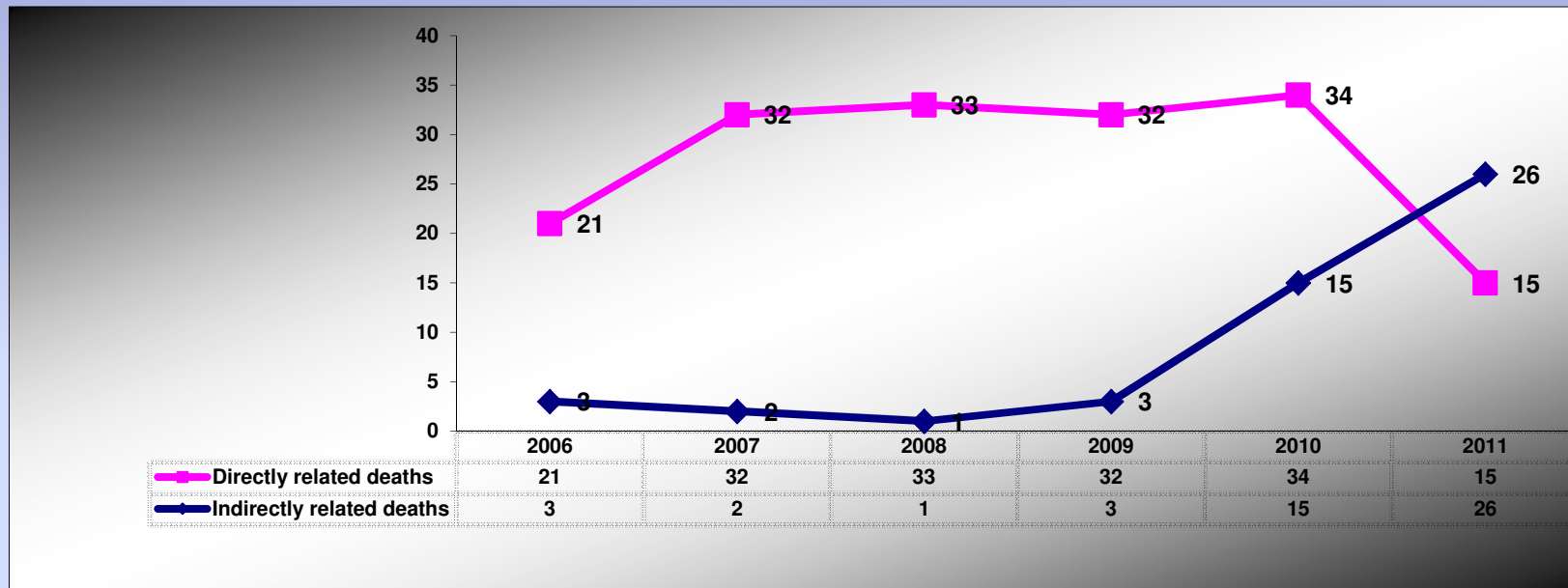


DRD and other indicators cross-indicator analyses and the limitations of the data

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DRD 2011

Distribution of the cases of drug related deaths, according to the type of death (direct, indirect), compared data, 2006-2011



Source: RNAA

DRD 2011

- The number of cases of death directly related to the drug use is significantly decreasing by contrast to the last 4 years – probably due especially the "substitution" of the consecrated drugs - heroin, in particular- with NPSs, which have a lower direct thanatogenerator potential).
- The difference at the case history level is found however in the indirect deaths (much increased number) as an additional confirmation of lesion and consumptive accelerated potential of these new drugs, leading to total mortality, direct and indirect, similar to previous years. **Only the causes of death changed, not also their number;**
- The injecting route of administration became exclusive in the direct drug related death case history, while the opiates continue to dominate the general picture of the illegal drugs in Romania, with the predominance of methadone;
- The number of "indirect deaths" increased significantly - possibly also as a consequence of a more strict application of the legal provisions regarding the classification of deaths for which a forensic agreement is required and implicitly, the identification of the cases for the statistical evaluations;
- It is noticed an accentuated increase of the pathology associated with administration of drugs - infectious acute, subacute or chronic, especially in the context of the explosion and transfer of the use towards NPSs, with the implicit risks of their specific use *pattern* (very frequent injecting, street doses with quantitative and qualitative uncertain composition, bacterial contamination);

DRD 2011

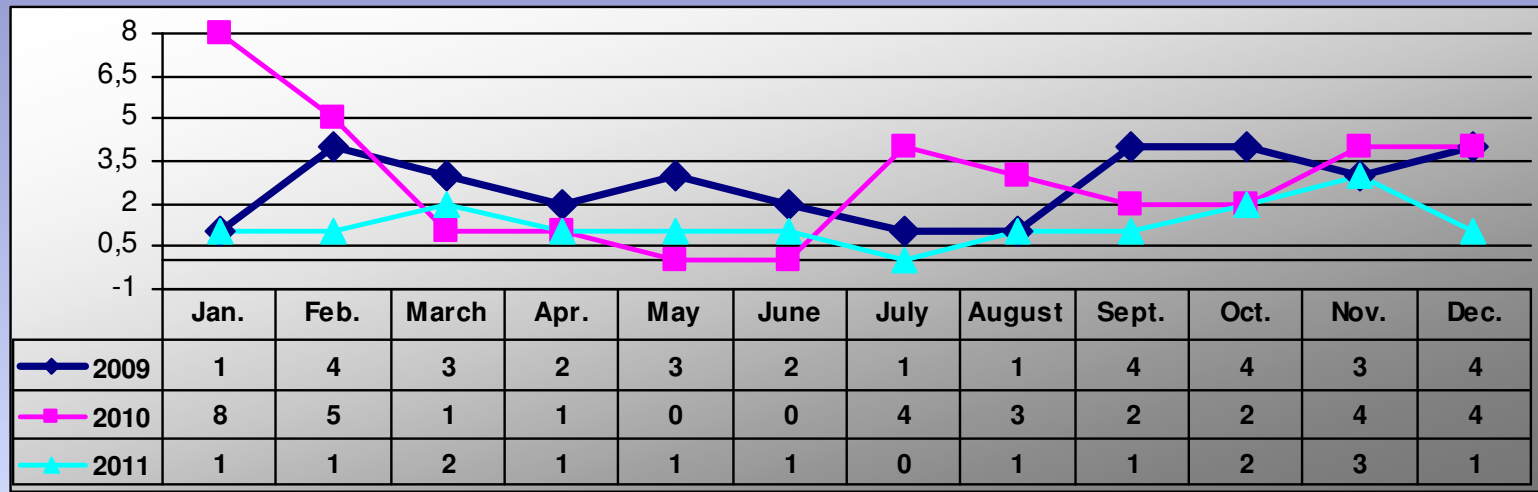
- Of the 26 deaths indirectly related to drug use in 14 cases the infectious endocarditis was found, which has seen a "explosion": from 0-1 % in the previous years to 10 % last year, to 54 % this year.
- in 70 % of the DRD cases were found damages of the mitral cell and of the aortic valve (the damage of the left cord valves; in 70 % of the cases multiple valve damages, mural damage or cardiac inflammation - eloquent expression of the severity of the damage and by the immunodepression degree, generated by the pharmaceutical action of the drug on the immunity mechanisms, the multi-organic deterioration, the lifestyle, etc. and in 2 cases by the immune depression due to pregnancy).

DRD 2011

To a population of nearly 3 million inhabitants that Bucharest and its surroundings count are present, almost 40 deaths are recorded in (direct or indirect) relation with the drug use, while in the rest of the country, counting almost 17 million inhabitants, only 2 cases of indirect deaths are reported.

The benchmark with other key indicators from other areas of the country - would represent a solid landmark - sustain the above mentioned discrepancy.

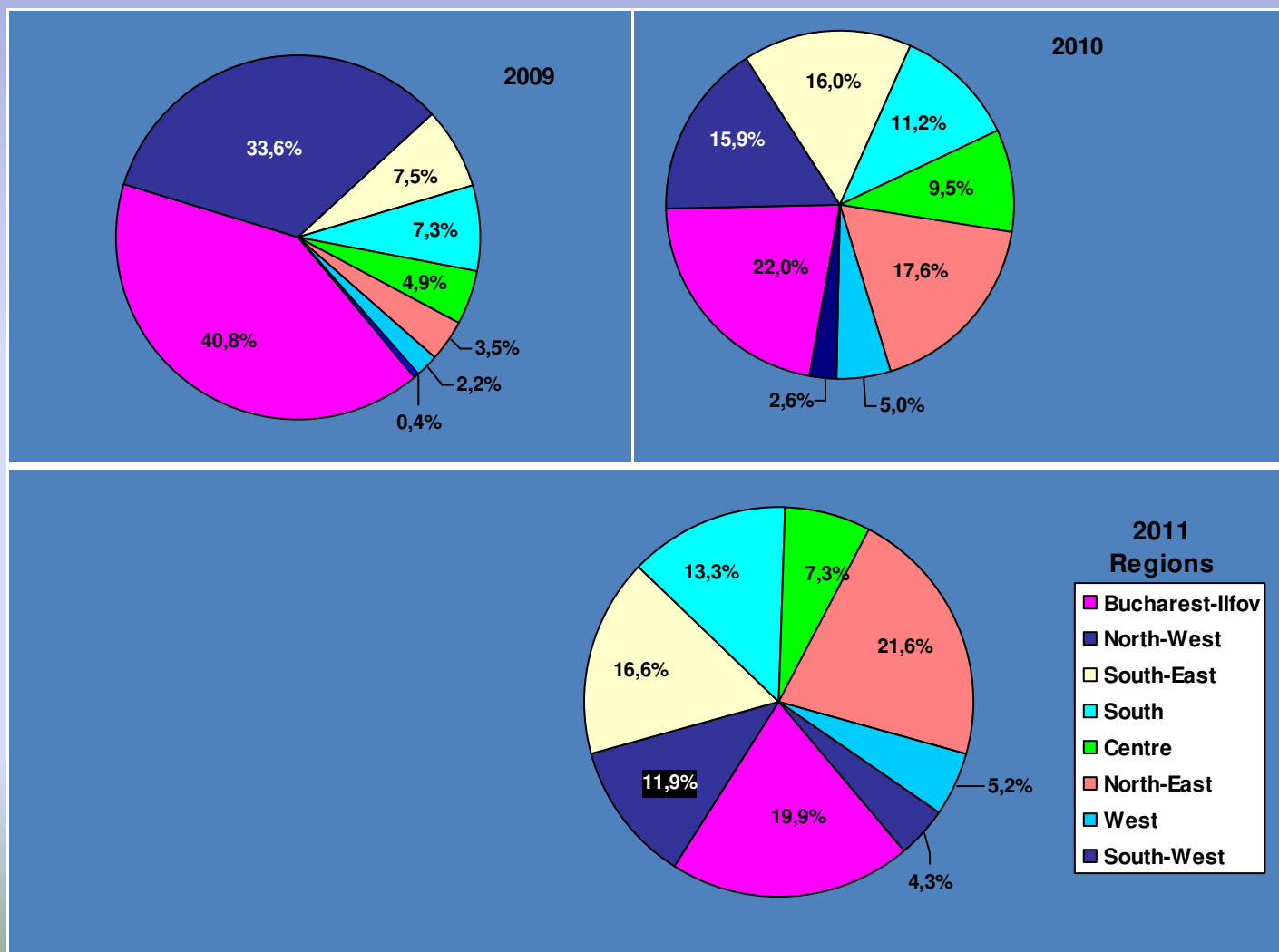
Evolution of non-fatal emergencies caused by the use of psychoactive substances, per months, compared data 2010- 2011 (No of cases)



- 1 395 (54.1 %) of the emergency cases recorded in 2011 where the NPS use was mentioned , such type of use was reported 1 279 emergency cases in 2010. **Only 2 cases of deaths directly related to the drug use was attributed to the NPSs "legal drugs",.**
- the decrease at half of the number of withdrawal cases and the reduction with about 3 times of the proportion of the number of cases of overdose. Correlated to these decreases, the proportion of the number of coma cases has significantly increased from 1.4 % in 2010 to 3.1 % in 2011
- the progressive amplification of the number of cases revealing other diagnoses induced or determined by the use of psychoactive substances (self-induced lesions or trauma, accidents and other external causes, harvest of biological testing material), from 0.2 % in 2009 to 1.9 % in 2010, reaching to 4.6 % in 2011.

Nonfatal drug related non-fatal emergencies

Distribution of the medical emergencies caused by the use of psychoactive substances, recorded in the sanitary units providing emergency services, between 2009 and 2011, By regions (%)



Delimitation of risk areas at county level, according to the number of non-fatal medical emergency cases recorded in 2011

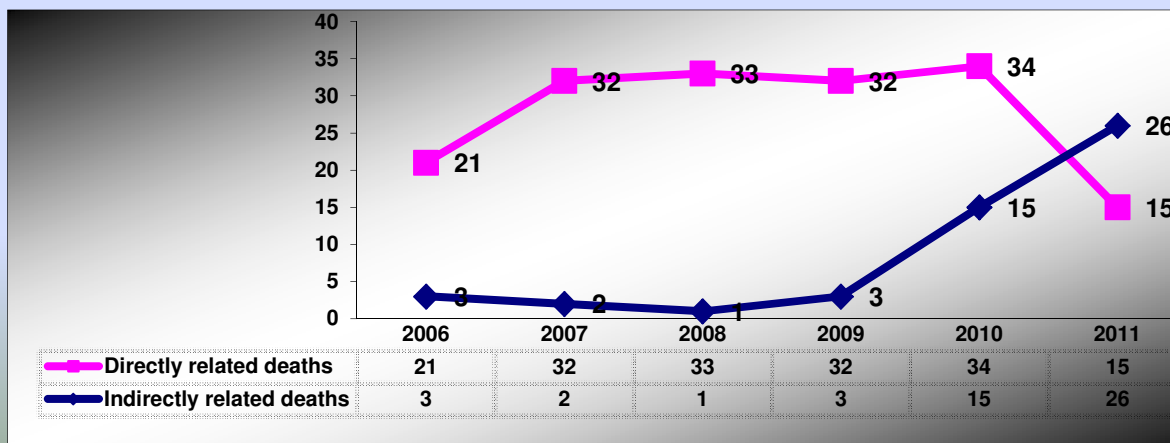
County	Area
Bucharest, Iași	VERY HIGH RISK AREA (proportions of over 10 %)
Cluj, Prahova, Constanța, Galați	HIGH RISK AREA (proportions between 5 % and 10 %)
Bihor, Timiș, Bacău, Brașov, Dolj, Sibiu, Tulcea, Brăila, Dâmbovița, Botoșani, Suceava, Giurgiu, Alba, Buzău, Vrancea	MODERATE RISK AREA (proportions between 1% and 5%)
Neamț, Caraș-Severin, Harghita, Vâlcea, Călărași, Vaslui, Hunedoara, Mehedinți, Gorj, Ialomița	LOW RISK AREA (proportions between 0.5 % and 1 %)
Arad, Maramureș, Mureș, Ilfov, Olt, Argeș, Covasna, Satu Mare, Sălaj, Teleorman, Bistrița Năsăud, Teleorman	VERY LOW RISK AREA (proportions below 0.5 %)

PoUs/IDUs

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 (an 14,2% increase compared to the estimated in 2007) and An accurate estimate of the size of the national PDU/POU population is not available due to the paucity of services/programmes outside Bucharest,

Estimation (in absolute figures and ratio) of the number of problem drug users in Bucharest, using the multiplier method, 2007- 2011

Year	Estimated number of problem drug users (PDU)	Ratio at 1 000 people, aged 18 to 49 years old
2007	16 867	17.4
2008	17 387	17.5
2009	17 767	18.0
2010	18 316	19.2
2011	19 265	20.1



Stimulant (NPS) and POU users among IDUs

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 the majority 49.4% of the respondents of the 2012 BSS declared they injected NPS and only 38.1% heroin. or 7339 subjects

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

Consequently the decrease in direct related deaths is consistent with the decrease in POUs and the increase in indirect related deaths correlates with the increase in NPS use among IDUs.

significant health consequences associated to the NPS administration, generated by unknown qualitative and quantitative compositions, uncertain excipients, high contaminations of the street doses, and the shared use of *paraphernalia*, led to a quick accumulation of pathology, particularly infectious, with fulminant or acute developments in the context of immunological depression specific to cathinone-like and synthetic cocaine (dimethocaine) incentives.

The difficulties in toxicological evidence of drug use represent the main worldwide impediment of forensic objectification. On the other hand, according to the limited studies available in the scientific community, taking into account the infinitesimal doses and the clinical action mechanisms associated to these substances, it is difficult to prove that death are as a direct result of these substances.

Decrease of the NSP provision

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.

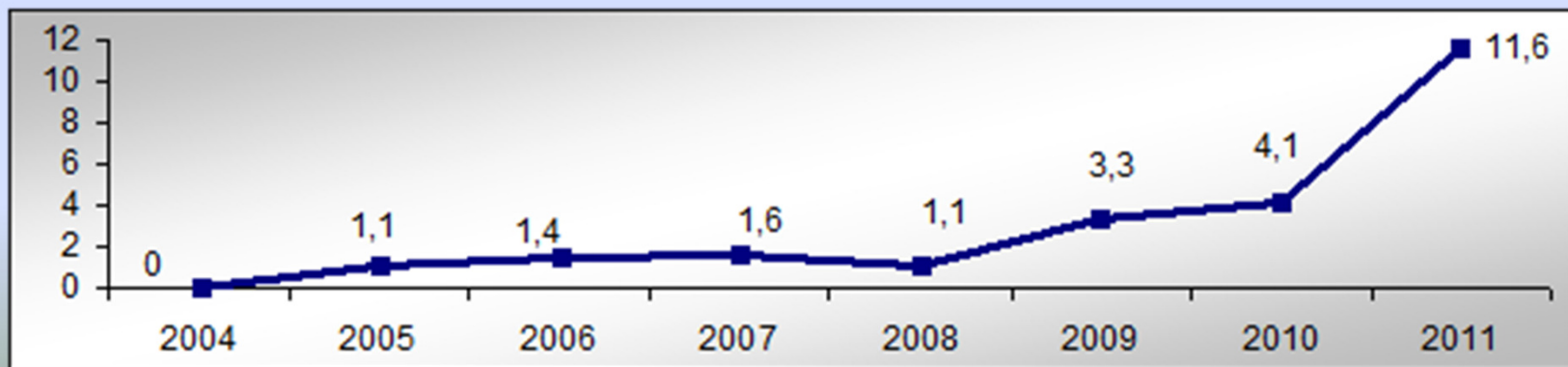
While drug use and injection risk patterns appear to be changing in Romania, access to sterile syringes has decreased. Numbers of sterile syringes distributed reportedly declined from 1.7 million in 2009 to 965,203 in 2010 and to 895,110 in 2011. The “returned syringes” indicator dropped also to 316,033 in 2011.

High frequency injecting behavior (6 times per day or more) among NPS users which accounts for about half of the IDUs population due to the general trend switch from mainly opioids injecting drug use to stimulants (NPS).

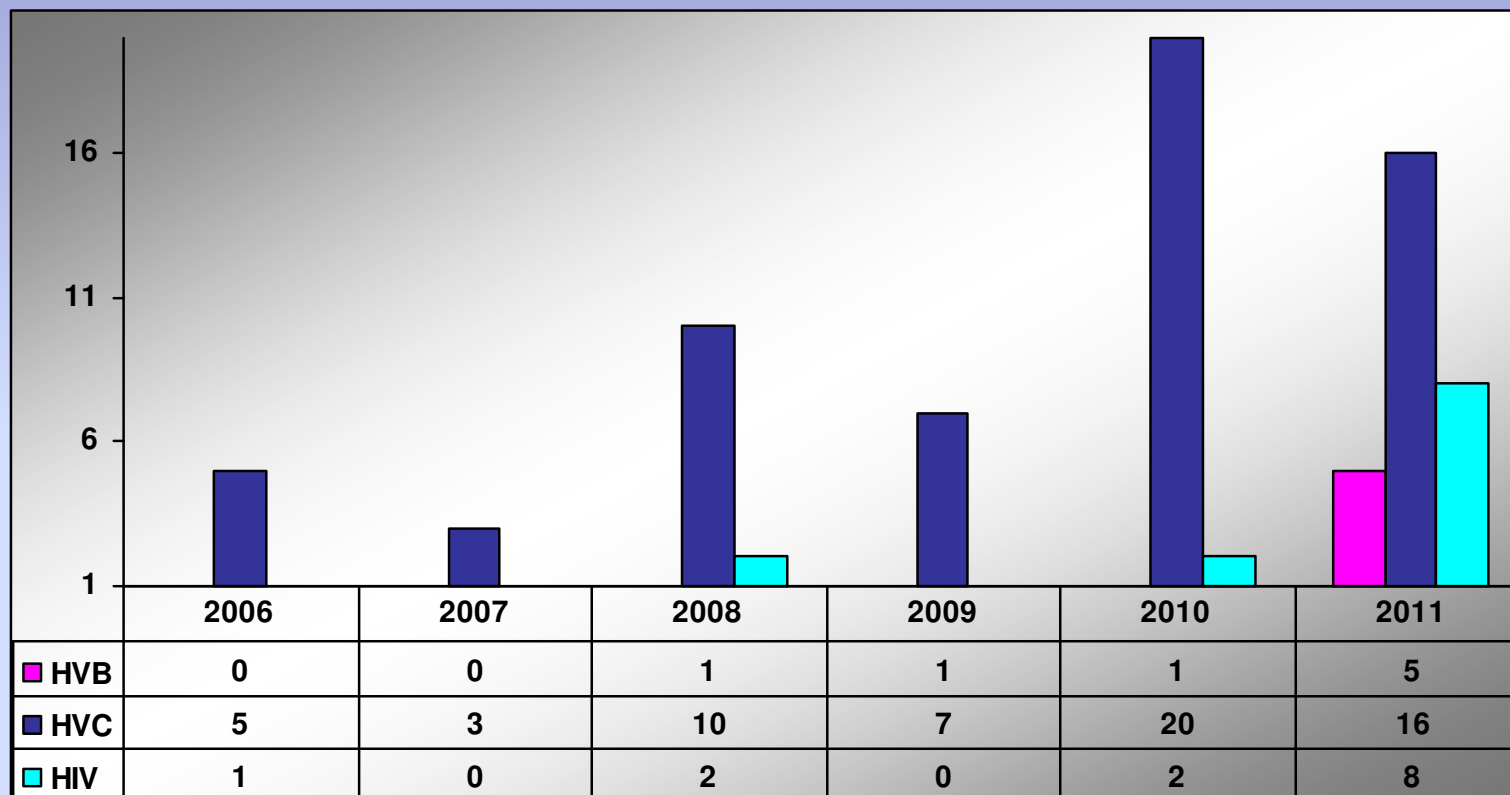
At the same time, the pathology identified in DRD cases reveals also the administration without minimum sepsis/antisepsis or the administration of highly contaminated doses. Example: the hot volatilization of heroin for the parenteral administration that destroys the most part of the microbial flora of the street dose, while new abuse drugs are highly soluble at room temperature, which leads to the direct administration into the bloodstream of rich bacterial loads .

HIV outbreak among IDUs

- While reporting three to five new HIV+ IDU's cases annually from 2007 to 2009, HIV infections among IDUs increased to 12 cases in 2010 and to 129 in 2011 followed by 102 new cases until the end of June 2012.
- Cases reported in 2012 (first 6 months) were also mostly from Bucharest and surroundings (93 out of 102 cases), mostly males (83 out of 102 cases), and between 20 and 34 years old.
- 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%, 25/934) in 2011.



Evolution of HVB, HVC and HIV infection incidence in the drug related deaths, compared data, 2002-2011



Source: RNAA 2012

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