

HIV/AIDS among injecting drug users in Romania

Report of a recent outbreak and initial response policies

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Summary

In November 2011, a strong increase of newly diagnosed HIV infections among IDUs during 2011 was reported to EMCDDA by the Romanian National Focal Point (NFP) on Drugs. This was based on the information provided by routine monitoring and case reporting coordinated by the Centre for Monitoring and Evaluation of HIV/AIDS Infection in Romania. The reported increase was further supported by data from Drug-related Infectious Diseases (DRID) indicator based on routine monitoring performed by Romanian NFP.

A risk assessment performed by the European Centre for Disease Prevention and Control (ECDC) and the European Monitoring Centre on Drugs and Drug Addiction (EMCDDA) in 2011 (1) together with the NFP and representatives of Centre for Monitoring and Evaluation of HIV/AIDS Infection in Romania / Romanian National Institute of Infectious Diseases 'Prof. Dr. Matei Bals' (INBI) documented an increased HIV incidence; increased hepatitis C prevalence (indicating increased injecting risk); recent changes in injecting patterns (with more frequent injecting and increased stimulant injecting); and low coverage of effective prevention services (needle and syringe programmes, opiate substitution treatment).

While reporting three to five cases annually from 2007 to 2009, HIV infections among IDUs increased to 12 cases in 2010 to 129 in 2011. Moreover, 102 new cases were registered until the end of June 2012 (2) which is over three times the number of cases reported for the same period in 2011 (30 cases).

Routine monitoring performed at registration for drug treatment services indicated also an increase in HIV-positive cases among IDUs tested (1.1% (2/182) in 2008, 3.3% (11/329) in 2009 and 4.2% (12/288) in 2010) and (11.6%, 25/216) in 2011 (3). The routine monitoring includes testing but also self-reporting.

In fresh unpublished data from the 2012 behavioural surveillance survey (BSS) among IDUs recruited using the RDS sampling procedure (n=417) in Bucharest the HIV prevalence among IDUs reached 52.5%.

No specific HIV testing campaigns had been initiated and most cases were detected when seeking drug treatment or hospital care for other conditions, suggesting that the increases reflected true increases in incidence of HIV infection rather than increased detection of cases.

In a BSS (4) among IDUs published in 2010, there were reports of changes in drug use patterns from 2009, where 97% of respondents reported heroin as the main drug of injection, to 2010, where 67% reported heroin and 31% reported amphetamine-type stimulants, mostly synthetic cathinones, as the main drug of injection. Stimulant use is associated with more frequent injection and there are reports of increased syringe sharing. In 2012 BSS significant changes are seen in drug use patterns. The main drugs of injection were NPS (the new amphetamine type stimulants) for 49.4% of the IDUs.

The HIV outbreak among IDUs in 2011 coincided with a significant reduction of harm reduction service provision due to the ending of the international programmes and funding available from the Global Fund and UNODC.

Following the recommendations of the risk assessment (1) the Romanian National Antidrug Agency initiated efforts to improve the harm reduction service network. It provided about 145 000 extra syringes for the needle exchange programmes active in the field and supported the opening of a new outreach centre coordinated by the Carousel NGO which covers 40 clients per day 2 days a week. It also sustained several advocacy events and measures in order to speed up the adoption of the Anti HIV/AIDS Strategy¹ 2011-2015 (5) which is now under public debate. The syringes were distributed by 2 outreach centres² in well-known areas and open scenes of IDUs in the capital city of Bucharest.

¹ More info at www.ms.gov.ro

² These centres were managed by ARAS and CARUSEL NGOs

Abbreviations

ALIAT	Romanian Association against Alcohol and Addiction
ANA	National Agency against Drugs
ARAS	Romanian Association against AIDS
ART	antiretroviral therapy
BSS	behavioural surveillance survey
CSW	commercial sex workers
ECDC	European Centre for Disease Prevention and Control
EMCDDA	European Monitoring Centre for Drugs and Drug Addiction
GFATM	Global Fund to Fight HIV/AIDS, Tuberculosis and Malaria
IDU	injecting drug use/injecting drug user
INBI	National Institute of Infectious Diseases 'Prof. Dr. Matei Bals'
MSM	men who have sex with men
NFP	national focal point on drugs and drug addiction
NSP	needle and syringe programme
OST	opioid substitution treatment
REITOX	network of national focal points coordinated by EMCDDA
NPS	new psychoactive substances (cathinones, MDPV, etc)
PLWHA	people living with HIV/AIDS
POUs	problem opioid users
RDS	respondent driven sampling
RNAA	Romanian National Antidrug Agency
RNFP	Romanian National Focal Point on Drugs
UNODC	United Nations Office on Drugs and Crime

1. HIV situation in Romania and description of the HIV outbreak among IDUs

Looking at a broader picture of historical data on HIV infection in Romania, the records show a cumulative 17,819 unique cases of HIV/AIDS from 1985 to the end of June 2012. HIV/AIDS related deaths form about one third of the total amount of cases (6023) (2).

Treatment is provided on a large scale. There is a large number of PLWHA who receive specific ARV therapy in relation to the total number of infected persons (~8000)³.

The age group distribution of HIV/AIDS infected people is uneven with a large group of people (5789) within the group 20-24 following a HIV outbreak in 1987-1990 among children. Most of them are long-term survivors, who belong to the 1987-1990 Romanian birth cohort.

HIV infection is one of the most serious potential health risks for IDUs, who have had a low incidence among this at risk category since until recently. The main routes of transmission of the HIV infection in the last 5 years and a half are presented in the following table.

Table 1: Trends in transmission route in Romania, 2007-2012

<i>Transmission route</i>	<i>31 December 2007</i>	<i>31 December 2008</i>	<i>31 December 2009</i>	<i>31 December 2010</i>	<i>31 December 2011</i>	<i>30 June 2012</i>
Vertical	8 (0.42 ⁴)	11 (0.58)	20 (1.05)	24 (1.26)	21 (1.10)	9 (0.47)
MSM	14 (0.74)	40 (2.10)	44 (2.31)	59 (3.10)	93 (4.88)	37(1.94)
IDU	4 (0.21)	3 (0.16)	7 (0.37)	14 (0.74)	129 (6.78)	102⁵ (5.35)
Heterosexual	351 (18.43)	395 (20.75)	382 (20.06)	389 (20.43)	422 (22.16)	151(7.93)
Unknown	67 (3.52)	70 (3.68)	42 (2.21)	31 (1.63)	23 (1.21)	18 (0.95)
Total	444	519	495	517	688	313

Source: Compartment for Monitoring and Evaluation of HIV/AIDS Infection in Romania INBI 'Prof. Dr. M. Bals'

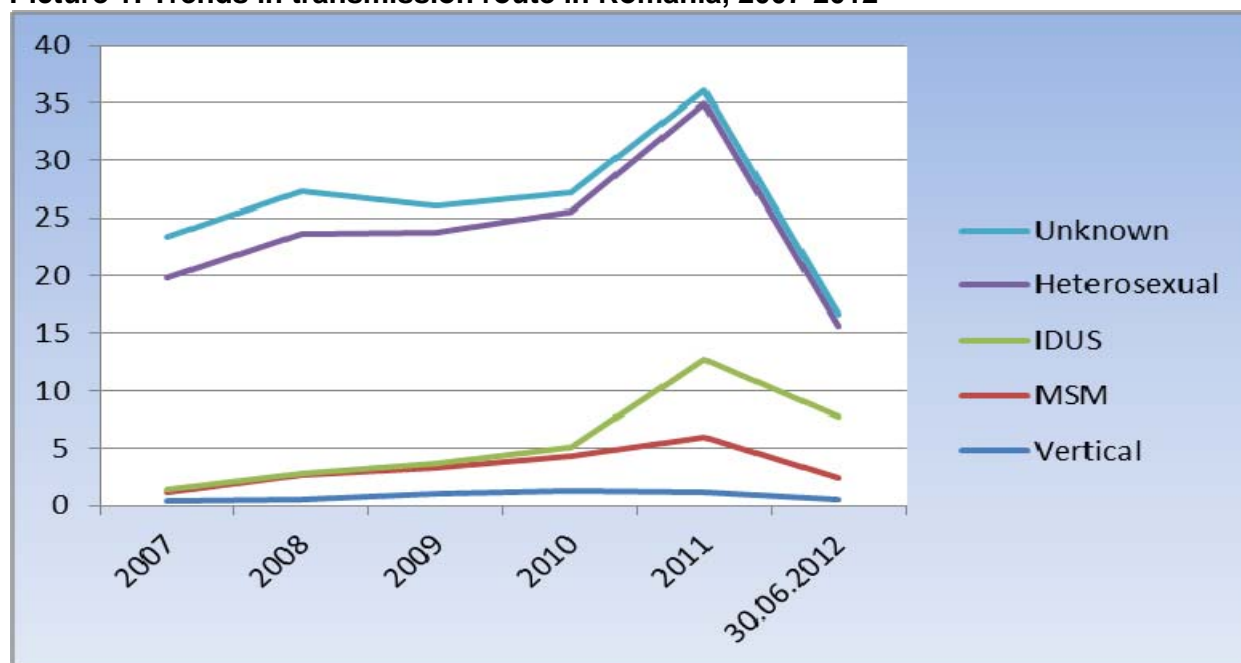
³ More info at INBI – Statistical data- Romania at 30 June 2012 -

http://www.cnlas.ro/images/doc/romania_30iunie2012.pdf

⁴ Rate per million people (calculated for a standard pop 19 042 936 – according with the last census -2011

⁵ 102 new cases were registered until the end of June 2012 (2) which is over three times the number of cases reported for the same period in 2011 (30 cases).

Picture 1: Trends in transmission route in Romania, 2007-2012



Source: Compartment for Monitoring and Evaluation of HIV/AIDS Infection in Romania INBI 'Prof. Dr. M. Bals'

On 14 November 2011, the Romanian NFP for the EMCDDA based on the data provided by the Compartment for Monitoring and Evaluation of HIV/AIDS Infection in Romania INBI 'Prof. Dr. M. Bals' notified EMCDDA about the detection of a strong increase of newly reported HIV infections among IDUs in 2011 by the Romanian HIV surveillance system. While reporting 3 to 5 cases annually from 2007 to 2009, HIV infections among IDUs increased to 12 cases in 2010 and to 62 cases in 2011, as of September.

Cases reported in 2011 were mostly residents of Bucharest and surrounding area (56/62), predominately males (55/62), and younger than 34 years (55/62). Half of these cases were diagnosed with HIV infection while being hospitalised for infectious conditions. The remaining cases were diagnosed while attending drug substitution treatment centres. In 87% of the 62 cases, hepatitis C virus (HCV) co-infection was detected. Thirteen newly diagnosed HIV infection cases were classified as AIDS cases, suggesting that at least this portion of the cases was infected less recently. Of the remaining 49 cases, 29 had a CD4 count at diagnosis, higher than 500 cells/mm³ suggesting more recent infections (6).

The majority (80%) of the IDU HIV cases were diagnosed during visits to the infectious disease hospital ward, seeking treatment for other health issues. The majority of new infections are among residents of Bucharest with very low socio-economic status and many have a history of imprisonment.

Other sources (3), reported results from the routine HIV testing of IDUs attending drug-related treatment services at national level, described an earlier increasing trend of 1% (2/182) in 2008, 3% (11/329) in 2009 and 4% (12/288) HIV-positive cases among IDUs tested in 2010.

Following those efforts of early outbreak detection the spread of HIV infection among IDUs did not stop, but to the contrary, the number of HIV cases increased dramatically: from 129 in 2011 to 102 confirmed HIV/AIDS new cases among IDUs in the first 6 months of 2012. A relative proportion of the increase might be explained also due to the fact that after March 2012 the knowledge those 'legal highs' injectors are at risk was spread consistently among the care givers, but also among the users, thus an increase in the number of the performed tests and positive results. However, the 102 new cases registered until the end of June 2012 represent over three times the number of cases reported for the same period in 2011 (30 cases).

Cases reported in 2012 (first 6 months) were also mostly from Bucharest and surroundings (93/102 cases), mostly males (83/102 cases), and between 20 and 34 years old (70/102).

As can be observed in the following table HIV/AIDS+ Cases increased among IDUs in 2011 almost 20 times comparing with 2009.

Table 2: All new cases of HIV/AIDS in 2009-2012 vs. new cases of HIV/AIDS among IDUs in 2009-2012 - rate per million

<i>All New cases of HIV/AIDS in 2009-2012 vs. new cases of HIV-AIDS among IDUs in 2009-2012</i>				
Year	2009	2010	2011	First 6 months/ 2012
All HIV	12.55	14.34	20.90	10.77
HIV among IDUs	0.21	0.32	5.36	4.20
All AIDS	13.45	12.76	15.23	5.67
AIDS among IDUs	0.16	0.47	1.68	1.16
Total HIV/AIDS among IDUs	0.37	0.79	7.04	5.36
Total HIV/AIDS among all new cases	26.00	27.10	36.13	16.44

Source: Compartment for Monitoring and Evaluation of HIV/AIDS Infection in Romania INBI 'Prof. Dr. M. Bals'

Only a quarter of the new HIV+ IDU cases were tested before for HIV which may suggest that there are either many IDU cases which are new for the harm reduction and treatment services or that testing in these services was not routinely offered.

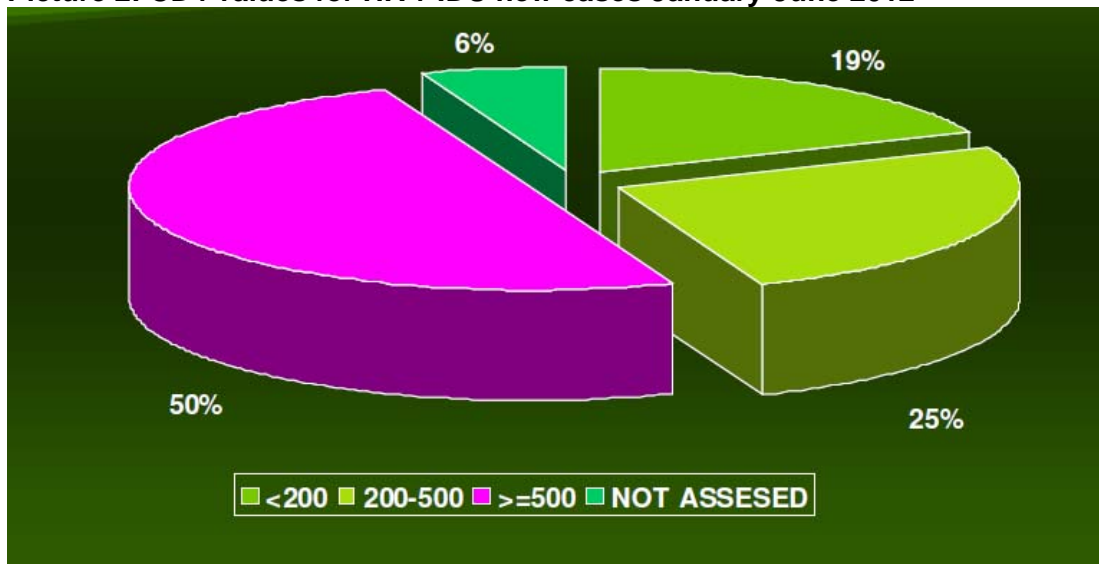
Table 3: New HIV+ IDU cases in 2012 previously tested for HIV

<i>Year of previous testing</i>	<i>Clients</i>
2012	2
2011	15
2010	3
2009	2
2008	1
2006	1
2004	1
total	25

Source: Compartment for Monitoring and Evaluation of HIV/AIDS Infection in Romania INBI 'Prof. Dr. M. Bals'

CD4 values show that half of the new identified cases of HIV/AIDS + among IDUs in 2012 might have a recent infection, i.e. may have been infected in the last year.

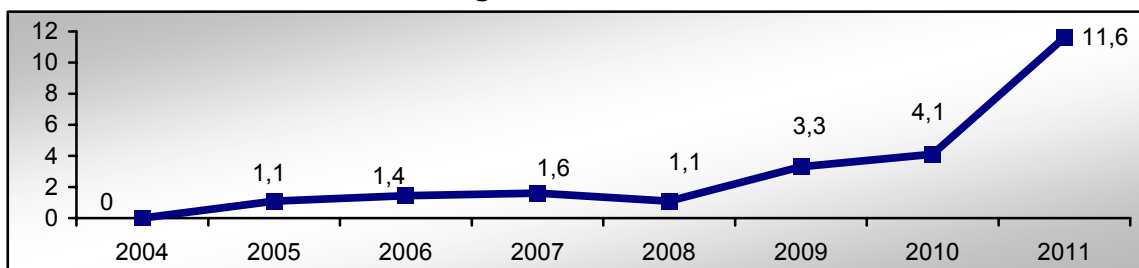
Picture 2: CD4 values for HIV+ IDU new cases January-June 2012



Source: Compartment for Monitoring and Evaluation of HIV/AIDS Infection in Romania INBI 'Prof. Dr. M. Bals'

Routine monitoring within the drug-related treatment system performed by the Romanian National Focal Point (RNFP) (3) shows that HIV started to increase among IDUs since 2009 reaching 11.6% in 2011, more than 10 times over the figure registered in 2008 (1.1%).

Picture 3: Prevalence of HIV among tested IDUs in treatment services



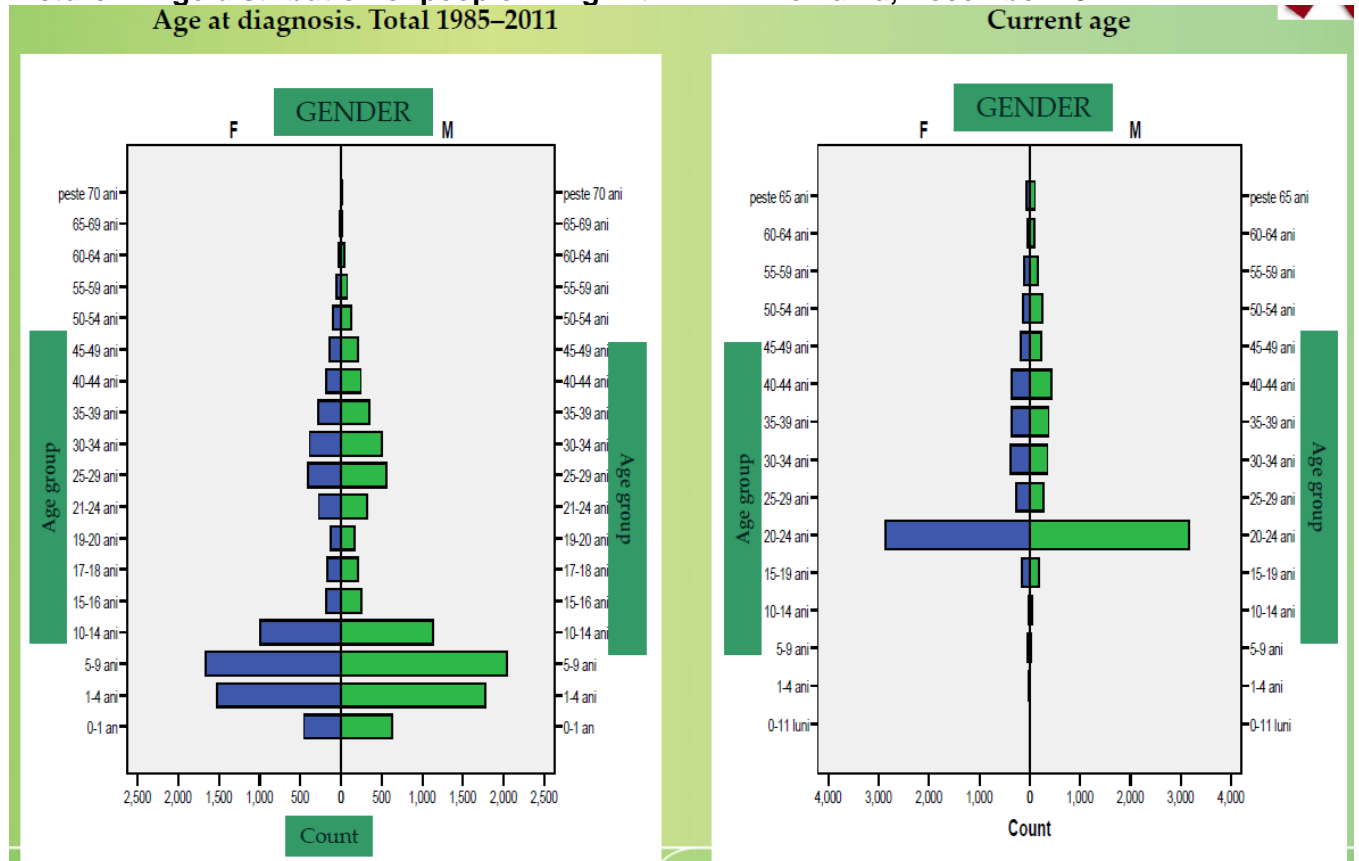
Source: RNAA 2012

In 2011(3), 934 new treatment demands for IDUs were recorded compared to 1,233 cases of injecting drug users (IDUs) in 2010. Heroin was the main drug of abuse in 2011 for 63% of the IDU clients (585) compared with 77% (953) in 2010. The second drug of treatment (332 or 36% of the treatment demands compared with 247 or 20% in 2010) was for IDUs the category of the new substances sold as legal highs also known as amphetamine type stimulants or new psychoactive substances (NPS). The decrease in new treatment demands might be connected with the changes in the drug use behaviour, due to the fact that there are few treatment options in the existing infrastructure for stimulant use (NPS).

The age distribution in the HIV-positive population is as follows:

Romania has a large number of survivors in the 19–24 age group, who belong to the 1987–1990 birth cohort (>6000) (10).

Picture 4: Age distribution of people living with HIV in Romania, December 2011



Source: Compartment for Monitoring and Evaluation of HIV/AIDS Infection in Romania INBI 'Prof. Dr. M. Bals'

Among all HIV-positive IDUs most cases are found in the age group 20 to 34 years.

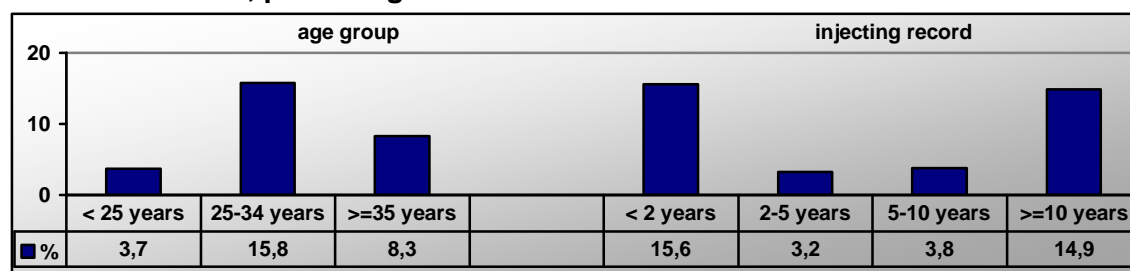
Table 4: Age distribution of the new HIV/AIDS cases among IDUs (January-June 2012)

Age group	Total
15-19 years	9
20-24	23
25-29	23
30-34	24
35-39	16
>= 50	1
Total	102

Source: Compartment for Monitoring and Evaluation of HIV/AIDS Infection in Romania INBI 'Prof. Dr. M. Bals'

One can look also to the data provided by the treatment demand indicator from the Romanian National Antidrug Agency (RNAA). The most prevalent age groups among the new HIV cases recorded by RNFP routine monitoring are 25-34 years, and in the second place are the persons older than 34.

Picture 5: Age group distribution and injecting history for HIV-positive IDUs in drug treatment centres, percentage in 2011



Source: RNAA 2012

HIV prevalence surveys performed in Bucharest (4) in recent years using respondent driven sampling techniques showed consistently low HIV prevalence in IDUs. The latest, part of the 2010 behavioural surveillance survey, gave an estimate of 1.1% for HIV prevalence among IDUs.

In terms of the prevalence of other drug-related infectious diseases the serological tests indicated a very high rate of HCV prevalence, 88.3% of the respondents being HCV infected and a relatively low HBV⁶ prevalence (3.1%). Generally, 85% of the tested injecting drug users had at least one of the 3 infections.

Significant changes in drug use patterns were detected through the BSS 2010 in Bucharest, where a higher frequency of injecting behaviour was found and where the drug use patterns appear to be changing, with 97% of respondents reporting heroin as the main drug of injection in 2009, as compared to 67% in 2010, and with 31% of respondents reporting amphetamine-type stimulants as the main drug of injection in 2010.

Fresh unpublished data from the 2012 BSS among IDUs in Bucharest show significant changes in HIV prevalence among IDUs, with 52.5%⁷ of IDUs in the sample being HIV-positive. The HCV rate among IDUs is 78.9% and 40.5% of the IDUs in the sample are co-infected with HCV and HIV. The main drugs of injection are as expected NPS (the new amphetamine type stimulants) reported by 49.4% of the sample, followed by heroin for 38.1%⁸. The sample size was 417 and all respondents were recruited using respondent driven sampling.

There were reports of more frequent injection and needle-sharing associated with stimulant use. In 2009, 97% of IDUs interviewed in the BSS mentioned heroin as the main drug of injection while in 2010 (3), 67% reported heroin and 37% reported amphetamine-type stimulants, mostly synthetic cathinones or the generic name NPS, as the main drug of injection. In 2012 most (49.4%) of the respondents of the 2012 BSS declared they injected NPS and only 38.1% heroin.

Injecting drug use behaviour is concentrated in Bucharest where the injecting drug using population size was estimated to be 16,867 in 2007 and 19,265 in 2011 (3) (an 14.2% increase compared to the estimated in 2007); an accurate estimate of the size of the national PDU/POU population is not available due to the paucity of services/programmes outside Bucharest.

A study performed among 'legal highs' intensive users (at least four times per month), recruited through harm reduction services by the Romanian Harm Reduction Network and UNICEF in September 2011 (9), showed as pattern of use: oral 8%, injecting 20%, sniff 18% and smoking 54%. The new substances are abused all over the country but NPS injecting is limited mainly to Bucharest. Even if not injected, the NPS are used together with injected opioids increasing the risk of needle sharing and higher frequency injecting.

⁶ HBsAg

⁷ HIV/HCV tests used in this seroprevalence study are produced by CORTEZ, DIAGNOSTICS, INC, USA

⁸ Source: Carusel 2012 – BSS among IDUs in Bucharest – crude data - unpublished

An important aspect is the injecting pattern which for stimulants involves injecting 6-10 times a day comparing with 3-5 times a day for opiates according to the data from BSS 2010.

Another indicator that supports the rapid spread of NPS abuse is that the new legal highs came to represent 38.9% of the required emergency medical assistance (30% are injecting daily users).

A new study based on a convenience sample of 100 IDUs outreach clients done by ARAS in the outreach units in August 2012 showed only 18% of the subjects reported using only heroin. 82% declared using also amphetamine type stimulants (NPS) alone or with heroin (or methadone).

Demographical data of the sample are as follows:

- 100 clients from NEP July - 2012
- 82 men 17 women
- median age 28 (16-46)

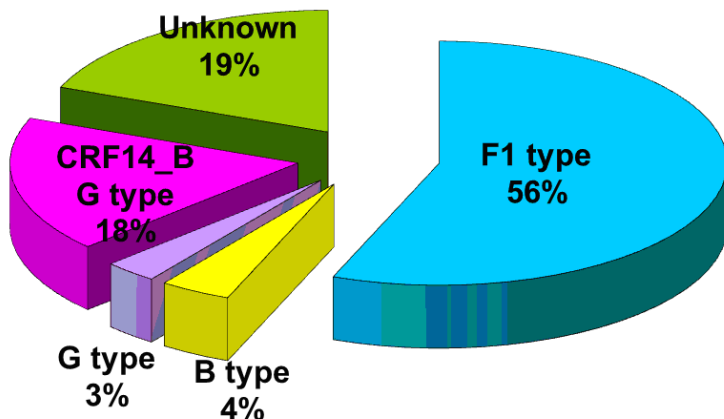
Other epidemiological findings are:

- mean 8.1 years of drug use
- 96% injecting every day
- 87% sharing needles or equipment
- 42% have never taken any HCV or HIV test
- 64% never tried any medically supervised drug treatment
- out of those who never tried any medically supervised treatment 92% never applied for such a treatment
- currently only 4% are under some type of medically supervised treatment
- out of those who are not under treatment 48% would definitely like to get in treatment but 31% would not like to be treated
- when asking for reasons of not being on treatment: 25% do not want to be treated, 13% do not have health insurance, 60% have different reasons where the most common are: they do not have ID, money and because they use illegal drugs they cannot be treated
- 79% have heard about substitution therapy and know what this is

An ongoing study on genotypes (11) and resistance of the ongoing HIV-1 outbreak in Romania among IDUs is performed by the molecular epidemiology department of INBI. According to this analysis of over 80 cases most of the phenotypes are F (a local type) and only in three of the cases the phenotype was found to be B, two cases were G and 14 were CRF related.

According to unpublished reports CRF is a type of virus that has been identified before in Spain and Portugal. Knowing the high Romanian immigration phenomenon in Spain (about 2 million people) and the high HIV rate among IDUs in Spain it is possible that some of the immigrants were infected and came back to Romania with this new virus type (14).

Picture 6: Genotype distribution of IDUs with HIV

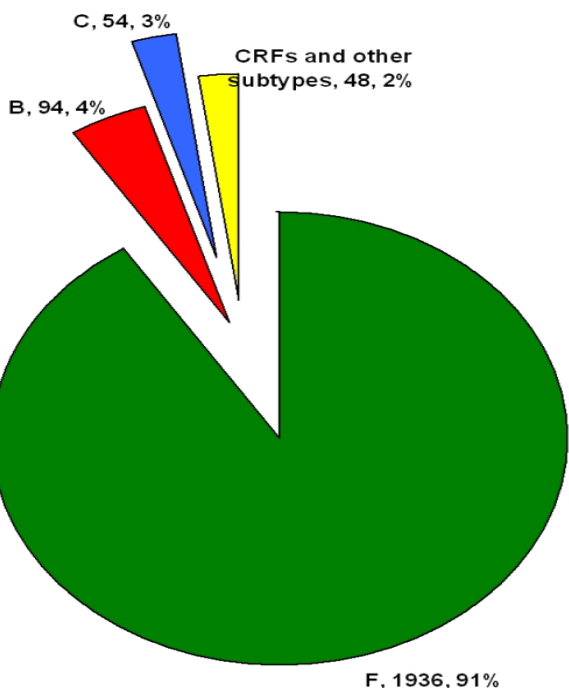


Source: Paraschiv S et al. 2012; *Recombination analysis for subtyping unclassified HIV-1 isolates in Romania*. Therapeutics, Pharmacology ad Clinical Toxicology – unpublished report

Previously the CRF subtype was less present in Romania as 2132 HIV-positive patients studied between 2003 and 2011 had the following HIV-1 subtype distribution:

- F1- 1936 (91%)
- B- 54 (3%)
- C- 54 (3%)
- CRF among other subtypes 48 (2%)

Picture 7: HIV-1 subtype distribution in HIV patients in Romania, 2003-2011



Source: Paraschiv S et al. 2012; *Recombination analysis for subtyping unclassified HIV-1 isolates in Romania*. Therapeutics, Pharmacology ad Clinical Toxicology – unpublished report

The phylogeographic and potential founder analyses are informative for directing prevention campaigns targeted at affected populations.

As we can observe in the following table, about 11% of the HIV cases among IDUs are registered outside Bucharest (although Ilfov could be considered to be part of the larger Bucharest area). This fact could represent a major threat as OST and NSP programmes do not exist in these affected areas.

Table 5: Distribution by county in new HIV cases in IDUs 01.01.- 30.06.2012

County	Male	Female	Total
Bucharest	73	16	89
Bacau	0	1	1
Calarasi	2	0	2
Galati	1	0	1
Ilfov	3	1	4
Prahova	1	0	1
Teleorman	1	1	2
Vaslui	2	0	2
Total	83	19	102

Source: Compartment for Monitoring and Evaluation of HIV/AIDS Infection in Romania INBI 'Prof. Dr. M. Bals'

The HIV infections among IDUs correlate highly with HCV status, according to the data provided by INBI.

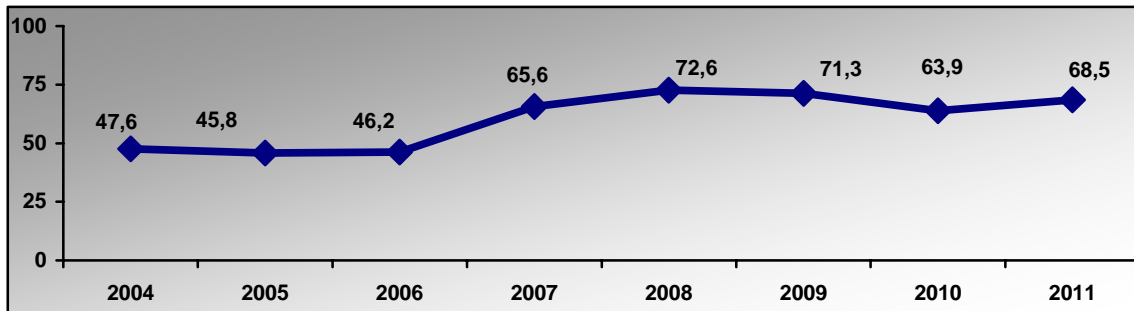
Table 6: Co-infection with HBV, HCV, and syphilis among HIV+ IDUs

Tested for	Number of clients tested	%
HBsAg	15	15%
HCV	93	91%
HBsAg + HCV	13	13%
Syphilis	14	10%

Source: Compartment for Monitoring and Evaluation of HIV/AIDS Infection in Romania INBI 'Prof. Dr. M. Bals'

The multi-annual distribution of HCV prevalence among IDUs provided by the routine monitoring performed by RNNa shows an increasing trend - after a stabilising period - at high levels. The values recorded over the last years are higher starting with 2007, and the high values of HCV prevalence among IDUs may suggest that there is an association between a long period of high prevalence of HCV and HIV outbreaks. As HCV can be considered an indicator of injecting risks (16) (17) this might indicate that injecting risks in the IDUs population have been increasing already since 2006 and initially increased only HCV prevalence (as HCV is more infective than HIV by the injection route) until HCV reached saturation levels among high risk IDUs in 2008, but injecting risks then continued increasing until eventually HIV could also rapidly spread in 2011 (the injecting risks – i.e. needle sharing frequency, number of sharing partners, mixing patterns between IDUs - passed the threshold value where in modelling terms R_0 is equal to 1 and below which no spread can be sustained). This pattern is very similar to findings from the HIV outbreak in Greece (18).

Picture 8: Prevalence of HCV among tested IDUs in treatment services



Source: RNAA 2012

If we look at the case in Greece, where a relatively similar HIV outbreak among IDUs has occurred, although the outbreak started in 2010, the genetic analyses suggested the first infections already happened a few years before. In Romania, then, it is possible that, similar to Greece, risk behaviours started to increase as early as 2007, showing in higher HCV, which then could not increase further (saturation in the IDUs at risk) but risks kept increasing in this group resulting in the large HIV outbreaks in 2011 (18).

2. Drug treatment and harm reduction situation in Romania

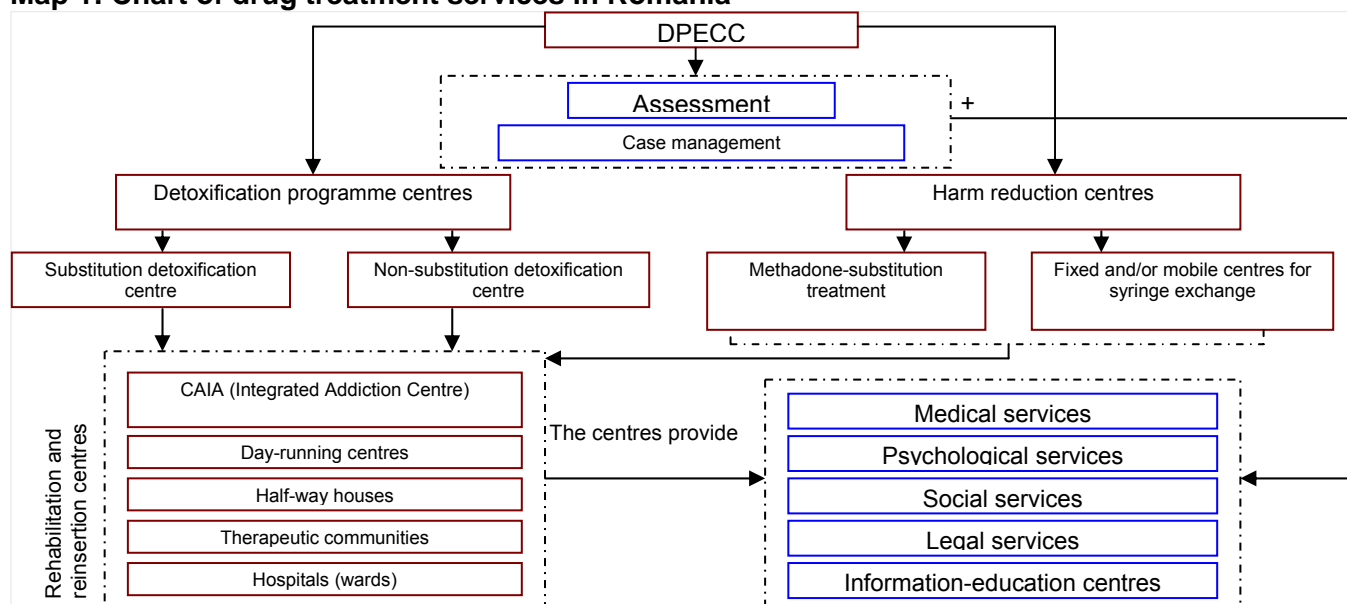
The institutional and enforcement framework of the drug addiction care system is outlined by the following provisions:

- Legal framework: Decision no. 860/2005 (7) approving the enforcement regulation of the Law no. 143/2000 on preventing and countering the illicit drug use, further amended and supplemented,
- Methodological framework: Standards of the national system of medical, psychological and social care for drug users (7).

The regulation sets the institutional framework in which treatment is provided

- drug prevention, evaluation and counselling centre (DPECC) (out-patient) - medical, psychological and social care and case management,
- day-time centre (12-hour out-patient care),
- therapeutic community, half-way housing, social housing and others (hotel-type) – care services,
- centre for integrated care of addictions (out-patient) – medical, psychological and social care,
- in-patient detox centres, units and departments (in hospital care) – medical detoxification services,
- harm reduction centres (out-patient or mobile units) – harm reduction services,
- mental health laboratory with a service running in the day-time – out-patient substitution treatment (methadone maintenance),
- other types of public and private services⁹, provided for in the law.

Map 1: Chart of drug treatment services in Romania



Source: RNAA 2011

⁹ The most important NGOs (which have also branches in other cities than Bucharest) are: Anti-AIDS Romanian Association – ARAS, Association for the Fight against Alcohol and Drugs – ALIAT, Samusocial Romania, PARADA Foundation, Fundația Familia și Ocrotirea Copilului – FOC, Integration Association, Health policy roma centre–SASTIPEN, Carusel

The Romanian network of drug addiction medical treatment, psychological and social care (7)

1. Services provided by the National Anti-drug Agency (out-patient):

- *Medical, psychological and social assessment* towards the inclusion in a treatment integrated programme (TIP) and the formulation of the individualised plan of therapeutic, psychological and social care - IPC.
- *Medical services*: pharmacological treatment for achieving abstinence (methadone, suboxone, naltrexone), rapid drug tests in body fluids, testing for HIV, HBV, HCV.
- *Services of psychological and social counselling* to achieve psycho-social reinsertion and rehabilitation (individual and group-based).
- *Case management* – coordination to ensure the implementation of the IPC and assessment of the measures provided for in the plan and their results.

2. Services provided by the Ministry of Health

- In-patient: detoxification, *overdose treatment*,
- out-patient – treatment centres: medical and psychological assessment, pharmacological treatment to maintain abstinence (methadone, suboxone, naltrexone), rapid drug tests in body fluids, testing for HIV, HBV, HCV, *Services of psychological and social counselling and case management*.

3. Services provided by the Ministry of Justice (National Administration of Penitentiaries)¹⁰ Harm reduction services – syringe exchange

- Substitution services – methadone.
- Therapeutic community – like services.

4. Services provided by other service providers

- Private or NGO-run out-patient treatment centres¹¹.
- Private or NGO-run after-care treatment centres¹².

5. Harm reduction services¹³ - provided by NGOs, most of which function under the RHRN umbrella. The Romanian harm reduction network (RHRN)¹⁴ is an informal network of NGOs and state institutions that promote the reduction of drug-related harm by increasing communication between partner organisations and improving the quality of services for drug users, at national level.

The main results of the syringe exchange projects implemented with the financial support of UNODC/Global Fund to Fight HIV/AIDS (7), Tuberculosis and Malaria from 2007 to 2010 were:

- 16,539 IDUs included in the programme;
- 3,314,884 distributed syringes to IDUs;
- 1,133,178 collected syringes from programme beneficiaries;

¹⁰ For incarcerated in-mates (arrests/penitentiaries) who use drugs, the medical, psychological and social care services are provided based on: joint order of the Ministry of health, ministry of Justice, ministry of Administration and Interior no. 1.216/C of May 18, 2006, regarding the functioning of the medical, medical, psychological and social care integrated programmes for drug using prison in-mates and the Joint order of the ministry of health and ministry of justice no. 898/2002 on medical and education measures for drug-addicted prison inmates.

¹¹ ARENA centre (ARAS), PSYMOTION clinical hospital, ANIT centre and D&C Medical

¹² Romanian Substance Abuse and Addiction Coalition - ROSAAC) is a joined effort of Christian organisations of different denominations towards the rehabilitation of addicted people <http://www.rosaac.ro/index.php>

¹³ Harm reduction activity was regulated by the Governmental Decision no. 860/2005 approving the Enforcement regulation of the provisions of the Law no. 143/2000 on preventing and countering the illicit drug use, as further amended and completed, provided in chapter I, art. 1, letter v.

¹⁴ <http://www.rhrn.ro/index.php?l=ro>

- 1,033,178 distributed condoms.

The substitution for opiate addiction in Bucharest is provided now by several services, some belonging to ANA, some attached to the Ministry of Health and some private, not-for-profit belonging to different NGOs.

The services for the new 'legal highs' dependence are provided for overdose and withdrawal by the emergency rooms of the main emergency hospitals and service for treating the dependence only by two psychiatric hospitals in Bucharest. As a general recommendation, all the substitution centres are providing at least once a year rapid HIV, HCV and HBV testing for their clients. When the tests are positive the patients are sent for confirmation to one of the two infectious diseases hospitals in Bucharest or some are accessing private medical services.

While the overall provision of opioid substitution treatment in Romania seems to be limited, the number of new clients in such programmes increased from 424 in 2009 to 601 in 2010 and followed by a decrease to 500 in 2011.

The total number of cases OST provision in 2011 is 742 (including new and old cases) out of an estimated 19265 IDUs (3) (of which about 38.1% or 7339 are problem opioid users (POUs) have a low level (aprox.10%) of coverage of opioid substitution treatment – based on crude unpublished data offered by the 2012 BSS. Also comparing the number of the total cases in 2011 with new cases/ entries in OST treatment in the previous years we can observe that the retention in substitution treatment is quite low.

In 2010 about 50% (about 9000 clients) of the IDUs in Bucharest were included in needle exchange services (at least once in the current year) and almost 9% were included in opioid substitution therapy. As for 2011 only about 25% (4,832) were included in needle exchange services.

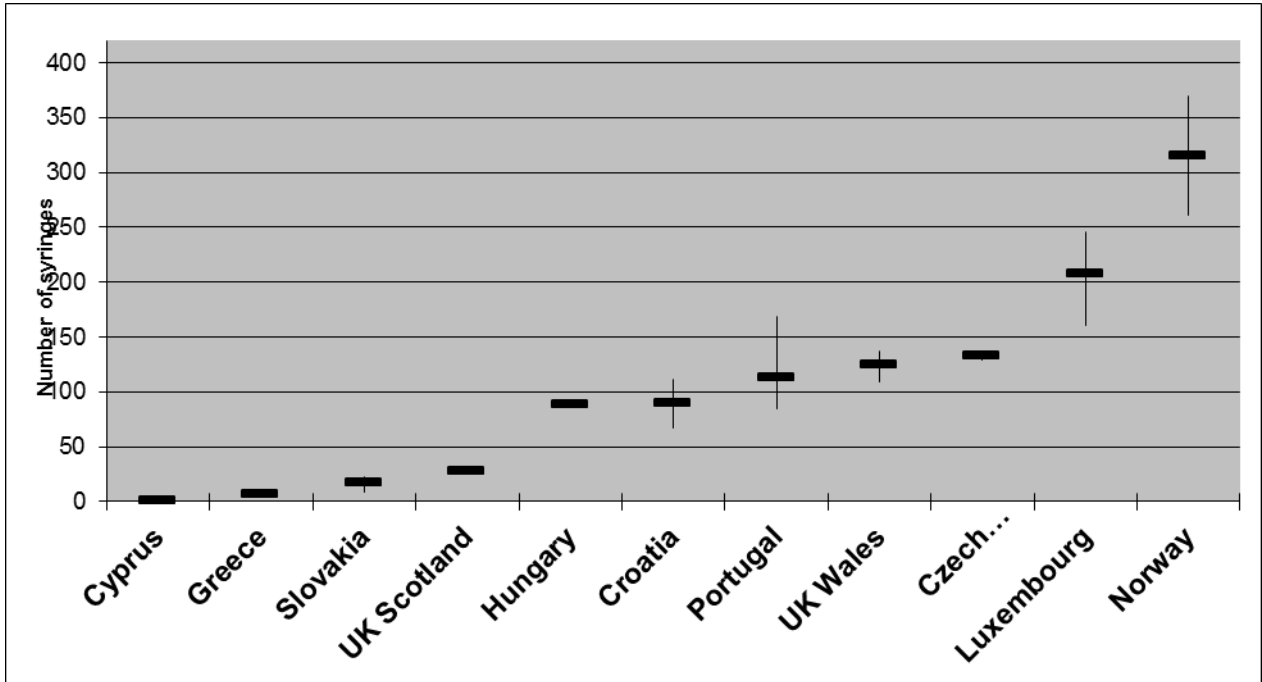
While drug use and injection risk patterns appear to be changing in Romania, access to sterile syringes has decreased. Numbers of sterile syringes distributed reportedly declined from 1.7 million in 2009 to 984,000 in 2010 and to 895,110 in 2011. The 'returned syringes' indicator dropped also to 316,033 in 2011. (3)

Based on the RNAA estimated number of IDUs, syringe provision in Bucharest has thus decreased from 97 syringes per IDUs in 2009 to 55 syringes in 2010 and 46 in 2011 based on the newest estimation of IDUs available in the capital city Bucharest.

A slight improvement of the needle exchange delivery was seen in the second part of 2011 when a new OST and NSP integrated centre was open but is far from being able to cover the demand for such measures. RNNA is in discussion to buy 800 000 syringes and ARAS already was able to buy for 2012 about 900,000 syringes through an EU financed GRANT and is actively distributing them.

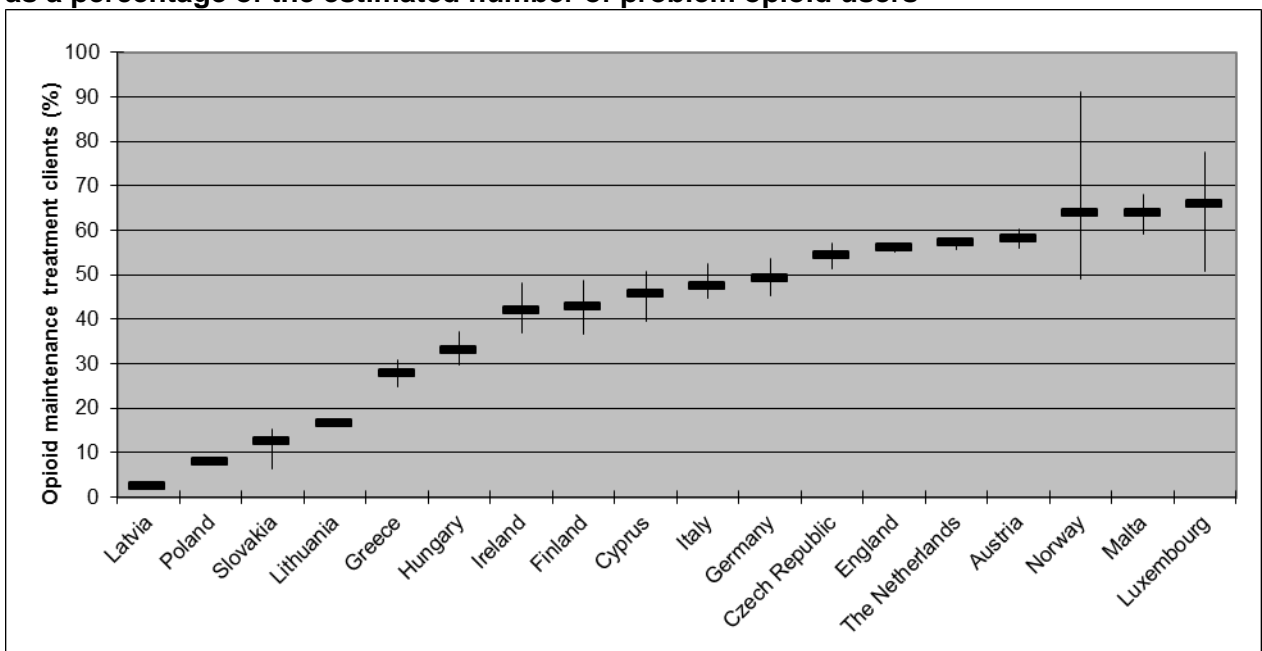
Comparing to most of the EU countries Romania has a low provision of NSP and OST as seen in the following figures (19):

Picture 9: Syringes distributed through specialised programmes in 2010 per estimated IDU



Source: EMCDDA – Statistical Bulletin 2012 - Figure HSR-3

Picture 10: Opioid substitution treatment coverage - opioid substitution treatment clients as a percentage of the estimated number of problem opioid users



Source: EMCDDA – Statistical Bulletin 2012 - Figure HSR-1 part 1

3. Possible hypotheses for the outbreak

Possible determinants or facilitators are described below:

Legal highs being mainly stimulants determine an increased frequency drug use pattern.

New drugs emerged on the market in Romania which were initially legally available and, thus, referred to as 'legal highs'. These are mostly synthetic cannabinoids and cathinones (part of them have now been regulated and are not legally available since 2011).

The switch of injecting drug users to the new stimulants - NPS from opiates determined higher frequency injecting according to the reports from the epidemiological chapter, injecting 6-10 times / day comparing with 3-5 times / day for opiates. Also the large availability of the new drugs contributed to an increase of about 14.2% of the IDUs number compared to the estimated number in 2007 when any of the new stimulants was not available in Romania.

Previous HCV positive status could be considered a facilitator for HIV infection, and is an indicator for injecting risks, including the sharing of injecting equipment, unprotected sexual contacts, high frequency injecting, etc. High HCV prevalence (almost 80%) among IDUs for several years in a row and the low level of treatment provision for this infectious disease could be a predictor of HIV outbreak although this hypothesis needs more in-depth investigation.

The evidence show that the HIV infections among IDUs correlate highly with HCV status, according to the data, provided by the Compartment for Monitoring and Evaluation of HIV/AIDS Infection in Romania INBI 'Prof. Dr. M. Bals' although a causal relation is hard to identify.

Moreover, in Romania HCV therapy is underfinanced and, by default people receiving ART for HIV is not qualified to get free treatment for HCV which could affect the immunological response to HIV evolution after the infection is identified.

This pattern of previous high prevalence of HCV was also identified in the Greece HIV outbreak.

Low services provision

ART has a good provision among general population. However many IDUs have problems registering to treatment as they do not possess legal ID papers, health insurance, or a stable home.

OST provision has had a low coverage during the past 8 years and this can be regarded as a facilitator of the outbreak. It is interesting to notice that the switch to stimulant use decreased the demand for OST treatment. Still, the minimum necessary OST slots will be 5000 (~70%) according with the POU estimation. Also the lack of services specialised on stimulant addiction treatment leave a large IDU population without treatment alternative.

Also the recent decrease in the number of syringes provided through needle and syringe programmes, as well as a recent rise in the combined use of opioids and amphetamine-type stimulants resulting in increased injecting frequency, could all have contributed to increased HIV transmission.

Using the estimate for the IDU population size in the capital city of Bucharest, the minimum target for annual syringe distribution would be 1.9 million syringes (100 syringes per IDU) However, in the context of this on-going outbreak, 200-400 syringes per IDU or even more¹⁵

¹⁵ Ideally one should provide one syringe per injection. For this data on average injecting frequency would be needed. IDUs should also be asked if they have sufficient needles/syringes for all their injections, using one syringe per injection and this question should be used to monitor syringe availability over time

(3.8 to 7.2 million syringes per year) would need to be considered for Bucharest only, many more than the 984 000 syringes that were distributed in the whole of Romania in 2010 (895 000 in 2011) or even many more than in 2008 and 2009 when about 1.7 million per year have been distributed.

Nosocomial transmission

The 1987-1990 HIV infected birth cohorts grew up to 20-25 years old in 2012.

Possible hypothesis: According to expert opinion, some of them are active now in spreading the infection because:

- They did not know about their infection status and they found out only at 18 years old.
- Many of them have been denying their diagnostic and have stopped treatment.
- Some of those above have started drugs in order to 'cope' with the diagnostic¹⁶.
- Difficult adherence for patients who were told late about their HIV status, by their parents, thus reactivation of the infection with 'experienced ARV' virus.
- The advanced stage of the disease along with the viral and immunological failure.
- The multiple associated diseases which require specific treatment + ARV therapy.
- Some of the HIV infected persons are well known members (according to outreach social workers) of high risk groups for drug use such as homeless, CSW or MSM.
- The treatment fatigue, as they are young people already taking daily medications for years (13).

If one looks at the data regarding the age distribution of the HIV infected people we can observe that currently, Romania has a large number of survivors in the 19–24 age group, who belong to the 1987–1990 birth cohort (>6000 cases) (10). A large number of PLWHA who receive specific antiretroviral treatment (ART) in relation to the total number of infected persons (about 8000 cases).

However, this hypothesis is not yet confirmed by the statistical evidence. If one looks at the age distribution of the newly diagnosed HIV cases among IDUs one does not find evidence of a similar birth cohort. This suggests that either this cohort could not explain the entire phenomenon or that HIV-positive (25-34) persons get in contact with many other age groups including 30-34 or 35-39. One would expect to see more peers of the same age group among the newly infected cases. However, it seems well possible that some from the cohort introduced the virus among the IDUs, and then it spread on among other people thus not showing this birth cohort in the statistics, still the cohort could have played a role provided IDUs have developed risk behaviours.

The most prevalent age groups among the new HIV cases recorded by RNFP routine monitoring are (25-34) and in the second place are the persons older than 34. Overall, they are older than in the data presented in the INBI cohort, where most of the persons infected as newborns are now 20-25 years old.

It is difficult to assess if the two mentioned groups have been involved in at risk contacts. Also according to historical injecting records the data from the treatment demand indicator are inconclusive, since both extremes are more prevalent (less than 2 years old injecting history record and over 10 years of injecting). However, this might be explained if 'old' injectors have tried to quit from heroin and turned to 'legal highs', wrongly believing they were safe, while 'new' injectors have directly used the new legal highs.

¹⁶ Interviews with A. Abagiu (Romanian Association Against AIDS and National Institute for Infectious Diseases), M. Mardarescu (National Institute for Infectious Diseases) and M. Ursan (CARUSEL NGO) – unpublished data

Local vs. imported virus

In almost 20% of the new HIV cases among IDUs the virus subtypes are not usually found among the local population according to the molecular epidemiology research studies performed by INBI. It is possible that part of the HIV outbreak among IDUs was imported from Spain or Portugal where Romania has a large immigrant population which are travelling back and forth frequently. However, still over 80% of the cases present the local subtype of the virus (F).

Adrian Abagiu (Romanian Association Against AIDS and National Institute for Infectious Diseases) and Andrei Botescu (Romanian National Focal Point on Drugs and Drug Addiction - RNFP) suggested a number of determinants that contributed to the spread of HIV among IDUs in Romania (8):

- *The lack of political consistency*, with four ministers of health in the past two years, and the lack of an approved HIV prevention strategy, has resulted in less effective political decision-making.
- There was also a temporary dissolution of the National Agency against Drugs (ANA), which was only reinstated in April 2011.
- Additionally, *large sources of external funding for HIV prevention from the Global Fund and UNODC finished in 2010* and national funding for HIV prevention has lagged. There is a temporal association between the increase of HIV among IDUs and reduced provision of prevention services. These reductions have coincided with the end of a grant from the Global Fund in June of 2010.

4. Assessment of eventual risks of further spread

As a recent development, due to the limited funding earmarked to this type of projects, the dimension of harm reduction services was reduced. On the other hand, budget-funded projects that supported such services, have always been underfinanced. Another feature of the harm reduction services in Romania is the concentration of these services mostly around Bucharest.

The lack of services/ programmes at national level continues to represent a major obstacle in making national estimations and tackling the new legal highs problem.

The outreach services of ARAS (Romanian Association against AIDS) were in 2011 the only services that were still providing rapid testing in the field after pre-test counselling. In 2012 RNNA supported Carusel (a new NGO) to open another outreach programme. Similar services were provided by ARAS and other 2 NGOs - Integration and ALIAT until June 2010, when Romania was still eligible to The Global Fund.

The economic crisis forms the greatest challenge in obtaining money for health services in Romania. Moreover there is a lack of political capacity focused on dealing with the HIV outbreak as in the last year period the ministry of health has been changed four times.

The lack of physicians qualified in addiction is an important disadvantage although the specialisation curriculum was published since 2008 and training family physicians to prescribe Suboxone was a solution in many EU countries.

Additional difficulties arose from IDUs' access to health services: many injecting drug users do not have personal identification documents, medical insurance nor the possibility to access medical facilities such as: ELISA confirmation for a positive result of an HCV rapid test, HCV treatment, sexually transmissible infection testing and treatment.

Missing treatment options and the particularities of stimulant injecting which implies higher frequency injecting represents a major threat regarding the evolution of the outbreak among IDUs.

5. Steps taken

The response to the HIV outbreak among IDUs has been limited due to lack of finances and lack of an approved national HIV prevention strategy.

In 2011, there was an increase in the number of drug treatment slots for OST when a new centre was opened in Bucharest by the Romanian Association against AIDS (ARAS) and the National Institute for Infectious Diseases. A new needle exchange centre was opened in 2012 by Carusel, an NGO supported by RNNA which covers 40 clients per day 2 days a week.

The RNNA has purchased 145 000 syringes which were distributed through outreach services in the first semester of 2012. Funding is available to purchase 800 000 more. 100 000 went to ARAS and 45 000 were distributed by CARUSEL. RNNA together with Carusel developed an outreach centre in a hot area 'Ferentari' called CARACUDA

The centre offers:

- Needle exchange
- HIV, HBV, and HCV testing
- Basic medical assistance
- Specialised treatment referral

ARAS was able to buy for 2012 about 900,000 syringes through an EU financed GRANT and is actively distributing them.

Although the National Interest Programme for tobacco, alcohol and drugs prevention was approved in the Governmental Decision no. 1.101/2008¹⁷ for the time interval 2009-2012, its implementation was not possible. The programme provides for tangible intervention measures to complete the national system of prevention and care services for drug users (outreach services, NGO-run specialised services funded from public funding). Even though proper funding was earmarked for programmes provided for in the G.D. no. 1101/2008, the current legal framework did not allow for awarding grant schemes to non-governmental organisations that intended to implement projects meant to ensure the access of drug users to harm reduction services.

The National HIV/AIDS strategy 2011-2015 is still under debate and hopefully will be soon approved.

The new National Antidrug Strategy 2013-2020 is under elaboration and will contain concrete measures regarding HIV/AIDS prevention and harm reduction among IDUs.

In February 2012 a meeting was held with decisional powers in the Ministry of Health at the Romanian Harm Reduction Network request in order to demand funding for the needle exchange programmes. Another similar meeting is scheduled for November 2012.

A national coordination meeting, including all relevant stakeholders and actors within Romania – the First National Conference on Addiction – was held on 19-20 October 2012 and had a special focus on the HIV outbreak among IDUs. The political consequences of the call to action messages communicated in this conference remain unclear.

Research efforts are on-going as two studies will publish final results this year: the new BSS 2012 performed by ANA together with RAA and Carusel and the study on genotype and resistance performed by the molecular epidemiology laboratory of INBI.

Four scientific papers were published in the last 2 years concerning the high risk (~25%) of heart involvement in the NPS injectors, who are developing severe bacterial endocarditis (15).

¹⁷ Governmental decision no. 1101/September 18, 2008 approving the National interest programme to prevent tobacco, alcohol and drug prevention 2009 - 2012 (issued by the Government, published in the Official Gazette no. 672 of September 30, 2008);

6. Possible steps that should be taken in the short term to avoid further spread

On the risk assessment performed together with EMCDDA and ECDC, two priority actions were determined:

- Monitor the ongoing situation of HIV cases, HIV prevalence, HCV prevalence, injection risk behaviour and/or changes in drug use patterns, and prevention intervention coverage
- Continue and improve close collaboration between sectors (HIV surveillance, prevention, drug services, civil society and NGOs) to better monitor and improve the response to the prevention of HIV among IDUs, if possible including regular national level meetings with all stakeholders.

It is now clear that the most important measures imply a rapid response ensuring high levels of harm reduction measures like OST and NSP provision and improving the access of the IDU HIV-positive population to ART services.

The short term priorities are:

1. Assuring at least 400 syringes/estimated user/year = minimum 8,000,000 kits for Bucharest and for other small scale groups of IDUs in the cities that reported injecting drug use.

For this the estimated costs are:

- money for kits ~ 1,600,000 €
- money for dispensing ~ 400,000 €

We estimate that the existing NSP are able to dispense up to 2,000,000 syringes (kits)/year, thus for the rest of the NSP coverage of all the costs is needed.

2. Assuring at least 1000 new OST treatment slots in the next year and other 4000 as soon as possible.

For this we need:

- specialised personnel
- adequate space
- willing clients (48% of NSP clients declare they will follow a treatment option)

Planning in phases:

- period 1 January until 30 June 2013: 4,000,000 syringes dispensed, 1000 new OST treatment slots available
- 1 November 2012 until end 2012: rapid provision of at least 1,000,000 more syringes

Options for syringes

- market prospection of pharmaceutical companies
- free syringes from pharmacies
- EU commission
- national funding shifts
- bilateral collaborations (other EU country)

In order to prevent new outbreaks of HIV among IDUs, it is of utmost importance to review the national or local prevention and control programmes in light of the current situation. Romanian authorities would need to scale up their services urgently to prevent new cases. In the context of significant increased transmission of HIV among IDUs, rapid interventions in the form of

scaling-up of needle and syringe programmes, provision of opioid substitution treatment and of condoms to reduce sexual HIV transmission are required.

Other specific actions were assessed both by Romanian authorities and by ECDC and EMCDDA (1):

- Approve the national HIV prevention strategy (Ministry of Health) – still on-going.
- Plan and carry out behavioural surveillance (including HIV surveillance) to better target and evaluate interventions.
- Apply for international funding to support NSP and other prevention programmes.
- Improve syringe sales at pharmacies – while the provision conditions are improving, still many IDUs can still not afford them. The best solution is to involve pharmacies in free syringe distribution.
- Increase HIV screening among IDUs – it is on-going.
- Identify and apply effective treatment for stimulant-dependent persons.
- Work on defining the population sizes and characteristics of opiate users and injectors.

Beside the international funding available from EC or Global Fund, the state should also assume emergency funding for evaluation and harm reduction measures including financing the network of services provided by NGOs. Not only by providing NSP but also covering the cost for personnel and logistics for distributing the injecting kits.

Some of the ideas that are worth to be implemented is to document more in-depth the HIV outbreak situation through network studies in order to better understand the demographical and behavioural factors that facilitate the spread of infections.

7. Challenges for harm reduction, drug treatment and policies

The NSP provision has been decreasing steadily in the last years although the changes in drug use behaviour showed that the IDUs inject at least three times more frequently.

ART has a constant financing budget which seems acceptable but as one can see from the data presented in the epidemiological studies many of the IDUs are not tested either because HIV testing is not available at all drug treatment facilities or the coverage of treatment specially OST is low (about 10% of POUs) and do not cover people without identity documents or health insurance).

Coverage of intervention services is much lower than the EU average in all settings.

One barrier to the scale-up of OST is the inability (due to legislation) for OST to be prescribed via a general practitioner, or other doctors trained in addictions.

In light of the growing prevalence of injection of amphetamine-type stimulants, as is reported in Romania, an additional and important challenge is to identify and implement effective treatment that targets this type of dependence.

Changing drug use patterns or increasing stimulant use appears to contribute to high spread of HIV in Romania. One of the topics in discussion is if the actual treatment system is prepared to deal with addiction to the new substances and if substitution therapy can have long lasting results for clients who switched from injecting heroin to injecting amphetamine type stimulants.

Economic issues are a threat to continued or scaled-up service provision. At the end of the Global Fund grant in 2010, it was stressed that the provision of syringes, for example, is cheap, but that it should be part of a more comprehensive prevention package which is more expensive. Economic issues were also mentioned as a barrier to on-going or comprehensive bio-behavioural surveillance among IDUs.

Up until the end of 2010, most preventive interventions of drug-related infectious diseases, as well as some of the substitution treatment interventions were supported by international funding (Global Fund, UNODC), mainly for NGO-run programmes.

The combination of an economic crisis, which could affect risk-taking behaviours and exacerbate social inequalities, and the phasing out of funding programmes could be particularly challenging. The closure of this grant coincides with the five-fold increase of HIV among IDUs in 2011 over 2010, and although the extent to which the continuation of services covered in this grant has been provided by alternative organisations needs to be further assessed, all evidence suggests that there has been an overall decline in prevention programmes.

Available evidence (1) indicates a temporal association between a reduction in the level of provision of prevention services and an increase in HIV incidence on the background of changing patterns of drug use among IDUs in Romania. The extent to which these services reductions or changing patterns of risk among IDUs have been related to the current economic crisis cannot be easily measured, and causal links are impossible to establish. However, based on available evidence, the prevalence of injecting drug use may increase during an economic crisis and public health budgets may be reduced. These outbreaks show there is a continuous need to keep public health and sufficient preventive services on the agenda, even in challenging economic times.

Prisons are an important setting for the response and present a challenge for prevention work. Legislation inhibits OST and/or NSP in prison in several countries. Romania has implemented

OST and NSP programmes in prison. 60 detainees were registered to OST programmes in 2011 and 350 received NSP. We do not have relevant data regarding levels of HIV among IDUs in prison. However there are known cases of IDUs which recently were released from prison and are recently infected. A priority of the harm reduction services will be to ensure better testing capacity for infectious diseases in prison.

HIV among IDUs is concentrated in minority groups and in larger cities: There may be an overlap between IDUs and sex work or MSM but this is not well documented.

The most robust and recent evidence published by ECDC and EMCDDA (12) suggests that the largest reduction of HIV and injection risk behaviour can be achieved by providing comprehensive prevention services, with high coverage of both needle and syringe programmes and opioid substitution treatment.

1. 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.
2. Vaccination: Hepatitis A and B, tetanus, influenza vaccines, and, in particular for HIV+, pneumococcal vaccine.
3. Drug dependence treatment: Opioid substitution treatment and other effective forms of drug dependence treatment.
4. 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.
5. 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.
6. Health promotion: Health promotion focused on safer injecting behaviour; sexual health, including condom use; and disease prevention, testing and treatment.
7. Targeted delivery of services: Services should be combined and 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.

8. Conclusions

As we described in this paper, the data in Romania are evidence of the existence of a HIV outbreak among IDUs. The major threats are:

- High increase in HIV incidence in the last 12 months
- Increase in IDUs in Romania in last 2 years 8.4% (from an estimated 17 767 to 19 265)
- High needle sharing among IDUs (87% in the last cross-sectional study available)
- High frequency injecting behaviour (6 times per day or more) among NPS users which accounts for about half of the IDUs population due to the general switch from mainly opioid injecting drug use to injection of stimulants (NPS).

At the same time the situation regarding intervention coverage has deteriorated:

- NSP provision has decreased from 1.7 million syringes in 2009 to 984,000 in 2010 and to 895,000 in 2011
- OST remained at low levels of coverage for POU population (under 10% of estimated POU's).
- ART has a good provision among general population. However, many IDUs have problems registering to treatment as they do not possess legal ID papers, health insurance, or a stable home.

Political framework/support:

Romanian authorities following the recommendations made by the European and international counterparts and public health structures need to scale up their efforts in order to prevent the spread of this outbreak. More targeted financing and training for the available harm reduction structures is needed.

- Beside the international funding available from EC or Global Fund, the state should also assume emergency funding for evaluation and harm reduction measures including financing the network of services provided by NGOs. Not only by providing financing for syringes but also covering the cost for personnel and logistics.
- The Global Fund Programme and UNODC programme have had a crucial role in creating a national network of harm reduction services in Romania, focused mostly on Bucharest, the city with most of the problematic drug use. Also RNNA and the Ministry of Health have built up a drug treatment network which is very competitive although underfinanced. However, these efforts were not enough to safeguard the IDU population from exposure to HIV/AIDS and other infectious diseases like HCV.

Since 2011, the cases of HIV/AIDS + among IDUs have been steadily growing and the peak of this trend may not yet have been reached. This may cause soon a very dangerous public health problem as HIV can be spread rapidly to other risk categories like CSW or MSM or to the sexual contacts of the infected persons.

A more clear picture of the situation will be available as two on-going studies will publish final results: the new BSS 2012 performed by ANA together with RAA and Carusel and the study on genotype and resistance performed by the molecular epidemiology laboratory of INBI.

More research is needed to understand the demographic and behavioural characteristics of the new IDU HIV+ cases in order to adapt better the preventive measures.

However, the short term priorities are:

- A. Assuring at least 400 syringes per estimated user per year = minimum 8,000,000 kits for Bucharest and for other small scale groups of IDUs in the cities that reported injecting drug use.
- B. Assuring at least 1000 new OST treatment slots in the next year and another 4000 in the following years.

Other important measures:

- Increase HIV screening among IDUs – in the last 12 months over 2000 rapid tests were performed both in treatment facilities and outreach services.
- Identify and apply effective treatment for stimulant-dependent persons.
- Approve the national HIV prevention strategy (Ministry of Health).
- Apply for international funding to support NSP and other prevention programmes.
- Develop the work on defining and monitoring the population (size) of IDUs.

9. References

- (1) Joint EMCDDA and ECDC rapid risk assessment 2012- HIV in injecting drug users in the EU/EEA, following a reported increase of cases in Greece and Romania p 3-4
- (2) INBI – Statistical data- Romania at 30 June 2012 - http://www.cnlas.ro/images/doc/romania_30iunie2012.pdf p 12-14
- (3) Romanian national report on drugs 2012 (Chapter 6 –Chapter 4 published by the Reitox National Focal Point Romanian National Antidrug Agency p101-115, p43-51
- (4) HIV, HBV and HCV Behavioral Surveillance Survey among Injecting Drug Users in Bucharest, Romania / United Nations Office on Drugs and Crime (UNODC). - București : Speed Promotion, 2010 – p 20
- (5) National Anti AIDS Strategy 2011-2015 – under public debate -www.ms.gov.ro
- (6) INBI – Statistical data- Romania at 31 December 2011 http://www.cnlas.ro/images/doc/romania_30december2011.pdf
- (7) Romanian national report on drugs 2011 (Chapter 5) published by the Reitox National Focal Point Romanian National Antidrug Agency p70-81
- (8) A. Abagiu and A. Botescu Tallinn, Estonia 29-30th March 2012 - Detecting and responding to outbreaks of HIV among people who inject drugs: Best practices in HIV prevention and control'; Romania –country situation- part 2
- (9) A Botescu et all ; Study among intensive NPS users 2011 –UNODC Romania
- (10) M. Mardarescu Tallinn, Estonia 29-30 March 2012 - Detecting and responding to outbreaks of HIV among people who inject drugs: Best practices in HIV prevention and control – Romania – country situation- part 1
- (11) A. Abagiu and A. Botescu, Lisbon, 12th October 2012; 2nd Meeting on detecting and responding to outbreaks of HIV among IDUs, Update on country situation: ROMANIA
- (12) ECDC and EMCDDA guidance (2011), 'Prevention and control of infectious diseases among people who inject drugs', EMCDDA/ECDC, Stockholm, October 2011 p 30-50
- (13) A. Abagiu et all ; First analysis of the HIV outbreak among IDUs in Bucharest Romania; Poster at the 11th ISAM Congress Geneva, Swiss; October 2012
- (14) Iulia Niculescu et all ; HIV Infection in IDUs from Bucharest-Romania ; The Romanian Infectious Diseases Revue – vol XV, Nr. 3, 2012 p 164
- (15) A Abagiu et all ; Heart involvement in new legal high abusers in Bucharest, Romania – poster at 74th CPDD Congress, June 2012 Palm Springs USA ; Program book p 38
- (16) Vickerman PH, M. May, M. Kretzschmar, M. Wiessing, L. Can hepatitis C virus prevalence be used as a measure of injection-related human immunodeficiency virus risk in populations of injecting drug users? An ecological analysis. *Addiction*. 2010; 105(2): 311-8.
- (17) Wiessing L, Likatavicius G, Hedrich D, Guarita B, van de Laar MJ, Vicente J. Trends in HIV and hepatitis C virus infections among injecting drug users in Europe, 2005 to 2010. *Euro surveillance: bulletin europeen sur les maladies transmissibles = European communicable disease bulletin*. 2011; 16(48).
- (18) Fotiou A, Micha K, Paraskevis D, Terzidou M, Malliori MM, Hatzakis A. HIV outbreak among injecting drug users in Greece - An updated report for the EMCDDA on the recent outbreak of HIV infections among drug injectors in Greece October 31, 2012. Greek REITOX Focal Point of the EMCDDA / EMCDDA, Athens / Lisbon 2012
- (19) EMCDDA – Statistical Bulletin 2012 - Figure HSR-3 Syringes distributed through specialised programmes in 2010 per estimated IDU; Figure HSR-1 part 1 - Opioid substitution treatment coverage - Opioid substitution treatment clients as a percentage of the estimated number of problem opioid users

HIV infection among drug users. According to the Medical Officer of Health for Infectious Diseases, by December 31st 1989, 1074 AIDS cases were reported in the Netherlands, 89 of which had intravenous drug use as a risk factor (75 heterosexual and 14 homosexual i.v. drug users). Although the actual number of AIDS cases among drug users is still relatively low, seroprevalence studies in Amsterdam show that about 30% of the injecting drug users are HIV antibody positive (Coutinho 1989, Van den Hoek 1988, Van den Hoek 1989). The HIV incidence among seronegative injecting drug users in the follow-up group was 12% in 1986 (95% CI 2-22), 5% in 1987 (95% CI 1-9) and 3% in 1988 (CI 0-7). Injection-drug users (IDUs) acquire human immunodeficiency virus (HIV) infection by sharing drug equipment with HIV-infected persons and by engaging in risky sexual behavior. In 2007, injection-drug use was the third most frequently reported risk factor for HIV infection in the United States, after male-to-male sexual contact and high-risk heterosexual contact (1). To characterize HIV-infected IDUs aged ≥ 13 years in the United States, CDC analyzed data from the national notifiable disease reporting system for 2004--2007 from the 34. Update and overview of practical epidemiologic aspects of HIV/AIDS among injection drug users in the United States. *J Urban Health* 2006;83:86--100. Kwiatkowski CF, Booth RE. HIV risk behaviors among older American drug users. AIDS incidence data from 1981 to 1994 among intravenous drug users (IDU) for 12 Western European countries were used. Earlier introduction of the virus and higher prevalence of injecting drug use may explain some of the generally higher incidence in Southern European countries, but the larger part of it is most likely explained by local characteristics of drug users, such as younger age and more frequent sharing of needles and syringes, and a less effective public health response. View. Show abstract. To study pre-AIDS mortality and its association with HIV disease progression in different exposure groups with known intervals of HIV seroconversion.