced deaths rates and vice versa for most of the years.

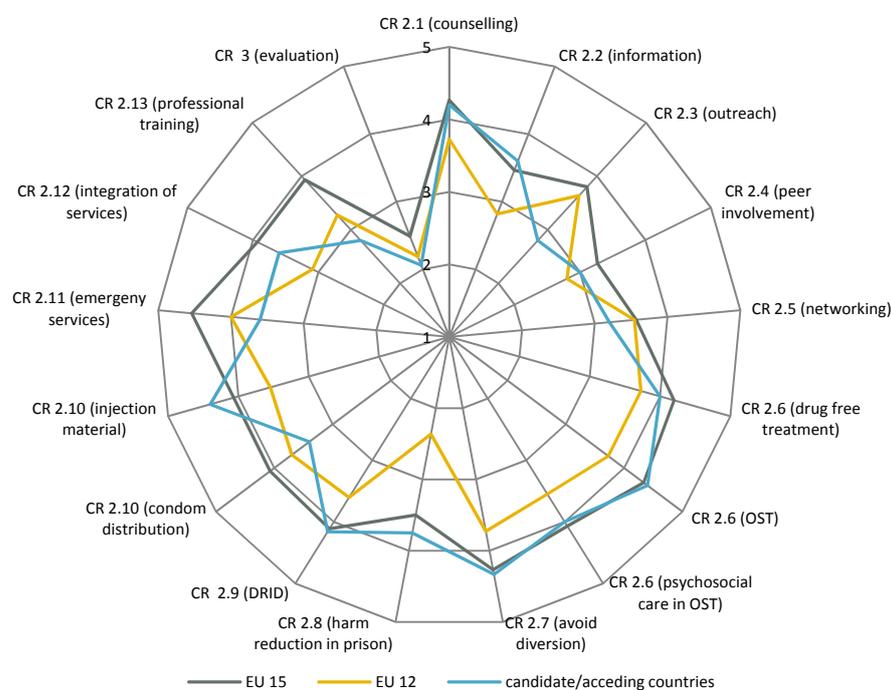
This correlation analysis and the results from Table 13.1 show that the numbers of drug-induced deaths and the numbers of newly diagnosed HIV infections among IDUs do not follow the same trends and are probably not influenced by the same factors (in accordance with results from the literature review – see above).

13.2 Coverage of harm reduction measures

As the first step, the coverage of harm-reduction measures in the EU is presented according to the definition of the EU 15 and the EU 12, as well as the candidate/acceding countries. The same differentiation but a different form of presentation was used in chapter 12. In order to provide a quick overview, the mean data for coverage/availability of CR 3 and CR 2.9 (infectious diseases) are presented. Figure

13.1 shows clearly that the EU 15 Member States report a broader coverage for all harm reduction measures stated in the Council Recommendation. The highest coverage is reported for counselling from the EU 15 and the EU 12 as well as the candidate/acceding countries. The harm reduction in prison is broadly lacking in particular in the EU 12. The coverage of harm reduction among the candidate/acceding countries does not provide a clear picture: the coverage/availability of some harm reduction measures is higher than in the EU 15, other harm reduction measures have a lower coverage/availability than in the EU 12.

Figure 13.1:
Coverage of harm reduction measures in EU 15 and EU 12 and candidate/acceding countries



DRID=drug-related infectious diseases, OST=opioid substitution treatment

Remark: Data refer to: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom, Croatia, the former Yugoslav Republic of Macedonia, Montenegro, Iceland, Turkey; The full wording of all CRs can be found in section 15.

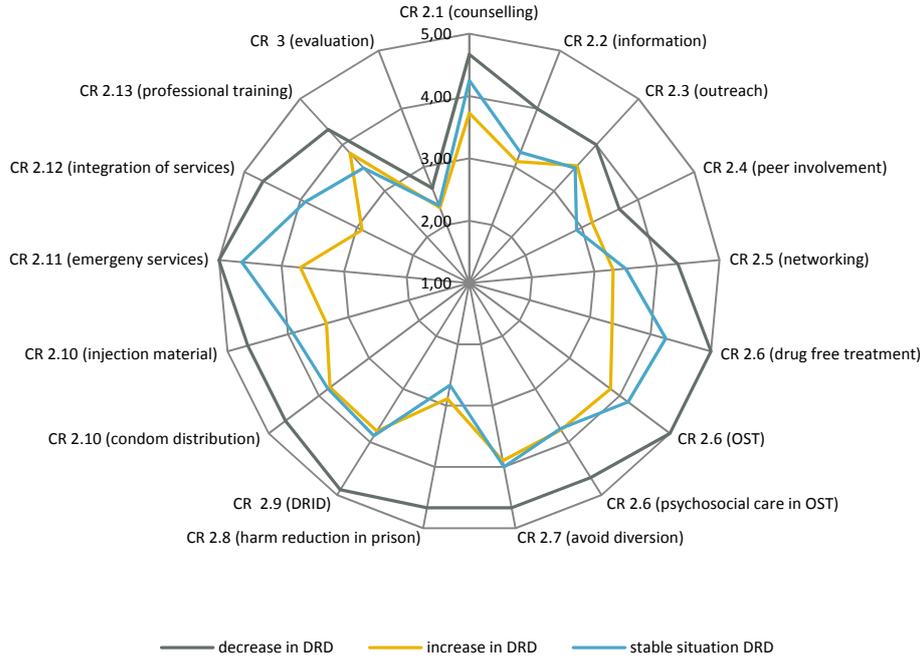
Coverage: 1=not available, 2=rare, 3=limited, 4=extensive, 5=full coverage

Source: GÖ FP, policy maker survey; graphic representation: GÖ FP

As mentioned above, the comprehensive overview of harm reduction measures and drug-related harm did not produce a consistent pattern of countries (see Table 13.1). In order to identify the association of drug-related harm and the coverage of available

measures, the following figures present the coverage of harm reduction measures (results from the policy questionnaire) according to countries with different trends of drug-induced deaths resp. HIV between 2003/2004 and 2009/2010.

Figure 13.2:
Coverage of harm reduction measures in countries with increasing, stable or decreasing numbers of drug-induced deaths



DRID=drug-related infectious diseases, DRD=drug-induced death, OST=opioid substitution treatment

Remark: Data refer to: Austria, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom, Croatia, Montenegro, Turkey; The full wording of all CRs can be found in section 15.

Coverage: 1=not available, 2=rare, 3=limited, 4=extensive, 5=full coverage

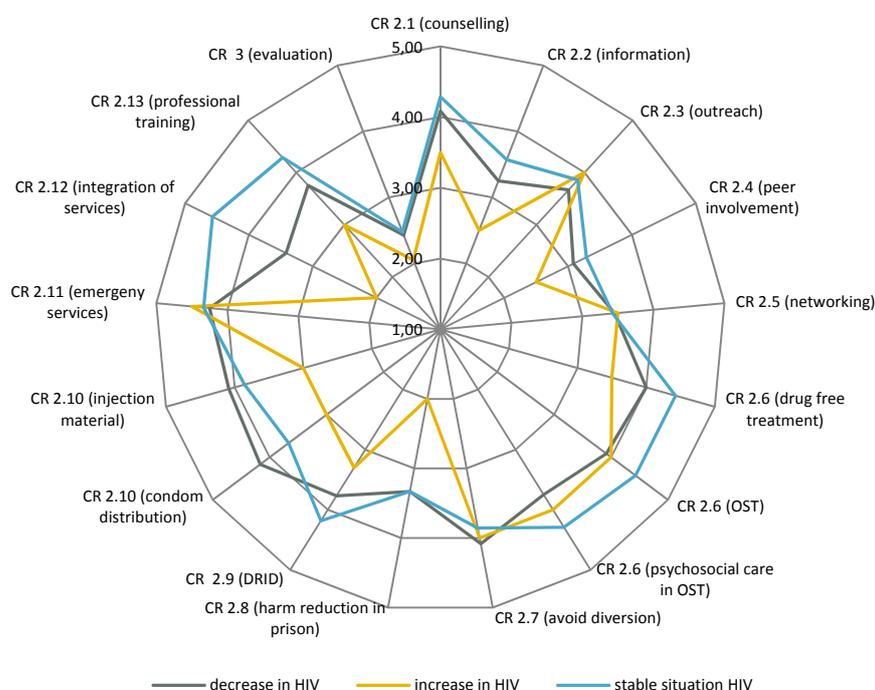
Source: GÖ FP, policy maker survey, Table 13.1; graphic representation: GÖ FP

Figure 13.2 shows that countries that have experienced a significant decrease in drug-induced deaths (Denmark, Spain and Italy; see Table 13.1) report the highest coverage of harm reduction measures. The pattern is less consistent comparing increasing and stable trends to the coverage/availability of harm reduction measures, but countries with an increase in the numbers of drug-induced deaths (Bulgaria, Estonia, Finland, France, Ireland, Lithuania, Poland, Romania, Sweden, United Kingdom and Turkey) tend to have a little lower coverage/availability than those with stable trends (Austria,

Cyprus, Czech Republic, Germany, Greece, Hungary, Latvia, Luxembourg, Malta, Netherland, Slovakia, Slovenia, Croatia).

Looking at the differences of coverage, in particular “integration of services” (CR 2.12), the availability of “drug treatment” (CR 2.6) and “harm reduction in prison” (CR 2.8) indicate the biggest gaps. A direct causal association between a high coverage of harm reduction measures in these fields and a decrease in the number of drug-induced deaths cannot be deducted, but it gives a strong hint for the direction of further research and analysis.

Figure 13.3:
Coverage of harm reduction measures in countries with increasing, stable or decreasing numbers of HIV acquired via IDU



DRID=drug-related infectious diseases, OST=opioid substitution treatment
 Remark: Data available for: Austria, Belgium, Bulgaria, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Netherlands, Poland, Portugal, Romania, Spain, Sweden, United Kingdom, Croatia, Montenegro; The full wording of all CRs can be found in section 15.
 Coverage: 1=not available, 2=rare, 3=limited, 4=extensive, 5=full coverage

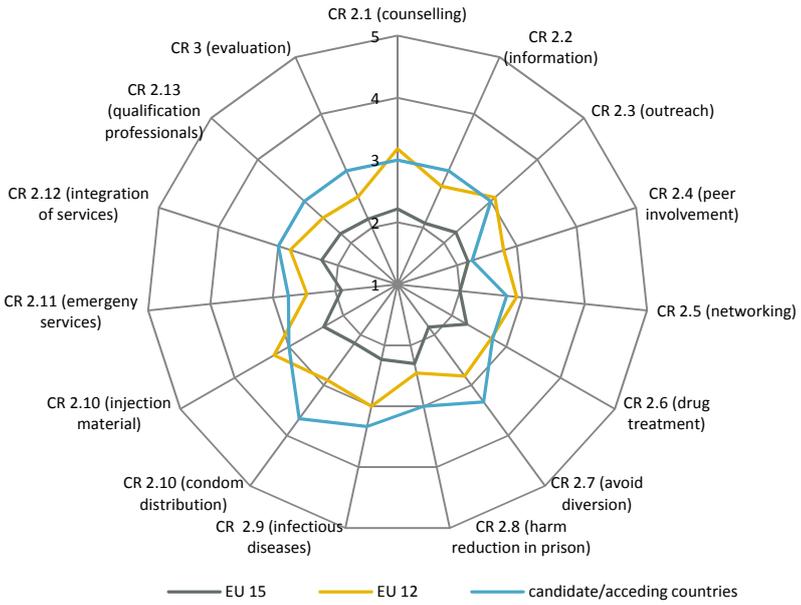
Source: GÖ FP policy maker survey, Table 13.1; graphic representation: GÖ FP

Figure 13.3 shows the reported coverage of harm reduction measures in the EU (from the policy questionnaire) according to increasing, decreasing or stable trends of newly

diagnosed HIV infections among injecting drug users. The picture is less consistent than for the trend concerning drug-induced deaths. Countries with a significant increase in HIV-infections via IDU (Bulgaria, Greece, Lithuania, Romania) report lower coverage/availability of most harm reduction measures than countries with stable or decreasing rates. The “integration of services” (CR 2.12) again shows the greatest differences, with the lowest coverage reported in those countries that show an increasing trend in IDU-related HIV infections, followed by harm reduction in prison. It is important to note that harm reduction measures associated with infectious diseases in particular (e. g. screening) in CR 2.9 show higher coverage for countries with stable or decreasing trends than those with HIV increase, but the differences are rather slim.

13.3 Influence of the Council Recommendation on harm reduction measures

Figure 13.4: Impact of the Council Recommendation on the coverage of harm reduction measures in the EU and candidate countries



Data available for: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, the former Yugoslav Republic of Macedonia, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom, Croatia, Iceland, Montenegro, Turkey; The full wording of all CRs can be found in section 15.

Impact: 1=no impact, 5=very strong impact

Source: GÖ FP, policy maker survey; graphic representation: GÖ FP

The impact of the Council Recommendation on the coverage/availability of harm reduction measures was higher (reported by the policy makers) in the EU 12 than in the EU 15. In the EU 15 the Council Recommendation was mainly considered to have had little impact, whereas in the EU 12 a medium impact was described. Again, the candidate/acceding countries show no clear picture, but the impact of the Council Recommendation was higher in the candidate countries than in the EU 15. It is important to keep in mind that the EU 15 report a higher coverage of harm reduction measures (see Chapter 12 and Figure 13.1) and have a higher “starting point”, for example regarding needle exchange and OST.

The highest impact of the Council Recommendation was measured on the coverage of “condom distribution” in the candidate and acceding countries and in “counselling” and “distribution of injection material” in the EU 12. The impact of the Council Recommendation in the EU 15 was on average “little”, for instance almost no impact on the prevention of diverting the substitution medications to the black market and no impact on the prevention of diversion of substitution medications to the black market and availability of naloxone in emergency services was reported.

13.4 Modelling the influence of the Council Recommendation on harm reduction

As discussed in chapter 13.1.1, the numbers of drug-induced deaths and the number of HIV infections via IDU show no stable correlation. This means that a high number of drug-induced deaths is not necessarily associated with a high number of HIV infections. Additionally, the literature review (see chapter 10) identified partly different influencing factors for overdoses and HIV infections. Due to these theoretical and empirical restraints, it was assumed that a general model including drug-induced deaths and HIV as an indicator of the effectiveness of harm reduction measures will not provide solid results. Therefore two models to measure the influence of the Council Recommendation on harm reduction were developed: one for HIV and one for drug-induced deaths. The models are calculated based on population rates and trend data. As stated above (see chapter 11), the quality of the numbers of drug-induced deaths and newly diagnosed HIV infections among injection drug users reported to the EMCDDA and ECDC varies dramatically and modelling the coverage of harm reduction services on low and high rates would be based on potentially biased data. It is assumed that the data collection systems in place did not change dramatically over the last few years and therefore conclusions regarding valid trends can be drawn from the provided data.

13.4.1 Modelling the influence of the Council Recommendation on harm reduction measures and drug-induced deaths

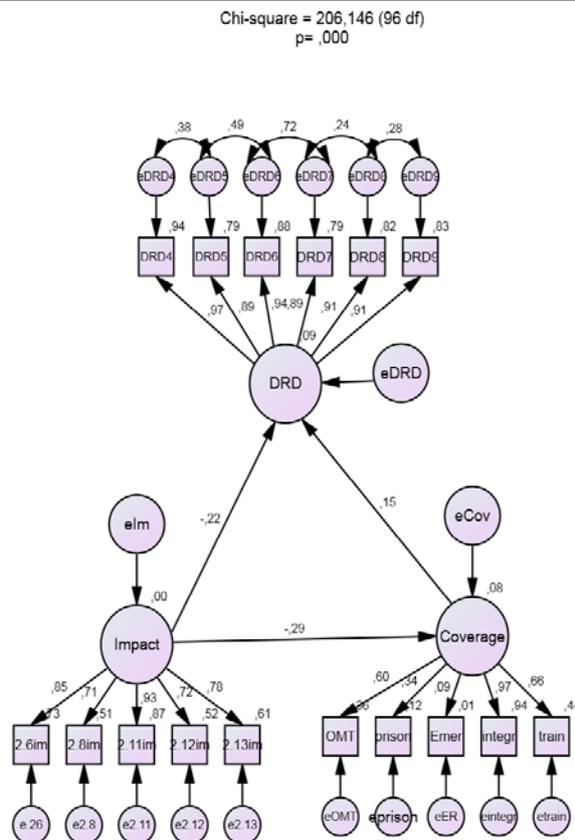
Factors that influence the risk of (opioid) overdoses identified by Darke and Hall (Darke/Hall 1997) – see also chapter 10.3) are opioid substitution treatment (OST), reducing risk factors (risk factor counselling in particular at prison release), improving responses at overdoses (i.e. cardiopulmonary resuscitation, ambulance services and police agreements), provision of naloxone, interventions to change the route of administration, medically supervised injecting rooms and heroin maintenance.

The Council Recommendation includes OST (CR 2.6), harm reduction in prisons (CR 2.8), preparation of emergency services to deal with overdoses (CR 2.11), integration of services (CR 2.12) and professional training on the reduction of health-related risks associated with drug dependence (CR 2.13). Those recommendations cover partly the above mentioned influencing factors of drug-induced deaths. However, major impact factors, such as peer naloxone provision (see chapter 10.3.2), are not covered by the Council Recommendation explicitly and therefore cannot be modelled.

In the first step, a regression analysis for the stated variables on significant changes on the number of drug-induced deaths was performed ($R^2=0,665$). Only integration of services showed a significant ($\alpha=0,05$) impact.

The general model for the impact of the Council Recommendation, the coverage of OST, harm reduction in prison, the preparation of emergency services and the professional training on the numbers of drug-induced deaths among people aged 15–64 shows a high probability level (chi-square: 206; df: 96; Figure 13.5). However, the model does not produce any significant association between the latent variables (drug-induced deaths rates in Europe, the impact of Council Recommendation and the coverage of selected harm reduction measures). The impact of the Council Recommendation shows a negative association to the overdose rate (suggesting that high impact would lead to lower drug-induced death rates), but the association is not significant. No significant association between “coverage of harm reduction measures” and “drug-induced deaths” was found.

Figure 13.5:
Model impact of the Council Recommendation and coverage of harm reduction on rates of drug-induced deaths²¹



Impact: 1=no impact, 5=very strong impact; Coverage: 1=not available, 5=full coverage; DRD rate: drug-induced deaths among 15-64 aged population per 100.000

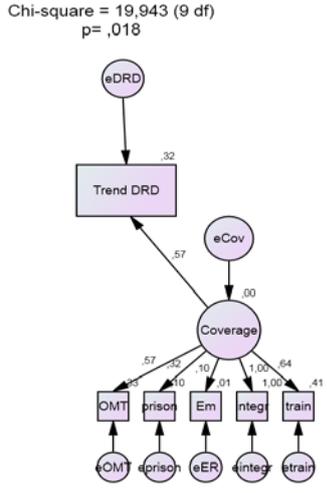
Source: GÖ FP policy maker survey; EMCDDA Statistical Bulletin 2012, Table DRD-2; graphic representation: GÖ FP

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Country included in the analysis: Austria, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, United Kingdom, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Romania, Slovenia, Spain, Sweden, Croatia and Turkey. For policy makers stating that the impact of the Council Recommendation was unclear, the impact was considered "no impact". This was necessary to overcome the substantial missing data concerning the impact of the Council Recommendation. If the coverage of treatment was unknown no coverage was assumed in order to minimize missing data. Drug-induced death rates (DRD): only 2004 to 2009 data used. Turkey: the drug-induced deaths rates for 2004 were taken from 2005 for DRD rates 2007 the mean of 2006 and 2008 data used. Denmark: the DRD rates for 2004 were taken from 2005.

As already detected in an earlier factor analysis, the different coverage of harm reduction measures show rather low correlations. This can be seen in particular for the variable “availability/coverage of emergency services adequately prepared to deal with overdoses”: The “coverage of emergency services” is not explained/influenced by the latent variable “coverage of services”. The availability of harm reduction measures in prison also shows a very low squared multiple correlation with “coverage of services”. This (together with the conducted factor analysis) indicates that a high (or low) coverage of emergency services and harm reduction in prisons is not correlated with high (or low) coverage of OST or integration of services. On the contrary, a high (or low) impact of one part of the Council Recommendation is correlated with a respectively high (or low) influence of other parts of the Council Recommendation.

Figure 13.6:
Model: Coverage of harm reduction on changes in drug-induced deaths²²



Coverage: 1=not available, 5=full coverage; drug-induced deaths (DRD): 1=significant increase from 2003 to 2010, 2=no significant change, 3=significant decrease from 2003–2009

Source: GÖ FP policy maker survey; Table 13.1; graphic representation: GÖ FP

A model just for the coverage and the significant changes in the number of drug-induced deaths (see Figure 13.6) was also calculated. The model analyses the effect of low or high coverage of harm reduction measures associated with drug-induced

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Country included in the analysis: Austria, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, United Kingdom, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Romania, Slovenia, Spain, Sweden and Turkey. If the coverage of treatment was unknown no coverage was assumed in order to minimise missing data

deaths (as stated by the policy makers) and significant increases, decreases or stable trends among drug-induced deaths.

The model shows a significant influence of “Coverage of harm reduction measures” on the trends of drug-induced deaths (32 % of the variance in the trends of drug-induced deaths are explained by the factor “coverage”). When the coverage goes up, the chances of a stable or decreasing number of overdoses goes up. As mentioned above, the latent variable “coverage” mainly explains the variations within the “integration of services”, “professional training on the reduction of health-related risks associates with drug dependence” and “OST”.

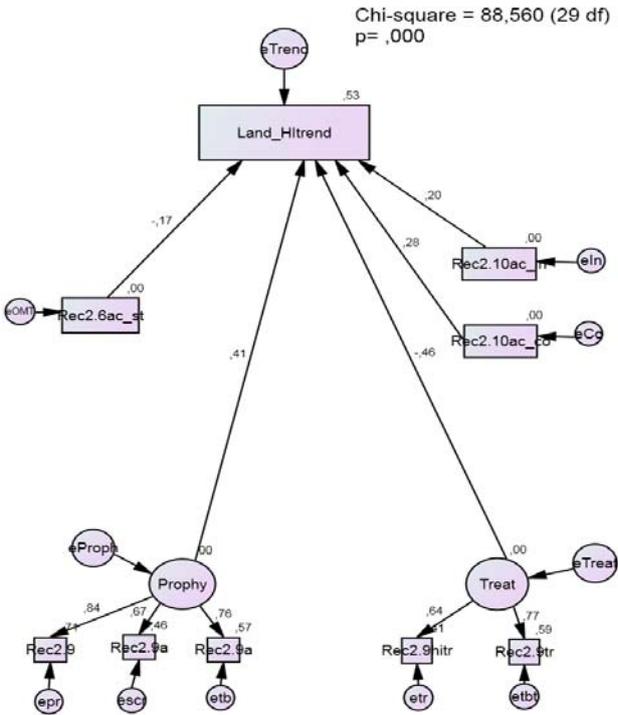
13.4.2 Modelling the influence of the Council Recommendation on harm reduction and HIV infections acquired via IDU

Harm reduction measures aimed at reducing HIV infections among injecting drug users include (see also chapter 10.2) OST, needle exchange programmes and prophylactic and treatment measures, as well as needle exchange in prison. The Council Recommendation covers OST (CR 2.6), prophylactic and treatment measures (CR 2.9) and distribution of injection materials and condoms (CR 2.10). Those variables are analysed in order to model the effect of these harm reduction measures on HIV. As stated above, the analysis is conducted in order to study the impact of the Council Recommendation and the impact of the harm reduction measures on the HIV rates and the HIV-trends. All models show a good model fit, but looking at the factor loadings, the results are rather inclusive. The baseline model focuses on the influence of the Council Recommendation and harm reduction measures on the HIV rates. Countries that report a high impact of the Council Recommendation on the distribution of injecting materials report higher HIV rates and therefore a high impact is significantly associated with high HIV rates²³. A high impact of CR 2.9 (prophylactic measures), in turn, is associated with a significant negative influence on HIV rates. The OST coverage shows a significant negative association with HIV rates. If the same model is calculated without the impact of the Council Recommendation, OST is again negatively associated with HIV rates (the high OST coverage leading to lower HIV rates) and no significant association between the distribution of injecting material and other prophylactic measures (e. g. screening) is found.

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This can partly be explained by the higher impact of the Council Recommendation in the EU 12, which also report higher HIV infection rates.

Figure 13.7:
 Model: Coverage of harm reduction on changes in drug-related HIV infections²⁴



Coverage: 1=not available, 5=full coverage; Land_Hltrend: 1=significant increase from 2003 to 2010, 2=no significant change, 3=significant decrease from 2003–2009

Source: GÖ PF policy maker survey; Table 13.1; graphic representation: GÖ FP

When looking at the significant changes in HIV rates from 2003 to 2010, the picture changes. Now, a high coverage of injecting materials and prophylactic measures associated with a decrease in the number of newly diagnosed HIV infections and high rates of OST coverage and treatment options show negative associations (e.g. high coverage implies stable or increasing trends). Due to these different outcomes referring either at the rates or the trends, a general conclusion for the impact of harm reduction on new HIV infections among IDUs cannot be drawn from this model.

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 Country included in the analysis: Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, United Kingdom, Greece, Ireland, Italy, Latvia, Lithuania, Netherlands, Poland, Portugal, Romania, Spain, Sweden. If the coverage of treatment was unknown, no coverage was assumed in order to minimise missing data.

14 Conclusions and recommendations

This report provides an overview of the availability and coverage of harm reduction measures in the EU, Croatia, the former Yugoslav Republic of Macedonia, Iceland, Montenegro and Turkey and discusses the evidence of their effectiveness. A special focus was put on the impact of the Council Recommendations and on developing recommendations for improvements in the field of harm reduction. The following conclusions and recommendations are based on the literature review, the analysis of the current situation and the recommendations of the stakeholders for future interventions. First, general conclusion on the effectiveness of the interventions are presented and discussed. In a second step, concrete recommendations have been elaborated, addressing the EU level, the national level and the harm reduction sites.

There exists strong **scientific evidence** for the effectiveness of opioid substitution treatment (OST) to reduce the infection risk in connection with drug-related infectious diseases as well as mortality. Interruptions of OST are a risk factor for drug-induced deaths. Challenges for the future are to clarify how the coverage can be increased further (e. g. to avoid waiting lists), how interruptions can be avoided and how OST concerning substances and regimes can be diversified to meet the needs of different subgroups of opioid addicts. As for the syringe provision through specialised programmes, there is strong scientific evidence concerning the reduction of infection risk, too. Challenges include improving the coverage and dealing with other routes of administration. On the one hand, it has to be clarified if and how needle exchange programmes (NSPs) can be used to promote other ways of administration than IDU. On the other hand, there are signs that injecting as a route of administration is decreasing, while delivering safer use materials and information for other routes of administration gets more relevance. Information, education and communication are effective when the setting is appropriate and messages are provided in an adequate form by trustable persons. One possibility to assure the right setting is outreach work. Since peers are the most trustable persons in many aspects peer involvement which has proven to be effective is a good strategy. In the last decade, the evidence on heroin assisted treatment as a second line intervention, drug consumption rooms and peer naloxone programmes has increased a lot. Based on this evidence, it can be assumed that these interventions are effective, but they should be further monitored and evaluated. There is strong evidence concerning the effectiveness of harm reduction in prison. Vaccination for hepatitis B, treatment of HIV, HBV and HCV in IDUs are effective measures. The treatment for HCV is a particularly effective instrument of infection prevention for others, too. Drug Checking is considered an integrated service that always combines chemical analysis with advice or counselling. Although there is no new evidence on the effectiveness of Drug Checking programmes, it might be worth to conduct new studies; on the one hand, because Drug Checking/counselling might be a reaction to the emerging of new psychoactive substances on the markets, on the other

hand, because professionalisation took place concerning testing and counselling methods during the last few years. The possible benefit of measures to avoid shifting from other routes of administration to injecting drug use (IDU) and to foster shifting from IDU to other routes of administration is pointed out in scientific literature. However, there is hardly any evidence on concrete projects

To summarise the **epidemiologic situation** concerning **drug-related harm**, it can be stated that a significant reduction of HIV infections among IDUs in most countries has been achieved but infection rates of hepatitis C are still high in many countries. Recent HIV-outbreaks in Greece and Romania show that HIV infection rates can increase rapidly under specific conditions including low coverage of harm reduction measures. High rates of HCV infection can be seen as an indicator for the risk of a HIV-outbreak. It was not possible to reduce direct drug-induced deaths since 2003 in most countries, although coverage of OST has increased. On the one hand, measures to improve retention rates in OST and to avoid interruptions (e. g. prison, attempts to become drug-free with no adequate indication) are necessary. On the other hand, interventions focusing on overdose risk, such as drug consumption rooms and peer naloxone programmes, should be considered. Prison release is a risk factor for overdoses. Adequate throughcare including prison release management and continuation of OST in prison as well as over the period of release is crucial.

The situation concerning **harm reduction measures** has improved significantly in most countries. **Coverage** of OST and NSP has increased considerably but especially NSP is still far from having full coverage in all countries. While OST is now available in many prisons, NSP is not. Therefore, prisons still constitute a high risk environment for infections with HIV or HCV and a driving factor for infectious diseases among injecting drug users (IDUs). Therefore, improvements in the prison setting are very urgent. Heroin assisted treatment as a second line intervention, Drug Checking, peer naloxone programmes and drug consumption rooms have been implemented only in a few countries. In the times of economic crises, the financing of the status quo and the expansion of harm reduction is an important issue in all countries. Some EU 12 Member States (e. g. Bulgaria and Romania), where harm reduction projects were initially funded by the Global Fund to Fight AIDS, Tuberculosis, and Malaria, are currently struggling to ensure national funding.

The **role of the Council Recommendation on harm reduction** can be judged as important, especially in the countries joining the EU in 2004 or later (EU 12). A further support on the EU level is requested from organisations involved in harm reduction. A clear new statement on harm reduction can help to foster the expansion of harm reduction measures. These EU recommendations should include in particular new measures, like drug consumption rooms and peer naloxone programmes related to the reduction of drug-induced death, and give a special focus to prisons (OST, NSP and adequate throughcare). In addition, the new recommendations should cover new areas

like housing, social re-integration and occupation because these are the main factors for stabilisation (or de-stabilisation if lacking). However, also existing harm reduction measures such as OSP and NSP as the backbone of any harm reduction strategy need to be strengthened.

There has been very good progress in **data availability** in the time-span from 2003 to 2010. Thanks to the continuous efforts of the EMCDDA towards the harmonisation and expansion of data collection, a lot of comparable data that allow describing the epidemiology of the drug situation and harm reduction measures are available. Unfortunately, data for time-series are not available for all countries; even basic data to analyse drug-related harm and availability of measures of harm reduction are missing in some countries. It has to be taken into account that absolute numbers (e. g. number of drug-induced deaths) are influenced by the quality of the respective monitoring system, too. Therefore country-specific comparisons have to be made with caution and should be avoided for some countries entirely. The implementation of **adequate evaluation protocols** for all drug prevention and risk reduction programmes, as well as the **involvement of all actors and stakeholders in evaluation** could be improved.

Based on the literature review and the analysis of the situation concerning harm reduction, the following concrete recommendations have been elaborated. These recommendations implicate activities on different levels: EU-policy-level, national-policy-level and the level of practical implementation in the field.

14.1 Political strengthening of harm reduction

Harm reduction still does not remain politically undisputed. While in many countries harm reduction measures have become well-implemented in the last decade, in some countries steps backwards can either be observed or are feared. Moral barriers and the prioritisation of abstinence-orientated services by some decision makers remain major obstacles for harm reduction services (stakeholder survey). Many stakeholders express concerns regarding the financing of harm reduction measures in the future due to the financial crisis. However, there are also objections by uninformed or despondent decision makers. The harm reduction approach should be strengthened further in a follow-up policy work at the EU level.

14.2 Syringe provision through specialised programmes

Syringe exchange for injecting drug users (IDUs) is an integral part of drug policies in all EU Member States and candidate countries, with the exception of Turkey. However, nearly all countries where respective data are available miss the WHO, UNODC, UNAIDS criteria of 200 syringes per IDU per year for good coverage concerning HIV prevention. This is a major obstacle, given that the levels required for the prevention of hepatitis C (HCV) are likely to be much higher. Activities to improve the coverage of the availability of sterile needles and syringes especially in rural areas are needed. Especially countries with an increase of HCV prevalence (Austria, Bulgaria, Cyprus, Greece and Romania) or of newly diagnosed HIV or high HIV rates among IDUs (Bulgaria, Estonia, Latvia, Lithuania, Greece, Portugal, Romania) are called upon to take some actions.

14.3 OST improvement of coverage and organisation

Coverage of OST has increased significantly since 2003. However, not in all countries coverage is regarded as full or extensive, and waiting lists for OST are common. Other challenges for practice and research are the diversification of OST according to substances used and of routes of administration and regimes (e. g. OST via drug treatment centres versus OST via general practitioners) in order to meet the needs of different groups of clients. The main purpose should be to avoid interruptions which are a risk factor, especially concerning drug-induced deaths. In this respect, clear indications for the change from OST to drug-free treatment are needed because failed attempts to become drug-free might increase the risk of overdoses. Another factor in avoiding interruptions is that the parallel consumption of other drugs should not be a reason to suspend someone from OST. Only Spain, Italy and Denmark have experienced a significant decrease in drug-induced deaths during the last decade. Thus, improvements in this field seem to be necessary in almost all countries. In addition, heroin assisted treatment should be expanded as a second line intervention.

14.4 Harm reduction in prison

While OST is now available in many prisons, syringe provision through specialised programmes (NSP) is not. The coverage of harm reduction in prison is estimated to be very low in general. Therefore, prisons are still a high risk environment for infection with HIV or HCV and a driving factor for infectious diseases among IDUs. There is a high risk of fatal overdoses after prison release which shows the importance of adequate prison release management (throughcare). The conclusion is that a lot has to be

done in this area. The implementation of NSP, which is possible and effective (see Spain for example), as well as the improvement of OST coverage and adequate throughcare including prison release management (assuring continuation of OST in prison and after prison release) is necessary. To speed up the full implementation of harm reduction measures in prison, this issue should be especially highlighted in a follow-up policy work at the EU level.

Example: Spain provides a high standard and elaborated prison-based harm reduction programme that includes also pre-release education and post-release treatment referral to community services (WHO 2010).

Example: Models of good practice in pre-release counselling on overdose risks or overdose prevention training were identified in Belgium (Flemish prisons) and Portugal.

14.5 Naloxone “take-home” programmes

Asked which implementation/expansion of harm reduction measures would have the biggest effect on reducing the numbers of drug-induced deaths (due to overdoses) in the respective country/region, first aid training for drug users and naloxone “take-home” programmes were quoted most often by civil society organisations. Based on the results from the evaluation studies, the recommendations from experts and the analysis of the objections against naloxone, it can be concluded that naloxone is a safe drug to use and peer naloxone programmes – in combination with emergency training – should be expanded in Europe to decrease the number of drug-induced deaths.

Example: In the United Kingdom, the project “Take Home Naloxone” (THN) provides training on the administration of naloxone and first-aid in case of an overdose event. After the training has been completed, THN kits are issued to opiate users and their carers (EDDRA).

14.6 Use of emergency services

The use of emergency services is an important aspect in preventing drug-induced deaths. However, the use of emergency services and its impact on harm reduction is hardly studied. One major aspect is the (perceived) risks of police arrests associated with calling emergency services or the fear of violating conditions of probation. More research is needed to identify and overcome obstacles (e. g. legal implications) when calling ambulance services during an overdose in Europe. Furthermore, it is important that expenses for the hospital stay as well as for the rescue effort are paid by the health insurance and not by the patient.

Example: In Luxembourg, a law exempts drug users who call for assistance in case another user is in need of medical help from prison sentences and from fines in certain circumstances. In general, witnesses meeting these conditions are not prosecuted. As an accompanying measure, an information flyer has been elaborated jointly with field agencies and the Ministry of Health and broadly distributed. The flyer contains useful information on safer injection and advice in case of overdose events (NFP–Luxembourg 2011).

14.7 Drug consumption rooms

It was not possible to reduce the number of drug-induced deaths in most of the countries from 2003 to 2009 (see section 11.3). Additional measures focusing on preventing drug-induced deaths are necessary. According to the stakeholders, the implementation of drug consumption rooms would be the second most effective measure to reduce drug-induced deaths after peer naloxone programmes. Based on evidence from recent literature on the effectiveness to reduce mortality and on the absence of negative consequences of consumption rooms, this measure can be recommended. Implementation should be accompanied by adequate monitoring and evaluation in order to strengthen the scientific base.

Example: In Germany, 28 drug consumption rooms exist with the objective to secure survival and stabilisation of the health conditions of drug users, as well as to reach those drug users, who are not in contact with the drug help system otherwise. Drugs are brought along to the drug consumption rooms by the drug users and infection prophylaxis is systematically provided by the staff. Minimum standards are defined in the Narcotics Act (NFP–Germany 2011).

14.8 Counselling, outreach and peer involvement

Counselling and outreach are mainly part of other interventions and proved to be effective when the setting is appropriate and messages are provided by trustable persons. In particular, peer delivered counselling including outreach fulfils these criteria (see section 10.2.3). The coverage of outreach is estimated to be at least extensive in roughly half of the countries and peer involvement in just one third of the countries (see section 12.6). The coverage of outreach and peer involvement in counselling should be improved.

Example: In Finland, an active participation of substance abusers is seen as crucial to reach the most excluded and most concealed client groups and to provide access to services with low threshold. This approach is used for example by the Osis project, a

centre of excellence in peer support for drug users in the Greater Helsinki area (country profile Finland – see annex 1).

Example: In Belgium, peers are trained within the snowball operations project to distribute information and harm reduction material among injecting drug users and other drug users who rarely have contact with drug help services. The training is carried out in six sessions of approximately two hours. The peers are asked to contact about ten drug users and recruit new volunteers among those (EDDRA).

14.9 Access to HCV treatment

Only 31 % of the countries in the stakeholder survey rate the coverage of medical treatment of HCV for injecting drug users as full or extensive. Many stakeholders state that increasing the coverage of HCV screening and treatment is a great challenge today. Scientific studies show that an integrated approach using needle exchange as well as HCV treatment is needed to reduce the prevalence of HCV, especially in high prevalence countries. The expansion of coverage of HCV screening and treatment should be improved.

14.10 HBV vaccination

HBV vaccination is effective for IDUs and especially important if there is already an HCV infection, because this leads to additional complications (see section 10.2.6). Taking into account the high rates of HCV infections among IDUs in most countries (see section 11.2.2), the low coverage of HBV vaccination (only 7 countries report full coverage; see section 12.7) is critical. Measures to improve HBV vaccination coverage are necessary.

Example: In Denmark free vaccination against hepatitis A and B is offered to drug abusers (country profile Denmark – see annex 1).

14.11 Housing

Housing was not covered by the Council Recommendation but is a relevant issue for improving the quality of life and stabilisation. Housing seems to be a field of harm reduction where still a lot of improvement is necessary, as all measures (night shelters, assisted living, “housing first” approach) are described to have a rather low coverage (stakeholder survey). For night shelters, which is the measure with the highest cover-

age, only 24 % report full or extensive coverage. The problem of housing should be considered in follow-up policy work.

Example: In Austria, Supervised Housing provides accommodation for people with drug-related problems. Targeted clients are those who are homeless, but relatively stable in their drug use, and who live in Vienna. This also includes couples and people with children. After a maximum of 2 years within this programme, clients are able to move into their own accommodation (EDDRA).

14.12 Integration of services

The integration of services between health, social care and risk reduction is reported to be full or extensively covered in most countries. However, countries that have experienced significant increases in drug-induced deaths report limited, rare or no coverage. The integration of services such as hospital release management (integrating health and social care) and treatment release management should be considered a priority in order to reduce the number of fatalities due to overdoses. Throughcare and prison release management are also very important issues (see above).

Example: In Portugal, a national network of harm and risk reduction structures (RRMD) has been established since 2001, which provides alternative paths leading to stabilisation and treatment. One of its elements is the early identification and prevention of HIV/AIDS among drug users (the Klotho Programme), which should be finally integrated in local healthcare structures. Meanwhile, this programme is incorporated in all RRMD structures (country profile Portugal – see annex 1).

Example: In Austria, the cooperation between the healthcare system and the drug help system is strengthened by CONTACT, a liaison service for hospitals. This service is provided in Vienna with the objective to stabilise drug users who are in hospital care after non-fatal overdoses by connecting them with a suitable service of the drug help system (EDDRA).

Example: The “Through the gate” scheme in Wales includes “in-reach”, prison gate pick-up, assertive outreach, local networking and enhanced engagement with support services (EMCDDA 2012h).

14.13 Research

There has been very good progress in data availability in the time-span from 2003 to 2010. Thanks to the continuous efforts of the EMCDDA towards the harmonisation and expansion of data collection, a lot of comparable data that allow describing the

epidemiology of the drug situation are available. Unfortunately, the data for time-series are not available for all countries, not even the basic data to analyse drug-related harm and the availability of measures of harm reduction can be found. The following priority areas where measures for improvement and targeted research related to harm reduction are necessary have been identified:

- » The improvement of coverage of estimates for the prevalence of problem drug use, especially the injecting drug use
- » The mortality rates directly related to overdoses (drug-induced deaths) differ to a large extent between countries. Research is needed to get insight if these differences are real (important information for policy evaluation) or due to the different quality of data collection systems
- » More standardised data and longitudinal research to follow the development of HCV epidemics are needed
- » The proportion of injecting as a route of administration of opioids differs a lot between countries. Research is needed to get insight into the reasons behind this and based on the results, measures to shift away from injection or to avoid shifting to injection from other routes of administration should be developed – if possible
- » The implementation of adequate evaluation protocols for all drug prevention and risk reduction programmes that involve all actors and stakeholders in evaluation is needed

Example: In the United Kingdom, quality standards for drug use disorders, which are based on scientific evidence, are provided by the NHS. According to the NHS, these quality standards describe markers of high-quality, cost-effective care that, when delivered collectively, should contribute to improving the effectiveness, safety and experience of care for people with drug use disorders. The NHS recommends though, to consider also national and local guidelines on training and competencies, for example competencies set out in the Drugs and Alcohol National Occupational Standards (DANOS) (NHS; <http://publications.nice.org.uk/quality-standard-for-drug-use-disorders-qs23/introduction-and-overview>).

Example: In Denmark, on the basis of a national action plan, 19 specific and new initiatives were launched in October 2010, including initiatives in the area of harm reduction. These initiatives are monitored on an ongoing basis and evaluated with the purpose to adjust the national drug policy (NFP-Denmark 2011).

14.14 Priorities for a new Council Recommendation

The Council Recommendation (CR) helped to foster harm reduction in the EU, but the coverage is still far from sufficient in most of the areas. These calls for political strengthening of harm reduction which can be achieved by a new or revised CR. Based

on the analysis of the situation and scientific evidence, the following priorities shall be addressed:

Priority A: The reduction of drug-induced deaths

Reasoning: It has not been possible to reduce the number of drug-induced deaths since 2003.

Target: significant reduction of the number of drug-induced deaths in the next ten years.

Proposed measures: Improvement of coverage (for specific subgroups of opioid addicts, low threshold access to OST, comprehensive health insurance covering OST) and organisation of opioid substitution treatment (avoid interruptions, avoid waiting lists), facilitating the use of emergency services, peer naloxone programmes, integration of services (especially prison and treatment release management), drug consumption rooms, outreach, peer involvement and family support.

Relevance for public health: Drug-induced deaths remain one of the major causes of deaths among young adults, which call for immediate action. In particular, easy-to-adopt and cost-effective measures, such as facilitating the use of emergency services should be addressed and supported on the European level in order to save young lives.

Priority B: The improvement of harm reduction in prison

Reasoning: The coverage of harm reduction measures in prison lies far behind coverage outside prison. Therefore prison is a high-risk environment for injecting drug users (IDUs) to get infected with drug-related infectious diseases. Prison release without adequate throughcare is one of the main risk factors for drug-induced deaths.

Target: harm reduction measures in prison should be assured as a comprehensive response, equivalent to the community in the next ten years.

Proposed measures: Opioid substitution treatment (OST), syringe provision through specialised programmes (introduction in all prisons), release management, throughcare into and out from prison (regarding OST continuity), housing for released prisoners, health assessments including infection prevention.

Relevance for public health: Harm reduction in prison is still very rare or limited in Europe, leading to high infections rates and increased mortality after prison release. Around 15 % of all drug-related deaths could be avoided with adequate prison release management only (Frisher et al. 2012)²⁵. High infection rates (e. g. HIV, hepatitis) of prison population threaten the health of the general population, too. Good prison health is good public health (WHO 2007). Action in this field promises instant results

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In 2005, 1.506 drug users died in England from 'overdose' or poisoning, drug abuse or drug dependence. Around 15% of these deaths occur in people after release from prison. Those fatalities might be avoided with adequate and coordinated prison release management (Department of Health 2007; Frisher et al. 2012).

and can be implemented cost-effectively (e. g. syringe provision through specialised programmes).

Priority C: The reduction of harm caused by drug-related infections

Reasoning: Existing harm reduction measures have been sufficient to decrease HIV prevalence in injecting drug users (IDUs) significantly in most countries covered with this research. Recent HIV outbreaks show that this situation can change very fast when harm reduction is not appropriate. Hepatitis C (HCV) rates are still on a high level and will lead – if reaction is not adequate – to enormous individual (e. g. death due to consequences of HCV) and public costs.

Target: Significant reduction of HCV prevalence among IDUs in the next five years, significant reduction of HIV incidence in countries with high rates or increasing trends (Bulgaria, Estonia, Latvia, Lithuania, Greece, Portugal, Romania) in the next five years, treatment (especially HCV treatment) of infected IDUs shall reach full coverage in the next five years (treatment should be available for everyone who needs it), HBV vaccination of IDUs shall reach full coverage in the next five years.

Proposed measures: See priority B, improvement of coverage of syringe provision through specialised programmes (NSP), HIV and HCV treatment programmes, improvement of HCV surveillance, hepatitis B vaccination programmes, outreach, peer involvement and family support.

Relevance for public health: Infection diseases are one of the major drug-related diseases and can be easily and cost-effectively influenced by widely available syringe provision through specialised programmes. It has been proven that OST is associated with a 50 % reduction of HIV infection among IDUs (MacArthur et al. 2012). HIV and HCV treatment decrease the risk of infections for others and are therefore cost-effective interventions to avoid individual harm and prevent further infections, which could lead to a substantial health burden for drug users and the society as whole.

15 Council Recommendation of 18 June 2003 on the prevention and reduction of health-related harm associated with drug dependence (2003/ 488/ EC)

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular the second subparagraph of Article 152(4) thereof,

Having regard to the proposal from the Commission(1),

Having regard to the opinion of the European Parliament(2),

Having regard to the opinion of the European Economic and Social Committee(3),

Having regard to the opinion of the Committee of the Regions(4),

Whereas:

(1) In accordance with Article 3(1)(p) of the Treaty, Community action is to include a contribution towards the attainment of a high level of health protection. The third subparagraph of Article 152(1) of the Treaty also makes provision for action in reducing drugs-related health damage, including information and prevention.

(2) The European Council, meeting in Helsinki on 10 and 11 December 1999, endorsed the European Union Drugs Strategy 2000 – 2004 that covers all European Union drug-related activities and sets main targets. These targets include a substantial reduction over five years of the incidence of drug-related health damage (such as HIV, hepatitis B and C and tuberculosis) and the number of drug-induced deaths.

(3) The European Council, meeting in Santa Maria da Feira on 19 and 20 June 2000, endorsed the European Union Action Plan on Drugs 2000 – 2004 as a crucial instrument for transposing the European Union Drugs Strategy 2000 – 2004 into concrete actions which provide an effective integrated and multi-disciplinary response to the drug problem.

(4) The Commission, in its Communication to the European Parliament and the Council on the European Union Action Plan to Combat Drugs (2000 – 2004), considered a comprehensive approach that should cover all areas of drug abuse prevention, from discouraging the initial use to reducing the negative health and social consequences as the best strategy.

(5) The European Parliament, in its Resolution on the abovementioned Communication welcomed the objective of reducing the number of deaths among addicts and called on the European Union and its Member States to encourage and develop damage limitation policies, without debarring individual Member States from adopting measures and pilot schemes in this area.

(6) The programme of Community action on the prevention of drug dependence within the framework for action in the field of public health and the programme of Community action on the prevention of AIDS and certain other communicable diseases within the framework for action in the field of public health have supported projects aimed at preventing and reducing the risks associated with drug dependence, in particular by encouraging cooperation between the Member States, supporting their action and promoting coordination between their policies and programmes. Both programmes have been contributing to improving information, education and training aimed at preventing drug dependence and the associated risks, in particular, for young people and particularly vulnerable groups.

(7) The decision of the European Parliament and of the Council adopting a programme of action in the field of public health (2003 – 2008) includes the development of strategies and measures on drug dependence, as one of the important lifestyle-related health determinants.

(8) Since, according to research, the morbidity and the mortality associated with drug dependence affects a sizeable number of European citizens, the health-related harm associated with drug dependence constitutes a major problem for public health.

(9) In accordance with the principle of subsidiarity, any new measure taken in an area which does not fall within the exclusive competence of the Community, such as prevention and reduction of risks associated with drug dependence, may be taken up by the Community only if, by reason of the scale or effects of the proposed action, the objectives proposed can be better achieved by the Community than by Member States. Prevention and reduction of risks associated with drug dependence cannot be confined to a geographical region or Member State and action therefore requires coordination at Community level.

(10) Provisions should be made on reporting at national and Community level to monitor the measures taken by the Member States in this area, and the results thereof, and the way these Recommendations have been implemented.

(11) The most important measure to reduce the risk associated with drug abuse is to prevent the abuse itself.

HEREBY RECOMMENDS THAT:

1. Member States should, in order to provide for a high level of health protection, set as a public health objective the prevention of drug dependence and the reduction of related risks, and develop and implement comprehensive strategies accordingly.

2. Member States should, in order to reduce substantially the incidence of drug-related health damage (such as HIV, hepatitis B and C and tuberculosis) and the number of drug-related deaths, make available, as an integral part of their overall drug prevention and treatment policies, a range of different services and facilities, particularly aiming at risk reduction; to this end, bearing in mind the general objective, in the first place, to prevent drug abuse, Member States should:

1. provide information and counselling to drug users to promote risk reduction and to facilitate their access to appropriate services;

2. inform communities and families and enable them to be involved in the prevention and reduction of health risks associated with drug dependence;

3. include outreach work methodologies within the national health and social drug policies, and support appropriate outreach work training and the development of working standards and methods; outreach work is defined as a community-oriented activity undertaken in order to contact individuals or groups from particular target populations, who are not effectively contacted or reached by existing services or through traditional health education channels;

4. encourage, when appropriate, the involvement of, and promote training for, peers and volunteers in outreach work, including measures to reduce drug-related deaths, first aid and early involvement of the emergency services;

5. promote networking and cooperation between agencies involved in outreach work, to permit continuity of services and better users' accessibility;

6. provide, in accordance with the individual needs of the drug abuser, drug-free treatment as well as appropriate substitution treatment supported by adequate psychosocial care and rehabilitation taking into account the fact that a wide variety of different treatment options should be provided for the drug-abuser;

7. establish measures to prevent diversion of substitution substances while ensuring appropriate access to treatment;

8. consider making available to drug abusers in prison access to services similar to those provided to drug abusers not in prison, in a way that does not compromise the continuous and overall efforts of keeping drugs out of prison;

9. promote adequate hepatitis B vaccination coverage and prophylactic measures against HIV, hepatitis B and C, tuberculosis and sexually transmitted diseases, as well as screening for all the aforementioned diseases among injection drug users and their immediate social networks, and take the appropriate medical actions;

10. provide where appropriate, access to distribution of condoms and injection materials, and also to programmes and points for their exchange;

11. ensure that emergency services are trained and equipped to deal with over-doses;

12. promote appropriate integration between health, including mental health, and social care, and specialised approaches in risk reduction;

13. support training leading to a recognised qualification for professionals responsible for the prevention and reduction of health-related risks associated with drug dependence.

3. Member States should consider, in order to develop appropriate evaluation to increase the effectiveness and efficiency of drug prevention and the reduction of drug-related health risks:

1. using scientific evidence of effectiveness as a main basis to select the appropriate intervention;

2. supporting the inclusion of needs assessments at the initial stage of any programme;

3. developing and implementing adequate evaluation protocols for all drug prevention and risk reduction programmes;

4. establishing and implementing evaluation quality criteria, taking into account the Recommendations of the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA);

5. organising standardised data-collection and information dissemination according to the EMCDDA recommendations through the REITOX national focal points;

6. making effective use of evaluation results for the refining and development of drug prevention policies;

7. setting up evaluation training programmes for different levels and audiences;

8. integrating innovative methods that enable all actors and stakeholders to be involved in evaluation, in order to increase acceptance of evaluation;

9. encouraging, in collaboration with the Commission, the exchange of programme results, skills and experience within the European Union and with third countries, especially the applicant countries.

4. Member States should report to the Commission on the implementation of this Recommendation within two years of its adoption and subsequently on request by the Commission with a view to contributing to the follow-up of this recommendation at Community level and acting as appropriate in the context of the European Union Action Plan on Drugs.

HEREBY INVITES the Commission to:

- cooperate with the Pompidou Group of the Council of Europe, the World Health Organisation, the United Nations International Drug Control Programme and other relevant international organisations active in the field,
- prepare a report, in accordance with the European Union Action Plan on Drugs and with the technical support of the EMCDDA, with a view to the revision and updating of this Recommendation, on the basis of the information submitted by the Member States to the Commission and the EMCDDA, and the latest scientific data and advice.

Abbreviations

AIDS	acquired immune deficiency syndrome
CI	confidence interval
CR	Council Recommendation
DFT	drug free treatment
DRD	drug-induced deaths
DRID	drug-related infectious diseases
DG JLS	Directorate-General for Justice, Security and Freedom
DG SANCO	Directorate-General for Health and Consumers
EAHC	Executive Agency for Health and Consumers
EC	European Commission
ECDC	European Centre for Diseases Prevention and Control
EDDRA	Exchange on Drug Demand Reduction Action
EMCDDA	European Monitoring Centre for Drugs and Drug Addiction
EU	European Union
EUROHRN	European harm reduction network
EU 12	countries which joined the EU in 2004 or later
EU 15	countries which joined the EU before 2004
GÖG	Gesundheit Österreich GmbH
GP	general practitioner
HBV	hepatitis B virus
HCV	hepatitis C virus
HDB(T)	high-dosage buprenorphine (treatment)
HIV	human immunodeficiency virus
IDM	interactive domain model
IDPC	International Drug Policy Consortium
IDU	injecting drug user, injecting drug use
IEC	information, education and communication
IPA	Instrument for Pre-Accession Assistance
MMT	methadone maintenance therapy

NIROA	non injecting route of administration
NFP	national focal point
NHS	National Health Service
NSP	needle (and syringe) exchange programme
NUTS	nomenclature of territorial units for statistics
ORW	outreach work
OST	opioid substitution treatment
PDU	problem drug use
PHARE	Poland and Hungary: Assistance for Restructuring their Economies
PICO	population–intervention–comparison–outcome
POU	problem opiate use
PSC	psychosocial care
RCT	randomised controlled trial
REITOX	Réseau Européen d'Information sur les Drogues et les Toxicomanies
RR	relative risk
SQ	standard questionnaire
ST	standard table
STD	sexually transmitted diseases
TB(C)	tuberculosis
TEDI	Trans European Drug Information
UNAIDS	United Nations Programme on HIV/AIDS
UNODC	United Nations Office on Drugs and Crime
UK	United Kingdom
WHO	World Health Organization

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