



STOCKTAKING REPORT

COUNTRY-SPECIFIC MEDICAL CONDITIONS IN DIAGNOSTIC AND TREATMENT OF HIV AND HEPATITIS B/C CO-INFECTIONS

Potsdam, March 2011

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Title: BORDERNETwork STOCKTAKING REPORT: COUNTRY-SPECIFIC MEDICAL CONDITIONS IN DIAGNOSTIC AND TREATMENT OF HIV AND HEPATITIS B/C CO-INFECTIONS

Potsdam, March 2011

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PREFACE

The spread of HIV/AIDS and other sexually transmitted diseases in the end of the eighties and the early nineties is situated between the collapse of the socialist authoritarian regimes in Middle-, Eastern and South-Eastern Europe and the reorientation of these societies. In a time with a large lack of statehood and the Great Transformation of centrally planned economies into liberal market economies, the governance became weak, so the health care system wasn't really able to react on the new establishing problems in the health care sector.

In the framework of this system collapse socio-economic problems like poverty, a high unemployment rate and the disintegration of normative value systems, lead to a great depression in Eastern Europe. A large number of persons covered their problems and hopelessness by using intravenous drugs.

In most of the reviewed countries the health care system developed a couple of years after the fall of the Iron Curtain. Estonia¹ and Slovak Republic² established health insurances in 1993. These health insurances were all citizens' health insurances with high out-of-pocket payment. Romania³ established a Health Insurance Fund in 1998 with a high co-payment of 30% of the costs for health care. At last, Poland⁴ created in 2003 a single health insurance company with the National Health Fund, in which all polish citizens take part.

The present epidemiological situation is the result of the weakness of statehood and governance in the former transition period. In countries, especially like Estonia, the spread of HIV/AIDS and other STIs, but also the drug consume weakens the regenerative process of these societies and lead to a shrinking number of inhabitants and a threat for the economic wealth⁵. HIV/AIDS affects the socio-economic process in three ways: At first, direct costs for the increasing expenses on health care programmes, health insurances or the education of health care professionals. The second issue are the indirect costs which influence the productivity of the single citizen (by the absence from the job or

¹ Merten, M.: Gesundheitssystem Mittel- und Osteuropas (Teil 7): Estland. Auf Erfolgskurs., in: Deutsches Ärzteblatt Jg. 103, Heft 1-2. 09. Januar 2006, S. A28 – A31

² Merten, M.: Gesundheitssystem Mittel- und Osteuropas (Teil 3): Slowakei. Zwei Seiten einer Reform., in: Deutsches Ärzteblatt Jg. 102, Heft 11. 18. März 2005, S. A737 – A740

³ Merten, M.: Gesundheitssystem Mittel- und Osteuropas (Teil 9): Rumänien. Veränderungen brauchen Zeit., in: Deutsches Ärzteblatt Jg. 105, Heft 19. 09. May 2008, S. A998 – A1000

⁴ Merten, M.: Gesundheitssystem Mittel- und Osteuropas (Teil 1): Polen. Bedrückende Resignation., in: Deutsches Ärzteblatt Jg. 101, Heft 47. 19. November 2004, S. A3150 – A3152

⁵ See: Barnett, T. and Whiteside, A. Aids in the Twenty-First Century: Disease and Globalization. London: Palgrave Publications, 2002; See also: World Bank / Adeyi, O. et al. Averting Aids Crises in Eastern and Europe and Central Asia. A Regional Support Strategy. Washington, D.C.: World Bank 2003

indisposition). At last the systematic costs, which occur by negative effects on the working climate or the team spirit.⁶

Beside these country-specific problems of HIV epidemic there are different global challenges. The HIV drug resistance is one of these increasing global issues and it is close connected with the management of Hepatitis b and c co-infections.

Drug resistance leads to the need for expensive second-line and third-line therapy regimens and the prognosis of the patient is worse. With the existence of transmitted or acquired HIV drug resistance the possibilities of treating both HIV infection and hepatitis co-infection are limited because important drugs cannot be used and remained medications can cause potential different side effects and drug interactions in the treatment of co-infections. That's why the prevention of HIV drug resistance also improves the conditions for a good clinical management of hepatitis co-infections.

THE STRUCTURE OF THE STOCKTAKING SURVEY

Work Package 7: "Referral, management, treatment and care of HIV/STIs and co-infections" started in August 2010. Together with the Robert Koch-Institute (RKI) we created an instrument to get more detailed information about the current situation of HIV/AIDS and co-infections in 5 Eastern- and South-Eastern European countries. We developed two questionnaires (see appendix) for our cooperation partners and for treatment specialists, who are dealing with HIV/AIDS and co-infections. The questionnaire for the cooperation partners should collect information about the general epidemiological situation in the relevant countries. An additional aim was to get information about existing national guidelines for diagnose and treatment of HIV/ AIDS, Hepatitis B, Hepatitis C and co-infections. The questionnaire for the treatment specialists is designed more detailed. We tried to find out, the epidemiological situation, the possibilities and standards in diagnostics and treatment they have in their clinics and treatment centres. We sent out 5 questionnaires to our cooperation partners and over 20 questionnaires to different treatment specialists in these countries. Our cooperation partners also provided our questionnaire through their own networks. At the moment we got 11 questionnaires back. A couple of the participating medical specialists will be invited to two training and hospitation workshops in June (Potsdam) and November (Rostock).

⁶ Brunne, V.: Wie Aids die Weltwirtschaft schwächt., in: Deutsches Ärzteblatt Jg. 104, Heft 43. 26. Oktober 2007, S. A2932 – A2934;

The following cooperation partners responded:

INSTITUTION	FIRST NAME	SURNAME	CITY	COUNTRY
HESED	Elena	Kabakchieva	Sofia	Bulgaria
National Institute for Health Development (NIHD)	Riina	Enke	Tallinn	Estonia
Public Woiwodship Hospital in Szczecin (SPWSZ)	Małgorzata	Kłys-Rachwalska	Szczecin	Poland
Romanian Association Against AIDS (ARAS)	Dr. Adrian	Abagiu	Bucharest	Romania
PRIMA	Assoc. Prof. Danica	Staneková	Bratislava	Slovakia
SALUS FOUNDATION	Maryana	Sluzhynska	Lviv	Ukraine

Table 1: Feedback of cooperation partners of BORDERNETwork (WP7)

The overall aim is to collect relevant data for country specific guidelines on HIV/AIDS and Hepatitis B/ co-infections. Important is the involvement of treatment specialists in a trans-border network, which seeks to improve education materials and find out clinical pathways, which are adaptable to the regional context and possibilities of the diagnostic and treatment system. Together with the experts on-site Work Package 7 tries to identify possible clinical pathways. The objective is not to establish a universal approach, which couldn't be used in the different regions with their specific demands. The contextual approach, which takes the country's specific medical conditions serious, tries to establish functional structures by integrating the specialists on site.

The following treatment specialists responded:

INSTITUTION	FIRST NAME	SURNAME	CITY	COUNTRY
Institute for Infectious Diseases - "Matei Bals"/ Bucharest	Dr. Adrian	Abagiu	Bucharest	Romania
Hospital for Infectious Diseases	Dr. Ramona Delia	Ionescu	Brasov	Romania
Constanta Regional Center for HIV/AIDS Surveillance and Monitoring	Prof. Dr. Sorin	Rugina	Constanta	Romania
West-Tallinn Central Hospital	Dr. Kai	Zilmer	Tallinn	Estonia
Narva Hospital	Dr. Dmitri	Jaaniste	Narva	Estonia
Pärnu Hospital	Dr. Helve	Vestman	Pärnu	Estonia
Clinic of Infectious Diseases at the University Hospital	Dr. Vakril	Nikolov	Plovdiv	Bulgaria
AIDS Department at the Specialized Hospital in Infectious and Parasitics Diseases	Dr. Toma	Tomov	Sofia	Bulgaria
Chief of the Dermatology and Venerology Department in Sofia	Dr. Mariela	Hitova	Sofia	Bulgaria
Out-patients Hepatology Clinic, Voivodship Hospital	Dr. Anita	Wnuk	Szczecin	Poland
University Kosice	Prof. Dr.	Jarcuska	Kosice	Slovakia
University Hospital Martin	Dr. Lukas	Murajda	Martin	Slovakia

Table 2: Feedback of treatment centres of BORDERNETwork (WP7)

EPIDEMIOLOGY: Current State of the Epidemic

I. HIV/AIDS

A. PREVALENCE

The project BORDERNETwork regards 5 East- and Southeast-European countries (Bulgaria, Estonia, Poland, Romania and Slovakia) of the European Union and one country which is

<i>Country</i>	<i>Population⁷</i>	<i>Reported Number of Persons living with HIV/AIDS in 2009⁸</i>	<i>Estimated Number of Persons living with HIV/AIDS in 2009⁹</i>	<i>Estimated adult HIV prevalence rate (aged 15-49) in 2009¹⁰</i>
Bulgaria	7.497.000	1.109	3.800 ¹¹	0,1
Estonia	1.339.000	7.320	11.500	1,2
Germany	82.057.000	54.000 ¹²	67.000 ¹³	0,1
Poland	38.038.000	12.757	100.000	0,1
Romania	21.190.000	16.162	50.000	0,1
Slovak Republic	5.412.000	443 ¹⁴	1.250	< 0,1
Ukraine	45.433.000	180.000	440.000	1,1

Table 3: Overview about the epidemiological situation in selected countries of CEE and SEE

⁷ <http://www.un.org/esa/population/publications/population-hiv2010/population-hiv2010chart.pdf> (27.02.2011).

⁸ <http://www.unaids.org/en/dataanalysis/monitoringcountryprogress/2010progressreportsubmittedbycountries/> (27.02.2011)

⁹ Reply of BORDERNETwork cooperation partners 2010

¹⁰ <http://www.unicef.org/infobycountry/> (28.02.2011)

¹¹ Ibid.

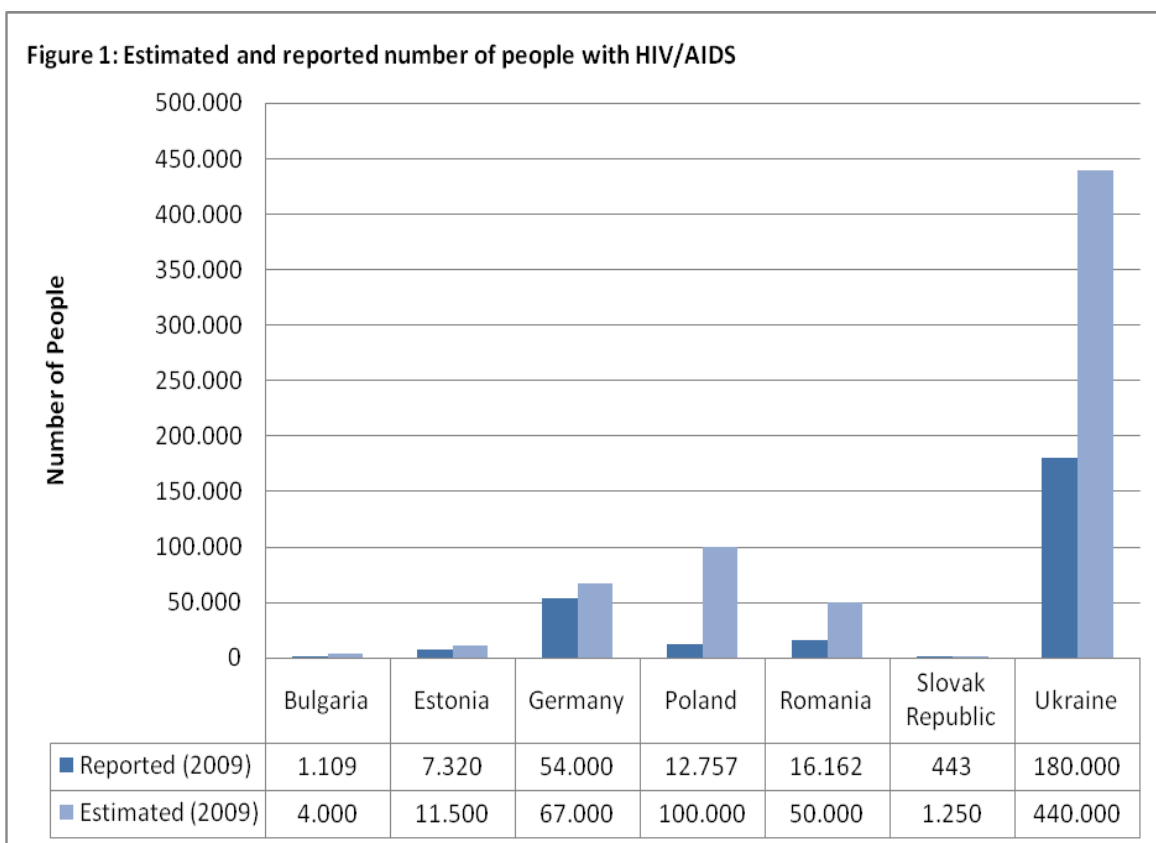
¹² Robert Koch-Institut: Epidemiologisches Bulletin 46/2010, p. 458

¹³ Ibid.

¹⁴ Source: BORDERNETwork Questionnaire for Cooperation Partners

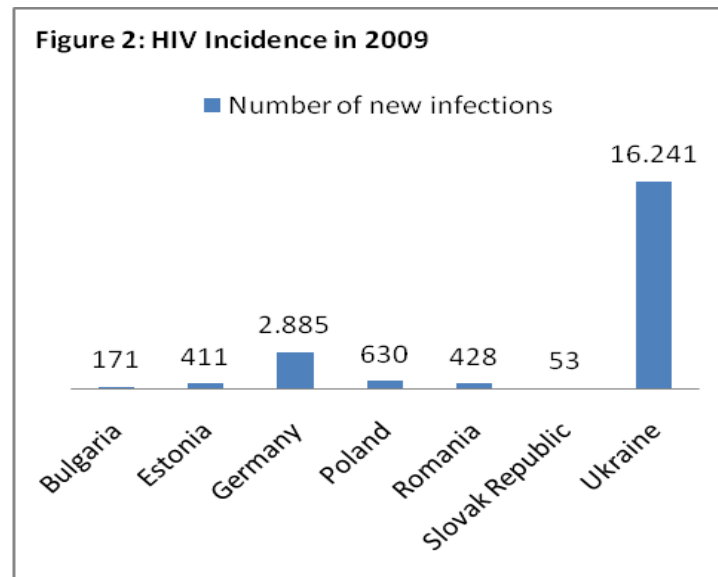
not part of the European Union (Ukraine). The spread of HIV/AIDS and other STIs differs in the regarded regions (see Table 3). While countries like Bulgaria, Poland, Germany, Romania and Slovak Republic have a low prevalence rate (0.1), countries like Estonia and Ukraine have a high prevalence rate (>1.0). Estonia developed a HIV/AIDS epidemic which is dramatic. As a country with a small population and in the immediate vicinity of the high prevalence country Russia (adult prevalence: 1.1), Estonia is hard affected by the HIV/AIDS epidemic.

The big difference between reported and estimated values is an indicator for the weakness of the national surveillance systems. In Poland the estimated number of people who are living with HIV and AIDS is 10 times higher than the official reported number of persons. In Bulgaria, Romania, Slovak Republic and Ukraine the estimated number is 2-3 times higher than the reported number of people with HIV/AIDS.



B. INCIDENCE

In the beginning of the new century the number of diagnosed infections increased rapidly in Europe. Now the number of new infections in the monitored countries is relatively stable. Since 2005, the picture of the development of HIV/AIDS in Europe changed and varied more than before.

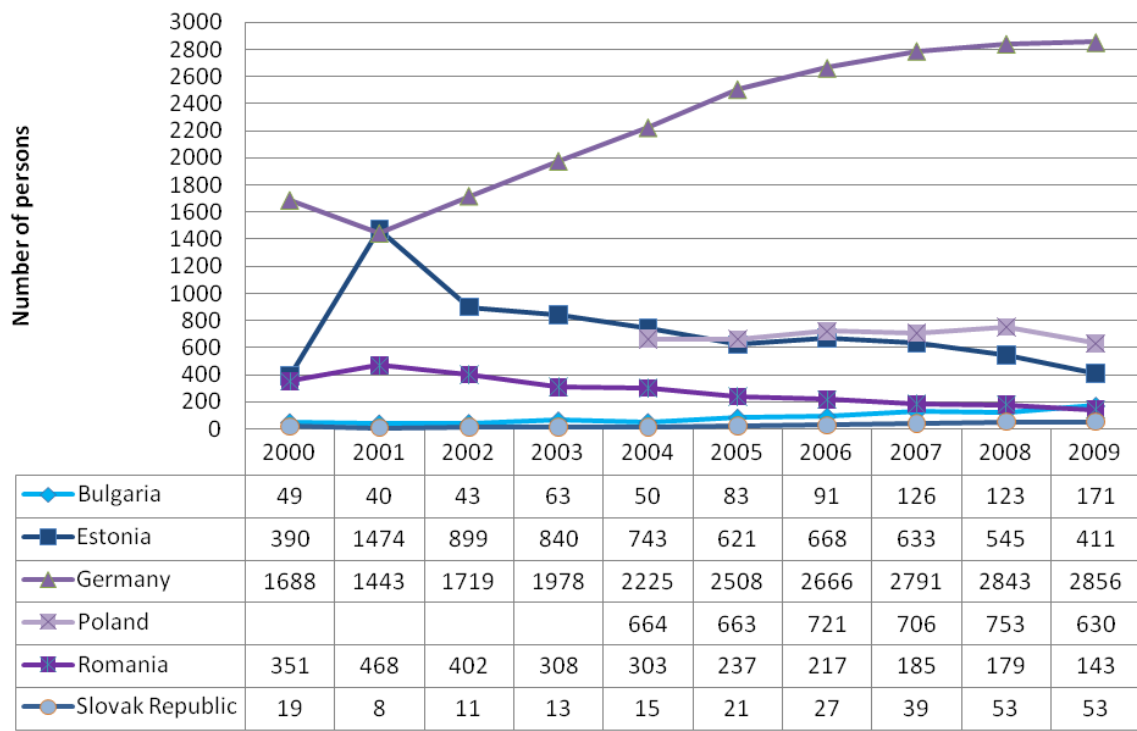


The number of new diagnoses stabilized (e.g. Poland and Germany), decreased (e.g. Estonia, Romania) or increased on a low level (Bulgaria, Slovak Republic). With 2.885 cases Germany had the most new diagnoses of HIV/AIDS in 2009. Poland (630), Romania (428) and Estonia (411) reported under 700 diagnoses. In Bulgaria and Slovak Republic the number of new infections stabilized below 200 cases, but doubled from 2005 (Bulgaria: 83 / Slovakia: 21) to 2009 (Bulgaria: 171 / Slovakia: 53).¹⁵ The incidence data¹⁶ only marks the year of the diagnosis. The infection often happened years before the diagnosis of HIV, so a gap between the year of the infection and the year of the diagnosis is too big. HIV is often diagnosed too late after the infection, when first AIDS typical diseases developed and the patient's immune system collapses. In this stage therapy is very difficult to conduct, so AIDS affected people often don't recover and die.

¹⁵ European Centre for Disease Prevention and Control (ECDC): HIV/AIDS surveillance in Europe 2009, Stockholm 2010, p. 24ff.

¹⁶ See URL: http://www.ecdc.europa.eu/en/publications/Publications/101129_SUR_HIV_2009.pdf
See URL: <http://www.unaids.org/en/dataanalysis/monitoringcountryprogress/2010progressreportsubmittedbycountries/>

Figure 3: Development of Incidence 2000 - 2009, Source: ECDC

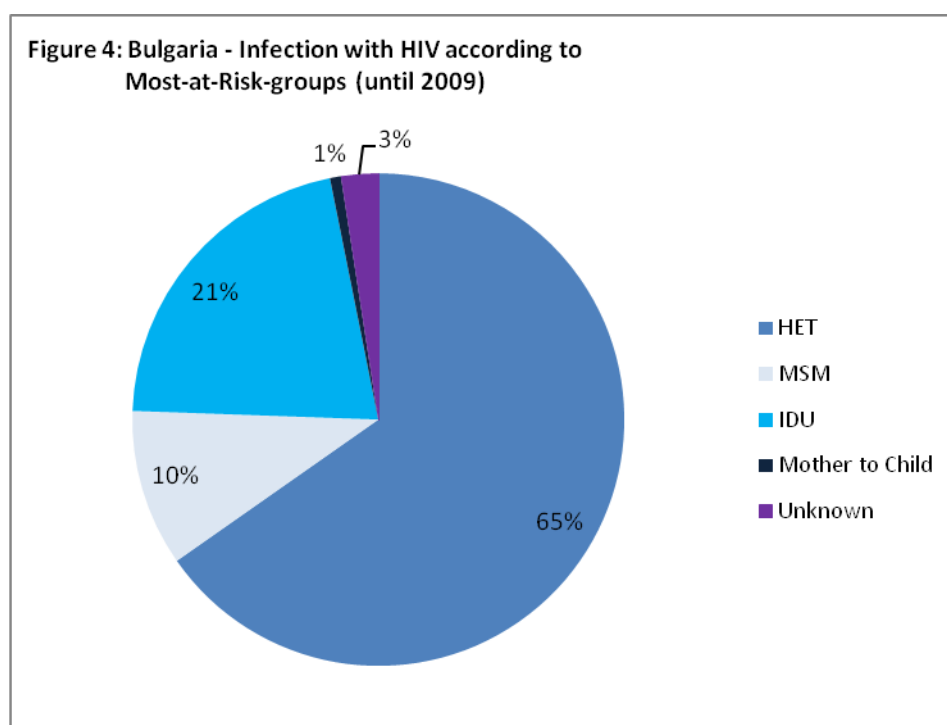


C. INFECTION WITH HIV ACCORDING TO MOST-AT-RISK-GROUPS

The spread of HIV is based on transmission ways, which are in every country very different pronounced. It is possible to divide the monitored countries in two different types. First in countries where HIV/AIDS is transmitted by intravenous drug use and the sharing of needles and syringes, that is Estonia, Poland and Ukraine. Secondly countries where HIV/AIDS is transmitted by sexual intercourse and sexual practices with high risk. In Germany and Slovakia the biggest Most-at-Risk populations are men, who have sex with men. In Bulgaria and Romania the number of people who infected themselves by heterosexual contacts is very high. Also a change in the percentage of different transmission ways is remarkable. While in countries like Germany, Romania and Ukraine the Most-at-Risk-groups are very stable, these groups in Bulgaria, Poland and Estonia changed it's proportion.

1. BULGARIA¹⁷

In Bulgaria the majority (65%) of all infections until 2009 with HIV/AIDS occurs through heterosexual intercourse. 21 % infected themselves by intravenous drug use. 10% of all persons who are affected by HIV/AIDS belong to the group of men who have sex with men. It is possible, that a large number of people, who were registered as heterosexual persons, infected themselves by using intravenous drugs or by homosexual contacts. Maybe legislative or moral restrictions are leading these people to hide their risky behaviour. Especially marginalized out-groups of Bulgaria, e.g. the Roma Community, covers the way of transmission to avoid punishment and social exclusion.



In 2009 the statistic draws another picture of the proportion of Most-at-Risk-groups. Now the percentage of IDU and heterosexual persons is nearly the same. With 43% the number of persons who infected themselves by intravenous drug use is 3 % higher than the infection by heterosexual intercourse (40%)

The rate of MSM increased from 10% (average until 2009) to 16% of new infections in the field of men, who have sex with men. It is possible, that the Most-at-Risk groups will differ more in the coming years. So the increasing rates of MSM and IDUs will decrease the infection of heterosexual persons. The rate of MSM will rise because of the male sexwork community of Roma boys who work in Western Europe and come back to Bulgaria with an infection of HIV or other STDs.

¹⁷ Source: BORDERNETwork Questionnaire for Treatment Centres; European Centre for Disease Prevention and Control (ECDC): HIV/AIDS surveillance in Europe 2009, Stockholm 2010 , p. 32 ff.

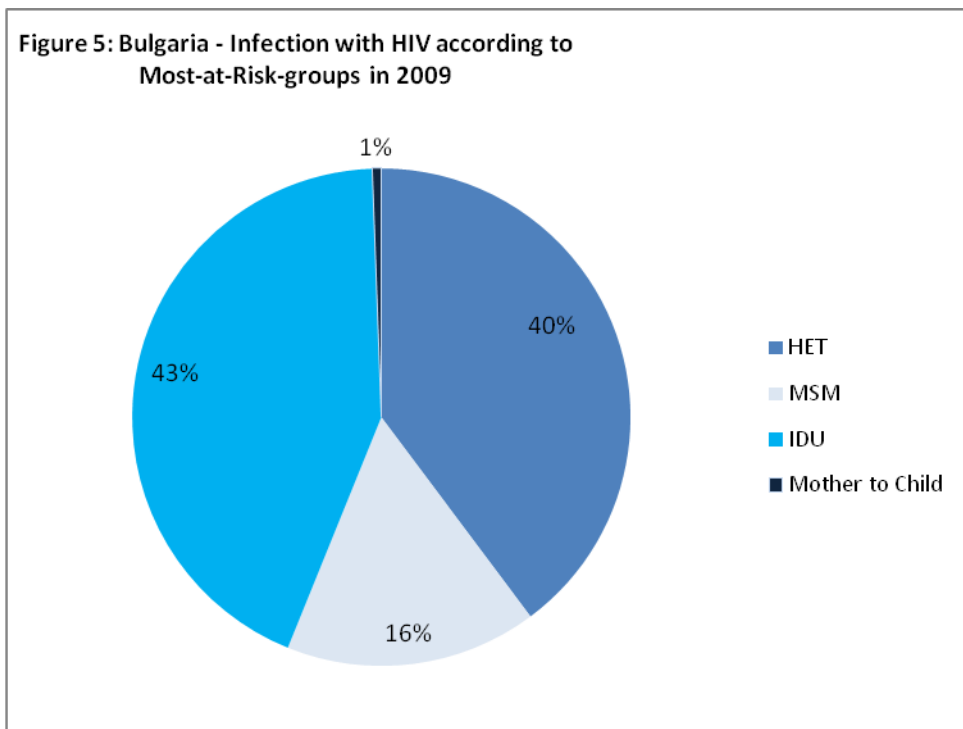
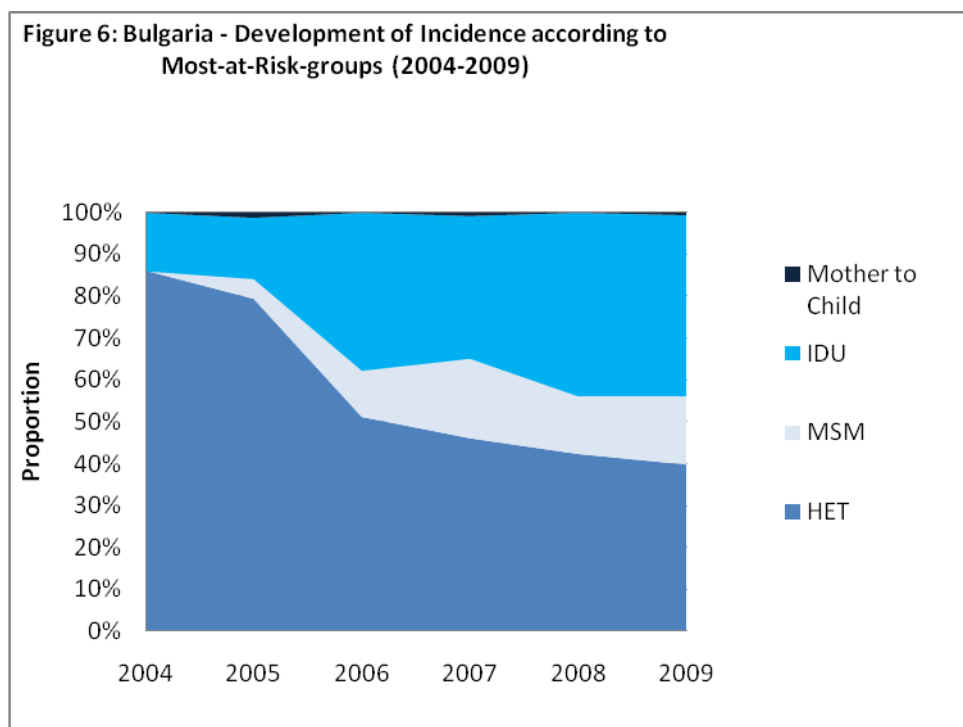
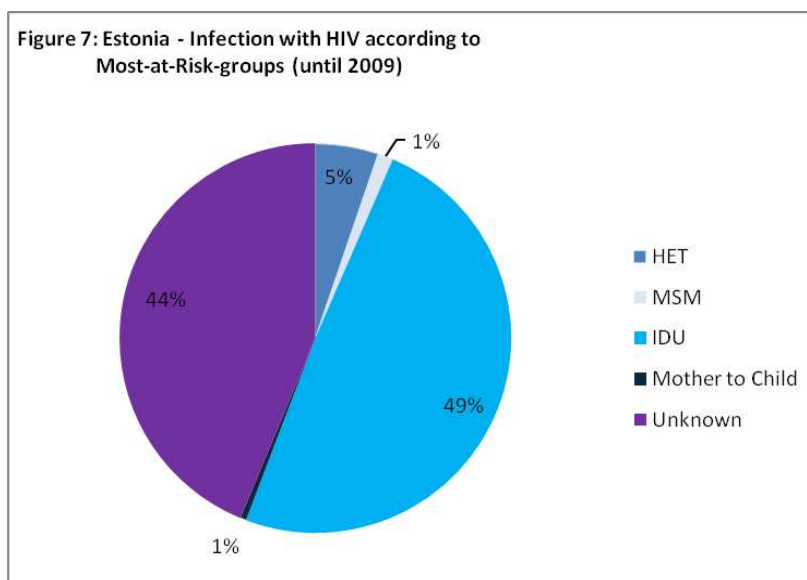


Figure 6 shows the continuous change in the transmission ways and Most-at-Risk-Groups. The beholder sees how the rate of heterosexual infections decreased from 2004 (85%) to 2009 (40%). In the same period the number of persons who infected themselves by intravenous drug use exploded from nearly 15% in 2004 to 43% in 2009. Bulgaria is a special case in the comparison, because the proportion of transmission ways has changed dramatically.

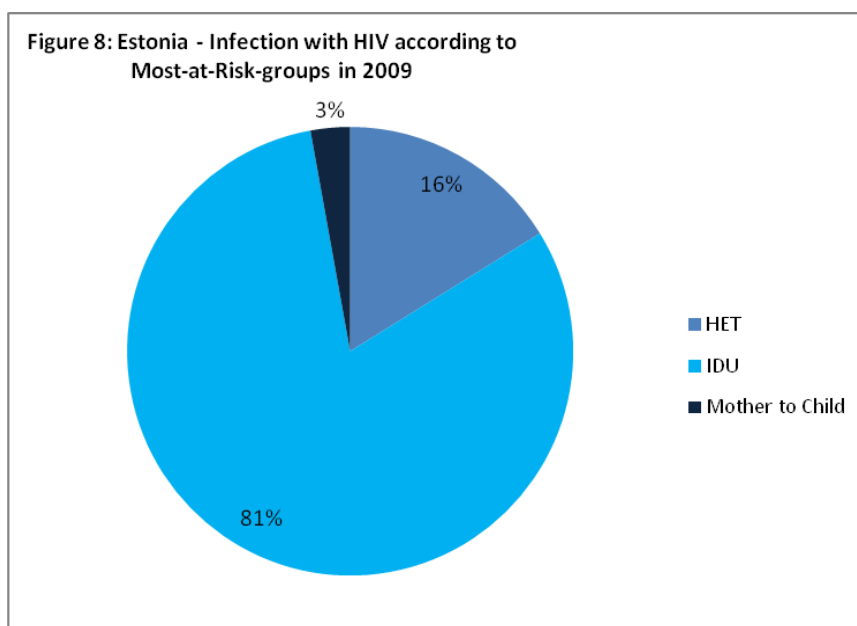


2. ESTONIA¹⁸

At a first glance, the high number of unknown infection ways attracts the attention of the viewer. Almost all reviewed countries have a large number of people who are not ascribable to one of the known Most-at-Risk groups. But on the other hand the number of IDUs is so high, that they emerge with 49%.



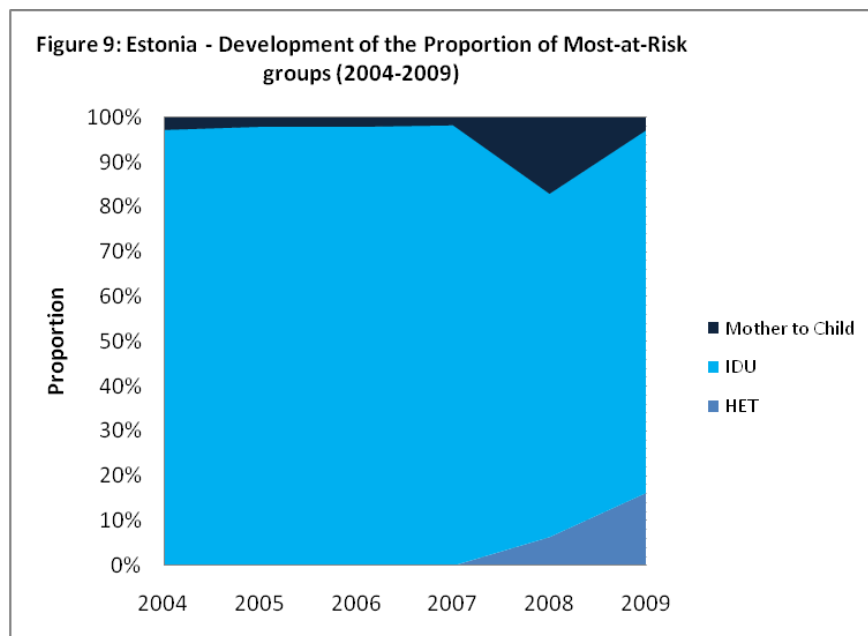
By eliminating the unknown cases, the percentage of HIV positive persons with an IDU problematic rises to 88%. Only 11% of infections cause from sexual intercourse (homosexual/ heterosexual). Along with Poland and the Ukraine, in Estonia the problems of intravenous drug use have the largest impact.



¹⁸ Source: BORDERNETwork Questionnaire for Treatment Centres; European Centre for Disease Prevention and Control (ECDC): HIV/AIDS surveillance in Europe 2009, Stockholm 2010 , p. 32 ff.

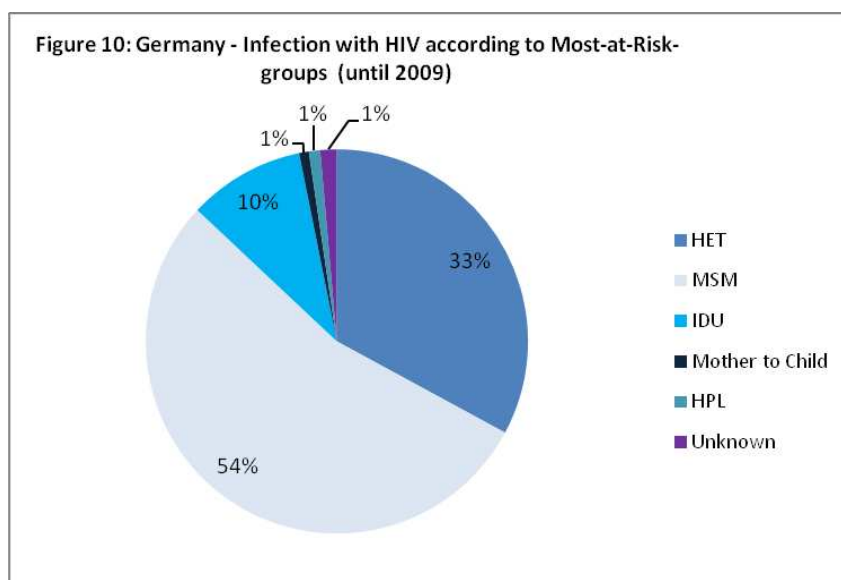
This trend doesn't change by widening the period of observation. Only the number of HIV infections by heterosexual contacts increased. Should emerge it in the coming years, that the number of persons who get their infection by heterosexual risky practices increases, this increasing could be indicative of the transmission of HIV/AIDS from the fringe of the Estonian society into the general population. Young men who are injecting drugs are in a highly active phase of sexuality. Also the need for starting a family and to produce children is higher in the group of young people who are infected with HIV/AIDS and other sexual transmitted diseases.

81 % of new infections with HIV in 2009 resulted from intravenous drug use. The number of persons who infected themselves by heterosexual intercourse increased from 5 % average to 16% in the year 2009. About 3 percent of new HIV infections are related to mother to child transmission.



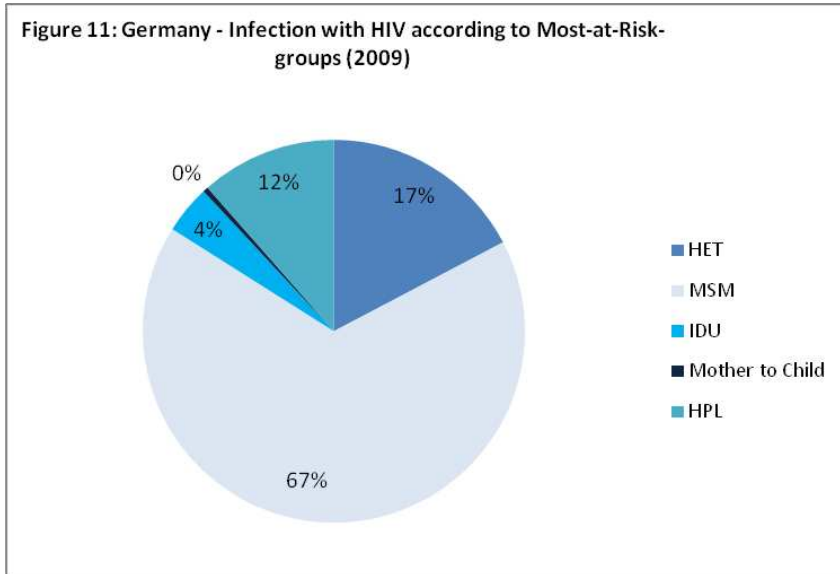
3. GERMANY¹⁹

With an estimated number of about 67.000 people, who are living with HIV/AIDS in Germany, the number of infected persons is high. But due to the large number of inhabitants Germany is a country with a low prevalence rate. Germany is a country in which the infection with HIV/AIDS spreads by transmission via sexual practices.

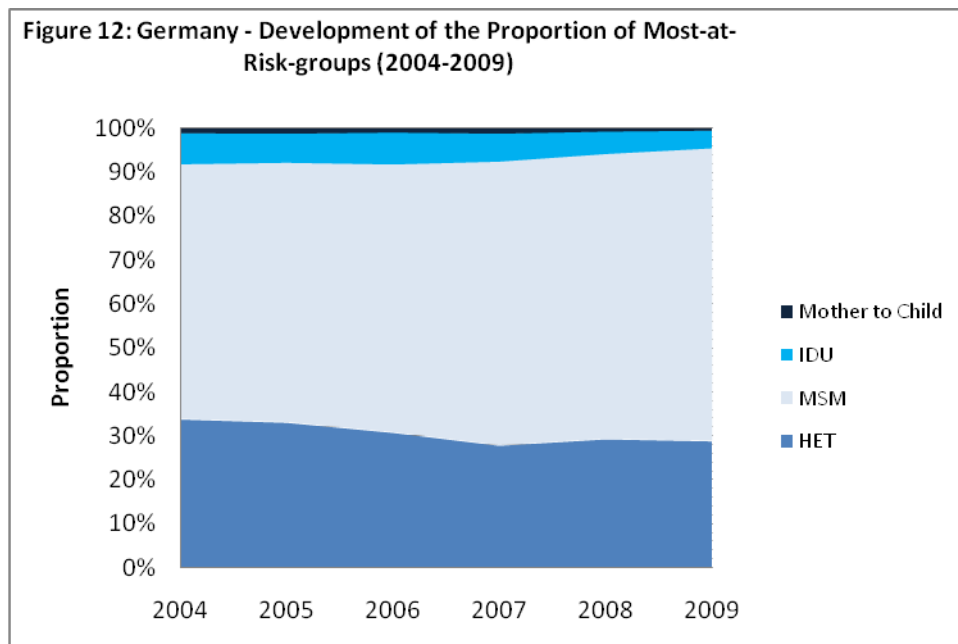


The majority of infected people belongs to the group of men who have sex with men. Through high risk and unprotected sex they often get their infection. The rate of infected people who are heterosexual is one third. The group of heterosexual persons in Germany is divided into two groups: persons from high prevalence countries and heterosexual persons. By comparing the Most-at-Risk-Groups (average 2000-09) with the incidence rate of 2009, it occurs that the rate of MSM increased from the average (54%) to 68%. In the same period the number of persons who infected themselves with HIV/AIDS by using intravenous drugs decreased continuously (from an average of 10% to 4% in 2009).

¹⁹ Source: BORDERNETwork Questionnaire for Treatment Centres; European Centre for Disease Prevention and Control (ECDC): HIV/AIDS surveillance in Europe 2009, Stockholm 2010 , p. 32 ff.

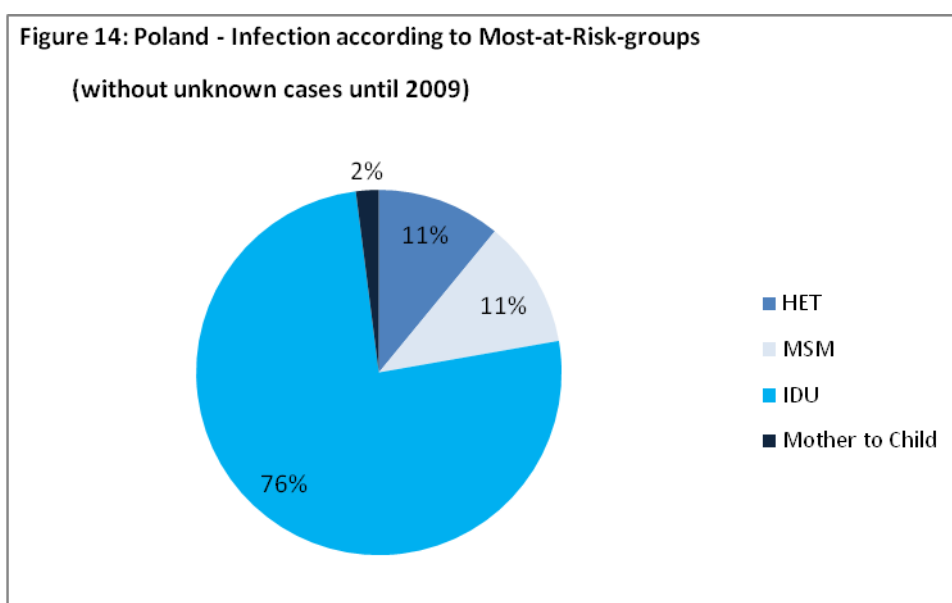
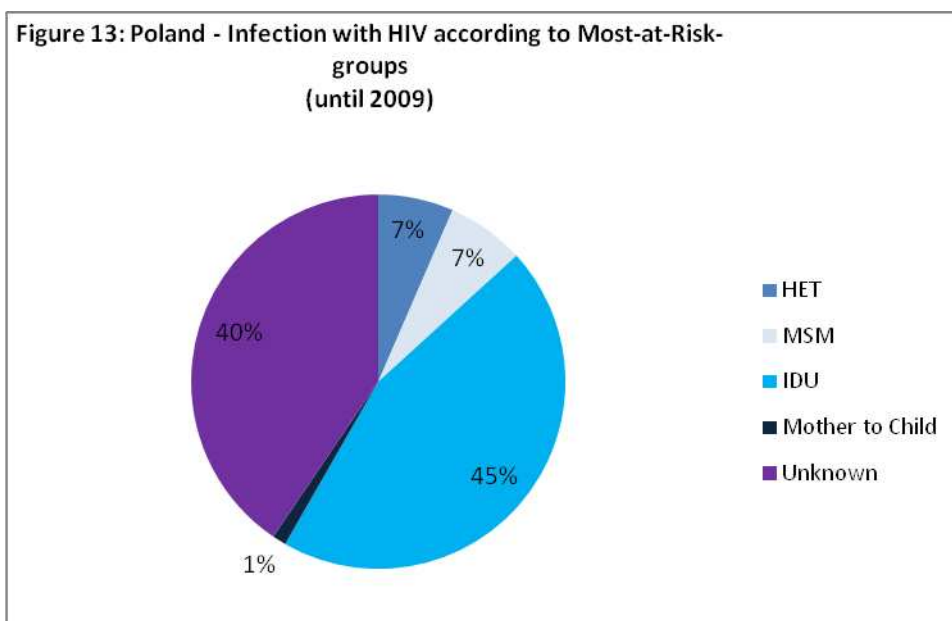


Intravenous drug use and the upcoming problem of HIV/AIDS coincided in the middle of the 1980s and developed until the beginning of the 90s of the 20th century. Since the 90s the number of infected persons with a MSM background increased continuously. Despite the changes in the proportion of Most-at-Risk-Groups, the situation in Germany is stable. The vast majority of infected persons got their infection by having unprotected sex.



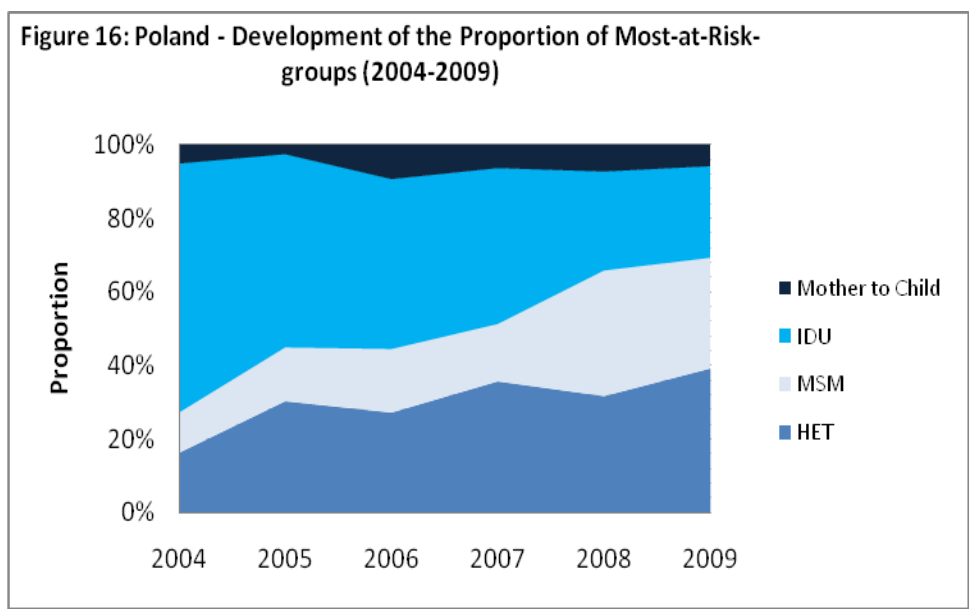
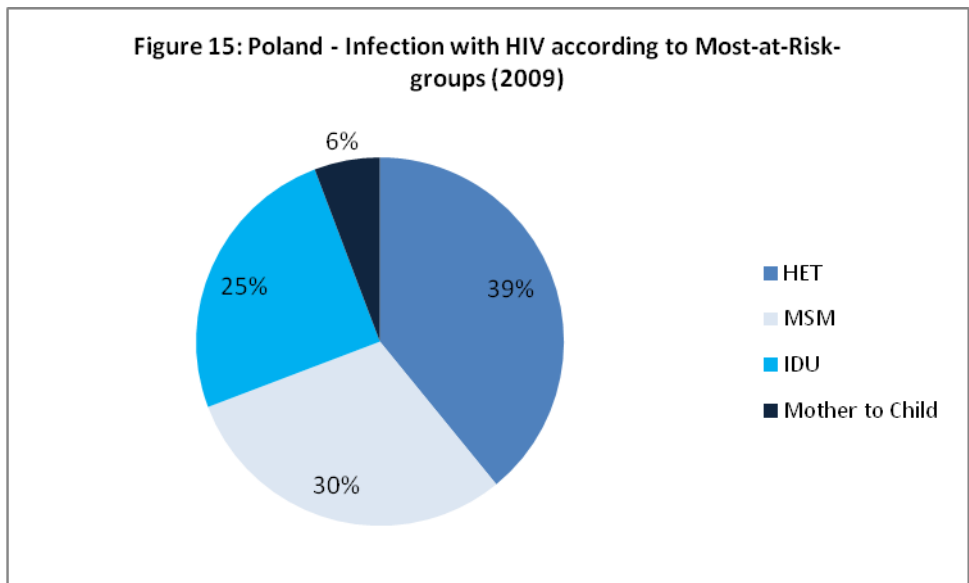
4. POLAND²⁰

The majority of people living with HIV/AIDS in Poland is the group of IDUs. The number of HIV-infections, which are not relatable to a transmission way is very high (40%). Without the not relatable number of people, 3 out of 4 persons infected themselves with the HI virus by using non-steril needles and syringes. The Most-at-Risk-groups with sexual transmission ways are relatively small. Only 22% got their infection by having sex with another person (11%MSM / 11% hetero).



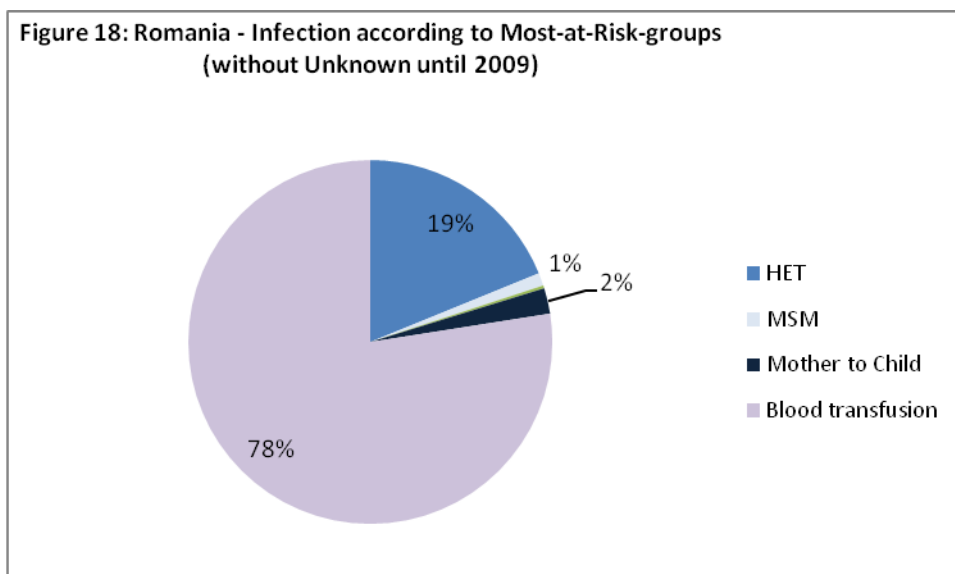
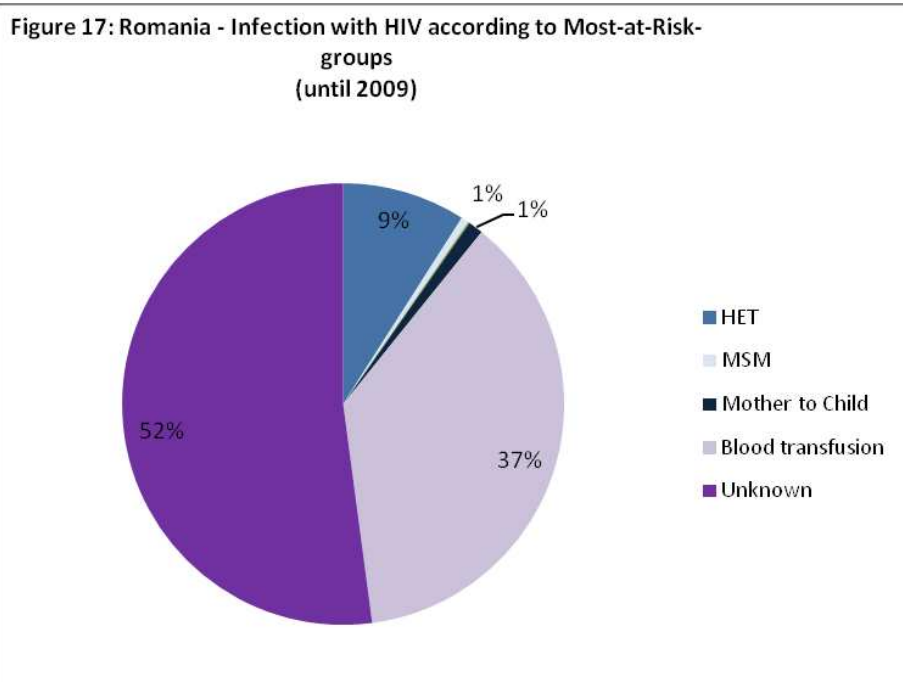
²⁰ Source: BORDERNetwork Questionnaire for Treatment Centres; European Centre for Disease Prevention and Control (ECDC): HIV/AIDS surveillance in Europe 2009, Stockholm 2010 , p. 32 ff.

By viewing 2009, the proportion of Most-at-Risk-groups changed. Now only 1 of 4 persons got their infection by injecting drugs and using non-steril materials. In the same period the number of persons, where the infection is related to sexual contacts increased: 39% heterosexual contacts / 30% homosexual contacts. It is possible that the high number of persons who are not relatable to any risk group, depends on moral and legal restriction in Poland. By comparing the single years its remarkable that the number of persons who got their infection by intravenous drug use decreased while the rate of people with a HIV infection, which arises from unsafe sex practices.



Romania²¹

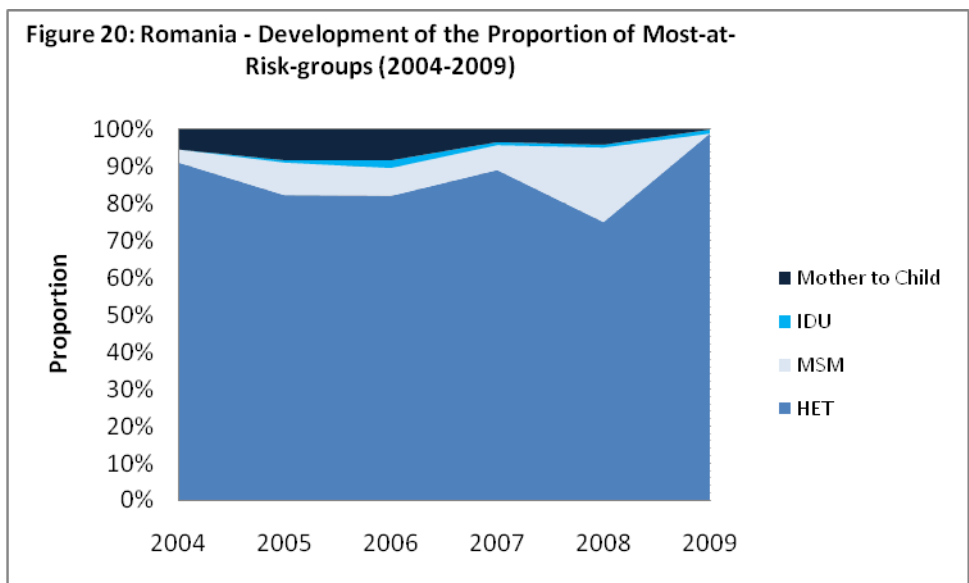
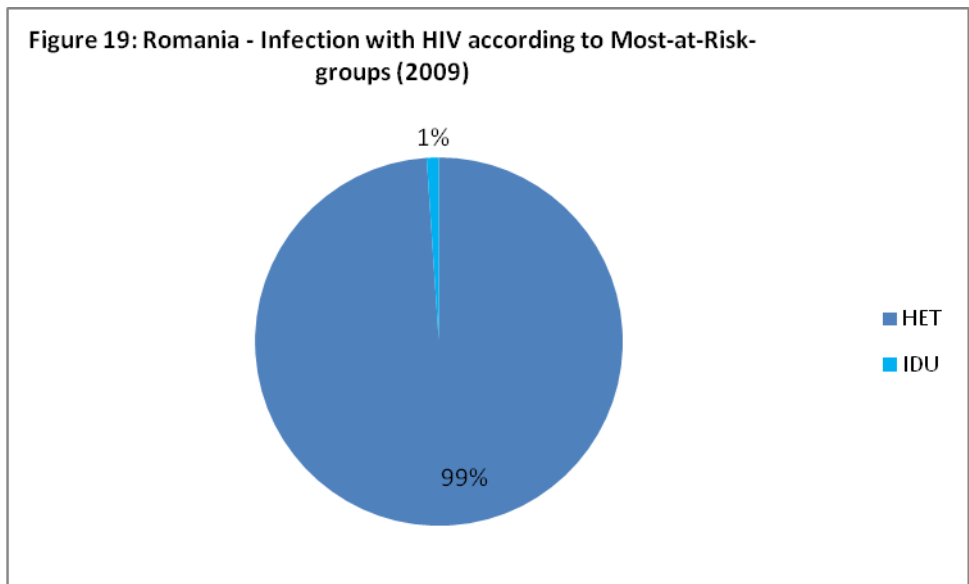
Romania is a special case in the reviewed countries. The number of persons who got their infections by blood transfusion is a very noticeable fact. In the stalinistic Ceausescu era were a lot of young children infected by blood transfusions. Because the state tried to strengthen physical weaknesses of childs by transfusion fresh blood. This blood was contaminated with the HI virus. In the meanwhile a lot of infected children died, but a majority of people who are affected by HIV is between 20-30 years old.



²¹ Source: BORDERNETwork Questionnaire for Treatment Centres; European Centre for Disease Prevention and Control (ECDC): HIV/AIDS surveillance in Europe 2009, Stockholm 2010 , p. 32 ff.

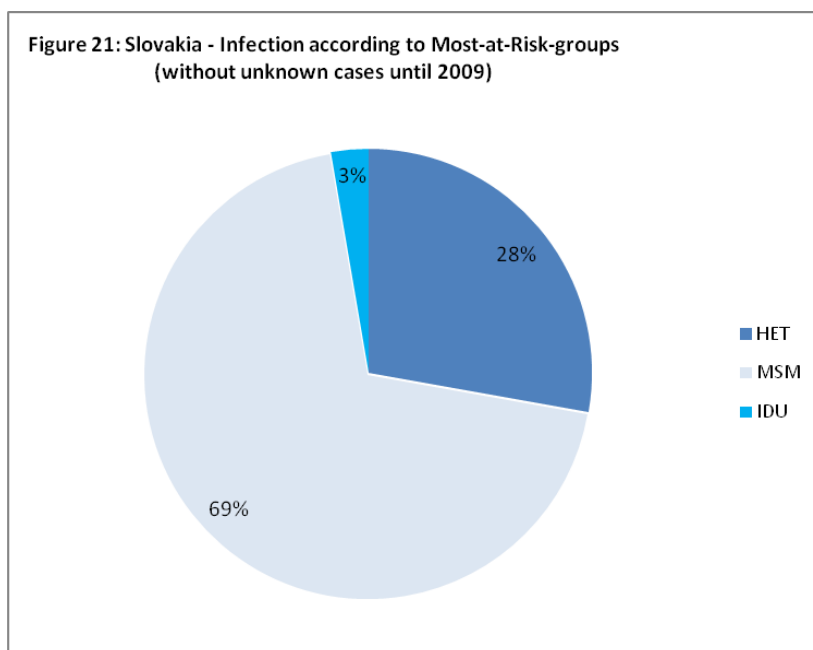
For this reason the spread of HIV/AIDS in 2009 is caused by unsafe heterosexual contacts. The men and women, who became infected as child, are in an age with a high rate of sexual activities.

Figure 20 shows the proportion of transmission ways. This proportion is very stable. In Romania, the dominance was infected heterosexual transmission ways (minimum 80% of new infections, 99% in 2009: see figure 19). It seems that the other transmission ways (MSM, IDU) play no relevant role.

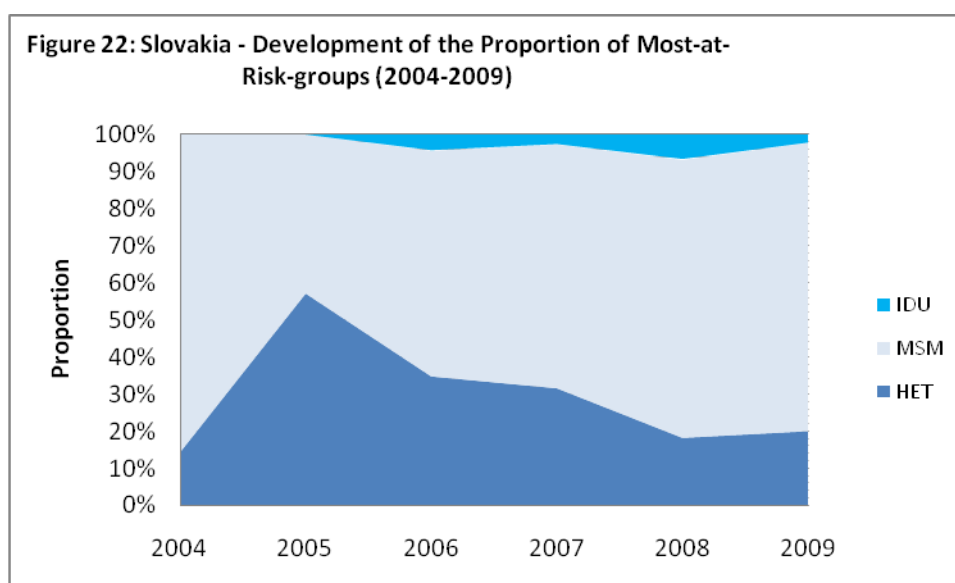


Slovak Republic²²

The Slovak Republic is similar to Germany. The most cases of new infections (78% in 2009) with HIV are from the group of men who have sex with men. The development of the transmission ways is stable. Only a small number of persons is affected by HIV/AIDS in Slovakia. The group of IDUs plays no role. Almost every new infection relates to unprotected and unsafe sexual practices. But the rate of MSM with an infection with HIV increased continuously.



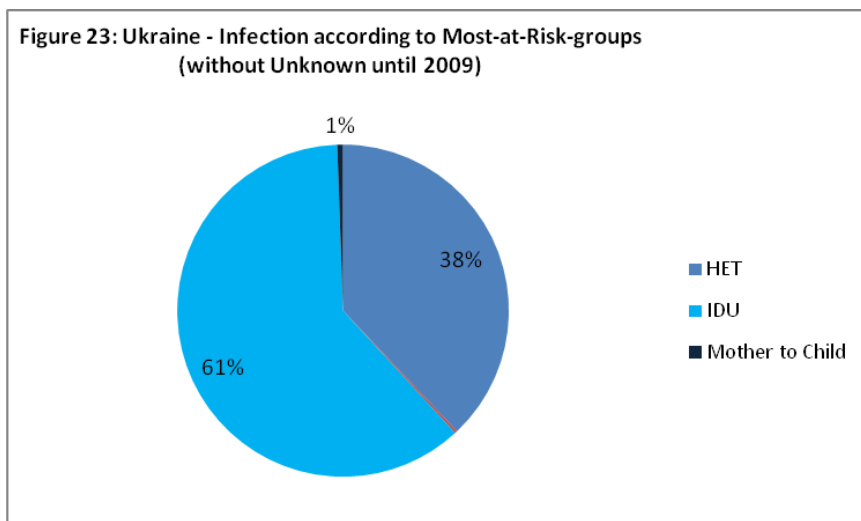
The number of new infections with HIV doubled from 2006 (27) to 2009 (53) and increased on a relatively low niveau.



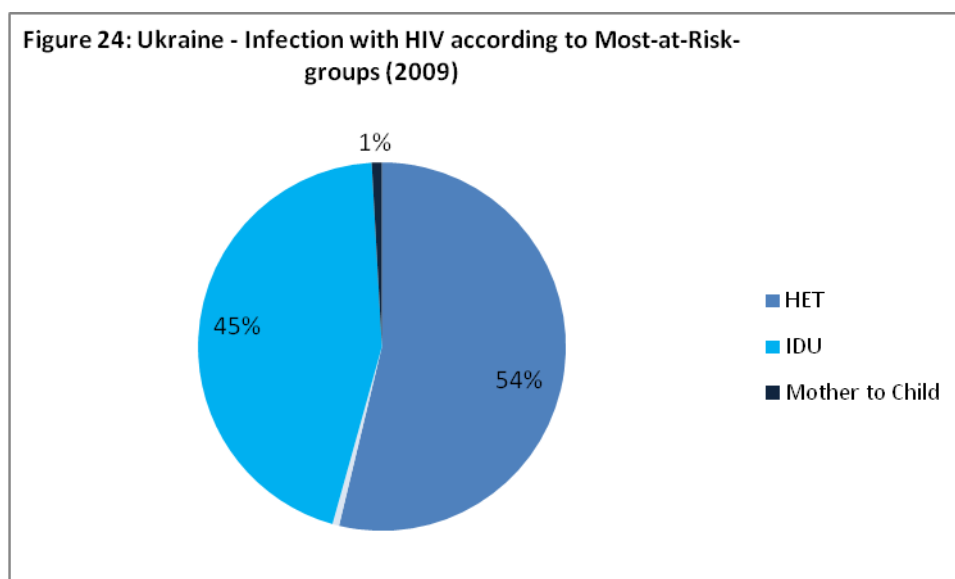
²² Source: BORDERNETwork Questionnaire for Treatment Centres; European Centre for Disease Prevention and Control (ECDC): HIV/AIDS surveillance in Europe 2009, Stockholm 2010 , p. 32 ff.

Ukraine²³

Ukraine is the most affected by the HIV/AIDS epidemic. 180.000 persons are infected with the HI virus. One quarter of the 180.000 infected persons are not relatable to any risk group. That is very high and means that the surveillance system in Ukraine is very weak. The group of injecting drug users is the most vulnerable group in Ukraine.

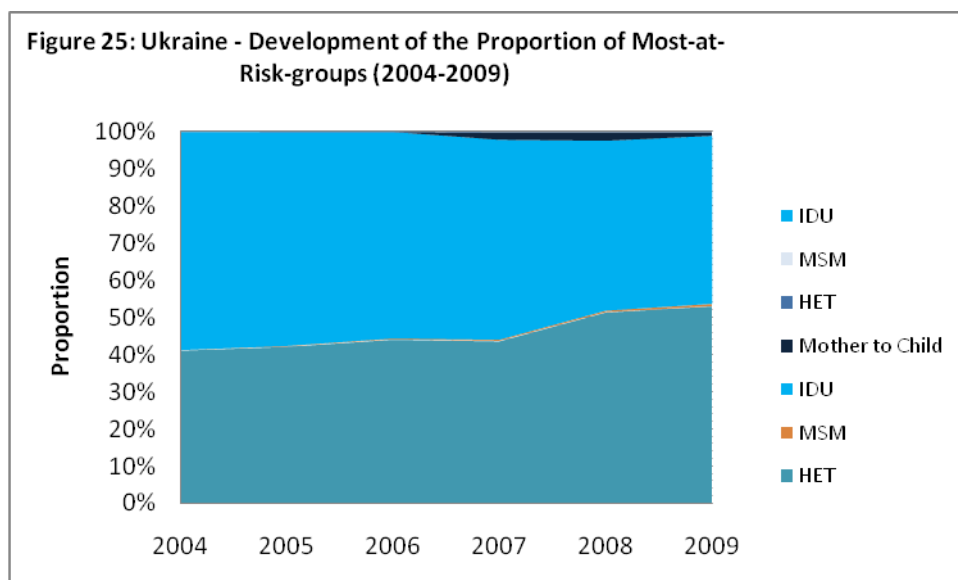


Other groups like MSM play no relevant role. By deleting the unknown cases of persons, who can not be related to any risk group, the dominance of persons with a drug related background is very noticeable. 61% of new infections until 2009 are injecting drug users. 38% of the new infections is related to unsafe heterosexual practices. The other transmission ways like unprotected homosexual intercourse, mother-to-child-transmission or transmission by blood transfusion play no relevant role.



²³ Source: BORDERNETwork Questionnaire for Treatment Centres; European Centre for Disease Prevention and Control (ECDC): HIV/AIDS surveillance in Europe 2009, Stockholm 2010 , p. 32 ff.

In 2009 the number of infections by heterosexual intercourse became more important. The rate of new infections, which results of unprotected heterosexual intercourse increased from 38% (average until 2009) to 54% in 2009. It seems that the epidemic makes an advance into the general population. Often intravenous drug user work in the field of sexwork to finance their addiction, so the HIV/AIDS epidemic reached the general population by the indirect way of prostitution and unprotected sexual practices. This trend seems to emerge slowly, but it will be the next step of the generalized HIV/AIDS epidemic in the Ukraine. The low number of MSM is a signal that this risk group is covered eventually as heterosexual transmission. Like other East- and Southeast-European countries it is possible, that the MSM scene is punished by the legislative and normative value system.



D. AIDS CASES AND AIDS DEATHS²⁴

With 37.000 people Ukraine is the country with the most people who are suffering from AIDS. In the regarded countries of the European Union Romania is affected hard by AIDS. With 11.682 people, the majority of people living with HIV is suffering from AIDS (2 out of 3 infected persons). In Poland every fifth person, who is infected with the HI-virus, has reached the advanced stage of AIDS. In the other countries the rate of people who are suffering from AIDS is relativley low. In general the number of people in 2009, who died of AIDS was decreasing (Bulgaria: 2, Estonia: 0, Germany: 57, Poland: 34, Romania: 39, Slovakia: 2 and Ukraine: 21).

Country	Number with people with AIDS in 2009	Number of people died of AIDS in 2009
Bulgaria	no data	2
Estonia	290	0
Germany	760	57
Poland	2.500	34
Romania	11.682	39
Slovakia	56	2
Ukraine	37.000	21

Table 4: AIDS Cases and AIDS Deaths in 2009. Source ECDC 2010

Since the millenium year 2000 the number of people who developed the stage of AIDS decreased in a period of one year continuously. Only Bulgaria doubled its AIDS affected people (2000: 16 cases / 2009: 30 cases) on a low level. Germany and Romania divided the number of AIDS cases into four. The Ukraine also decreased the number of people suffering from AIDS in a rapid way.

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Bulgaria	16	14	13	13	22	19	16	22	29	30
Estonia	3	2	6	10	29	29	32	57	61	38
Germany	821	754	711	674	717	683	667	597	486	226
Poland	126	132	124	145	176	152	163	134	160	76
Romania	599	445	370	382	337	328	283	279	224	114
Slovakia	5	5	2	2	2	3	4	6	1	4
Ukraine	903	1070	1593	2108	2948	4360	4922	1491	1104	140

Table 5: AIDS cases 2000-09. Source ECDC 2010

²⁴ Source: Source: BORDERNETwork Questionnaire for Treatment Centres; European Centre for Disease Prevention and Control (ECDC): HIV/AIDS surveillance in Europe 2009, Stockholm 2010 , p. 66 ff.

E. TREATMENT OF HIV/ AIDS²⁵

Country	2009
Bulgaria	327
Estonia	1263
Germany	40000
Poland	4434
Romania	8402
Slovakia	< 100
Ukraine	11000

Table 6: Persons getting treatment in 2009

The treatment landscape differs in the monitored countries extremely. While in Germany 74% of people who are infected with the HI virus are getting a treatment, in Ukraine only 6% participate in a treatment. With 30% in Bulgaria, 17% in Estonia, 35% in Poland and less than 23% in Slovakia the majority of people who are infected with HIV get no treatment. With 52%, Romania covered a greater number of infected people with a antiretroviral treatment than the other countries.

²⁵ Source: BORDERNetwork Questionnaire for Cooperation Partners; United Nations. Department of Economics and Social Affairs / Population Division; UNGASS 2010

II. HEPATITIS B (HBV)²⁶

Hepatitis B is a serious problem in the European Union. The most affected countries are Poland (1.400.000), Romania (1.200.000) and Germany (492.300). Because of the high incidence rate (9,9 cases per 100.000 between 2006-2008) in Bulgaria the number of people who are affected by Hepatitis B is probably much higher. The number of the infections in the period between 2006 and 2008 was the highest in Bulgaria (9,9 cases per 100.000). With 5,1 cases per 100.000 inhabitants in Romania and 3,5 cases per 100.000 inhabitants in Estonia these countries are in the midfield of the reviewed incidence rate of the countries. Germany and Slovakia have a low prevalence rate (0,6%). Data on Hepatitis B in case of the Ukraine are not available.

Country	No. Of Persons with chronic HBV estimated	Prevalence rate	Incidence 2006-08, cases per 100.000	HBV/HIV Co infection estimated
Bulgaria	no data	no data	9,9	no data
Estonia	60.000	4,5	3,5	no data
Germany	492.300	0,6	1,2	no data
Poland	1.400.000	3,7	1,1	~10.000
Romania	1.200.000	5,6	5,1	~10.000 / 2.400 reported
Slovakia	32.474	0,6	2,1	no data
Ukraine	no data	no data	no data	no data

Table 7: HEPATITIS B IN CEE AND SEE

It can also be mentioned that data on Hepatitis B and HIV coinfections are hardly available. There are only estimated numbers of persons with a HBV/HIV coinfection in Poland (10.000 cases) and Romania (10.000 cases). There are no data available, how the Hepatitis B virus emerges, e.g. as chronic HBeAg positive or HBeAg negative Hepatitis with or without zirrrosis, and which transmission ways and risk groups are the dominant factors for the spread of the Hepatitis B infection in the reviewed countries.

Source: BORDERNETwork Questionnaire for Cooperation Partners;

URL: http://ecdc.europa.eu/en/publications/Publications/101012_TER_HepBandC_survey.pdf;

URL: http://ecdc.europa.eu/en/publications/Publications/TER_100914_Hep_B_C%20_EU_neighbourhood.pdf

URL: <http://www.oecd-ilibrary.org/docserver/download/fulltext/8110161e.pdf?expires=1303822435&id=id&accname=guest&checksum=638F8FE72D3EDB86D3E94A5FC8EB6DDC>

III. HEPATITIS C (HCV)²⁷

From reported European countries where data are available, Romania, Germany and Poland have a high number of persons with a chronic HCV infection. In Romania estimated 1.000.000 people are infected with Hepatitis C. Almost 5% of the whole population of Romania is infected with Hepatitis C.

Country	Number of persons with chronic HCV estimated	HIV/HCV coinfectd in %, end 2006	Number of persons with HIV/HCV-coinfection estimated.
Bulgaria	100.000	10	400
Estonia	12.000	70	6500 -8.000
Germany	500.000	35	23.450
Poland	570.000	20	20.000 - 60.000
Romania	1.000.000	5	1.000 - 2.500
Slovakia	no data	5	60
Ukraine	no data	80	352.000

Table 8: Hepatis V in CEE and SEE

The Hepatitis C epidemic in Eastern and South-Eastern Europe is boosted by intravenous drug use. Table 8 shows this dramatic interaction. In countries with a high number of illicit drug users like Estonia and Ukraine the possibility to suffer from a HIV/HCV coinfection is also very high. In Estonia at least 70% of all people who are living with HIV/AIDS are co-infected with Hepatitis C. In Ukraine at least 80% are HIV/HCV coinfectd. Germany and Poland are in the midfield of this development. In Germany approximately 35% of persons with HIV/AIDS are coinfectd with Hepatitis C, while in Poland 20% of PLWH are HIV/HCV coinfectd. While there is a large number of persons with a Hepatitis C infection in Bulgaria and Romania, there are only 10 and 5% reported with an HIV/HCV coinfection.

On the one hand one reason could be that the number of illicit drug users is relatively low (see below), on the other hand data could be underreported, because EuroSida had published 2005 the number of 46,9% prevalence of Hepatitis C in HIV population in Eastern Europe (Rockstroh et al. J inf Dis 192; 992-1002).

²⁷ Source: BORDERNETwork Questionnaire for Cooperation Partners;
 URL: http://ecdc.europa.eu/en/publications/Publications/101012_TER_HepBandC_survey.pdf;
 URL: http://ecdc.europa.eu/en/publications/Publications/TER_100914_Hep_B_C%20_EU_neighbourhood.pdf
 URL: <http://www.oecd-ilibrary.org/docserver/download/fulltext/8110161e.pdf?expires=1303822435&id=id&accname=guest&checksum=638F8FE72D3EDB86D3E94A5FC8EB6DDC>
 URL: http://www.unaids.ru/files/Hepatitis_and_HIV_Moscow_eng.pdf

DIAGNOSTIC AND TREATMENT:

Results of the Survey

We have got response to our questionnaires mostly from HIV treatment centres:

3 times from Romania, 2 from Estonia, 1 from Poland, 2 from Slovakia, and 2 from Bulgarian HIV treatment Centres. The last one from Bulgaria is a Dermatological – Venerological Outpatient Centre.

1	Romania	Infectious Diseases Hospital Brasov; Rodica Silaghi
2	Romania	National Institute for Infectious Diseases, Bucharest; Adrian O. Abagiu
3	Romania	Irina Magdalena Dumitru, Ovidius University Constanta, Faculty of Medicine, Constanta
4	Estonia	West-Tallinn Central Hospital; Dr. Kai Zilmer, Tallinn
5	Estonia	Dr. Dimitri Jaaniste, Narva-Hospital, Narva
6	Poland	Dr. Anita Wnuk, Department of Infectious Diseases, Pomeranian Medical University, Szczecin
7	Slovakia	Prof. Dr. Jarcuska and Mrs. Mgr Katarina Cároková, University Kosice
8	Slovakia	Dr. Lukas Murajda, Clinic of Infectiology and Travel Medicine, University Hospital, Martin
9	Bulgaria	Dr. Nikolov, Department of Infectious Diseases, University Hospital, Plovdiv
10	Bulgaria	Dr. Toma Tomov Hospital for Infectious Diseases, Sofia
11	Bulgaria	Dr. Mariela Hitova, Dermatology and Venerology Out Patient Clinic, Sofia

Table 9: Respondents of BORDERNetwork Questionnaire for Treatment Centres

I. ANALYSIS OF HIV DIAGNOSTIC²⁸

First we have asked for possibilities in HIV diagnostics (Rapid Test, ELISA, anti-HIV Western blot and HIV PCR-quantity).

The HIV rapid test is not so important, it is used for instance in special situations like voluntary counselling and testing (VCT) or post exposure prophylaxis (PEP), but in many resource limited countries it is still the only diagnostic possibility for HIV.

The ELISA is the screening test for HIV antibodies with very high sensitivity and a good specificity, but every reactive ELISA should be confirmed with the HIV-Western Blot.

The measurement of viral load with a very sensitive PCR technique is very important and absolutely essential for the treatment success control.

HIV	Romania			Estonia		Poland	Slovakia		Bulgaria		
Centres	1	2	3	4	5	6	7	8	9	10	11
Rapid Test	0	x	x	x	x	0	x	0	0	x	x
ELISA	x	x	x	x	x	x	x	x	x	x	x
Western Blot	x	x	x	x	x	x	x	0	x	x	0
PCR quantity	x	x	x	x	x*	x	x	x	?	x	0

* viral load determined by reference laboratory

Table 10: Possibilities for HIV Diagnostics

All 10 treatment centres are able to diagnose and confirm an HIV infection. With the measurement of HIV quantity with PCR they have also one important condition to manage therapy of HIV infection in a good clinical practice.

²⁸ Source: BORDERNETwork Questionnaire for Treatment Centres

II. ANALYSIS OF HEPATITIS B DIAGNOSTICS²⁹

For management of Hepatitis B there is need for detection of antibodies like anti-HBc and anti-HBe and also for the detection of parts of the virus directly, like HBsAg, HBeAg and the most important thing HBVDNA quantity.

The first criterion for successful therapy is the stop of complete viral replication. In this case HBVDNA decreases below the detection level.

The second criterion for a successful therapy is seroconversion from HBeAg to anti-HBe and from HBsAg to anti-HBs.

HBV	Romania			Estonia		Poland	Slovakia		Bulgaria		
Centres	1	2	3	4	5	6	7	8	9	10	11
HBs Ag	x	x	x	x	x	x	x	x	x	x	o
Anti HBc	x	x	x	x	o	x	x	x	x	?	o
Hbe Ag	o	x	x	x	x	x	x	x	x	?	o
Anti HBe	o	x	x	x	o	x	x	x	x	x	o
HBV DNA	o	x	x	x	o	x	x	x	x	x	o
Diagnoses in 2009	50	15	92	no data	9	180	25	no data 2010:6	56	no data	no data
HIV/HBV coinfections 2009	no data	1	4	no data	1	2	0	no data 2010:5	2	no data	no data

Table 11: Possibilities for HBV Diagnostics

All 10 treatment centres can diagnose Hepatitis B infection, and 8 centres have with the possibility of measurement of HBVDNA the condition for managing the treatment.

The number of diagnoses ranges 2009 between 15 and 180 cases.

The number of co-infections seems to be low with about 1 to 10%.

²⁹ Source: BORDERNETwork Questionnaire for Treatment Centres

III. ANALYSIS OF HEPATITIS C DIAGNOSTICS³⁰

The diagnosis of Hepatitis starts with antibody detection. Primary we use the anti-HCV ELISA as screening test. It is very sensitive but sometimes false reactive. Every reactive HCV screening test has to be confirmed with the Immunoblot or Westernblot.

The HCV PCR is necessary if the confirmation test is positive. A positive PCR for HCV RNA demonstrates the viral replication in case of acute or chronic Hepatitis C. If the HCV PCR is more than 6 month positive the chronic Hepatitis C is confirmed.

For management of therapy there is also a need for examination of the HCV Genotype and the measurement of viral concentration in the blood. The examination of viral load before starting treatment and after 4, 12 and 24 weeks is very important for the decision to continue or to stop treatment with pegylated interferon and ribavirin.

HCV	Romania			Estonia		Poland	Slovakia		Bulgaria		
Centres	1	2	3	4	5	6	7	8	9	10	11
Anti HCV ELISA	x	x	x	x	o	x	x	x	x	x	o
Anti HCV Western Blot	o	o	o	x	x	o	x	o	o	no data	o
HCV RNA qualitative	o	no data	o	no data	o	x	x	x	x	no data	o
HCV RNA quantitative	o	x	x	x	o	x	x	o	o	no data	o
HCV Genotype	o	no data	o	x	o	x	x	o	o	no data	o
Diagnoses in 2009	60	25	71	no data	23	230	35	no data 2010:6	15	no data	o
HIV/HCV coinfections 2009	no data	no data	0	no data	12	15	1	no data 2010:1	17*	no data	o

* not explainable

Table 12: Possibilities for HCV Diagnostics

³⁰ Source: BORDERNetwork Questionnaire for Treatment Centres

Nine centres can carry out a screening test or confirmation test for diagnosis of Hepatitis C infection. Seven Centres can measure the virus directly with PCR, and three centres can measure the Genotype and quantity of the virus as necessary conditions for therapy.

The number of diagnosis of HCV infections in 2009 ranges between 15 and 230 cases. There are no data from Romanian centres regarding HIV/HCV co-infections. In other centres the number of co-infections ranges from 1 to 17 cases in 2009.

SUMMARY OF TREATMENT POSSIBILITIES

HIV:

All HIV treatment centres are able to treat patient with different classes of HIV drugs regarding to EACS-recommendations in the first regimen.

Nine centres meet the European guidelines regarding to start ART depending on the number of CD4 cells below 350 cells per μl , one Slovakian centre starts with CD4 cells below 300.

Hepatitis B:

Several medications are approved for the treatment of chronic Hepatitis B virus infection: Interferon alfa, pegylated Interferon alfa-2a, Adefovir, Entecavir, Lamivudin, Telbivudine, and Tenofovir.

In former time many HIV/HBV co infected patients had been treated with Lamivudin as a component of Combivir. The result was a selection of Lamivudin-resistant HBV strains in many patients, because after four years therapy with Lamivudin about 70% of HBV patients develop such drug resistance. That's why Lamivudin should not be given as first choice.

Entecavir is a drug with high antiretroviral activity but can select the mutation M184V in HIV. So it could be used only in coinfecting patients if there is an effective antiretroviral therapy with complete HIV suppression. But there are different interactions between Entecavir and antiretroviral drugs. The same situation applies to Telbivudin. Entecavir and Telbivudin should be used only in special circumstances.

The only anti HBV drugs that could be used without interference to HIV are Adefovir and pegylated interferons, but Adefovir has a low viral activity against HBV. The use of pegylated interferon depends on special predictive markers and conditions and is connected with a lot of side effects and it has a very low chance of success.

Tenofovir has the greatest antiviral potency in terms of HBVDNA suppression. In HIV treatment it is co-formulated with Emtricitabin as Truvada. Emtricitabin is another drug with activity also against HBV. That's why Truvada is the preferred drug for HIV/HBV coinfecting patients.

In summary four of the ten centres have Tenofovir or Truvada. Four centres have Entecavir and two centres have only Lamivudin available.

Hepatitis C:

Treatment in chronic Hepatitis C with pegylated interferon and Ribavirin is possible in nine from ten treatment centres.

A condition for management of therapy is the possibility to carry out the complete serological and viral HCV diagnostics including HCV genotype and HCV quantity with very sensitive methods. Here we have a difference which we will discuss with our partners during countryside visits and following workshops.

Outlook:

Chronic infections with Hepatitis B and Hepatitis C represent the most significant cause of liver disease in HIV patients. These coinfections accelerate the clinical course of liver disease; more patients develop cirrhosis and hepatocellular carcinoma in faster time. The mortality regarding to liver disease is distinctly increased in HIV coinfecting patients. Therefore the adequate treatment of Hepatitis B and C is now a priority in HIV coinfecting patients.

In the first line successful management of Hepatitis B and C coinfection depends on a good laboratory diagnosis of all HBV and HCV markers both viral antibodies and viral antigens.

We have succeeded in getting cooperation with the WHO Collaborating Centre for Quality Assurance and Standardization in Laboratory Medicine for Virology (<http://www.instandev.de/en/about-instand-ev/who-collaborating-centre/>).

The head of this virological laboratory Prof. Heinz Zeichhardt has promised a close cooperation and support for the laboratories in our partner countries. All laboratories can take part free of charge in EQA-Survey (External – Quality – Assessment – Survey).

During the next meetings, workshops and country site visits we will start to establish these relations.

SOURCES:

- Barnett, T. and Whiteside, A.: AIDS in the Twenty-First Century: Disease and Globalization. London: Palgrave Publications, 2002.
- Brunne, V.: Wie AIDS die Weltwirtschaft schwächt., in: Deutsches Ärzteblatt Jg. 104, Heft 43. 26. October 2007, S. A2932 – A2934.
- Central Intelligence Agency (CIA): CIA World Fact Book. Washington 2009.
URL: <https://www.cia.gov/library/publications/the-world-factbook/index.html>
- European Centre for Disease Prevention and Control (ECDC): HIV/AIDS surveillance in Europe 2009, Stockholm 2010.
URL: http://ecdc.europa.eu/en/publications/Publications/101129_SUR_HIV_2009.pdf
- European Centre for Disease Prevention and Control (ECDC): Annual epidemiological report on communicable diseases in Europe 2010, Stockholm 2010
URL: http://ecdc.europa.eu/en/publications/Publications/1011_SUR_Annual_Epidemiological_Report_on_Communicable_Diseases_in_Europe.pdf
- European Centre for Disease Prevention and Control (ECDC): Surveillance and prevention of Hepatitis B and C in Europe. Stockholm 2010
URL: http://ecdc.europa.eu/en/publications/Publications/101012_TER_HepBandC_survey.pdf
- European Centre for Disease Prevention and Control (ECDC): Hepatitis B and C in the EU neighbourhood: prevalence, burden of disease and screening policies. Stockholm 2010.
URL: http://ecdc.europa.eu/en/publications/Publications/TER_100914_Hep_B_C%20_EU_neighbourhood.pdf
- Merten, M.: Gesundheitssystem Mittel- und Osteuropas (Teil 7): Estland. Auf Erfolgskurs., in: Deutsches Ärzteblatt Jg. 103, Heft 1-2. 09. Januar 2006, S. A28 – A31
- Merten, M.: Gesundheitssystem Mittel- und Osteuropas (Teil 3): Slowakei. Zwei Seiten einer Reform., in: Deutsches Ärzteblatt Jg. 102, Heft 11. 18. März 2005, S. A737 – A740
- Merten, M.: Gesundheitssystem Mittel- und Osteuropas (Teil 9): Rumänien. Veränderungen brauchen Zeit., in: Deutsches Ärzteblatt Jg. 105, Heft 19. 09. May 2008, S. A998 – A1000
- Merten, M.: Gesundheitssystem Mittel- und Osteuropas (Teil 1): Polen. Bedrückende Resignation., in: Deutsches Ärzteblatt Jg. 101, Heft 47. 19. November 2004, S. A3150 – A3152
- OECD: Health at a Glance: Europe 2010. Paris 2010.
URL: <http://www.oecd-ilibrary.org/docserver/download/fulltext/8110161e.pdf?expires=1303822435&id=id&accname=guest&checksum=638F8FE72D3EDB86D3E94A5FC8EB6DDC>
- Robert Koch-Institut (RKI): Epidemiologisches Bulletin 46/2010. HIV/AIDS. Berlin 2010.
URL: http://www.rki.de/cln_169/nn_1759378/DE/Content/Infekt/EpidBull/Archiv/2010/46__10,templateId=raw,property=publicationFile.pdf/46_10.pdf
- UNGASS/ Republic of Bulgaria: Country Progress Report on Monitoring the Declaration of Commitment on HIV/AIDS. Sofia – New York, 2010.

- URL:http://www.unaids.org/en/dataanalysis/monitoringcountryprogress/2010progressreports/submittedbycountries/bulgaria_2010_country_progress_report_en.pdf
- UNGASS/ Estonia: Country Progress Report on Monitoring the Declaration of Commitment on HIV/AIDS. Tallinn – New York, 2010.
URL: http://www.unaids.org/en/dataanalysis/monitoringcountryprogress/2010progressreports/submittedbycountries/estonia_2010_country_progress_report_en.pdf
 - UNGASS/ Poland: Country Progress Report on Monitoring the Declaration of Commitment on HIV/AIDS. Warsaw – New York, 2010.
URL: http://data.unaids.org/pub/Report/2010/poland_2010_country_progress_report_en.pdf
 - UNGASS/ Romania: Country Progress Report on Monitoring the Declaration of Commitment on HIV/AIDS. Bucharest – New York, 2010.
URL: http://www.unaids.org/en/dataanalysis/monitoringcountryprogress/2010progressreports/submittedbycountries/romania_2010_country_progress_report_en.pdf
 - UNICEF: Statistical info by country: Bulgaria. New York, 2009.
URL: http://www.unicef.org/infobycountry/bulgaria_statistics.html#76
 - UNICEF: Statistical info by country: Estonia. New York, 2009.
URL: http://www.unicef.org/infobycountry/estonia_statistics.html#76
 - UNICEF: Statistical info by country: Poland. New York, 2009.
http://www.unicef.org/infobycountry/poland_statistics.html#76
 - UNICEF: Statistical info by country: Romania. New York, 2009.
http://www.unicef.org/infobycountry/romania_statistics.html#76
 - United Nations. Departement of Economics and Social Affairs / Population Division: Population and HIV/AIDS 2010. New York: United Nations, 2010.
URL: <http://www.un.org/esa/population/publications/population-hiv2010/population-hiv2010chart.pdf>
 - WHO EUROPE/ Dr. Irina Eramova: HIV/Hepatitis coinfection in Europe. WHO Response. UNAIDS Forum Moscow 2008.
URL: http://www.unaids.ru/files/Hepatitis_and_HIV_Moscow_eng.pdf
 - World Bank/ Olusoji Adeyi et al.: Averting AIDS Crises in Eastern Europe and Central Asia: A Regional Support Strategy. Washington: World Bank Publications 2003.

Questionnaire for diagnostic and therapy of HIV/AIDS and Co-Infections (Hepatitis B/C)

Please send back to:

Stamp or Address of Institution

Filled in by Mrs./Mr.: _____

Or send it via e-mail at:
al@aidshilfe-potsdam.de

Country/Institution: _____

Date: _____

Survey: HIV/STI diagnostic and treatment

(Please refer your answers to the year 2009)

1. General Overview: HIV/AIDS

How many HIV positive persons are reported in your country?
_____ persons

What is the estimated number of persons, who live with HIV in your country?
_____ persons

How many of these persons are suffering from Aids?
_____ persons

What is the number of HIV-infected persons getting a treatment?
_____ person

How many treatment-centres existing in your country? Please tell us the names and contacts of the treatment-centres:

1. _____
2. _____
3. _____

2. Overview: Hepatitis B

How many persons with a chronic Hepatitis B-Infection are living in your your country?

Reported number of persons: _____ Estimated number of persons: _____

How many persons with a HIV/HBV Co-Infection have been reported?

Reported number of persons: _____ Estimated number of persons: _____

Which serological tests can be conducted for the characterization of a Hepatitis B- infection?

- | | | |
|--------------------------------------|--------------------------------------|---|
| <input type="checkbox"/> HBs Antigen | <input type="checkbox"/> HBe Antigen | <input type="checkbox"/> Anti HBc |
| <input type="checkbox"/> Anti HBe | <input type="checkbox"/> Anti HBs | <input type="checkbox"/> HBV DNA quantity |

Is a statistic about the distribution of risk-groups available? Which at-risk groups are affected at most by an infection with HIV and STI?

At-risk group	HIV		STI	
	Number	% Ratio of at-risk group	Number	% Ratio of at-risk group
Heterosexual persons				
Men, who have Sex with men				
Persons from high prevalence countries				
Sexworkers				
Intravenous drug-users				
Receivers of blood transfusions/Hemophilia				
Mother-to-Child-Transmission				

What are the main transmission paths for HIV and STI?

Transmission path	HIV		STI	
	Number	% Ratio of transmission paths	Number	% Ration of transmission paths
Unprotected sexual intercourse of heterosexual persons				
Unprotected sexual intercourse of MSM				
Intravenous drug-use				
Mother-to-Child-Transmission				
Blood transfusion				

Who pays for the therapy of HIV/Aids?

Who pays for the therapy of STI?

Are there groups, who have no access to diagnostic and therapy? If yes, which groups:

Is a screening for pregnant women available? If yes, for which infections:

- HIV Chlamydia Hepatitis B Syphilis

Are there any guidelines in your country for the diagnostic and treatment of HIV/Aids available?

Please tell us your data sources:

Are there any guidelines in your country for the diagnostic and treatment of HIV/HBV- and HIV/HCV-Co-Infections available?

Please tell us your data sources:

Hepatitis B

Do you perform Hepatitis B- tests in your centre? Yes No

What kind of **Hepatitis B- tests** do you use and how often?

HBs- AG (antigen) Yes No Don't know

Anti HBc (antibody) Yes No Don't know

HBe-AG (antigen) Yes No Don't know

Anti HBe (antibody) Yes No Don't know

HBV-DNA quantitative Yes No Don't know

How many new **Hepatitis B infections** did you diagnose in 2009? _____

How many **co-infections Hepatitis B and HIV** did you diagnose in 2009? _____

Which drugs for **Hepatitis B- therapy** do you use?

Alpha-Interferon

Peg Interferon

Lamivudin

Adenofovir

Telbivudin

Entecavir

Tenofovir

Hepatitis C

Do you perform Hepatitis C- tests in your centre? Yes No

What kind of **Hepatitis C- tests** do you use and how often?

Anti-HCV (antibody test (ELISA)) Yes No Don't know

Anti- HCV (antibody test (Western Blot)) Yes No Don't know

HCV RNA qualitative Yes No Don't know

HCV RNA quantitative Yes No Don't know

HCV Genotype Yes No Don't know

How many new **Hepatitis C infections** did you diagnose in 2009? _____

How many **co-infections Hepatitis C and HIV** did you diagnose in 2009? _____

Is **Hepatitis C- therapy** with peg-Interferon and Ribavirin available?

Yes

No

Don't know

Chlamydia

Do you perform chlamydia- tests in your centre? Yes No

What kind of **chlamydia- tests** do you use to diagnose an acute infection?

Antigen detection: DIF Yes No Don't know

(direct immunofluorescence) ↳ if yes, in how many percent of tests? _____ %

Antigen detection: EIA Yes No Don't know

(enzyme immunoessay) ↳ if yes, in how many percent of tests? _____ %

Hybridization test Yes No Don't know

(Using specifically marked DNA/RNA) ↳ if yes, in how many percent of tests? _____ %

Amplification test Yes No Don't know

(NAAT, PCR, LCR, SDA, TMA) ↳ if yes, in how many percent of tests? _____ %

Antibody test Yes No Don't know

(Serology) ↳ if yes, in how many percent of tests? _____ % which method? _____

Culture Yes No Don't know

↳ if yes, in how many percent of tests? _____ %

Do you perform chlamydia- tests in **asymptomatic patients**? Yes No

↳ if yes, in which cases? _____

Please tick which **chlamydia test** you use for each **specimen**

	Rapid test	Hybridization	Amplification test (PCR, LCR, SDA, TMA)	Culture
Cervical smear				
Vaginal smear				
Urine				
Urethral smear				
Anal smear				
Pharyngeal smear				

Gonorrhoea

Do you perform gonorrhoea- tests in your centre? Yes No

What kind of **gonorrhoea- tests** do you use to diagnose an acute infection?

Microscopy Yes No Don't know

(Methylene blue/Gram-stain) ↳ if yes, in how many percent of tests? _____ %

Hybridization test Yes No Don't know

(Using specifically marked DNA/RNA) ↳ if yes, in how many percent of tests? _____ %

Amplification test Yes No Don't know
 (NAAT, PCR, LCR, SDA, TMA) ↳ if yes, in how many percent of tests? _____ %

Culture Yes No Don't know
 ↳ if yes, in how many percent of tests? _____ %

Do you perform **antibiotic resistance** checks for gonorrhoea?
 Yes No Don't know
 ↳ if yes, in how many percent of tests? _____ %

Do you perform gonorrhoea- tests in **asymptomatic patients**? Yes No
 ↳ if yes, in which cases? _____

Please tick which **gonorrhoea test** you use for each **specimen**

	Microscopy	Hybridization	Amplification test (PCR, LCR, SDA, TMA)	Culture
Cervical smear				
Vaginal smear				
Urine				
Urethral smear				
Anal smear				
Pharyngeal smear				

Syphilis

Do you perform syphilis- tests in your centre? Yes No

What kind of **syphilis- test** do you use and how often?

Darkfield examination Yes No Don't know
 (dark field microscopy, immunofluorescence) ↳ if yes, in how many percent of tests? _____ %

Serological test Yes No Don't know
 ↳ if yes, in how many percent of tests? _____ %

Please further specify:

- Screening test
 - TPHA/TPPA/MHA-TP Yes No Don't know
 - EIA/ELISA Yes No Don't know
 - VDRL/RPR/MPR/Cardiolipin Yes No Don't know

- Confirmation test
 - FTA-Abs Yes No Don't know
 - IgG-Immunoblot Yes No Don't know
 - EIA/ELISA Yes No Don't know
 - TPHA/TPPA/MHA-TP Yes No Don't know

- Test to base decision of therapy on
 - 19-S-IgM-FTA-Abs-test Yes No Don't know
 - IgM-EIA Yes No Don't know
 - IgM-Immunoblot Yes No Don't know
 - VDRL/RPR/ MPR/Cardiolipin Yes No Don't know
- Follow-up test
 - TPHA/TPPA Yes No Don't know
 - 19-S-IgM-FTA-Abs-Test Yes No Don't know
 - IgM-EIA Yes No Don't know
 - VDRL/RPR/Cardiolipin Yes No Don't know

Do you perform syphilis- tests in **asymptomatic patients**? Yes No

↳ if yes, in which cases? _____

Thank you for your participation!

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