

UPDATE OF HIV EPIDEMIOLOGY IN ROMANIA

**OVERVIEW OF HIV EPIDEMIC IN
ROMANIA- EXPERIENCE WITH
LONG TERM SURVIVORS -
TEENAGERS AN YOUNG ADULTS**

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Monitoring and Evaluation of HIV/AIDS
Data in Romania - INBI “Prof.Dr.M.Balș”**

- At a global level, HIV infection is constantly expanding, with an epidemiologic profile set by local and regional factors.
- According to UNAIDS estimates, at the end of 2009 there were over 33 million PLWHA worldwide, compared to 26 million PLWHA reported in 1999 (a 27% increase in this number).
- At the end of 2009, the estimated number of HIV positive children was calculated at the value of 2,5 million, while the proportion of women living with HIV/AIDS apparently remained stable, namely 15,9 million.
- Unlike the infections in other Eastern and Central European Countries, HIV/AIDS infection in Romania is a different phenomenon.

- The specificity of the epidemic consists of a high rate of HIV incidence at children, infected at the end of the 1980s, the maximum number of these patients having been recorded in the beginning of the 1990s.
- During the same period the rate of HIV incidence among the adult population was low, with a significant increase afterwards, by heterosexual contact.
- According to the data provided by Compartment for Monitoring and Evaluation of HIV/AIDS Data in Romania, in National Institute of Infectious Diseases Prof. Dr. Matei Bals, at 30 September 2011 17.212 cumulative cases of HIV/AIDS cases were recorded, with a figure of 10.765 people living with HIV/AIDS.
- Recent information released by UNAIDS (December 2009) ranks the number of PLWHA in Romania between 12.000-16.000 persons.

- The difference between the number of the diagnosed patients and the estimates is relatively small next to other Central and Eastern European countries.
- The rate of HIV prevalence at adults was somewhere below 0.1% , at 31 December, 2010.
- Currently, Romania has a large number of survivors, integrated in the 19-24 age group, who belong to the 1987-1990 cohort (>6000) and a large number of PLWHA who receive specific ARV therapy in relation to the total number of infected persons (>7000).
- Due to an optimal therapy administration, the mean period of survival has increased from 3 month is 1990-2000 to 84 months today.

- The current tendencies of the HIV/AIDS infection in Romania are:

- The same main way of transmission for adults - unsafe heterosexual contact - 63% of the new cases.
- A slight decrease in the vertical transmission (mother to child)- 2,5% in 2011 vs. 4,8% in 2010.
- A relevant increase for the IDU group (15% in 2011 vs. 3% in 2010).
- A doubled number of infections among the MSM group compared with 2009, namely from 8% to 16% in 2011.
- An overall increase of PLWHA who require specific medical services and ARV therapy.

- ✓ Due to the epidemiologic particularity, namely *the long term survivals*, who have experienced multiple therapeutic schemes, the problem of ART resistance is major, with many implications in the design of potent therapeutic schemes.

- The activity related to HIV/AIDS in Romania is coordinated by Ministry of Health and National Health Insurance House, which provide both the activity of prevention and the specific ART treatment.

- The order approving the technical norms for national health programs, during 2011-2012 manages (1591/1110, December 2010):
 - The program for surveillance and control of the HIV infection through National Institute of Public Health and National Institute of Infectious Diseases “Prof. Dr. Matei Bals”, the nine Regional HIV/AIDS Centers and Public Health Counties.
- The program for surveillance and control for the abovementioned period targets:
 - Maintaining a low rate of incidence at the adult population;
 - The reduction of mother to child transmission.
- The program addresses to the general population and to the vulnerable groups (see **HIV TESTS* BY RISK GROUPS IN 2011** slide).

- The treatment program is coordinated by National Institute of Infectious Diseases “Prof. Dr. Matei Bals”, the nine Regional HIV/AIDS Centers and sustained by National Health Insurance House.

- The HIV/AIDS Strategy for 2011-2015 is in process of approval.

Guiding principles of National HIV/AIDS Strategy

- 1. HIV/AIDS represents more than a public health priority. It is a complex problem, which affects all the layers of a society.*
- 2. The strategy will emphasize the prevention methods against HIV transmission and the reduction of the social impact. The assigned resources must take in consideration vulnerable groups and individuals at risk as well as the affected communities.*
- 3. Multisectoral and interdisciplinary involvement at a national level is essential for an adequate answer to the HIV/AIDS problem.*
- 4. Vulnerable persons and groups at risk must have the necessary knowledge and access to adequate services in view of preventing the infection with HIV virus.*

Guiding principles of National HIV/AIDS Strategy

- 5. HIV/AIDS programs/interventions, especially those addressing to vulnerable and at high risk of infection groups must be adapted to age, sex, culture and behavioural differences.*
- 6. All PLWHA or diagnosed with AIDS, as well as vulnerable groups have equal and permanent to treatment, medical care and social services, in accordance with according the standards stipulated by the legislation.*
- 7. The rights of PLWHA and of vulnerable groups are granted by the national legislation and by the International Treaties, which Romania signed.*
- 8. Law establishes individual responsibilities of PLWHA.*

Guiding principles of National HIV/AIDS Strategy

9. *Universal precautions will be applied in view of preventing all possibilities of HIV transmission, within the sanitary and the social assistance systems.*
10. *HIV testing is voluntary, and/or anonymous, confidential, accompanied by pre- and post - test counselling, in both private and state sectors.*
11. *The form of policies and and socio-economic programs development must also be based on HIV/AIDS phenomenon.*
12. *The present strategy serves as a main orientation document for the elaboration of programs and national, local projects of intervention within the HIV/AIDS field.*

MINISTRY OF HEALTH
NATIONAL INSTITUTE OF INFECTIOUS DISEASES “PROF.DR.MATEI BALȘ”
Compartment for Monitoring and Evaluation of HIV/AIDS Infection in Romania
GENERAL DATA AT 30 SEPTEMBER 2011

TOTAL HIV/AIDS CASES (CUMULATIVE 1985-2011) <u>OUT OF WHICH:</u>	17.212
HIV/AIDS CASES at children (0-14 years at diagnosis date)	9.866
HIV/AIDS CASES at adults (> 14 years at diagnosis date)	7.346
Total no. of AIDS deaths	5.850
Out of records HIV/AIDS children + adults	597
NUMBER OF PLWHA (people living with HIV/AIDS)	10.765
TOTAL AIDS CASES (CUMULATIVE 1985-2011)	12.369
AIDS Cases at children (0-14 years at diagnosis date)	7.941
AIDS Cases at adults (> 14 years at diagnosis date)	4.428
TOTAL HIV CASES (CUMULATIVE 1992-2011)	4.843
HIV Cases at children (0-14 years at diagnosis date)	1.925
HIV Cases at adults (> 14 years at diagnosis date)	2.918
NEW HIV/AIDS CASES, diagnosed during 01.01 – 30.09.2011	405
NEW HIV NOTIFIED CASES	226
NEW AIDS NOTIFIED CASES	179
NUMBER OF DEATHS IN 2011 (01.01-30.09.2011)	117

Source: Compartment for Monitoring and Evaluation of HIV/AIDS Infection in Romania INBI “Prof.Dr.M.Balș”

MINISTRY OF HEALTH

NATIONAL INSTITUTE OF INFECTIOUS DISEASES "PROF.DR.MATEI BALȘ"

Compartment for Monitoring and Evaluation of HIV/AIDS Infection in Romania

GENERAL DATA AT 30 SEPTEMBER 2011

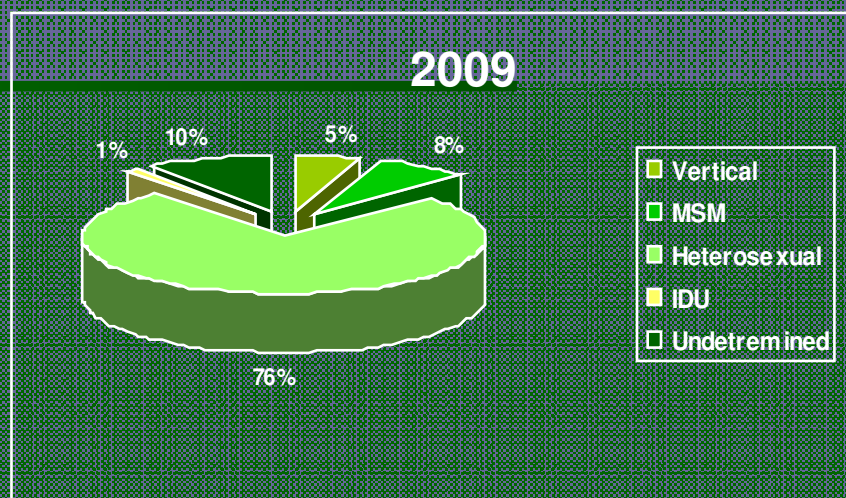
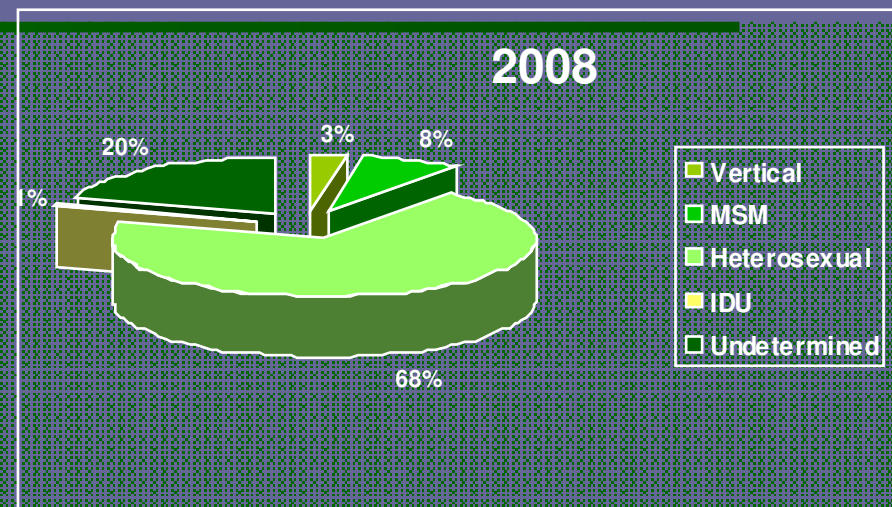
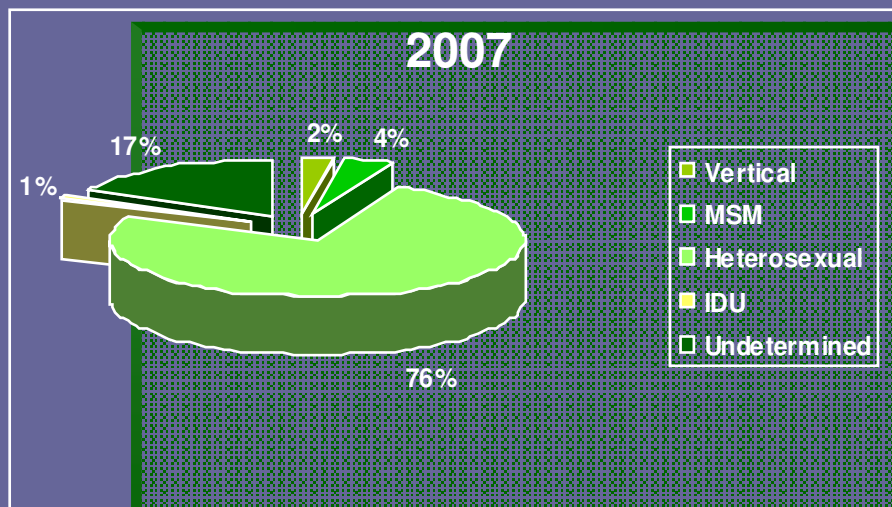
<i>Patients in active records HIV+AIDS</i>	8.916
<i>Children (0-14 years*)</i>	234
<i>Adults(> 14 years*)</i>	8.682
<i>Patients with ARV treatment</i>	7.352
<i>Children (0-14 years*)</i>	192
<i>Adults (> 14 years*)</i>	7.160
Persons who received ARV prophylaxis	384
Persons who interrupted the ART treatment voluntarily	354

*current age

TENDENCES OF THE TRANSMISSION WAY IN ROMANIA 2007-2011

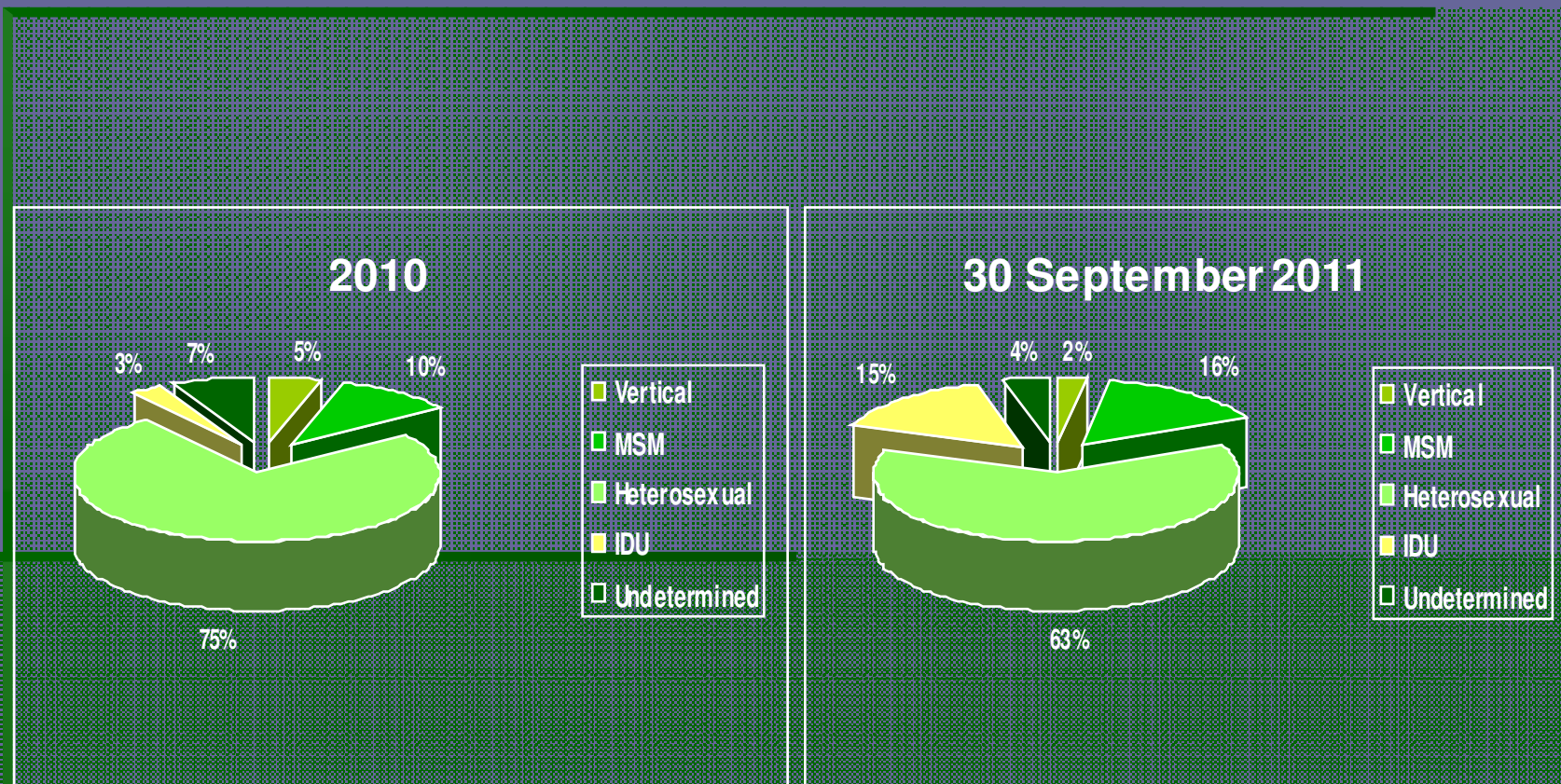
TRANSMISSION WAY	2007	2008	2009	2010	30 September 2011
Vertical	9 (2,44%)	12 (2,7%)	22 (5%)	21 (4,8%)	10 (2,5%)
MSM	14 (3,8%)	33 (7,5%)	34 (8%)	46 (10,5)	63 (15,5%)
IDU	3 (0,8%)	3 (0,7%)	5 (1,1%)	12 (2,7%)	62 (15,3%)
Heterosexual	278 (75%)	302 (69%)	324 (75%)	329 (74,7%)	254 (62,7%)
Undetermined	64 (17%)	86 (20%)	43 (10%)	32 (7,3%)	16 (4%)
Total	368	436	428	440	405

TENDENCES OF THE TRANSMISSION WAY IN ROMANIA 2007-2009



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

TENDENCES OF THE TRANSMISSION WAY IN ROMANIA 2010-2011



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

HIV/AIDS incidence at adults and children, between 1985 – 2010 (per 100.000)



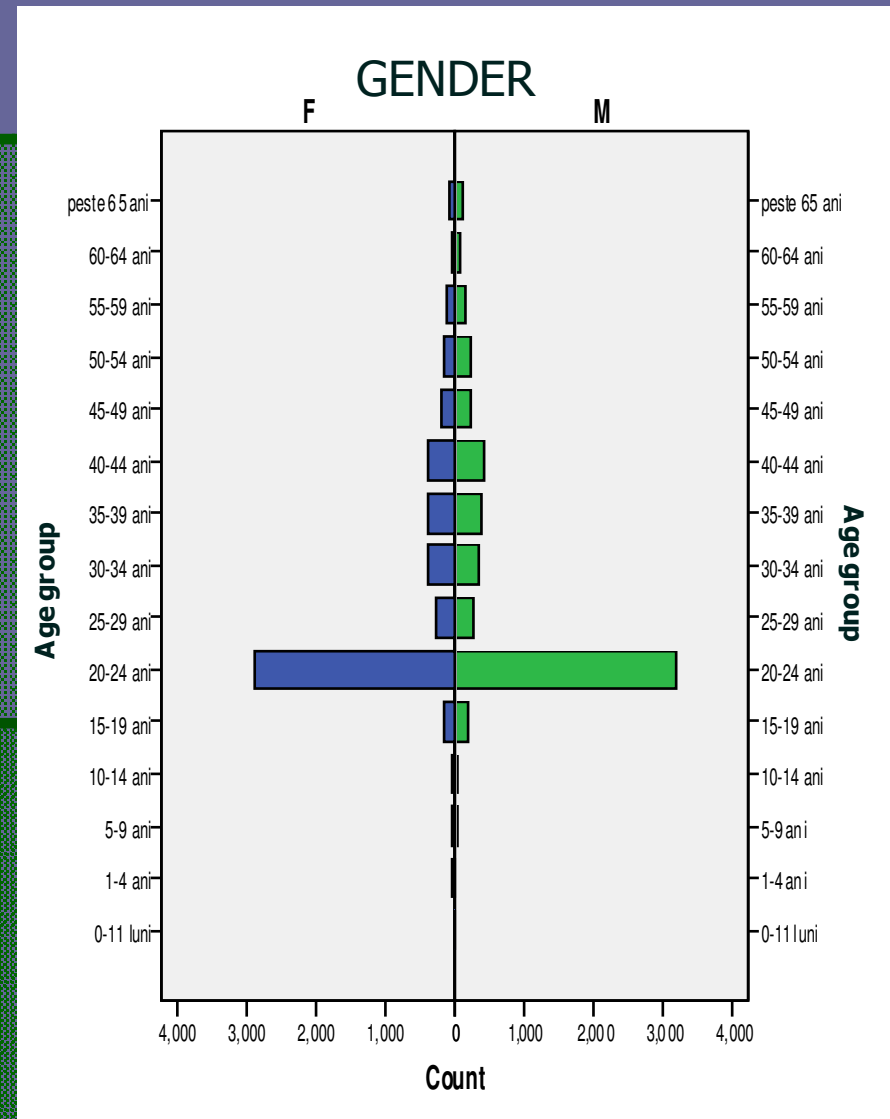
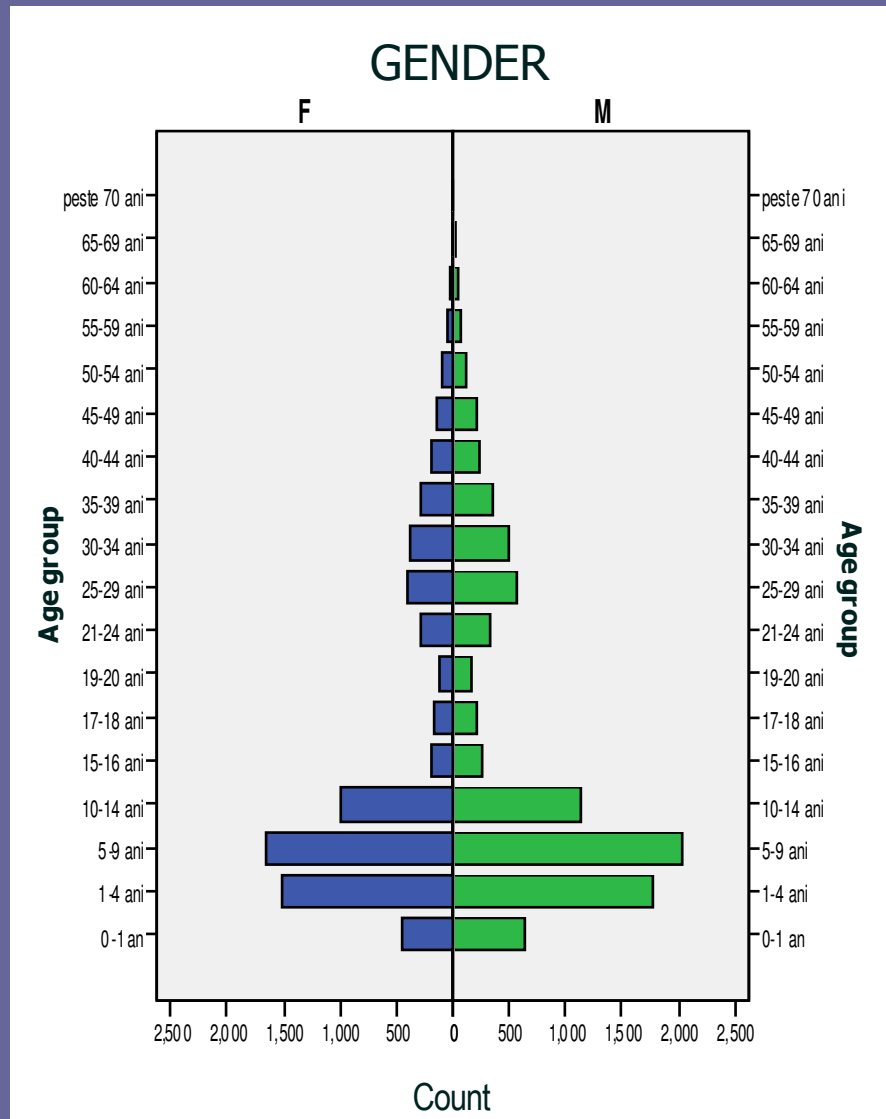
Children 2010: 0,43/100.000
Adults 2010: 1,24/100.000

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

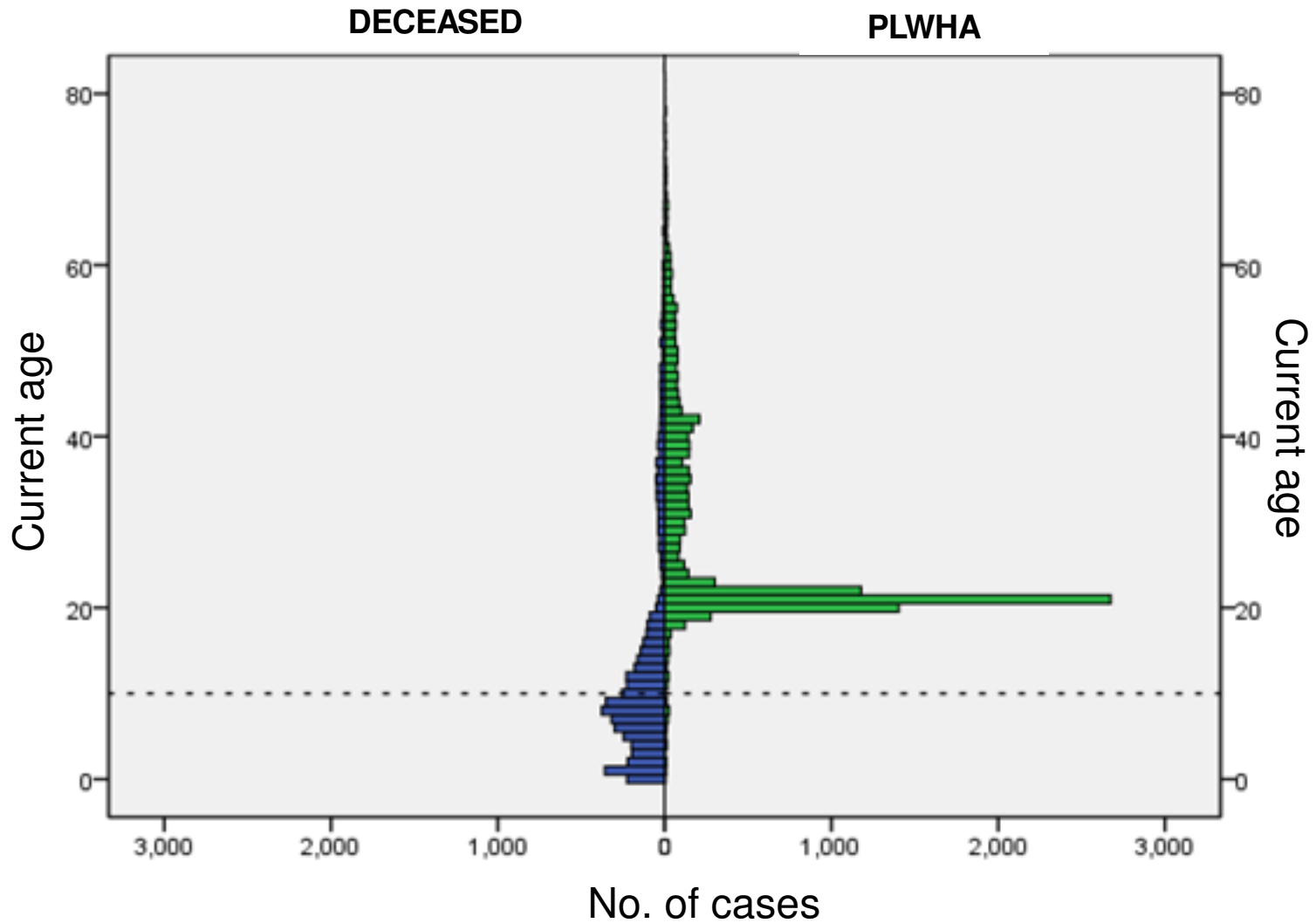
AGE PYRAMID – TOTAL – 31 DECEMBER 2010

AGE AT DISCOVERY/NOTIFICATION DATE
TOTAL 1985-2010

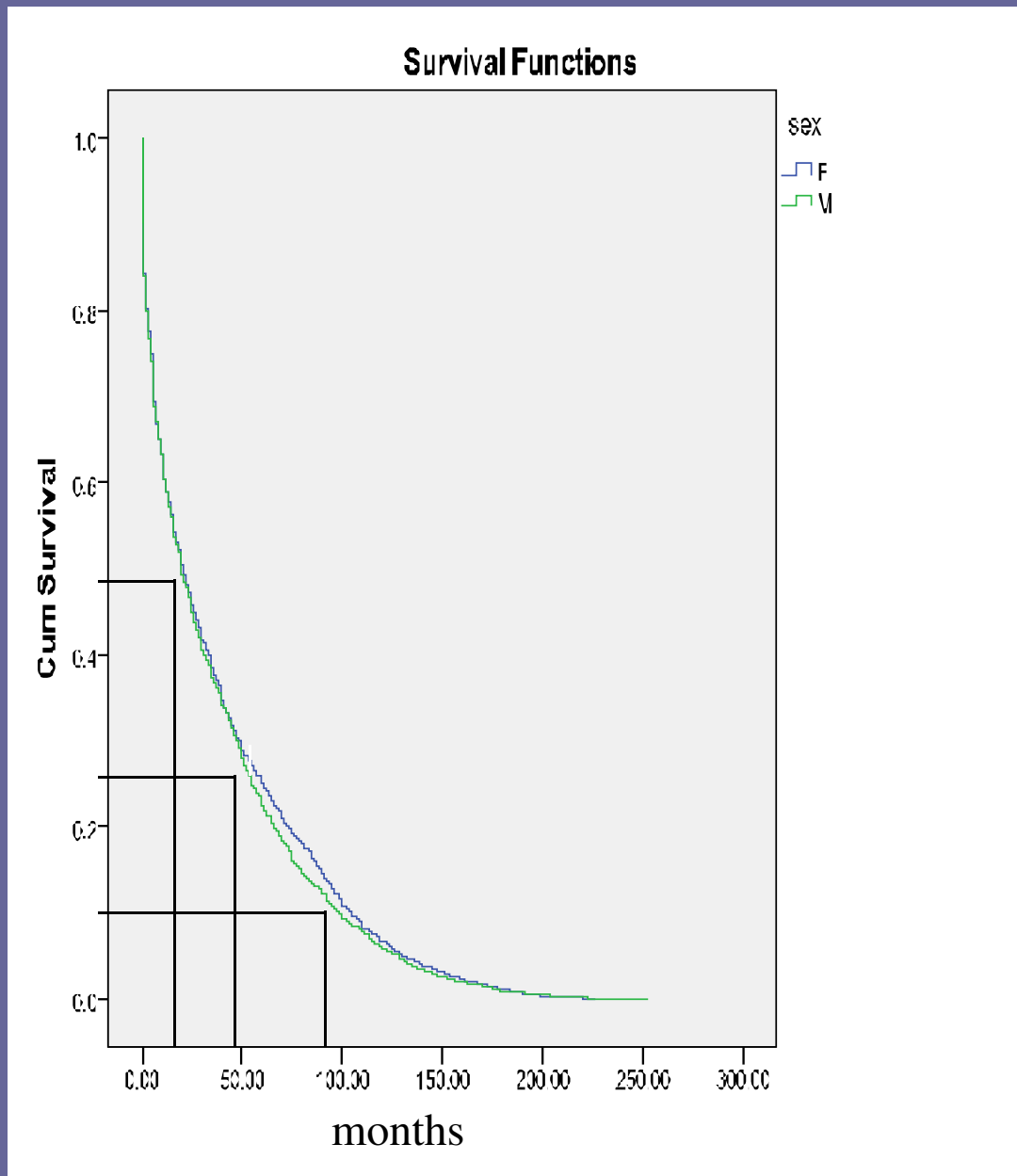
CURRENT AGE



AGE PYRAMID (deceased patients vs.PLWHA) BY CURRENT AGE

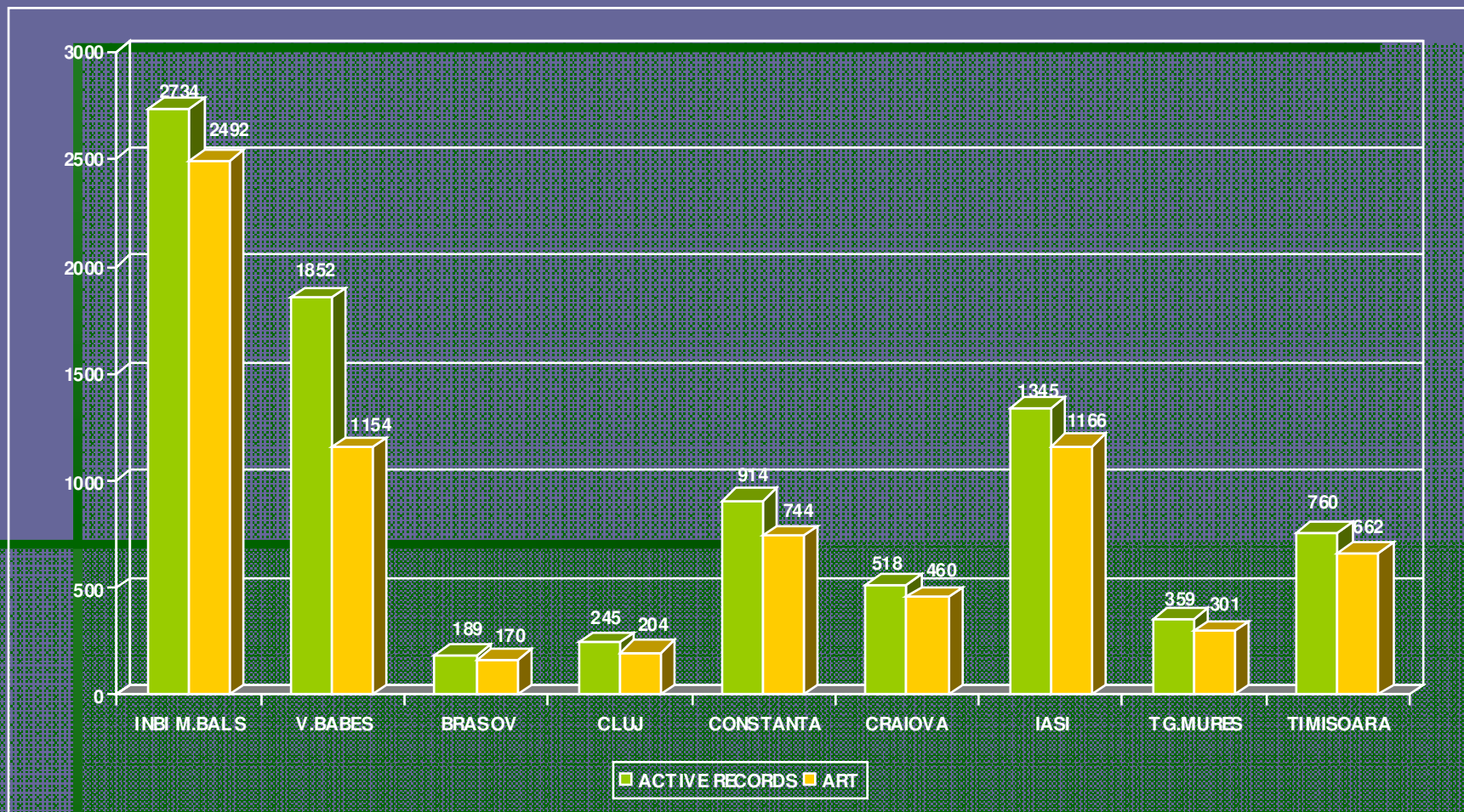


Analysis of the survival rate, Kaplan-Meier type



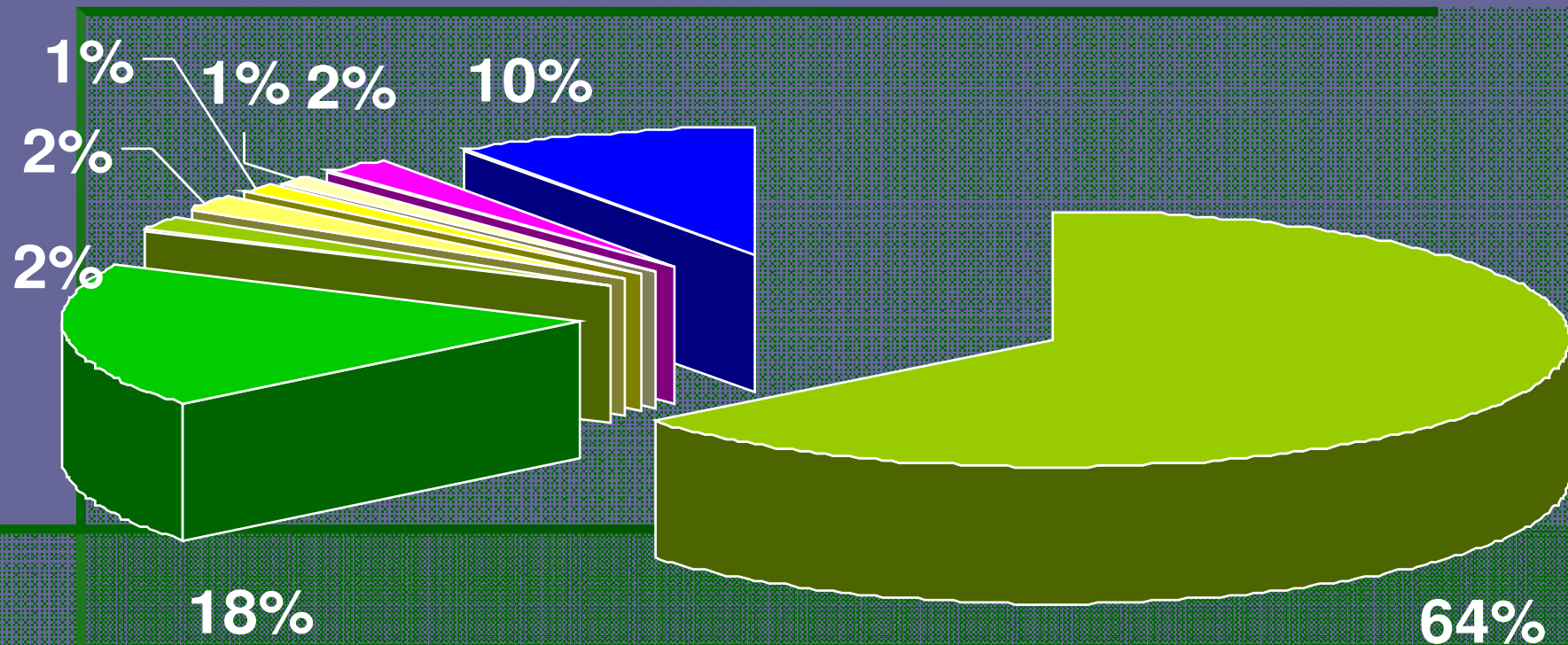
- 50% of deaths had a mean period of survival (POS) < 50 months;
- 25% of deaths had a mean POS of 50 months;
- 10% of deaths had a mean POS \geq 100 months;
- Limits: periods without treatment, ARV schemes, duration of treatment are excluded
- Mean POS = 37.4 months (C.I.95% 35,1-38,1)
 - Mean POS for men = 36,6 months (C.I.95% 35,1-38,1)
 - Mean POS for women = 38,6 months (C.I.95% 36,7-40,5)

PATIENTS WITH ART AND IN ACTIVE RECORDS BY REGIONAL CENTRES – 30 SEPTEMBER 2011



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

ARV SCHEMES AT 30 SEPTEMBER 2011

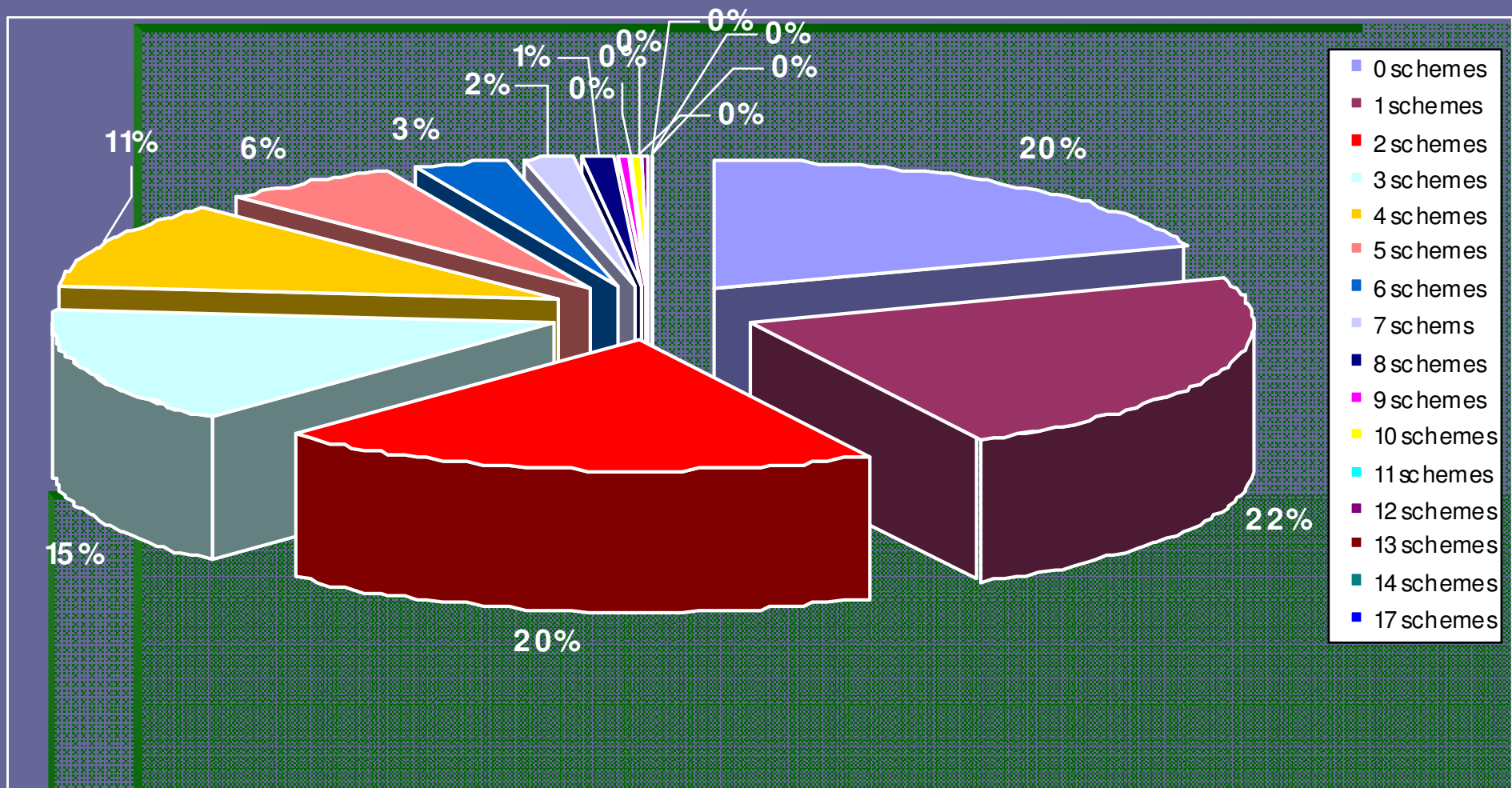


- 2 INRT + 1 IP/r
- 1 INRT + 1 INNRT + 1 IP/r
- 3 INRT
- 2 INRT + 1 IP/r + 1 II

- 2 INRT + 1 INNRT
- 3 INRT + 1 IP/r
- 2 INRT + 1 INNRT + 1 IP/r
- OTHER

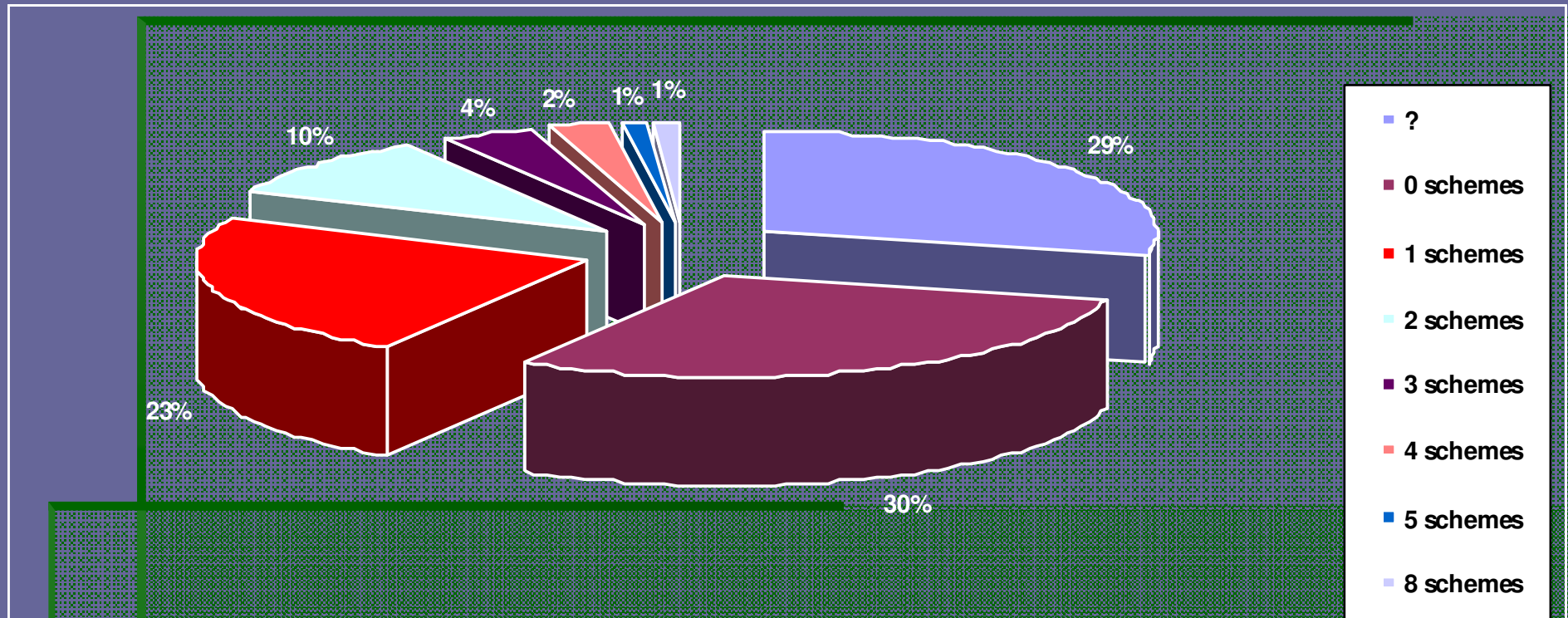
Source: Compartment for Monitoring and Evaluation of HIV/AIDS Infection in Romania INBI "Prof.Dr.M.Balș"

ADULTS (≥ 15 YEARS): NUMBER OF ARV SCHEMES, PRIOR TO THE CURRENT ONE NO. OF PATIENTS

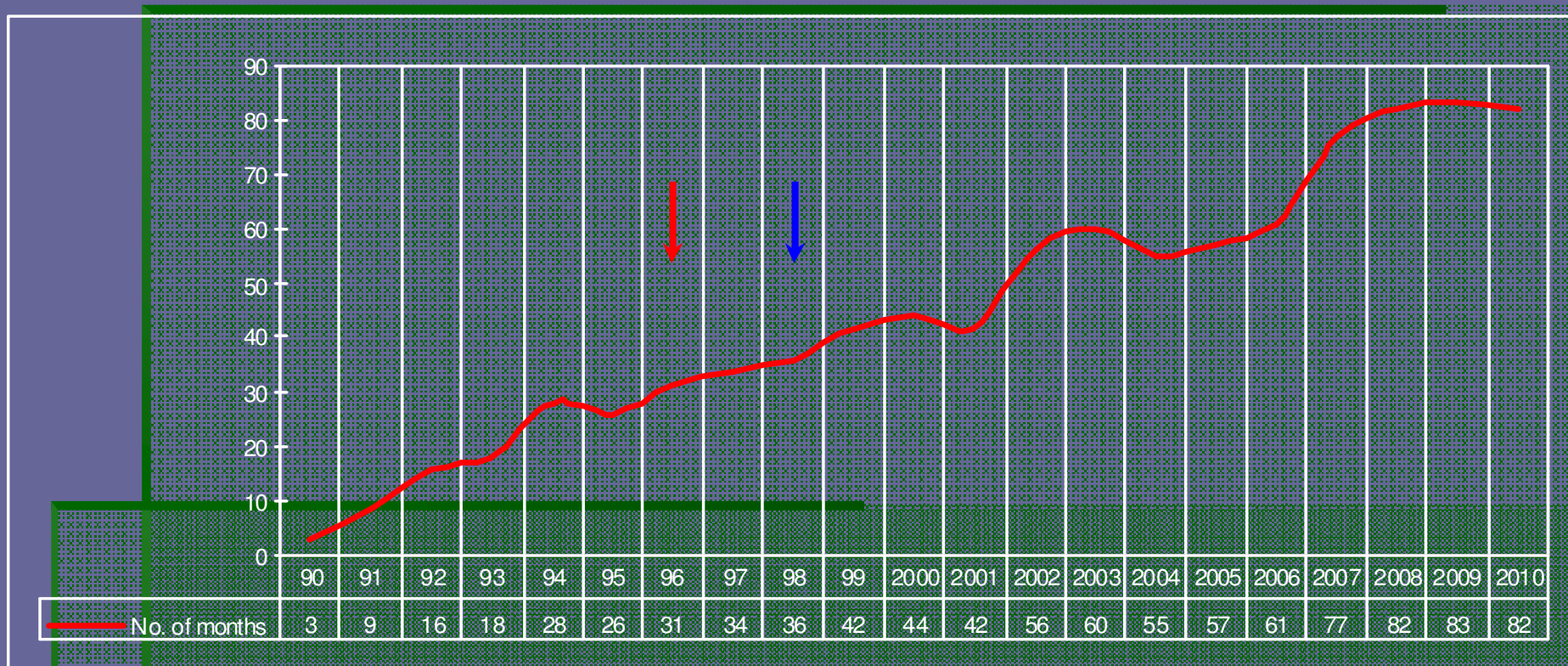


Source: Compartment for Monitoring and Evaluation of HIV/AIDS Infection in Romania INBI "Prof.Dr.M.Bals"

CHILDREN (0-14 YEARS): NUMBER OF ARV SCHEMES, PRIOR TO THE CURRENT ONE



AVERAGE SURVIVAL PERIOD (IN MONTHS) OF AIDS PATIENTS , BETWEEN 1990 - 2010



→ Initiation of ART bi therapy

→ Initiation of ART tri therapy

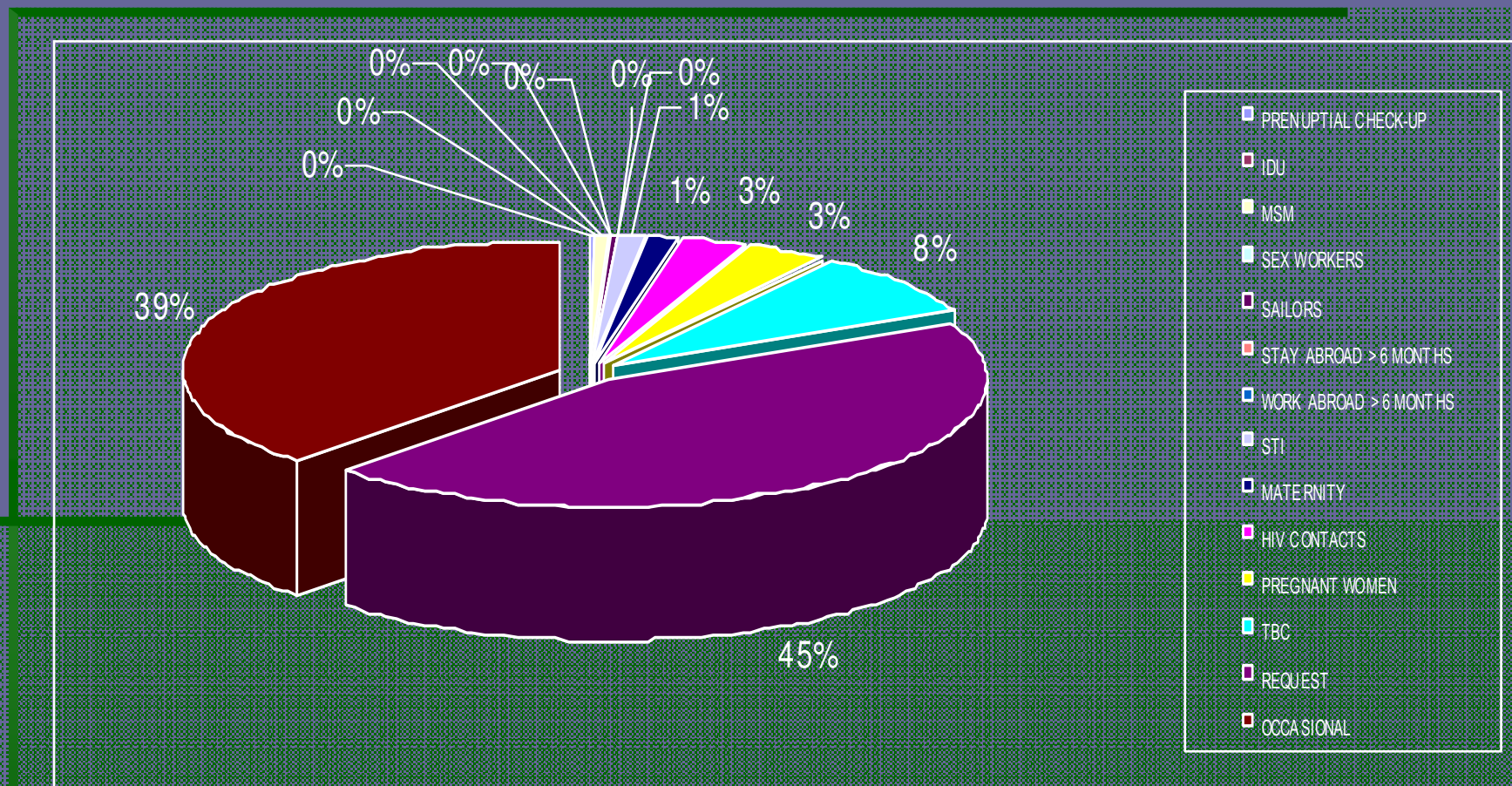
HIV TESTS* BY RISK GROUPS IN 2011

Risk group	Negative tests	Positive tests	TOTAL	%POZITIVE
STI	2960	23	2983	0,77
TBC	11201	168	11369	1,48
MATERNITY	411	27	438	6,16
PREGNANT WOMEN	91068	68	91136	0,07
MEDICAL STAFF	6748		6748	0,00
HEMODIALYSIS	2598		2598	0,00
TRANSFUSION RECEPIENT	230		230	0,00
PRENUPTIAL CHECK-UP	4989	5	4994	0,10
IV DRUG USERS	42	3	45	6,67
INMATES	304		304	0,00
MSM	50	7	57	12,28
SEX WORKERS	66	4	70	5,71
HIV CONTACTS	693	61	754	8,09
SALORS	5625	2	5627	0,04
DRIVERS	15		15	0,00
WORK ABROAD > 6 MONTHS	359	1	360	0,28
STAY ABROAD > 6 MONTHS	115	1	116	0,86
REQUEST	86472	918	87390	1,05
OCCASIONAL	15228	780	16008	4,87
TOTAL	229174	2068	231242	0,89

* The data is received from County Public Health Authorities

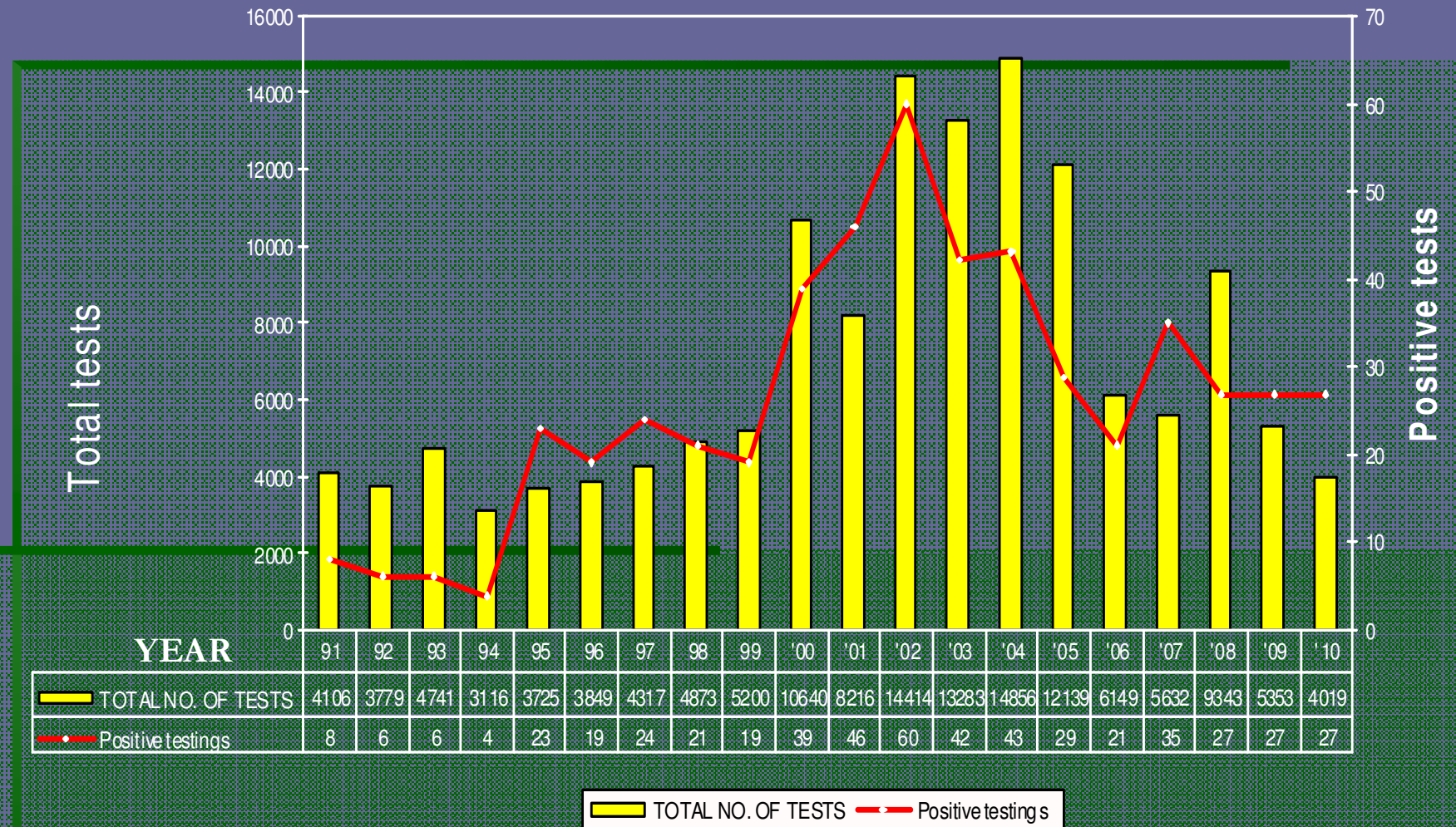
Source: Compartment for Monitoring and Evaluation of HIV/AIDS Infection in Romania INBI "Prof.Dr.M.Bals"

POSITIVE TESTS BY RISK GROUPS IN 2011 (%)*



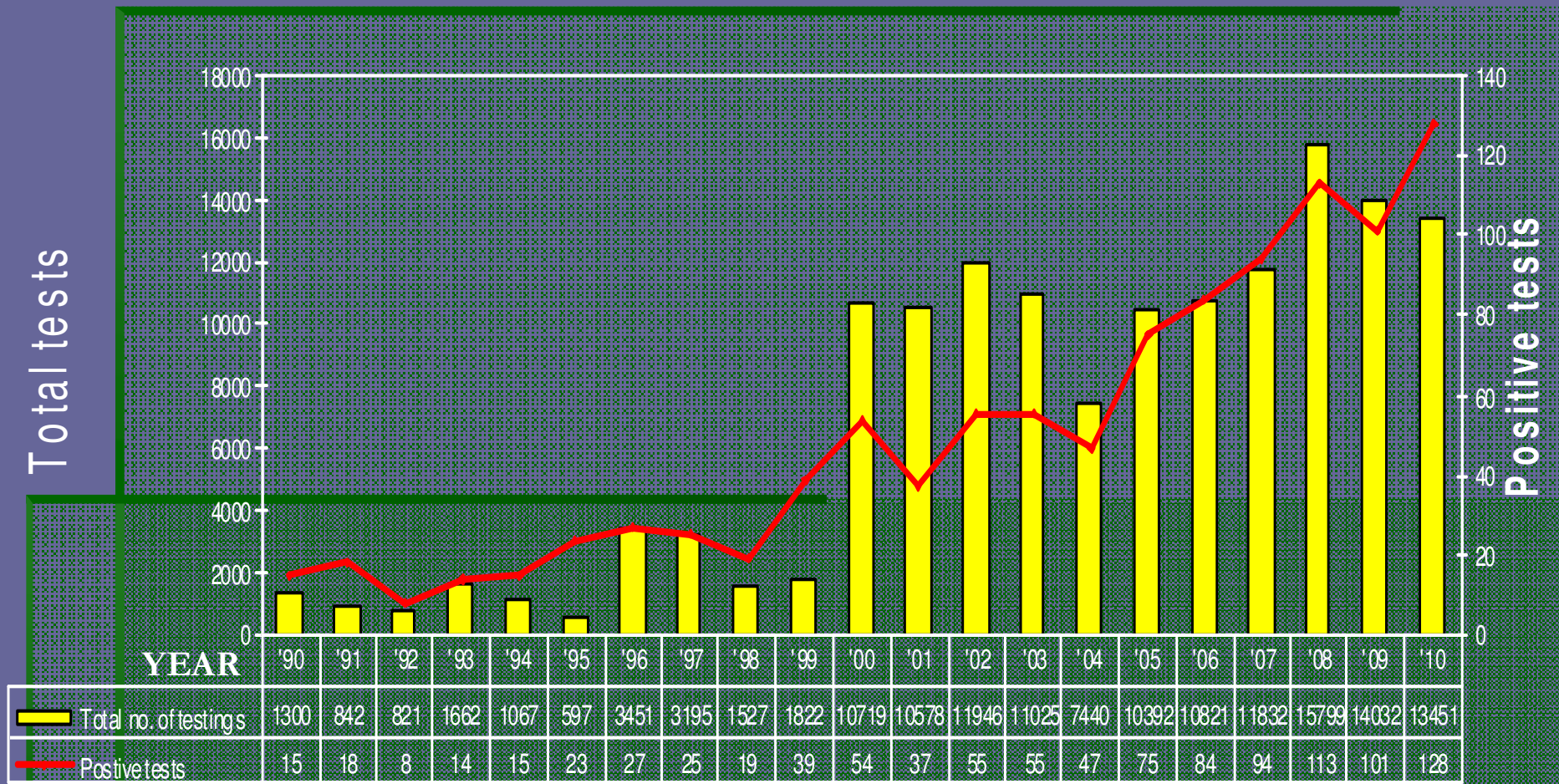
*From 2527 positive tests

HIV TESTINGS IN STI PATIENTS



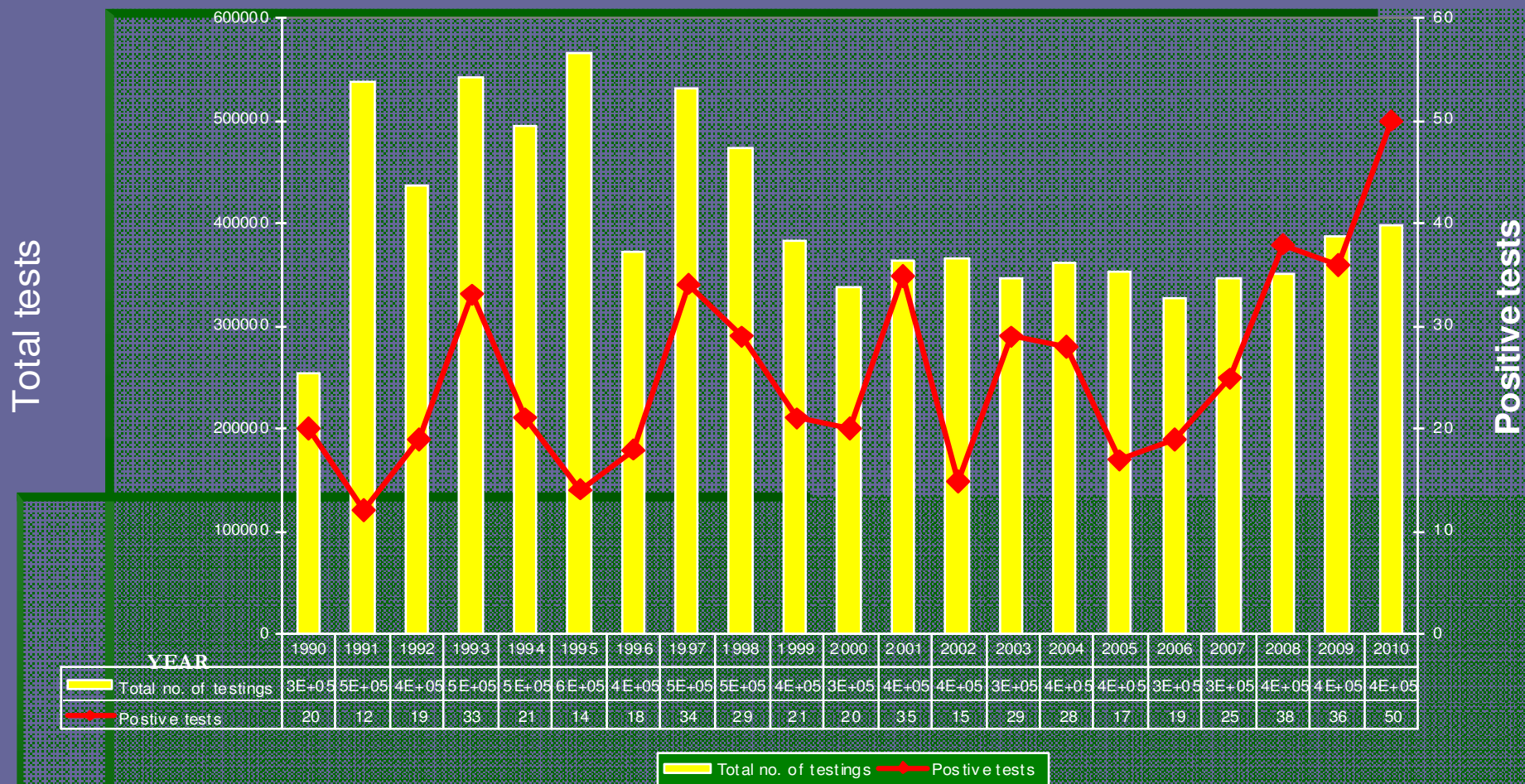
Source: Compartment of Monitoring and Evaluation of HIV/AIDS data in Romania- INBI "Prof. Dr. M. Balș"

HIV TESTINGS IN TBC PATIENTS



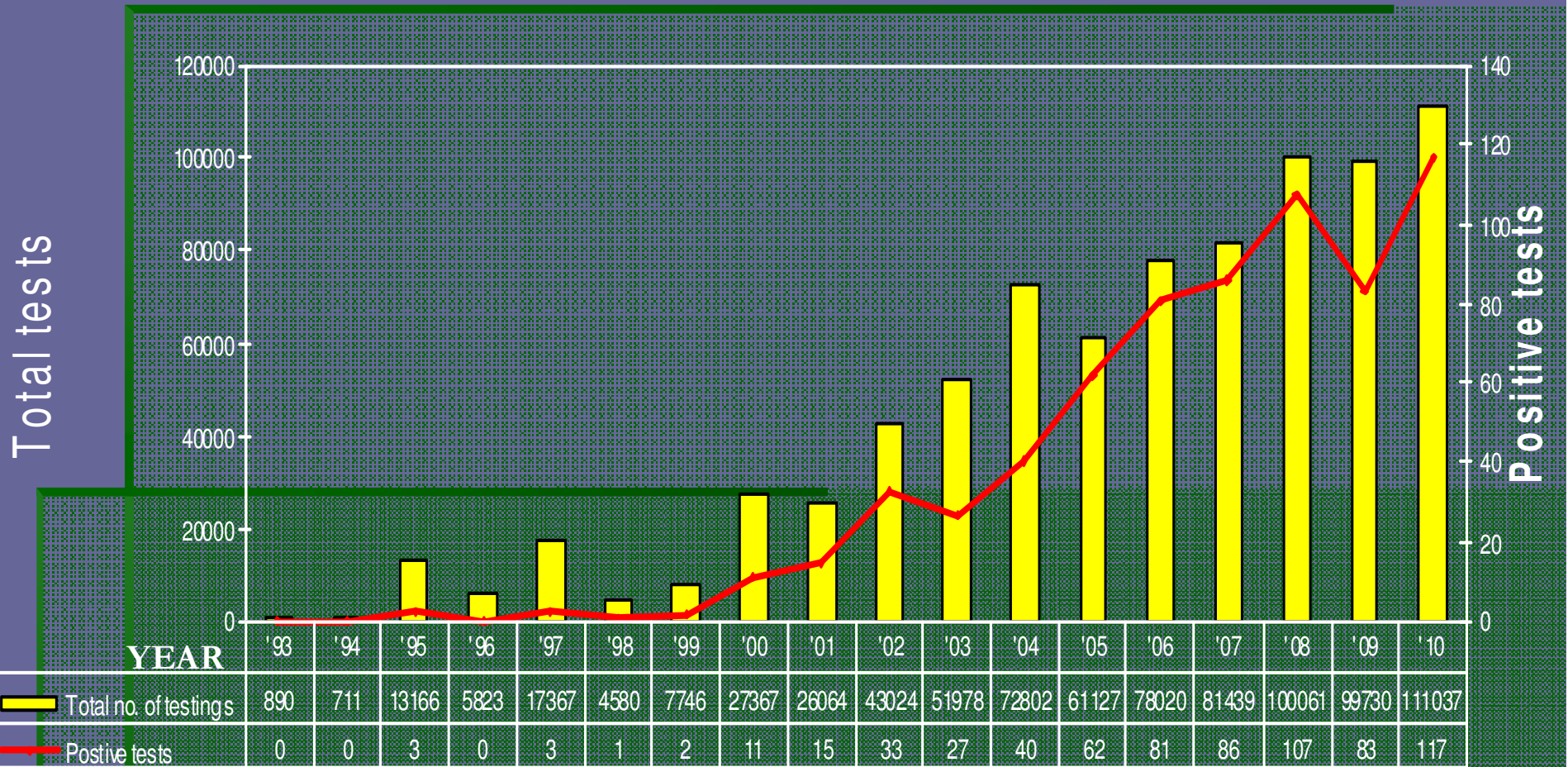
Source: Compartment of Monitoring and Evaluation of HIV/AIDS data in Romania- INBI "Prof. Dr. M. Balş"

HIV TESTINGS IN BLOOD DONORS



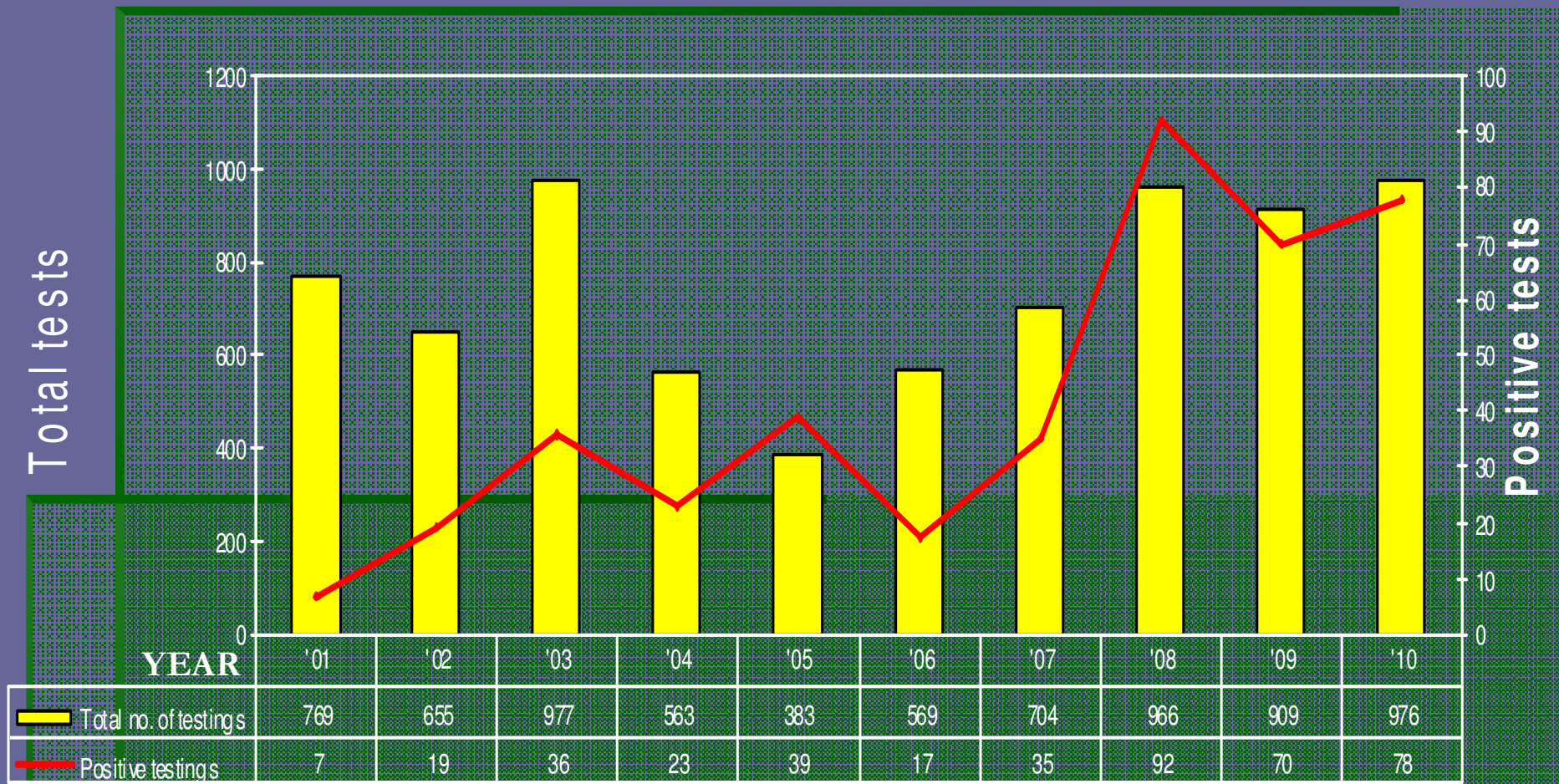
Source: Compartment of Monitoring and Evaluation of HIV/AIDS data in Romania- INBI "Prof.Dr.M.Balș"

HIV TESTINGS IN PREGNANT WOMEN



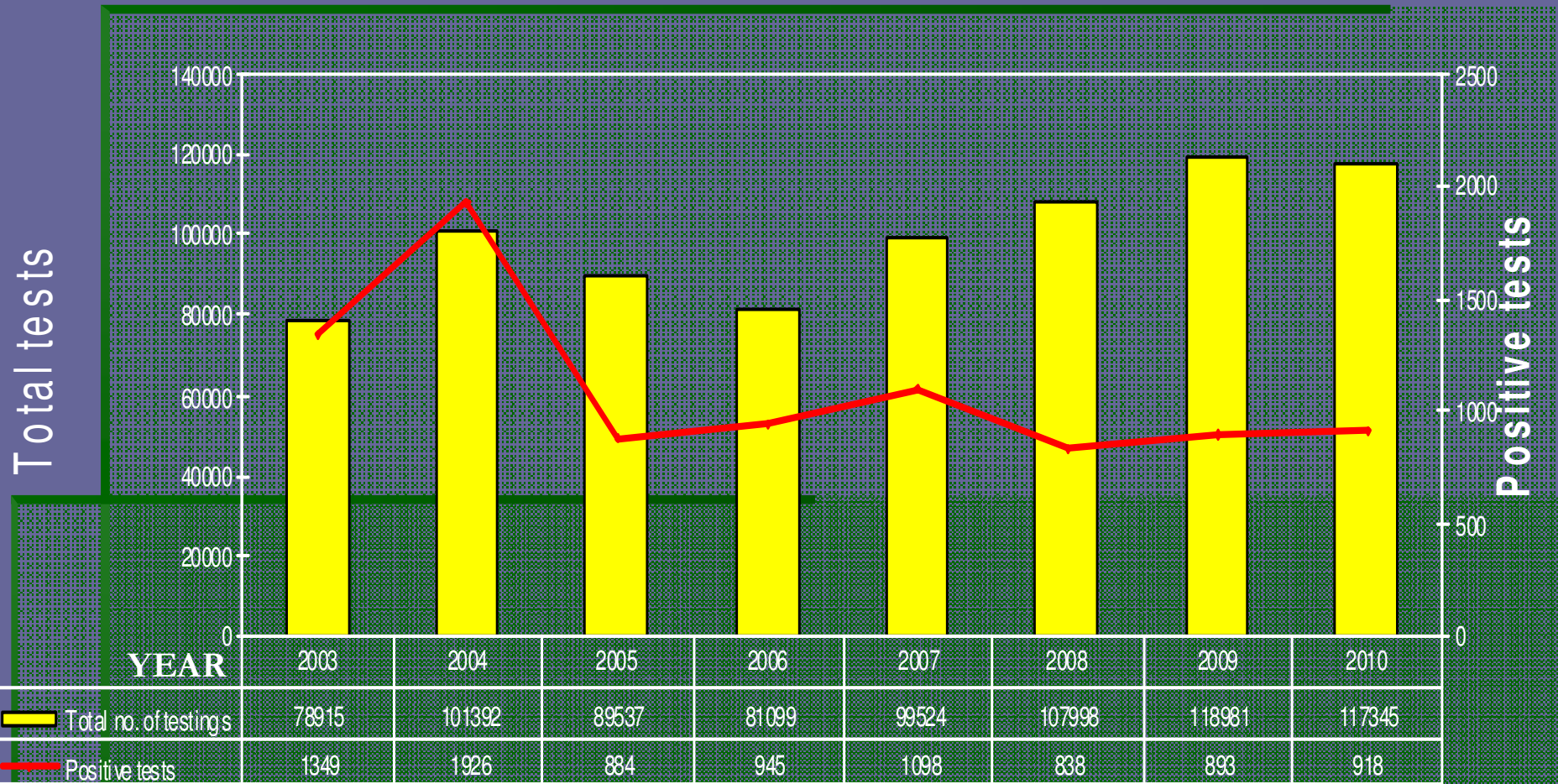
Source: Compartment of Monitoring and Evaluation of HIV/AIDS data in Romania- INBI "Prof.Dr.M.Balş"

TESTINGS IN HIV CONTACTS



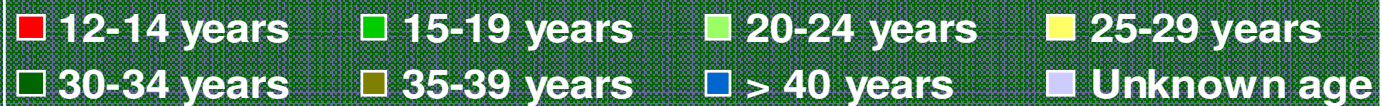
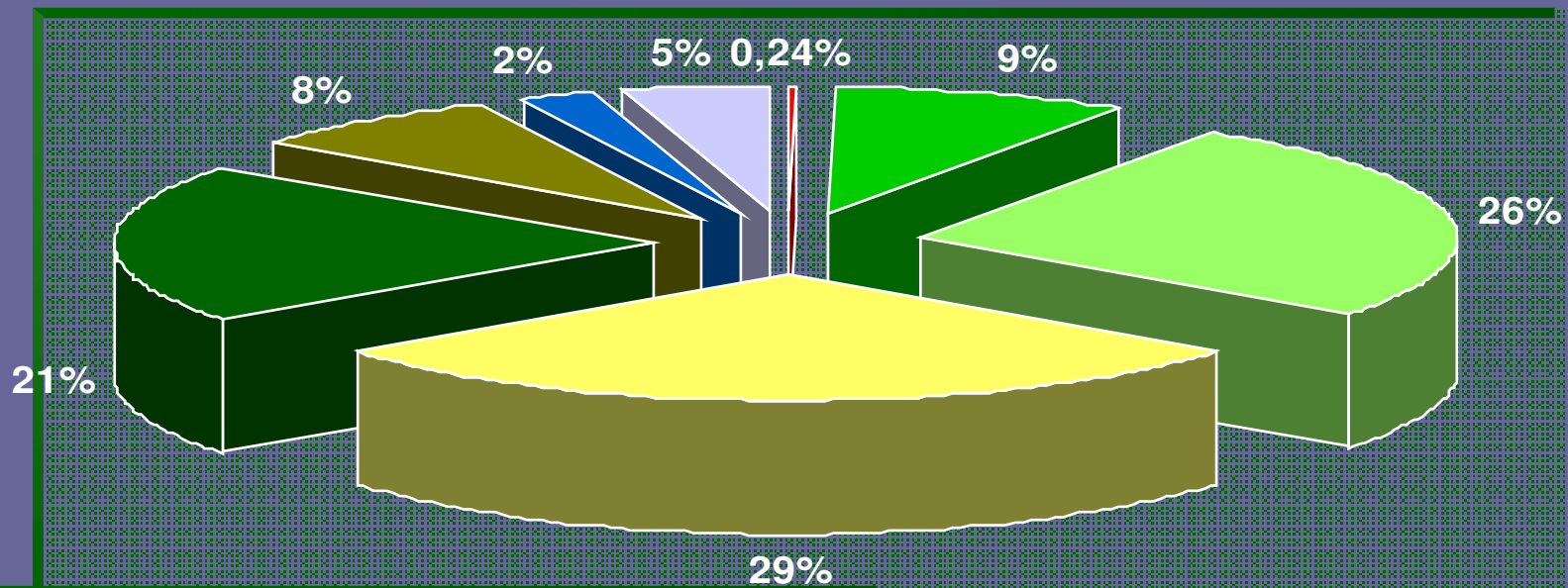
Source: Compartment of Monitoring and Evaluation of HIV/AIDS data in Romania- INBI "Prof.Dr.M.Balș"

REQUESTED HIV TESTINGS



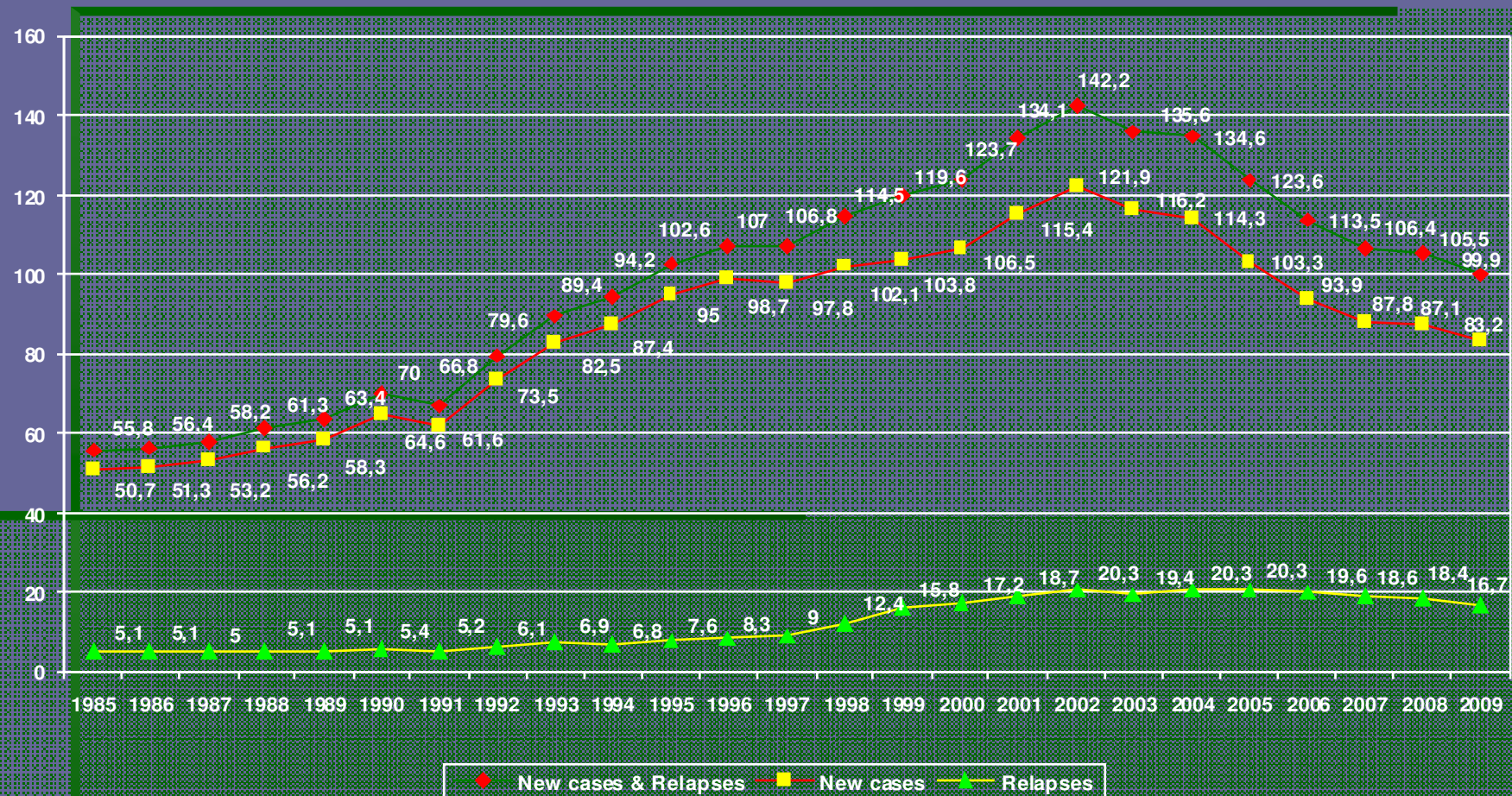
Source: Compartment of Monitoring and Evaluation of HIV/AIDS data in Romania- INBI "Prof. Dr. M. Balș"

HIV TESTINGS* AT PREGNANT WOMEN BY AGE GROUPS IN 2011



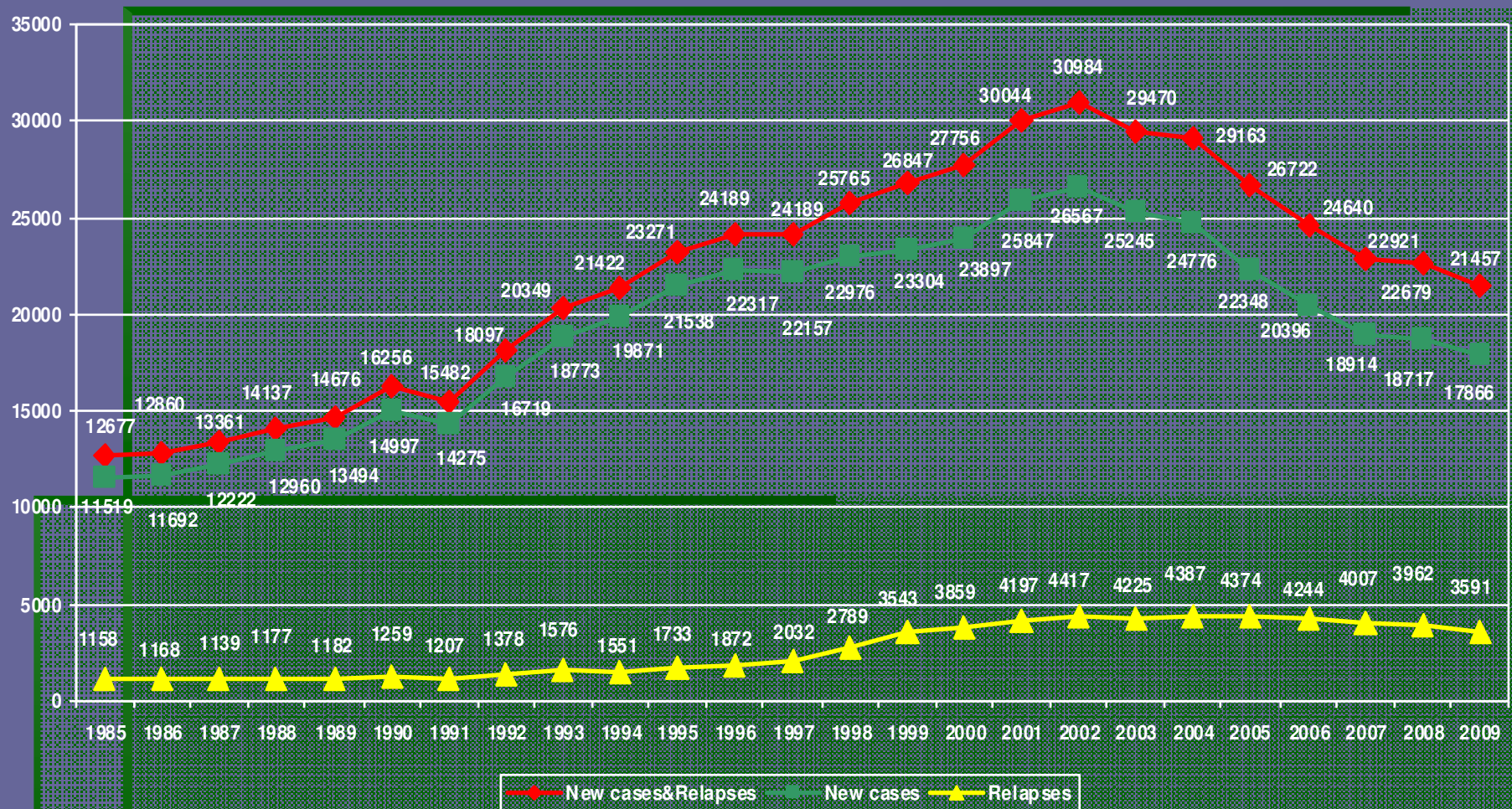
Source: Compartment for Monitoring and Evaluation of HIV/AIDS Infection in Romania INBI "Prof.Dr.M.Balș"

TB global incidence in Romania 1985-2009



Source: National Institute of Pneumoftiziologie *Marius Nasta*, Bucharest

Number of TB new cases and relapses, 1985-2009

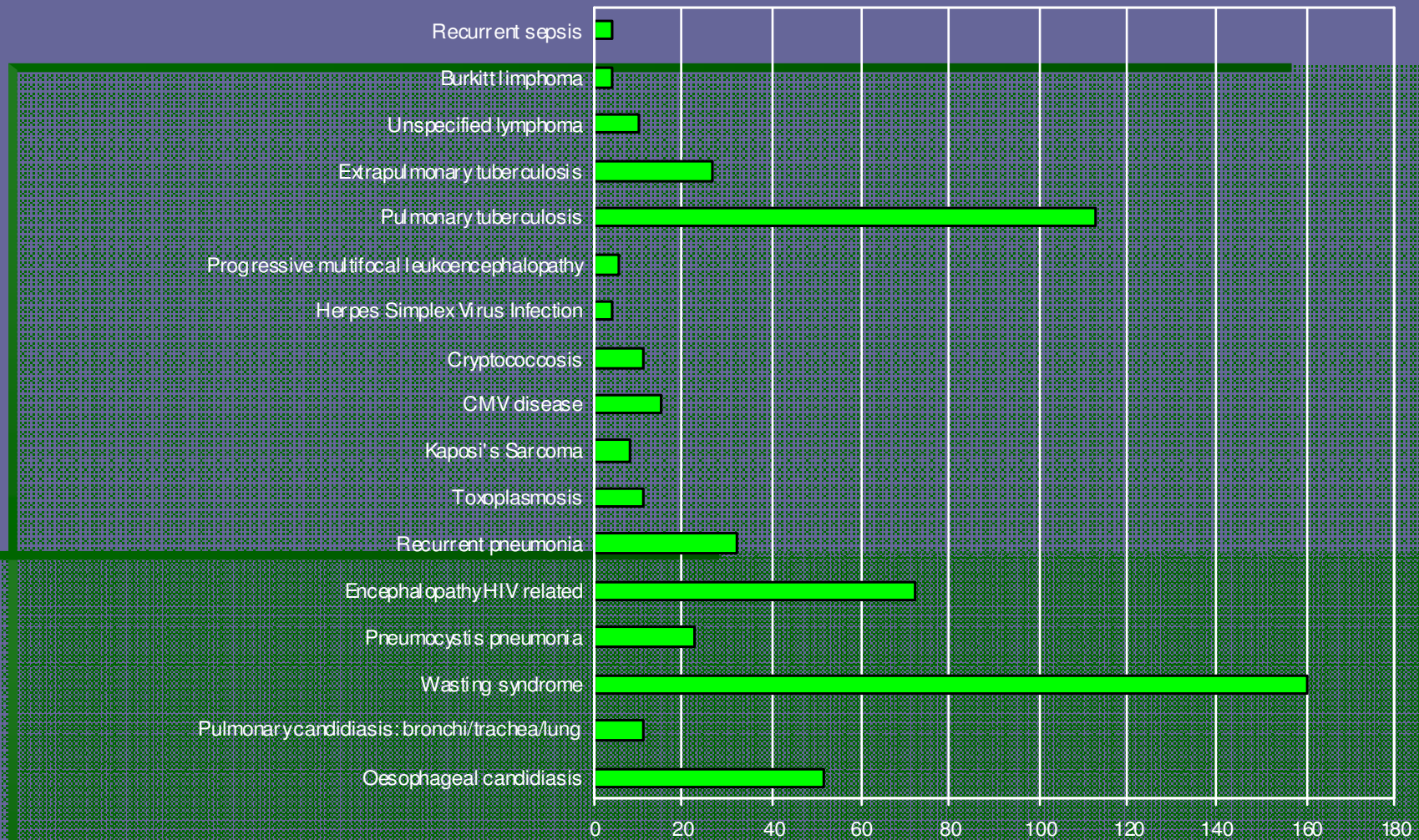


Source: National Institute of Pneumoftiziologie *Marius Nasta*, Bucharest

HIV-TB association

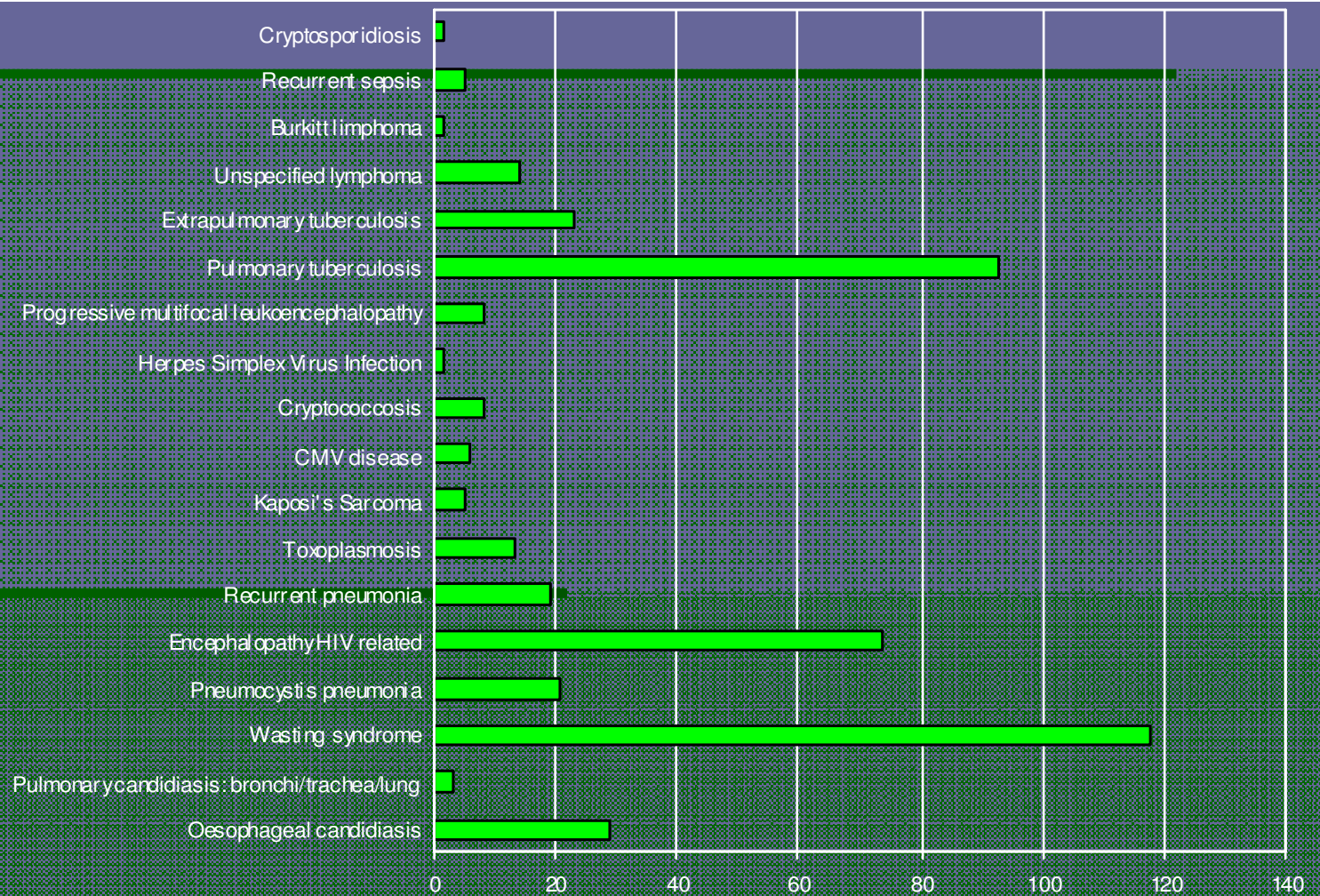
- **Current situation :**
 - In 2009 **142** cases of HIV-TB co-infection were registered, out of which **78** at the new AIDS cases (**2** children and **76** adults).
 - In 2010 **178** cases of HIV-TB co-infection were registered, out of which **66** at the new AIDS cases (**1** child and **65** adults).

AIDS INDICATIVE DISEASES IN 2010



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

AIDS INDICATIVE DISEASES IN 2011



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

The immunologic and virologic data represent the joint effort of laboratories in the nine Regional Centers in collaboration with Compartment for Monitoring and Evaluation of HIV/AIDS data in Romania, in National Infectious Diseases Institute–Bucharest.

Infectious Diseases Hospital

Regional Centers
University Clinics

County Public Health

**National Institute of Infectious Diseases
“Prof. Dr. Matei Bals”**

M.O.H.

National Institute of
Statistics

ECDC
Stockholm

WHO- Copenhagen

The data is collected from the HIV/AIDS confirmation charts, sent by the nine Regional Centers for Evaluation and Monitoring of HIV/AIDS Data and further processed and elaborated by Compartment for Monitoring and Evaluation of HIV/AIDS data in Romania, in National Infectious Diseases Institute–Bucharest.



NATIONAL INSTITUTE OF INFECTIOUS DISEASES “PROF.DR.MATEI BALȘ”

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- Statistical data operators:**
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