



*“PROF. DR. MATEI BALS”*

*NATIONAL INFECTIOUS DISEASES INSTITUTE*

*HIV/AIDS MONITORING AND EVALUATING*

*DEPARTMENT*

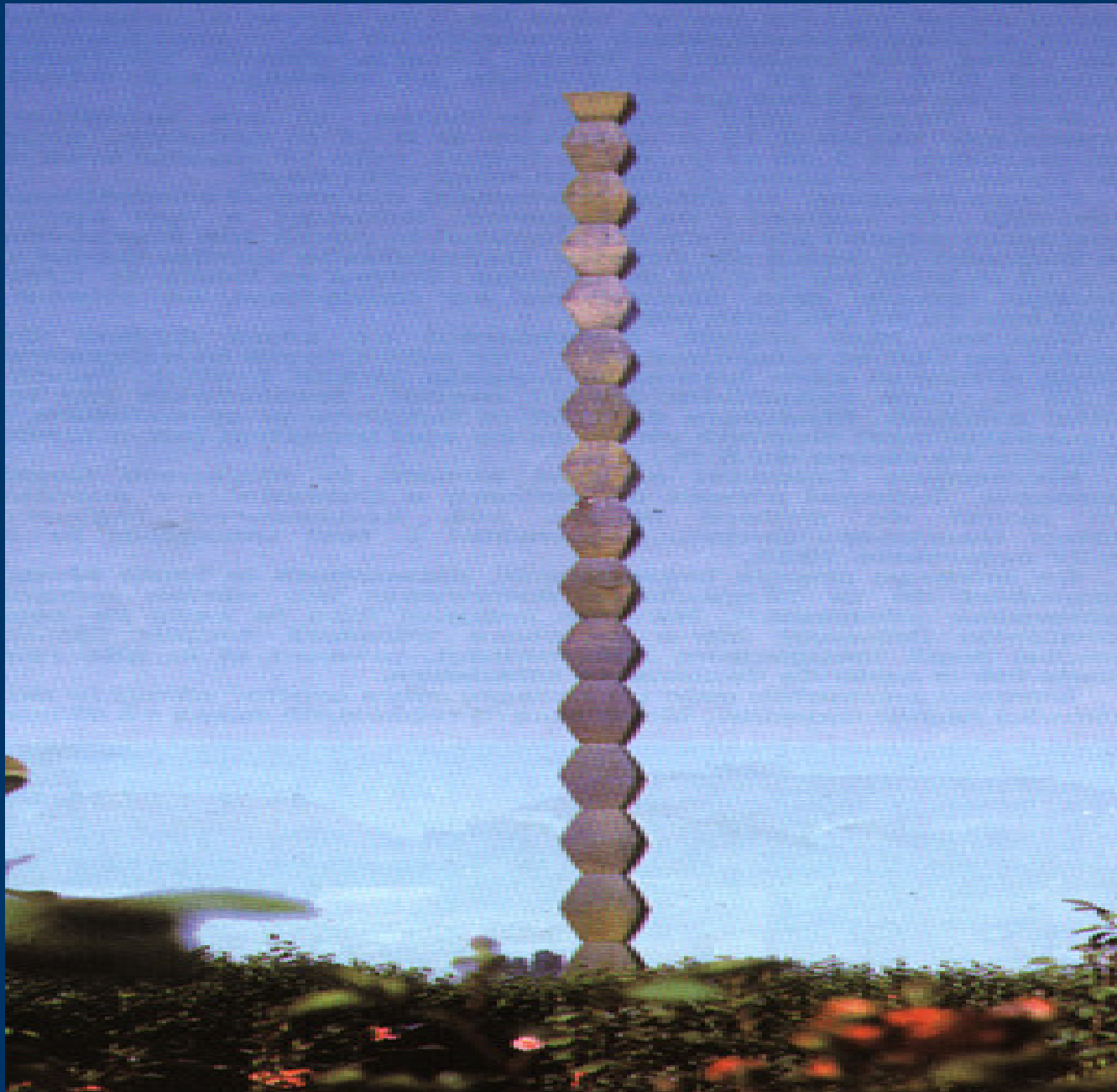


**THE EVOLUTION  
OF THE HIV/AIDS  
PHENOMENON IN ROMANIA  
BETWEEN 1985-2007**

# Romania



General population = 21.53 mill  
People living with HIV = 9540



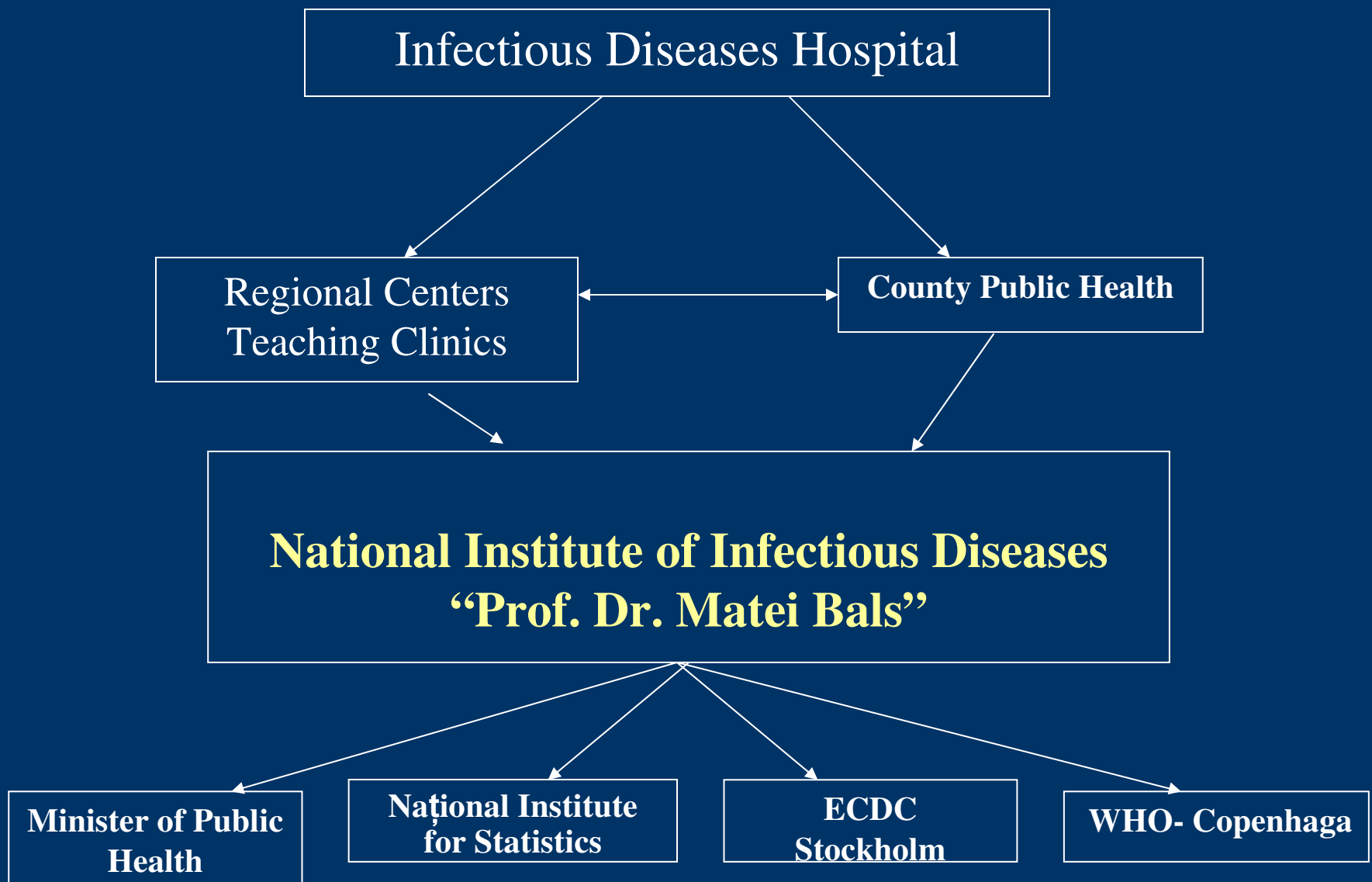
## The beginning of HIV in Romania

- 1985: Colentina Infectious Diseases Clinic – male, 45 years old, gay, Stewart on lit wagon
- 1989: Paediatric Clinic Fundeni Hospital - HIV infection in children with malnutrition and chronic diarrhoea
- Other cases:- lab staff / washing glass tubes
  - gay physician
  - vet doctor / multiple sexual contacts
  - CSW / arabian students
  - female / blood transfusion
  - sportsman / international competitions
- 1990: AIDS patients received medical care in *any* hospital

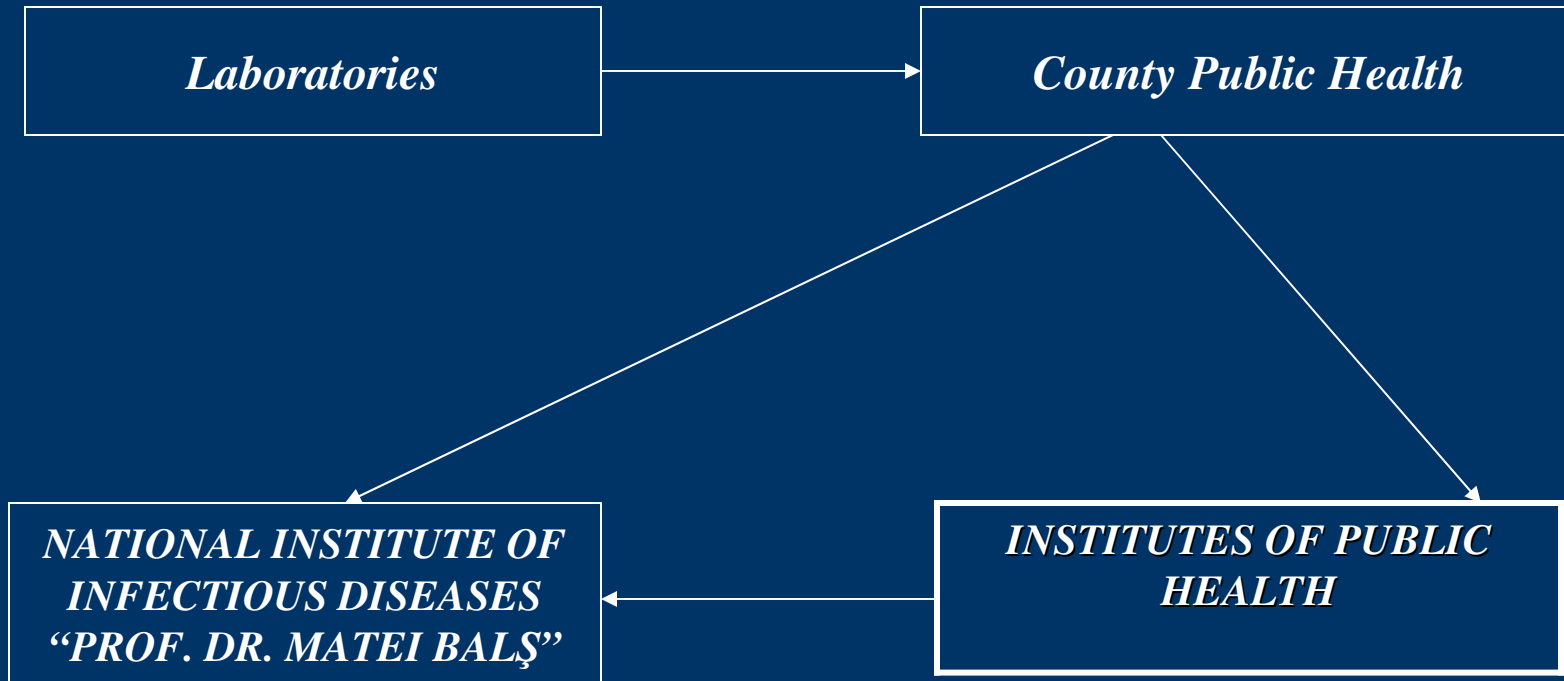


# **Actual HIV/AIDS**

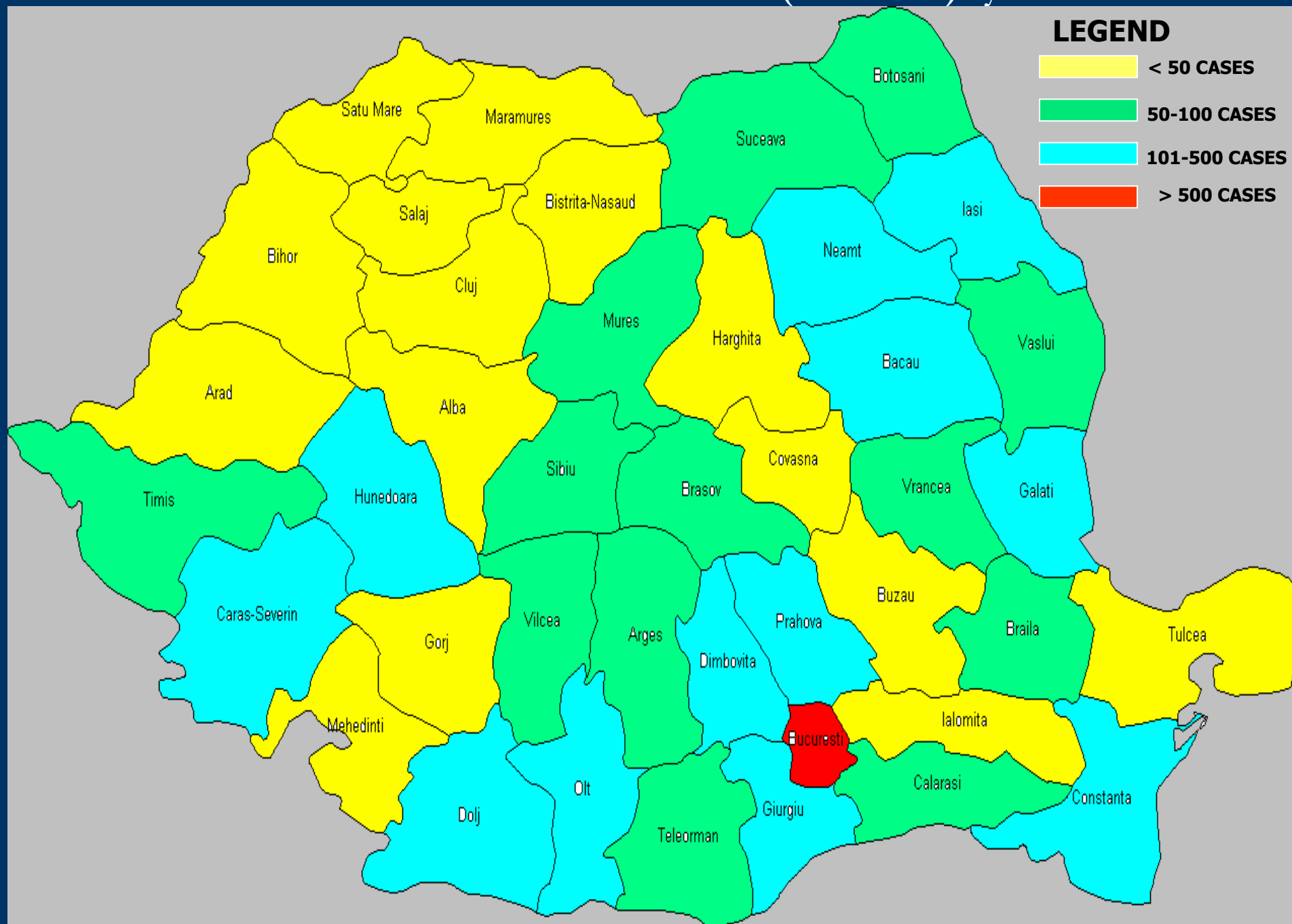
## **epidemiological and clinical surveillance sistem**



# ROUTE OF HIV TESTS INFORMATION

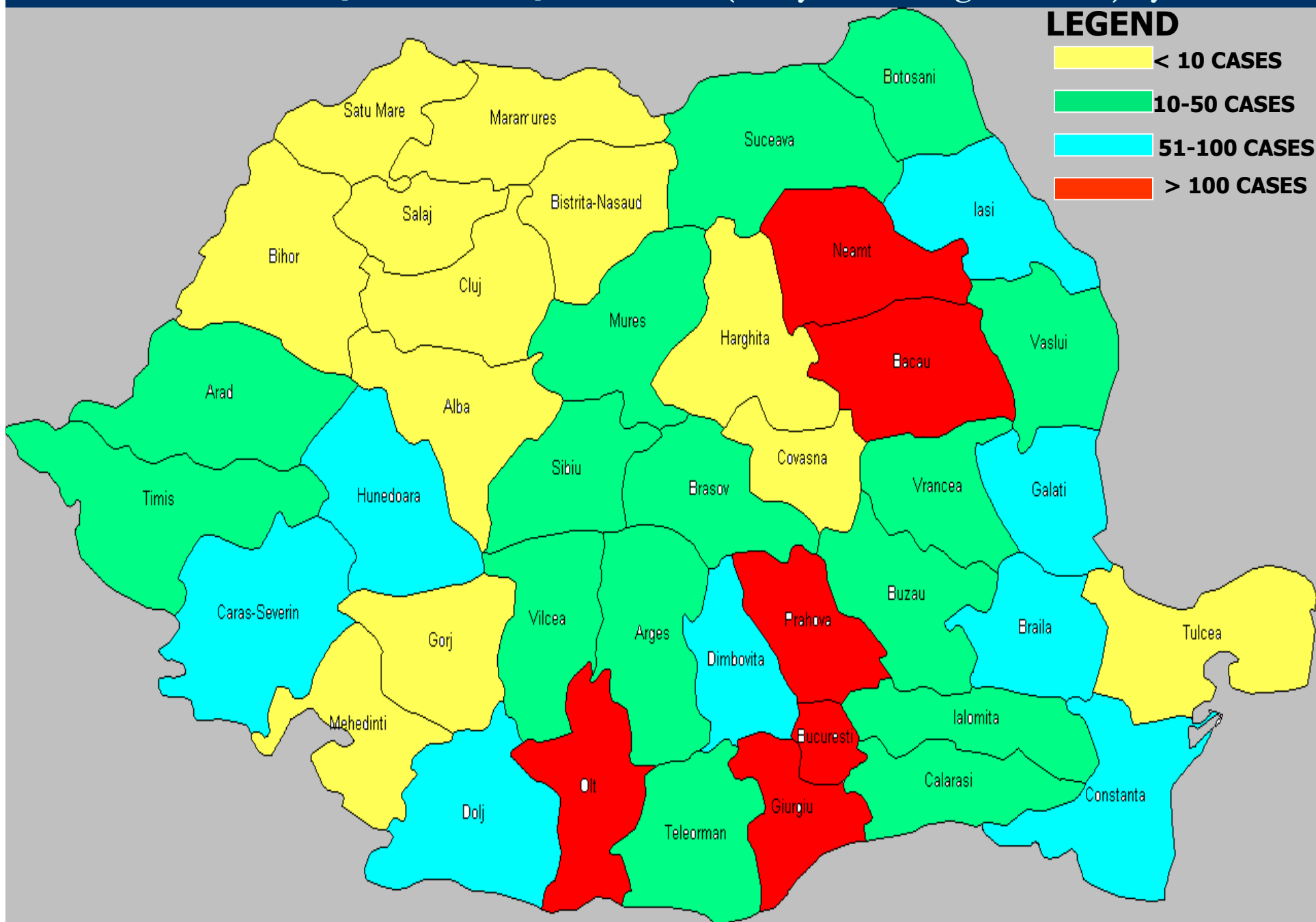


## Cumulative HIV cases – adults and children (1992 – 2007) by counties

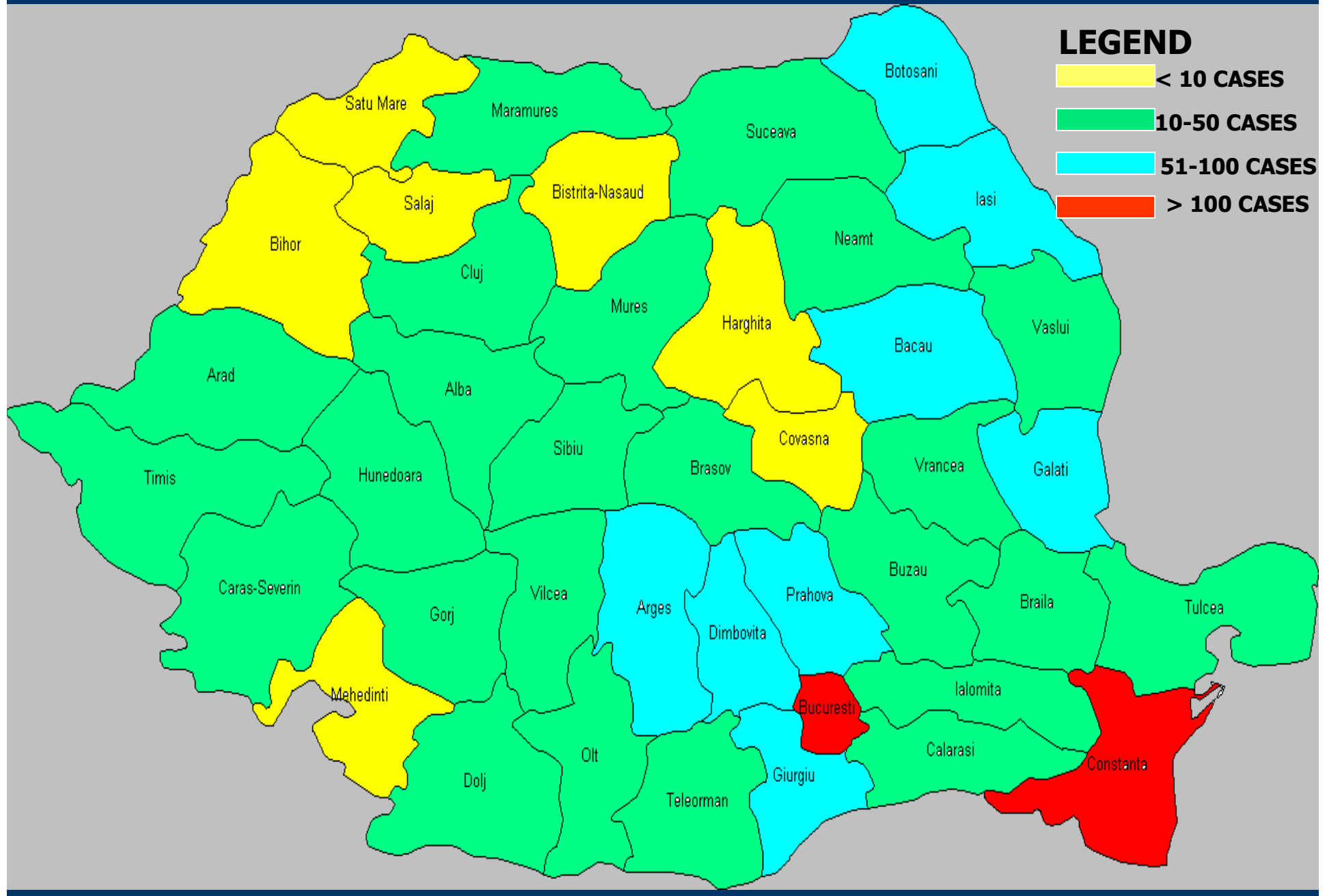




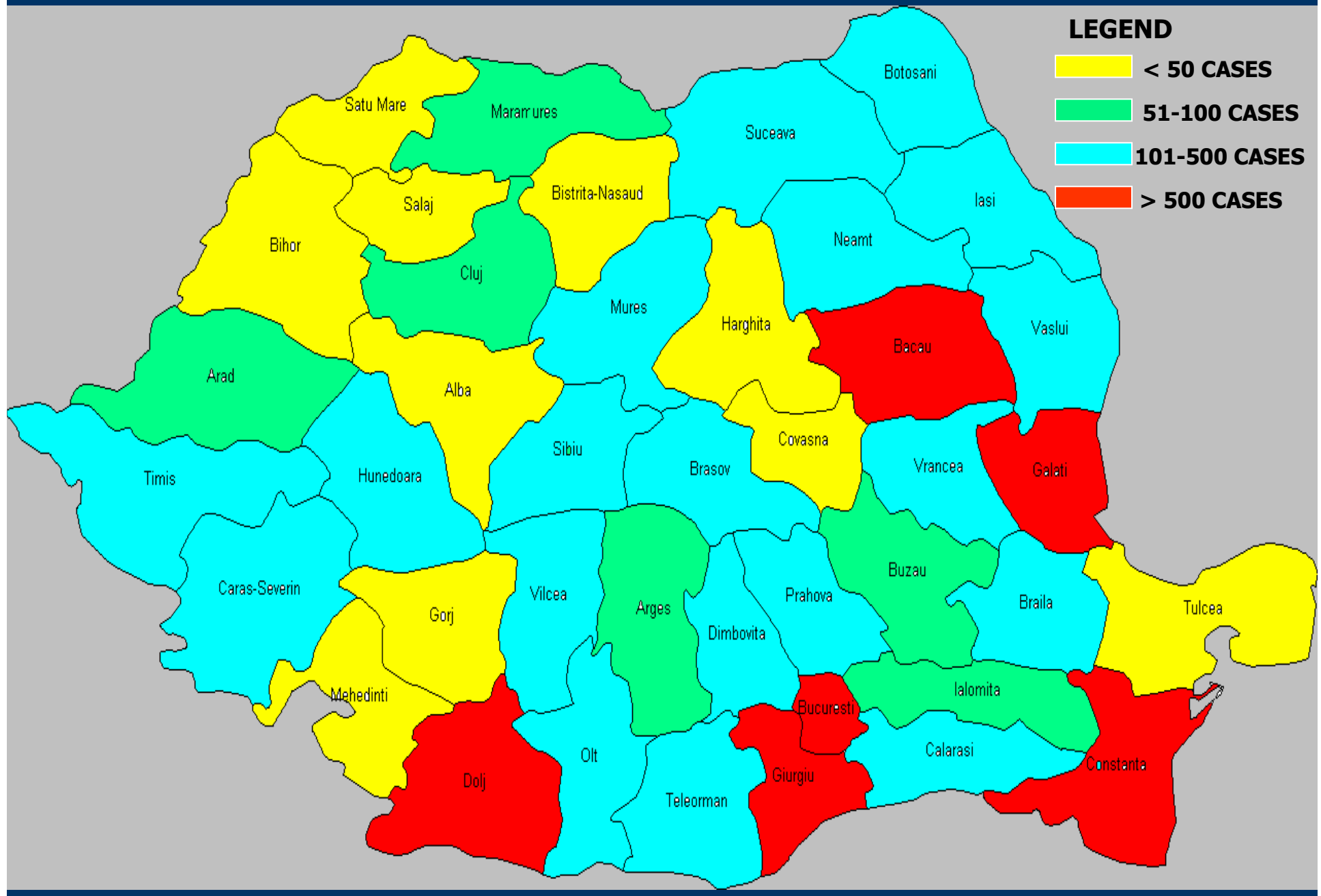
# Cumulative HIV cases (1992 – 2007) on children (0-14 years at diagnosis date) by counties



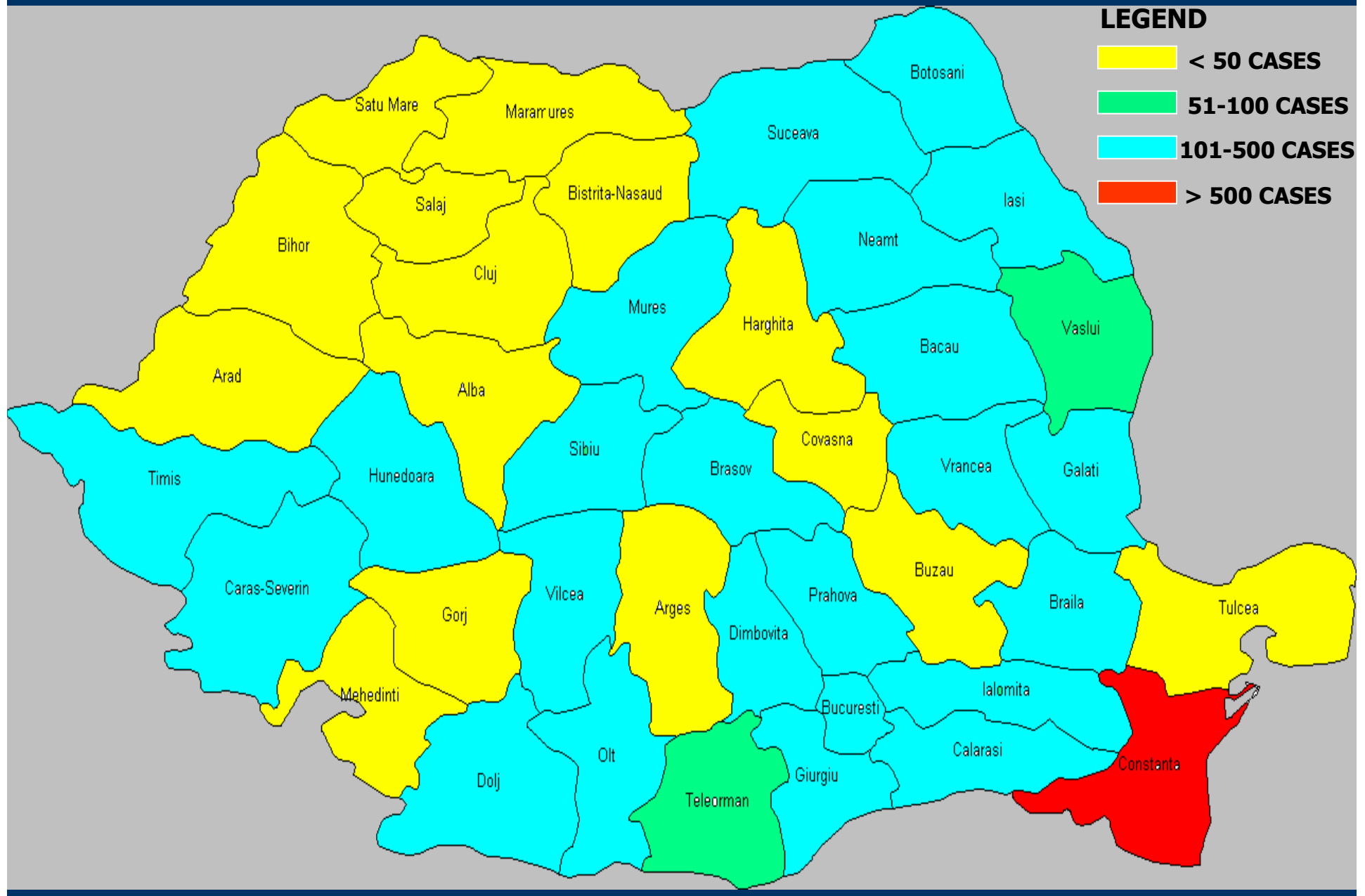
# Cumulative HIV cases (1992 – 2007) on adults (> 14 years at diagnosis date) by counties



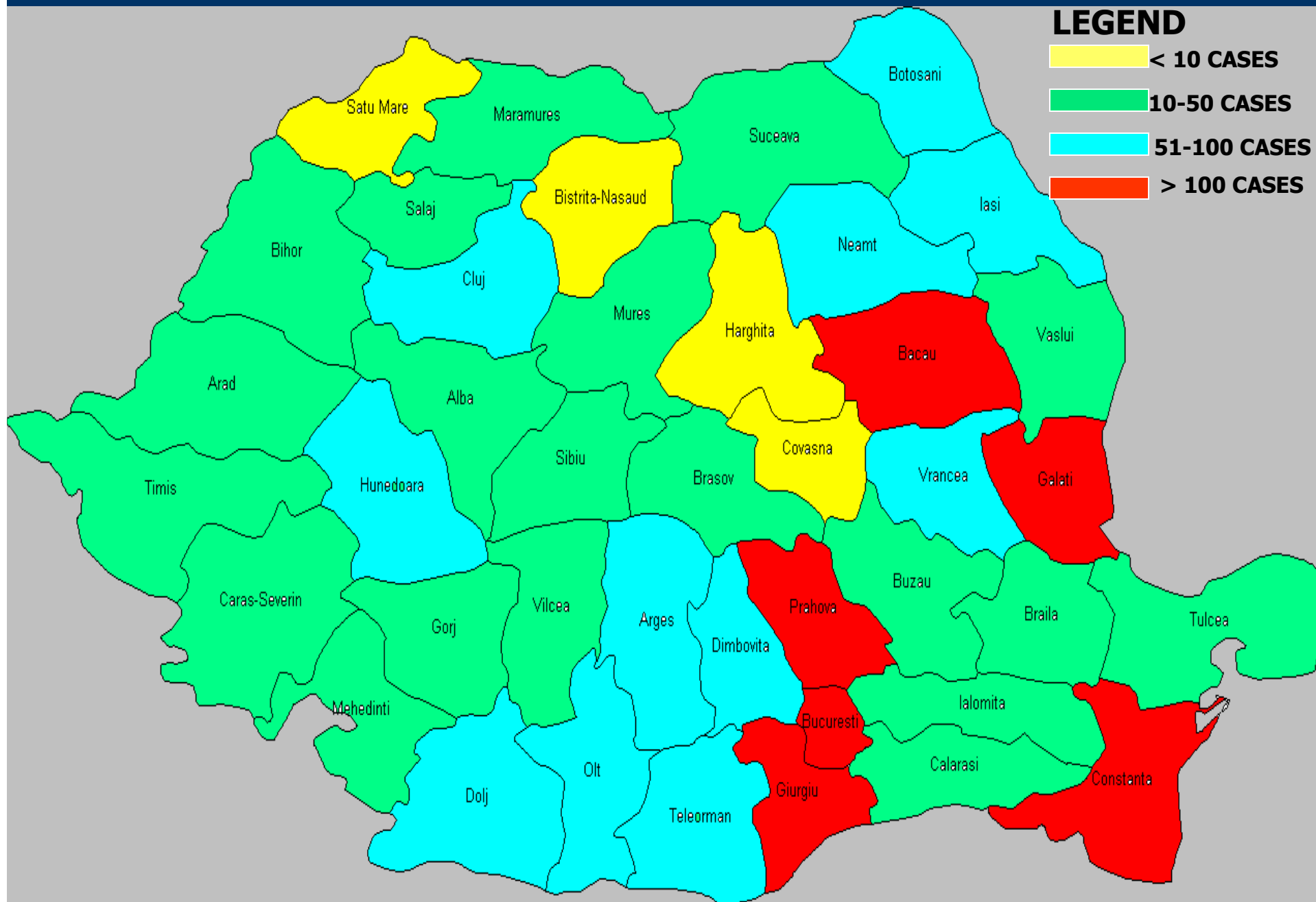
# Cumulative AIDS cases – adults and children (1985 – 2007) by counties



# Cumulative AIDS cases (1989 – 2007) on children (0-14 years at diagnosis date) by counties



# Cumulative AIDS cases (1985 – 2007) on adults (> 14 years at diagnosis date) by counties



## General data on HIV/AIDS in Romania at 31. 12. 2007

<b><i>TOTAL AIDS CASES</i></b>	<b><i>10851</i></b>
AIDS CASES AMONG CHILDREN*	<b>7606</b>
- Living	<b>3607</b>
- Death	<b>3843</b>
- Lost from records	<b>156</b>
AIDS CASES AMONG ADULTS	<b>3245</b>
- Living	<b>1994</b>
- Death	<b>1139</b>
- Lost from records	112
<b><i>Total AIDS death</i></b>	<b><i>4982</i></b>
<b><i>TOTAL HIV CASES</i></b>	<b><i>4232</i></b>
HIV CASES AMONG CHILDREN	<b>2131</b>
HIV CASES AMONG ADULTS	<b>2103</b>
<b>Lost of records (adults and children)</b>	<b>295</b>

\*0-14 years at diagnosis date

## General data on HIV /AIDS in Romania at 31. 12. 2007

PATIENTS UNDER ACTIVE MEDICAL SURVEILLANCE	<b>7591</b>
<i>Children (0-14 years*)</i>	240
<i>Adults (&gt; 14 years*)</i>	7351
PATIENTS RECEIVING HAART (Highly Active Antiretroviral Therapy)	<b>6500</b>
<i>Children (0-14 years*)</i>	196
<i>Adults (&gt; 14 years*)</i>	6304

\*current age

## New cases of AIDS and HIV infection registered in 2007

AGE GROUPS	HIV			SIDA			TOTAL HIV AND AIDS
	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	
< 1 year	1	1	2	1		1	3
1-4 years	1	1	2	1	1	2	4
5-9 years				1		1	1
10-12 years		1	1				1
13-14 years							
15-19 years	10	22	32	40	27	67	99
20-24 years	9	7	16	9	5	14	30
25-29 years	15	15	30	10	14	24	54
30-34 years	10	8	18	19	10	29	47
35-39 years	13	11	24	23	9	32	56
40-49 years	6	3	9	17	9	26	35
50-59 years	5	1	6	16	11	27	33
≥60 years	1		1	1	3	4	5
<b>TOTAL</b>	<b>71</b>	<b>70</b>	<b>141</b>	<b>138</b>	<b>89</b>	<b>227</b>	<b>368</b>



**DISRIBUTION OF AIDS CASES REGISTERED ON ADULTS  
( > 14 ANI AT DIAGNOSIS DATE ) IN 2007, BY MODE OF TRANSMISSION**

<b>COD</b>	<b>Mode of transmission</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
1	Homosexual/bisexual	6		<b>6</b>
2	IDU	2		<b>2</b>
3	Haemophiliac*			
4	Transfusion recipient*	7	7	<b>14</b>
5	Heterosexual	96	65	<b>161</b>
6	Undetermined	24	16	<b>40</b>
	<b>TOTAL</b>	<b>135</b>	<b>88</b>	<b>223</b>

\*Patients who received blood or plasma donations at the end of the '80s and the beginning of the '90s

**DISRIBUTION OF AIDS CASES REGISTERED IN CHILDREN  
( < 14 ANI AT DIAGNOSIS DATE ) IN 2007, BY MODE OF TRANSMISSION**

<b>Mode of transmission</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
Mother-to-child – mother heterosexual	1		1
Mother-to-child – mother undetermined	2	1	3
<b>TOTAL</b>	<b>3</b>	<b>1</b>	<b>4</b>

**DISRIBUTION OF HIV CASES REGISTERED ON ADULTS  
(> 14 ANI AT DIAGNOSIS DATE) IN 2007, BY MODE OF TRANSMISSION**

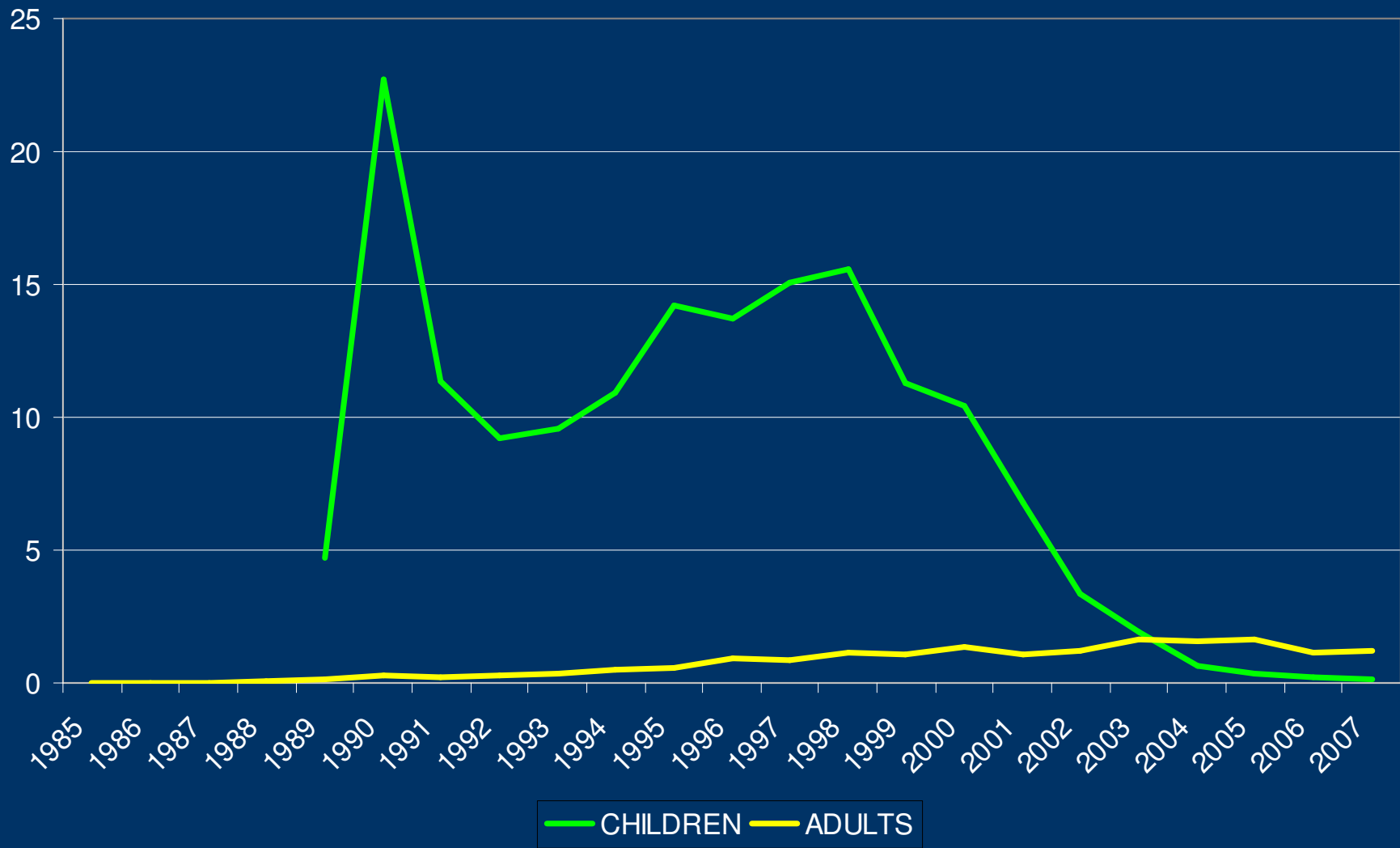
<b>Mode of transmission</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
Homosexual/bisexual	8		8
IDU	1		1
Transfusion recipient*	4	2	6
Heterosexual	54	63	117
Undetermined	2	2	4
<b>TOTAL</b>	<b>69</b>	<b>67</b>	<b>136</b>

\*Patients who received blood or plasma donations at the end of the '80s and the beginning of the '90s

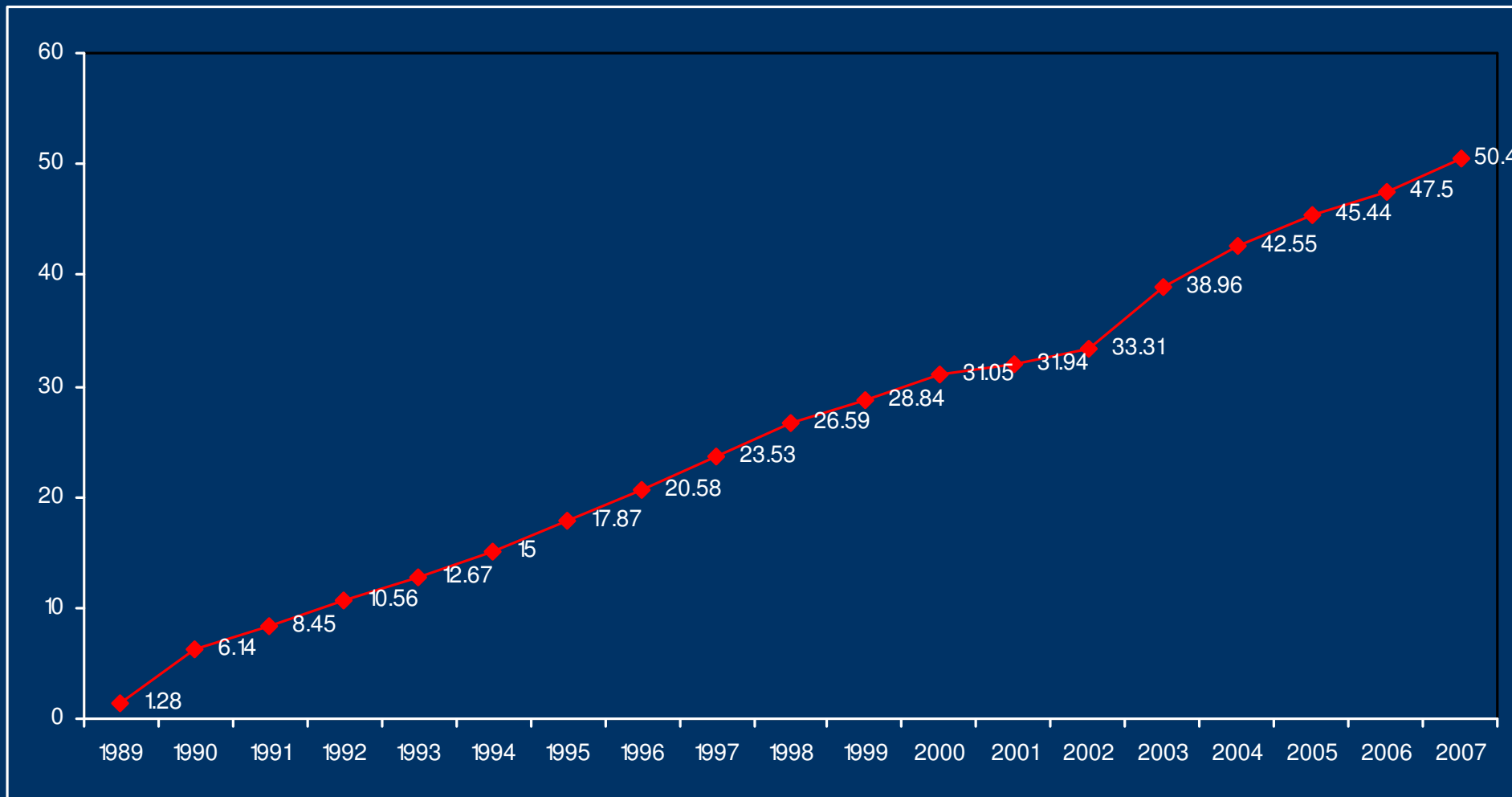
**DISRIBUTION OF HIV CASES REGISTERED ON CHILDREN  
( < 14 ANI AT DIAGNOSIS DATE ) IN 2007, BY MODE OF TRANSMISSION**

<b>Mode of transmission</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
Mother-to-child – mother heterosexual		2	2
Mother-to-child – mother undetermined	2		2
<b>Nosocomial</b>		1	1
<b>TOTAL</b>	<b>2</b>	<b>3</b>	<b>5</b>

# AIDS incidence (per 100 000) among adults and children (1985 – 2007)



# AIDS PREVALENCE (per 100 000) (1989 – 2007)



## CUMULATIVE AIDS CASES BY AGE GROUPS (age at diagnosis date) AND SEX - 31 DECEMBER 2007

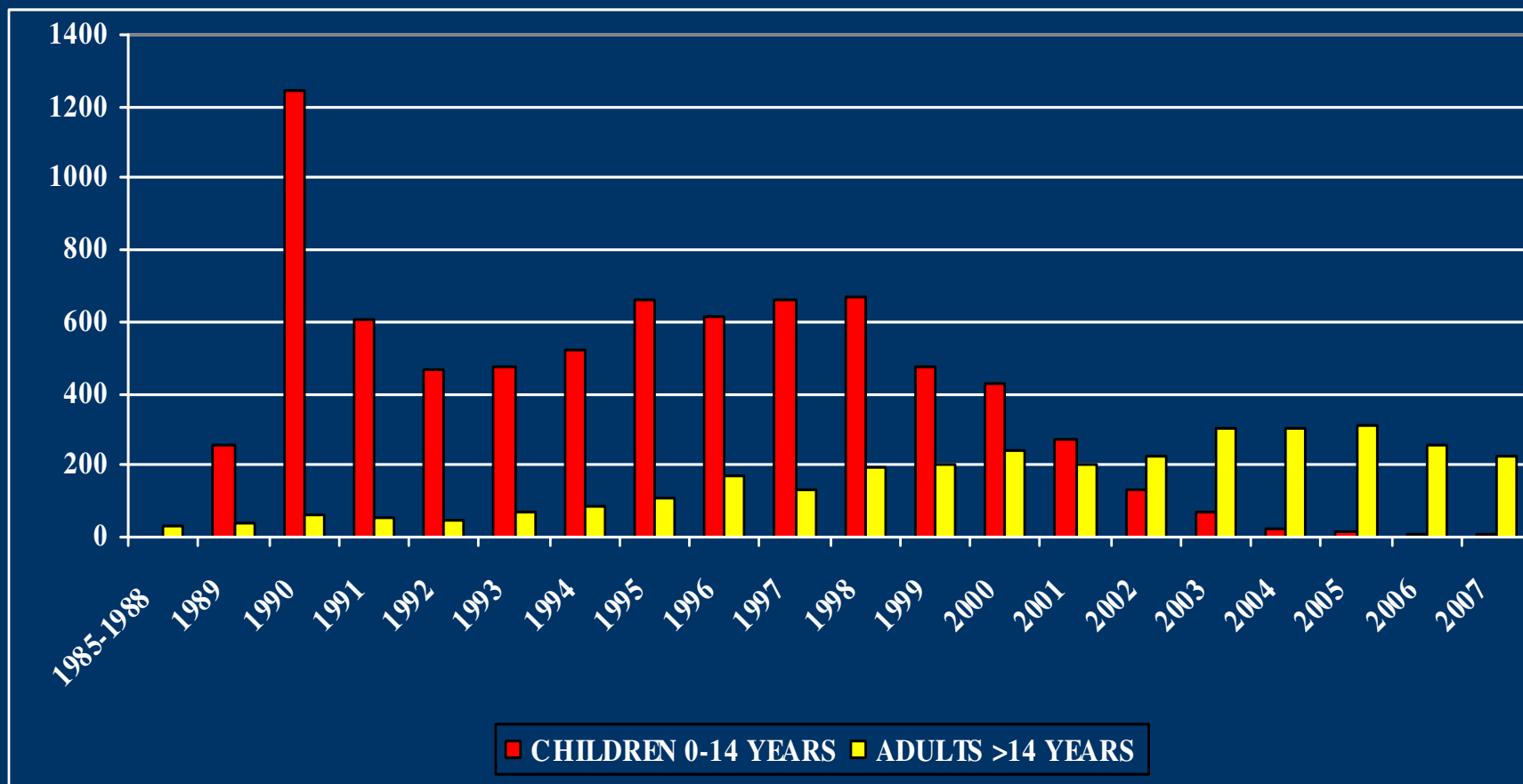
AGE GROUPS	SEX		TOTAL
	MALE	FEMALE	
< 1 year	355	283	638
1-4 years	1506	1014	2520
5-9 years	1776	1275	3051
10-12 years	663	495	1158
13-14 years	136	103	239
15-19 years	420	395	815
20-24 years	103	189	292
25-29 years	221	247	468
30-34 years	279	207	486
35-39 years	232	166	398
40-49 years	316	169	485
50-59 years	159	72	231
≥60 years	41	29	70
<b>TOTAL</b>	<b>6207</b>	<b>4644</b>	<b>10851</b>

# *HIV/AIDS CASES ON CHILDREN AND AGE AT FIRST POSITIVE TEST, BETWEEN 1989 – 2007*

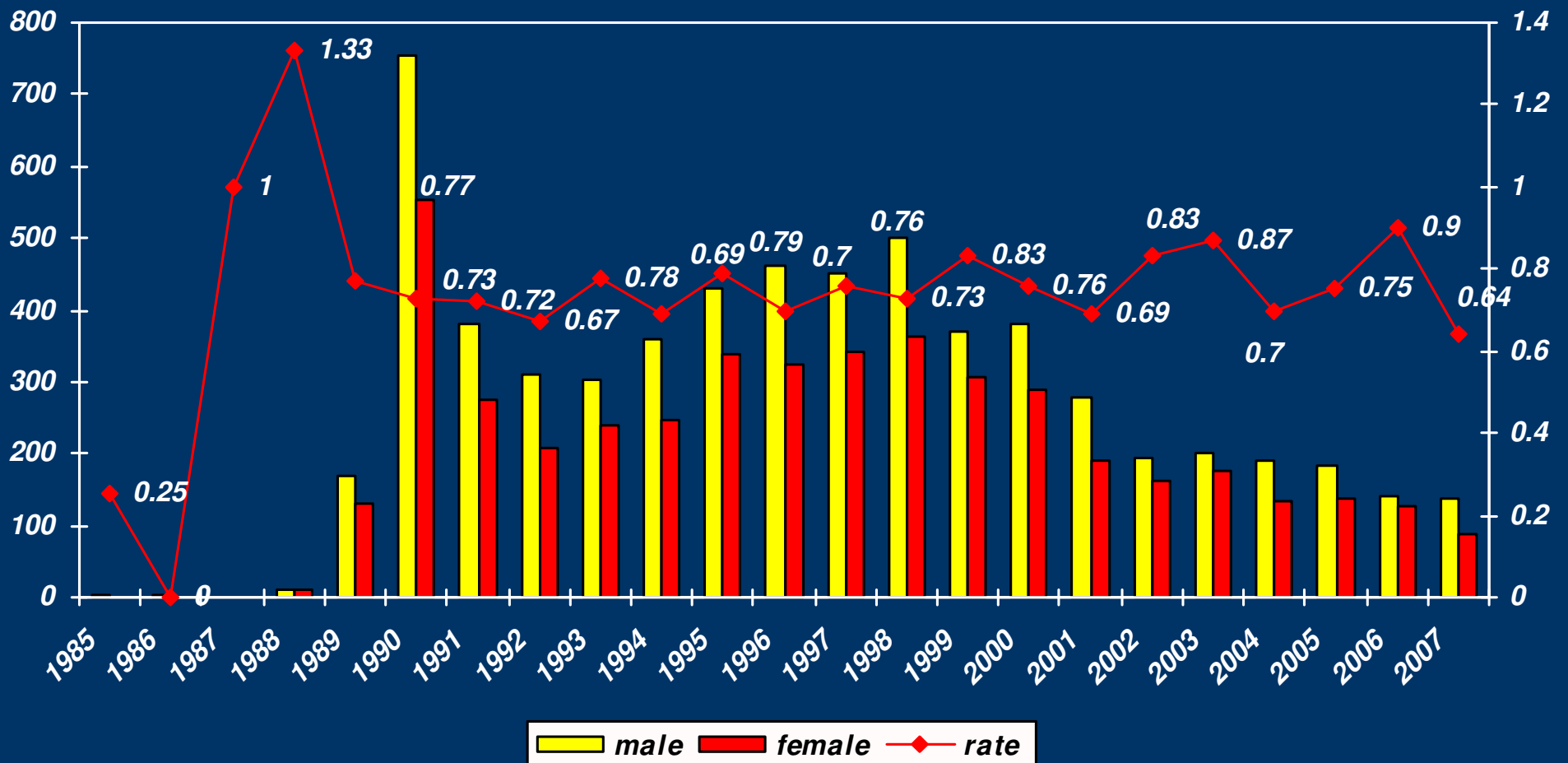
Age	Year of first positive test																		
	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07
0	160	612	90	30	24	19	17	10	12	16	16	9	7	12	10	6	9	11	4
1	107	803	189	62	46	10	7	3	6	5	4	1	2	2	5	4	3	0	0
2	17	301	259	149	38	7	7	4	3	5	1	1	4	1	2	3	2	2	0
3	0	40	143	251	135	22	14	2	3	1	0	3	1	3	2	1	1	2	0
4	0	8	25	112	235	140	40	17	6	2	8	1	1	0	2	0	2	1	3
5	0	5	9	23	123	308	152	37	14	5	7	3	1	1	0	2	0	1	0
6	0	1	0	7	25	154	366	200	42	12	2	1	3	1	1	0	1	1	0
7	0	0	1	3	4	32	173	315	196	43	13	1	1	1	0	1	0	1	0
8	1	0	1	1	5	8	38	149	316	189	27	9	4	0	0	2	0	0	0
9	0	1	1	0	1	3	15	34	154	248	143	25	5	4	2	1	4	1	1
10	2	0	1	2	0	1	7	9	30	99	209	135	32	9	1	0	0	0	0
11	1	0	1	1	0		5	3	13	20	79	212	130	13	5	0	0	0	1
12	0	1	0	0	1	3	3	6	8	3	27	83	154	92	16	8	5	0	0
13	0	1	2	1	2	2		4	3	3	9	21	80	132	80	9	3	0	0
14	0	0	2	0	1	2	5	5	4	1	6	12	16	72	119	55	12	5	1



## Distribution of AIDS cases by year of diagnosis and age groups (1985 – 2007)



## Distribution of AIDS cases by year of diagnosis and sex (1985 – 2007)

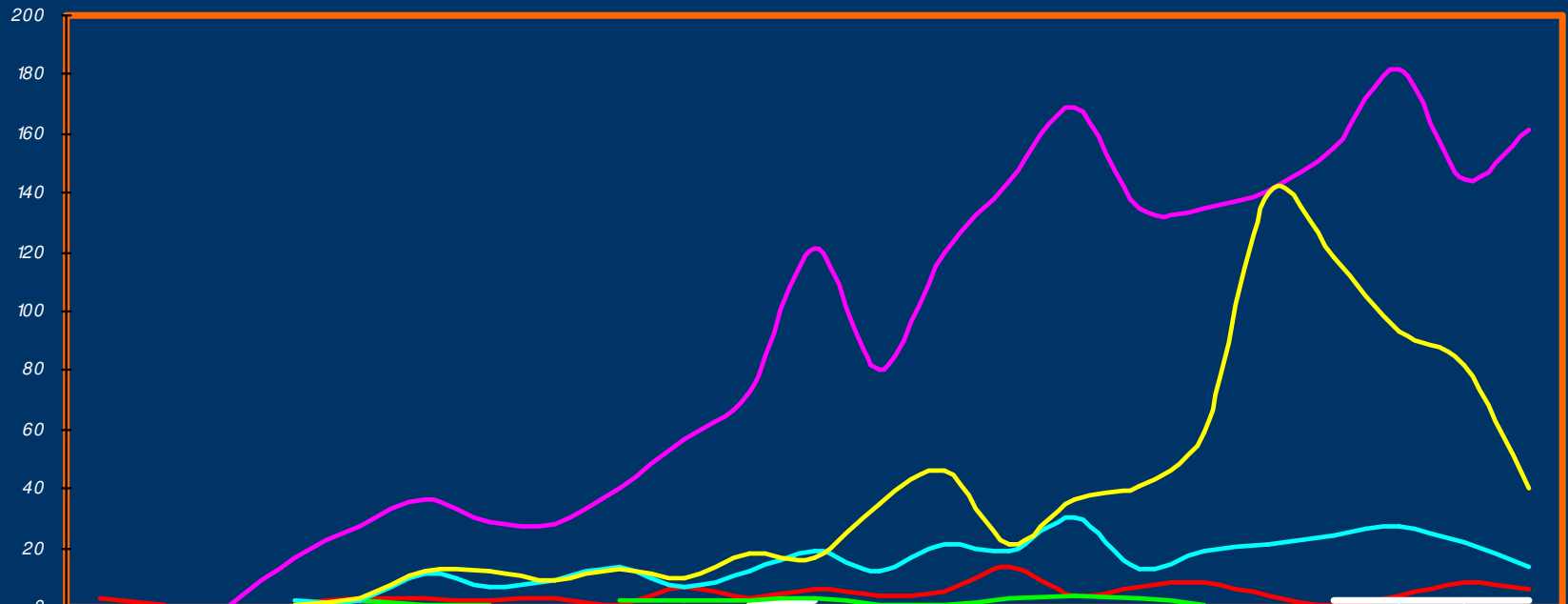


**DISTRIBUTION OF AIDS CASES (TOTAL CUMULATIVE) ON ADULTS  
(> 14 YEARS AT DIAGNOSIS DATE) BY MODE OF TRANSMISSION AT 31  
DECEMBER 2007**

<b>Mode of transmission</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
Homosexual/bisexual	98	0	98
IDU	8	3	11
Haemophiliac*	19	8	27
Transfusion recipient*	132	175	307
Heterosexual	1091	905	1996
Undetermined	423	383	<b>806</b>
<b>TOTAL</b>	<b>1771</b>	<b>1474</b>	<b>3245</b>

\*Patients who received blood or plasma donations at the end of the '80s and the beginning of the '90s

# Distribution of AIDS cases among adults by mode of transmission and year of diagnosis (1985 – 2007)



	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Homo/bisexual	3	1		1	3	3	2	3	1	7	3	6	4	5	14	4	7	8	4	1	4	8	6
Injecting drug user					0	0					1	2								2	2	2	2
Haemophillic*		1			2	1	1		2	2	2	3	1	1	3	4	3	1		0	0	0	0
Transfusion recipient*	2			2	2	11	7	9	14	7	12	19	12	21	19	30	13	19	21	24	27	22	14
Heterosexual			1	17	27	36	29	28	40	57	73	121	80	120	144	169	135	135	141	155	182	145	161
Undetermined				1	3	12	12	9	13	10	18	17	35	46	21	36	41	59	140	118	93	82	40

— Homo/bisexual   
 — Injecting drug user   
 — Haemophillic\*   
 — Transfusion recipient\*   
 — Heterosexual   
 — Undetermined

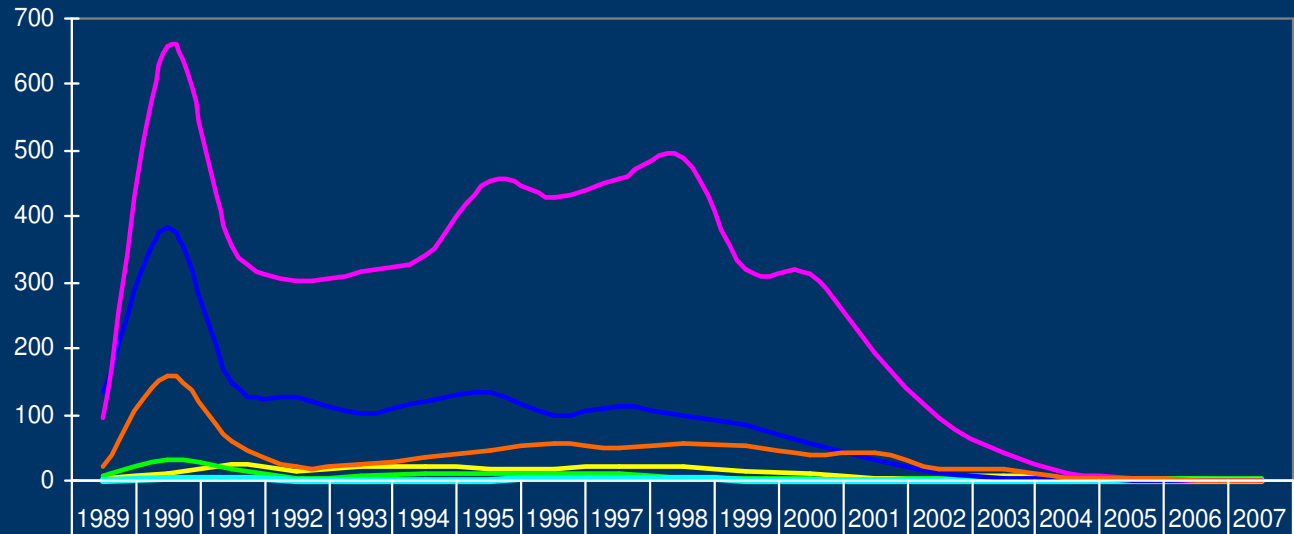
\*Patients who received blood or plasma donations at the end of the '80s and the beginning of the '90s

**DISTRIBUTION OF AIDS CASES (TOTAL CUMULATIVE) ON CHILDREN (0-14 years at diagnosis date) BY MODE OF TRANSMISSION AT 31 DECEMBER 2007**

<b>Cale de transmitere</b>	<b>Masculin</b>	<b>Feminin</b>	<b>Total</b>
Mother-to-child – mother IDU	0	1	1
Mother-to-child – mother heterosexual	137	85	222
Mother-to-child – mother undetermined	89	43	132
Haemophilic*	7	10	17
Transfusion recipient*	970	670	1640
Nosocomial	2848	2037	4885
Undetermined	385	324	709
<b>TOTAL</b>	<b>4436</b>	<b>3170</b>	<b>7606</b>

\*Patients who received blood or plasma donations at the end of the '80s and the beginning of the '90s

# Distribution of AIDS cases among children (0-14 years at diagnosis date) by mode of transmission and year of diagnosis (1989 – 2007)

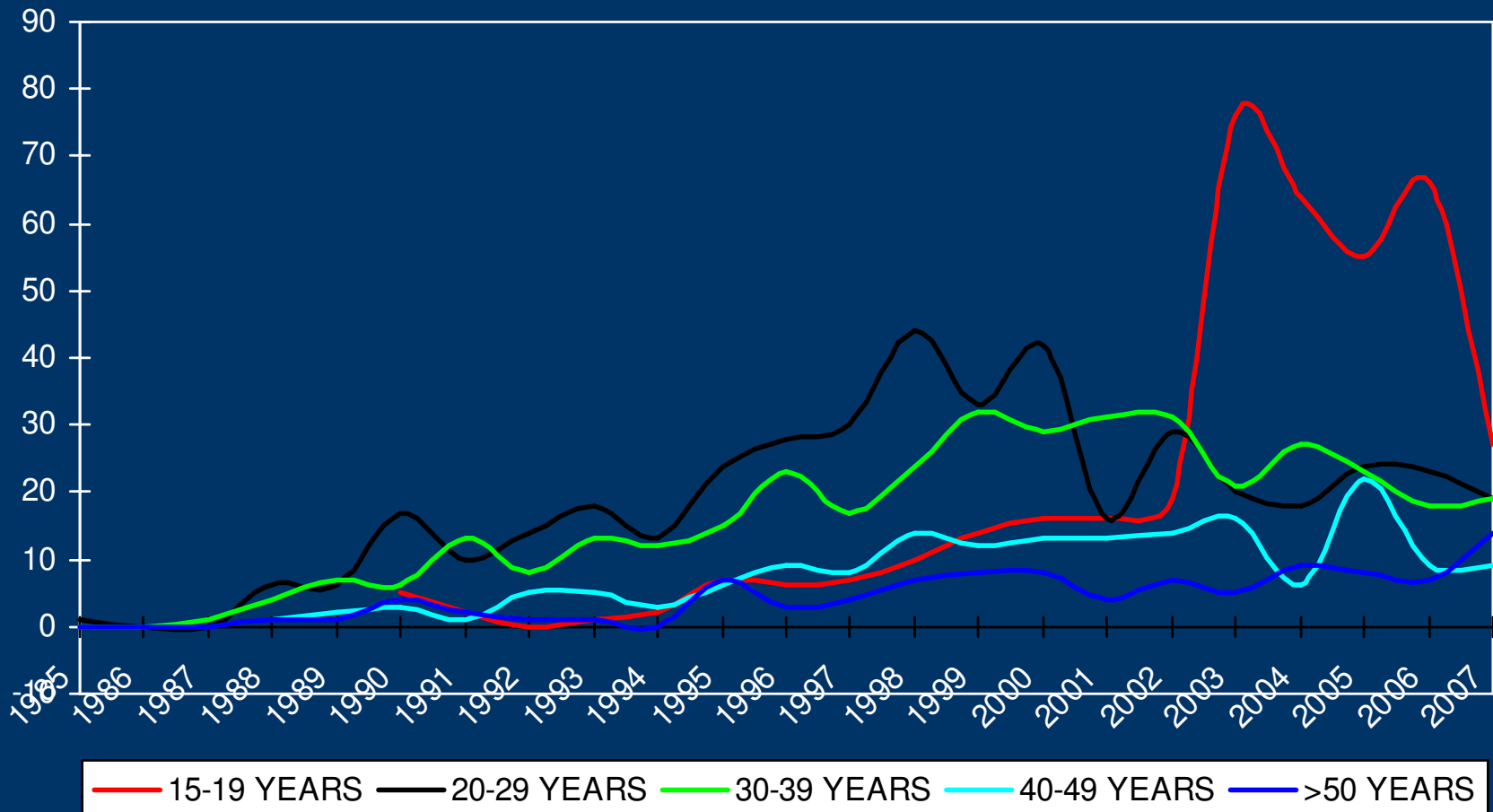


	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Mother-to-child - Mother IDU												1				0	0	0	0
Mother-to-child - Mother Heterosexual	2	12	23	15	20	21	18	19	21	20	14	12	3	5	7	4	2	3	1
Mother-to-child - Mother Undetermined	6	30	16	4	6	9	9	10	11	5	5	5	1	4	1	2	3	2	3
Haemophillic*	1	2	3	0	1	0	1	2	4	2	1	0	0	0	0	0	0	0	0
Transfusion recipient*	135	382	148	127	102	120	132	98	114	97	83	55	30	11	3	2	1	0	0
Nosocomial	95	659	354	302	317	341	454	430	459	490	320	314	194	96	42	12	5	1	0
Undetermined	21	157	60	22	26	34	47	57	51	57	54	40	43	17	17	3	2	1	0

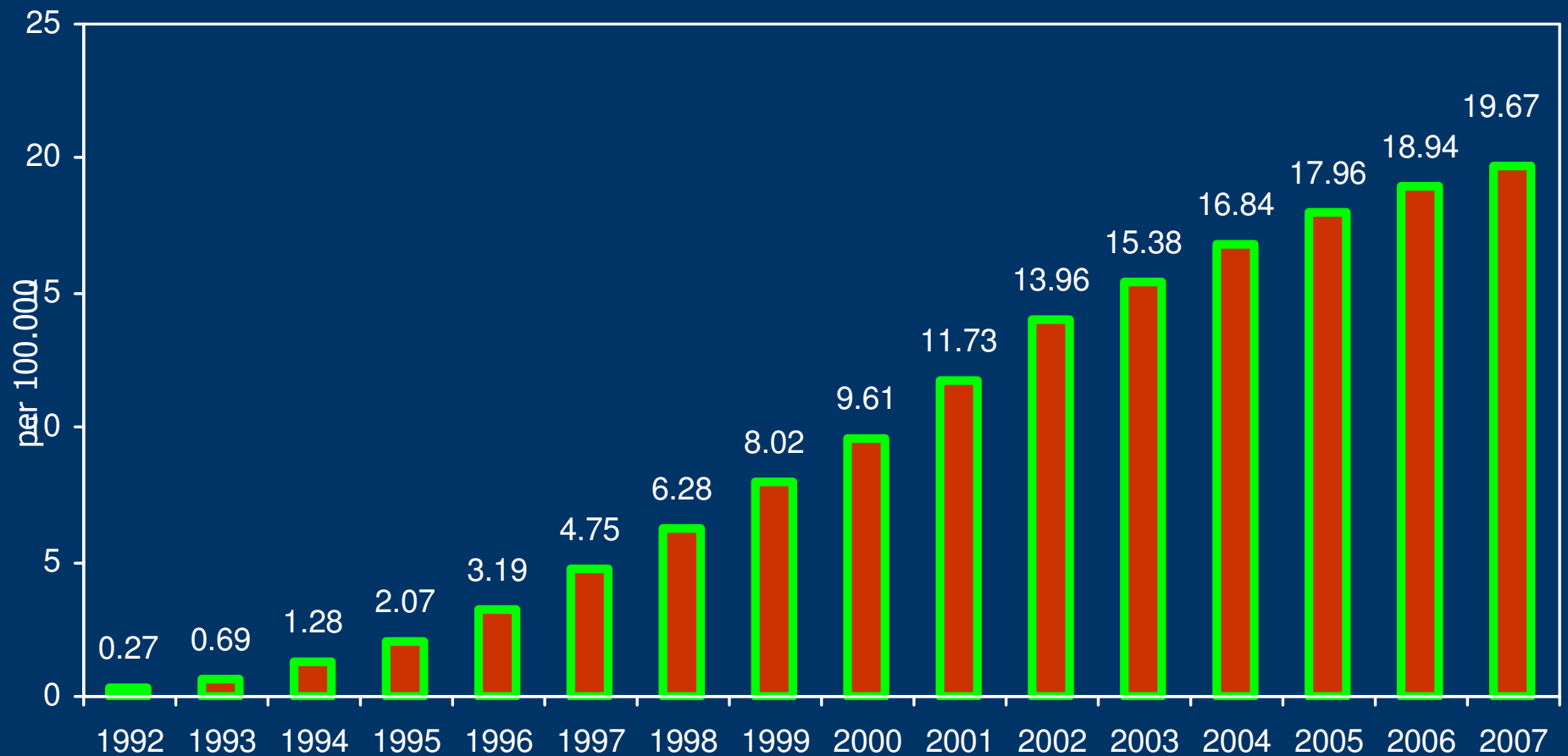
Mother-to-child - Mother IDU	Mother-to-child - Mother Heterosexual	Mother-to-child - Mother Undetermined
Haemophillic*	Transfusion recipient*	Nosocomial
Undetermined		

\*Patients who received blood or plasma donations at the end of the '80s and the beginning of the '90s

## Distribution of AIDS cases among females by age groups and year of diagnosis (1985 - 2007)



# Prevalence (per 100 000) of HIV infection (1992 – 2007)

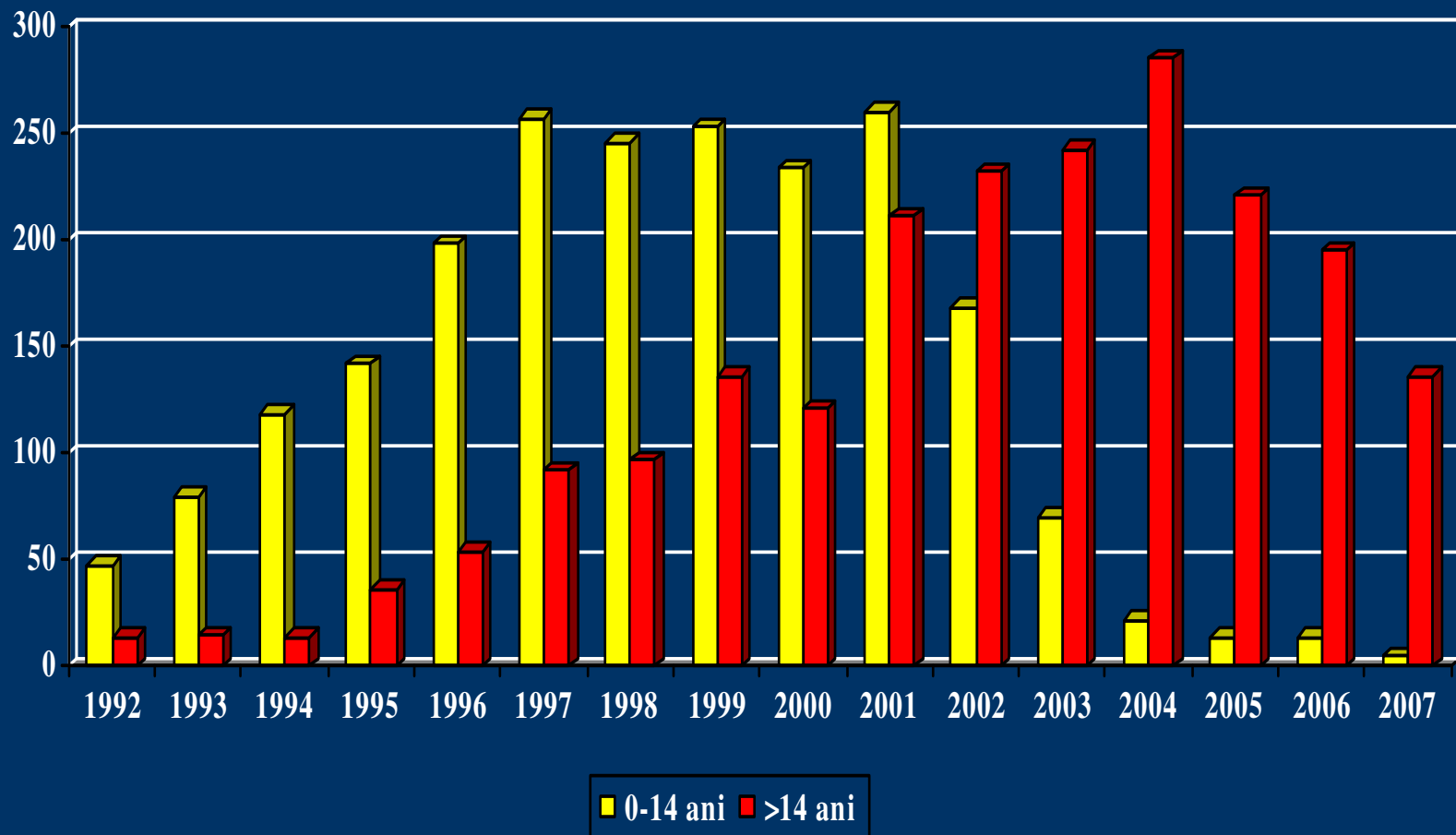




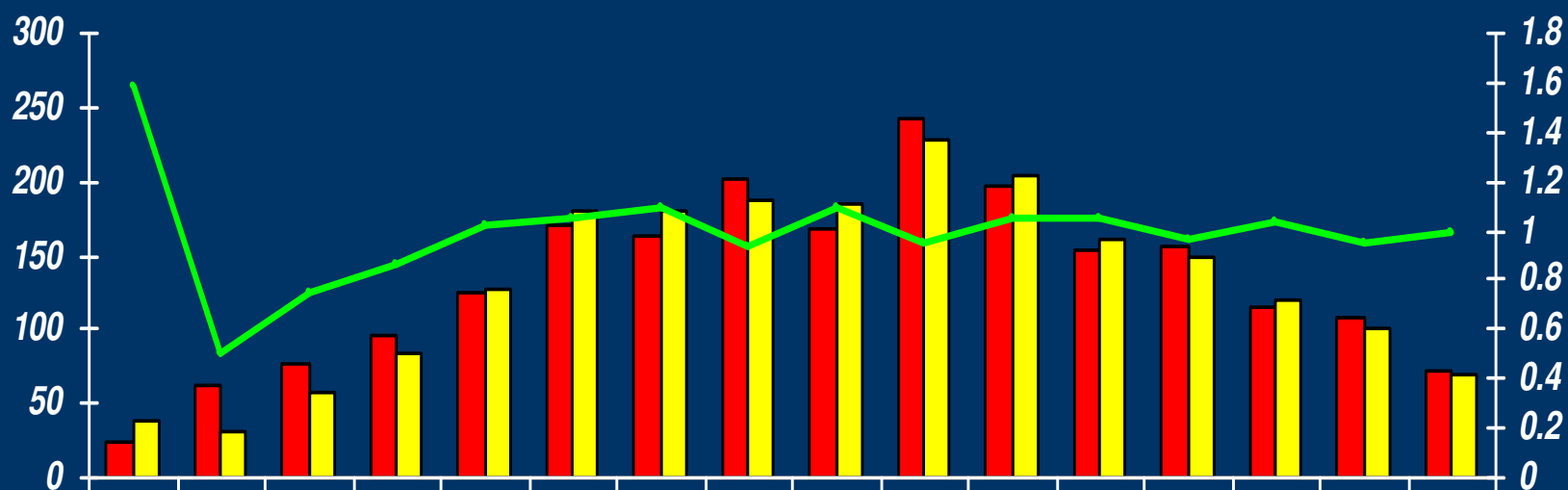
## CUMULATIVE HIV CASES BY AGE GROUPS (age at diagnosis date) AND SEX AT 31 DECEMBER 2007

AGE GROUPS	SEX		TOTAL
	MALE	FEMALE	
< 1 year	43	37	80
1-4 years	140	94	234
5-9 years	488	456	944
10-12 years	354	337	691
13-14 years	89	93	182
15-19 years	180	254	434
20-24 years	119	181	300
25-29 years	197	232	429
30-34 years	173	166	339
35-39 years	119	114	233
40-49 years	139	91	230
50-59 years	59	39	98
≥ 60 years	29	11	40
<b>TOTAL</b>	<b>2129</b>	<b>2105</b>	<b>4234</b>

# Distribution of HIV infection cases by age groups and year of diagnosis at 31 decembrie 2007



## Distribution of HIV infection cases by year of diagnosis and sex (1992 – 2007)



	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
<span style="color: red;">■</span> male	24	63	76	96	125	170	163	201	169	242	196	153	157	116	107	71
<span style="color: yellow;">■</span> female	38	32	57	83	127	179	180	188	186	229	205	160	150	119	102	70
<span style="color: green;">—</span> rate	1.58	0.51	0.75	0.86	1.02	1.05	1.1	0.94	1.1	0.95	1.05	1.05	0.96	1.03	0.95	0.99

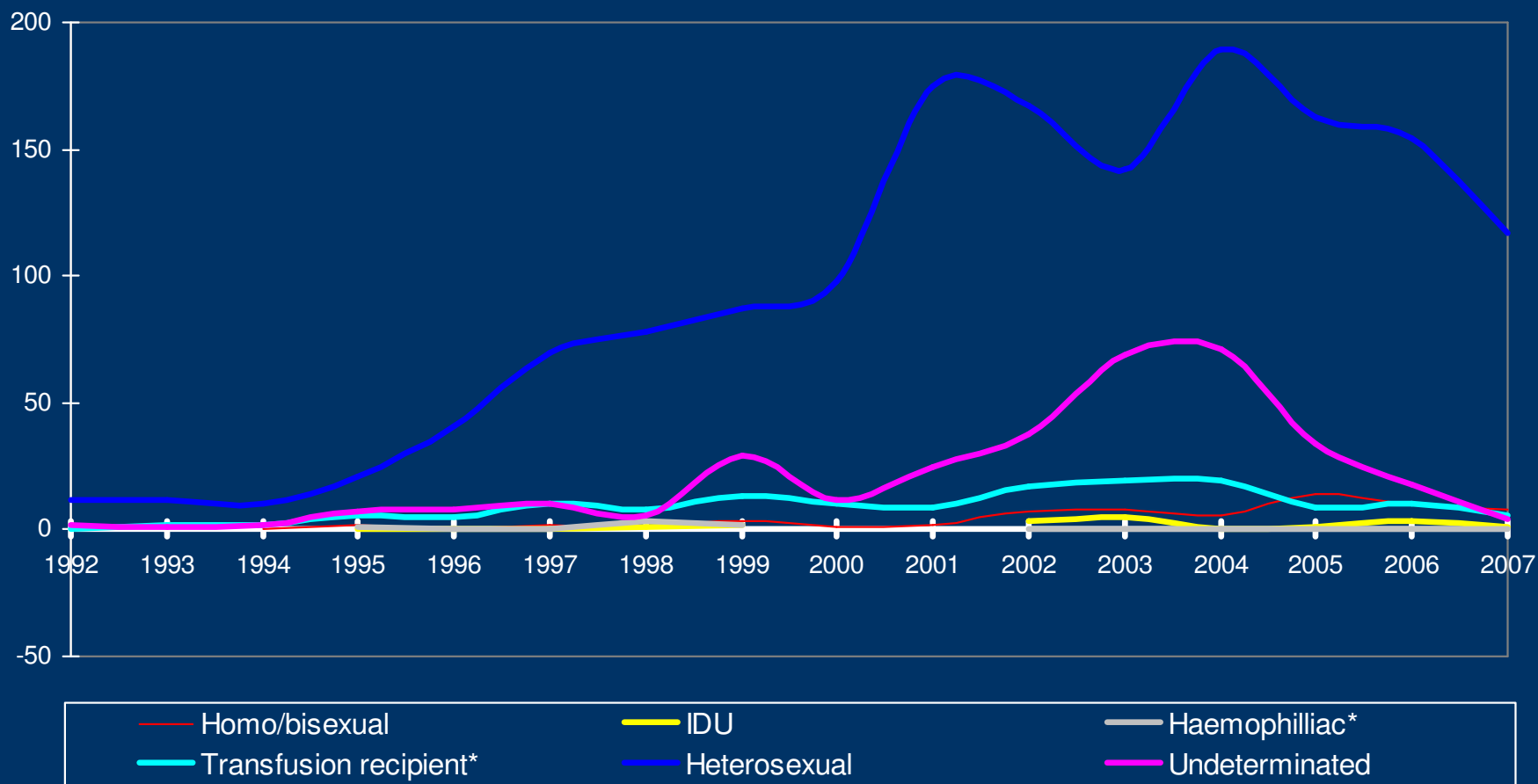
■ male ■ female — rate

**DISTRIBUTION OF HIV CASES (TOTAL CUMULATIVE) ON ADULTS  
(> 14 YEARS AT DIAGNOSIS DATE) BY MODE OF TRANSMISSION AT 31  
DECEMBER 2007**

MODE OF TRANSMISSION	SEX		Total
	Male	Female	
Homosexual/bisexual	64		64
IDU	13	3	16
Haemophiliac*	5	1	6
Transfusion recipient*	59	86	145
Heterosexual	698	838	1536
Undetermined	176	160	336
<b>TOTAL</b>	<b>1015</b>	<b>1088</b>	<b>2103</b>

\*Patients who received blood or plasma donations at the end of the '80s and the beginning of the '90s

## Distribution of HIV infection cases among adults (> 14 years at diagnosis date) by mode of transmission and year of diagnosis (1992 - 2007)



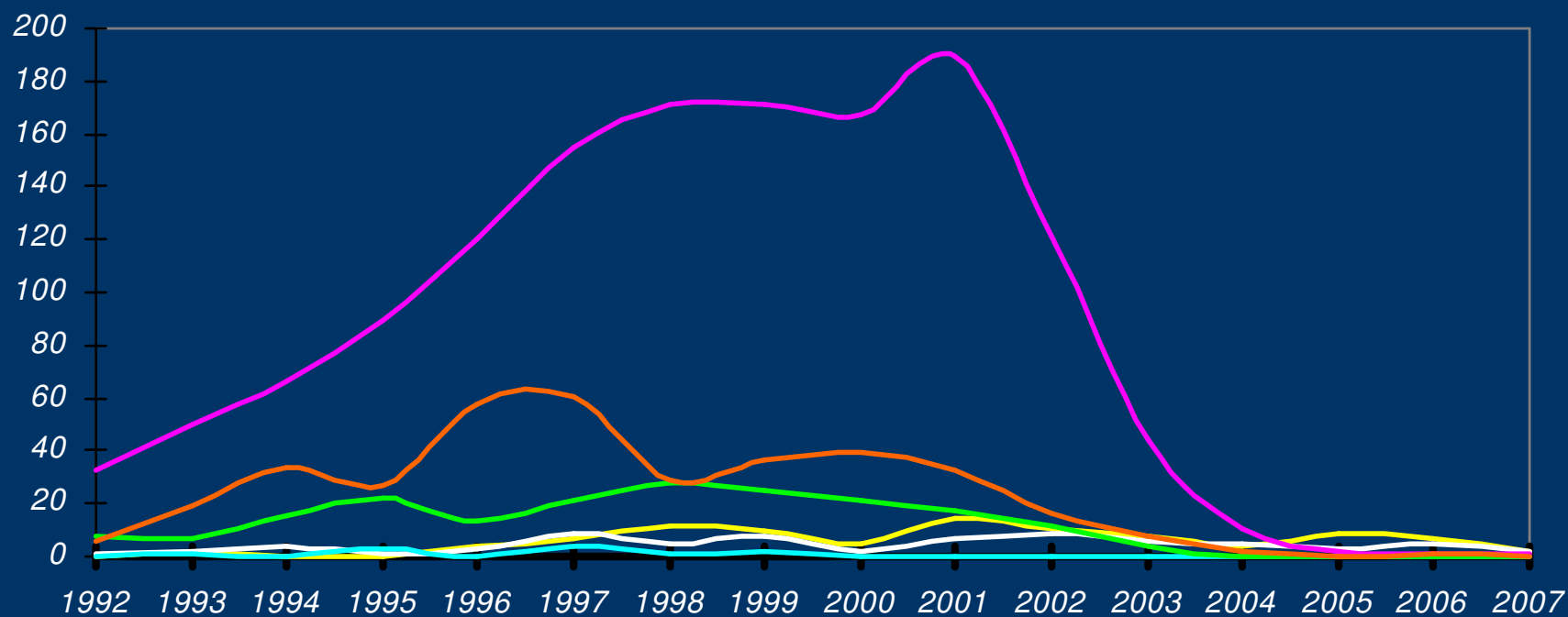
\*Patients who received blood or plasma donations at the end of the '80s and the beginning of the '90s

**DISTRIBUTION OF HIV CASES (TOTAL CUMULATIVE) ON CHILDREN (0-14 YEARS AT DIAGNOSIS DATE) BY MODE OF TRANSMISSION AT 31 DECEMBER 2007**

Mode of transmission	SEX		Total
	Male	Female	
Mother-to-child – mother heterosexual	49	45	94
Mother-to-child – mother undetermined	37	35	72
Haemophilliac*	5	6	11
Transfusion recipient*	101	92	193
Nosocomial	726	665	1391
Undetermined	196	174	370
<b>TOTAL</b>	<b>1114</b>	<b>1017</b>	<b>2131</b>

\*Patients who received blood or plasma donations at the end of the '80s and the beginning of the '90s

## Distribution of HIV infection cases among children (0-14 years at diagnosis date) by mode of transmission and year of diagnosis (1992 - 2007)



Mothe-to-child - Mother heterosexual

Haemophilliac\*

Nosocomial

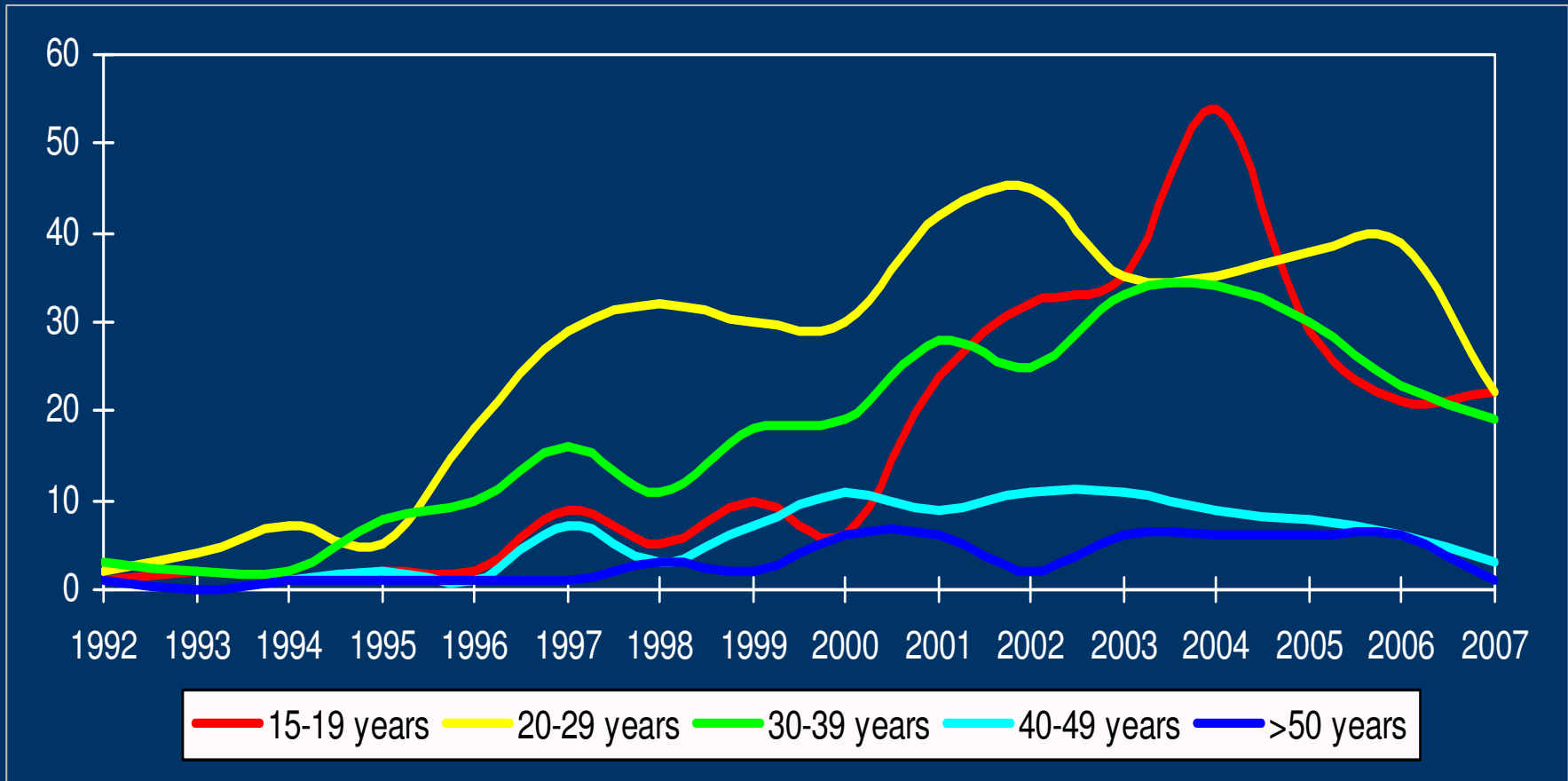
Mother-to-child - Mother Undetermined

Transfusion recipient\*

Undetermined

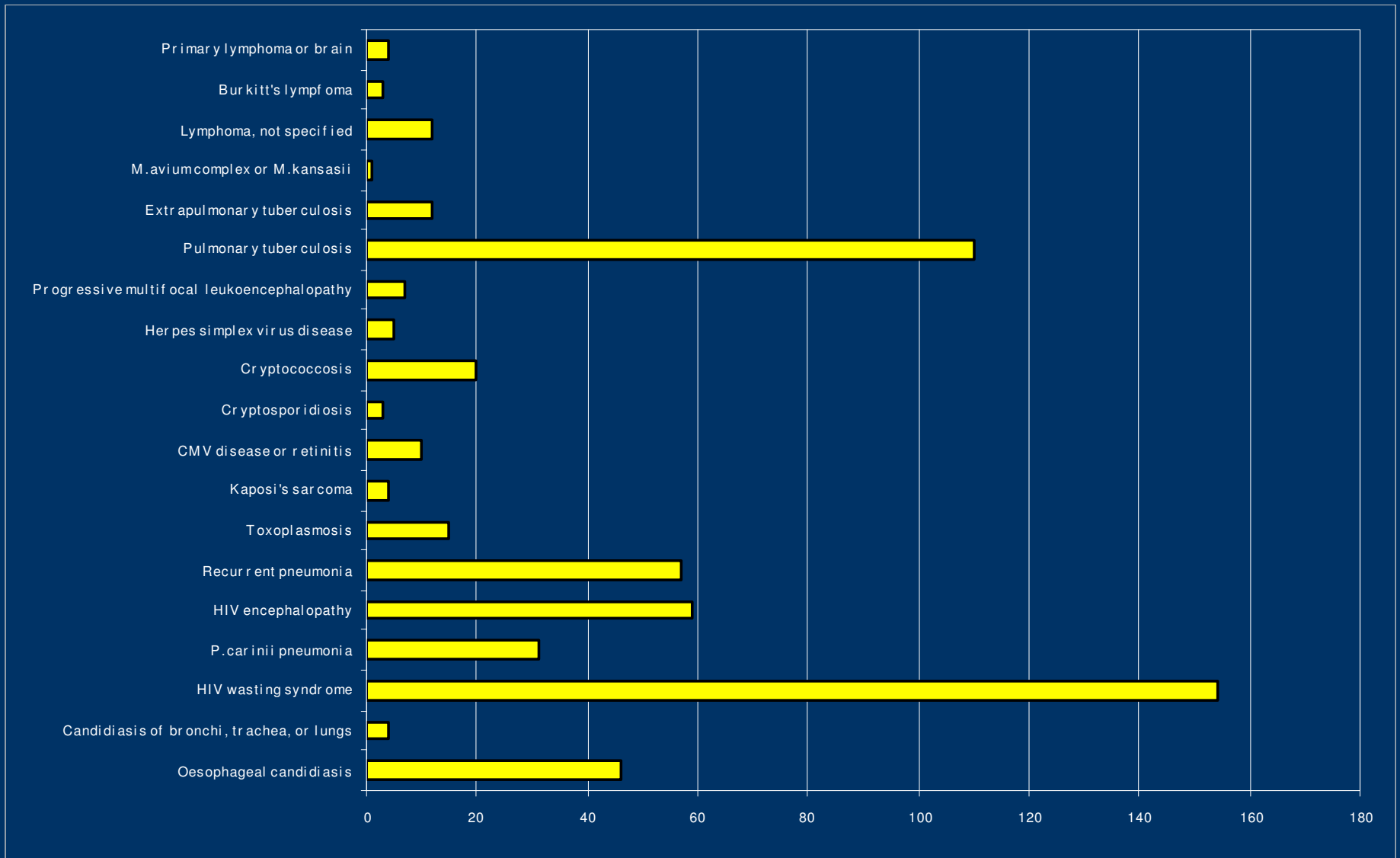
\*Patients who received blood or plasma donations at the end of the '80s and the beginning of the '90s

## Distribution of HIV infection cases among females by age groups and year of diagnosis (1992 - 2007)

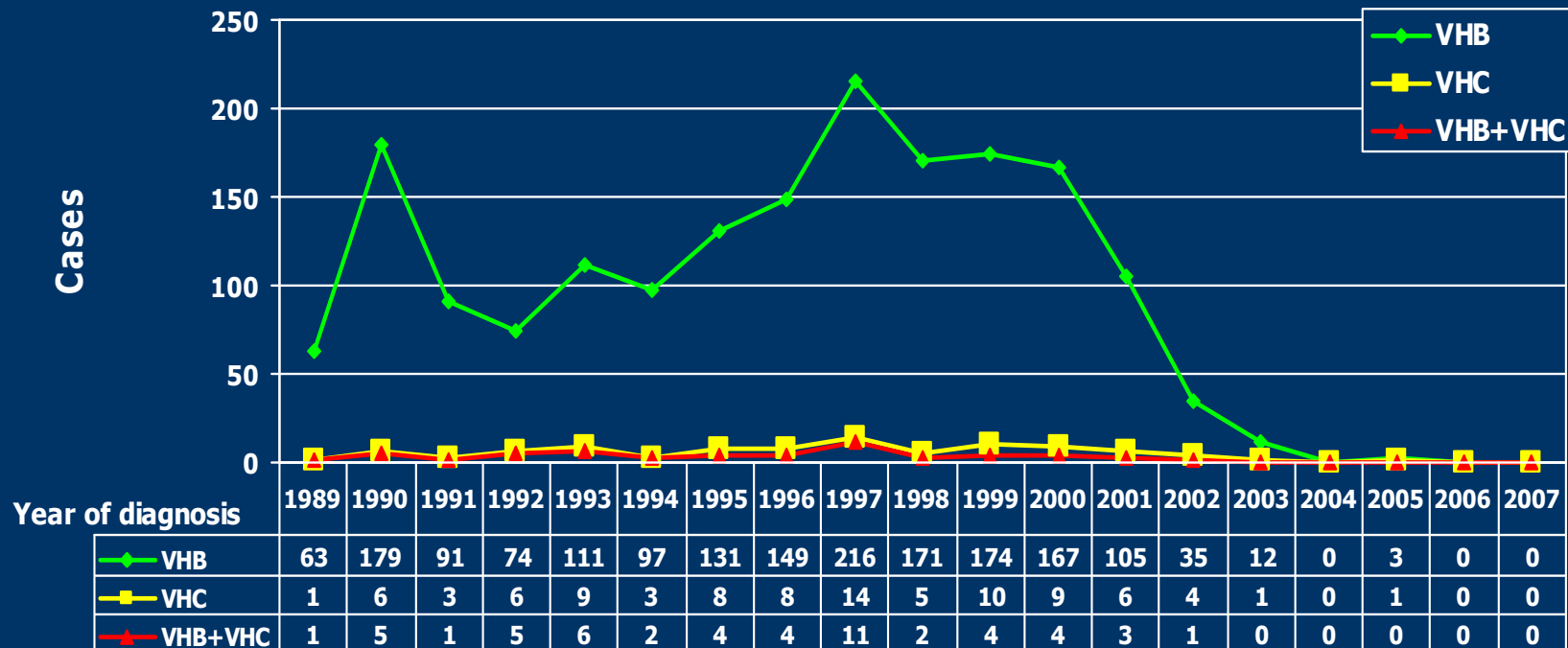




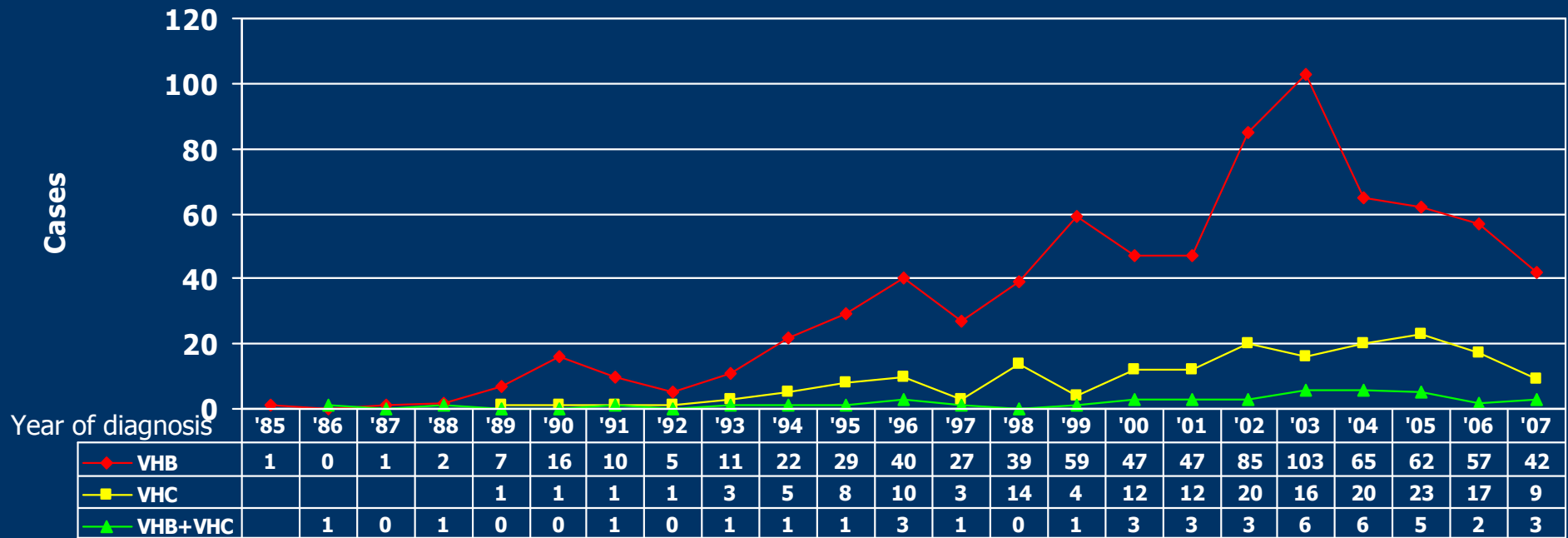
## AIDS indicative diseases diagnosed in 2007



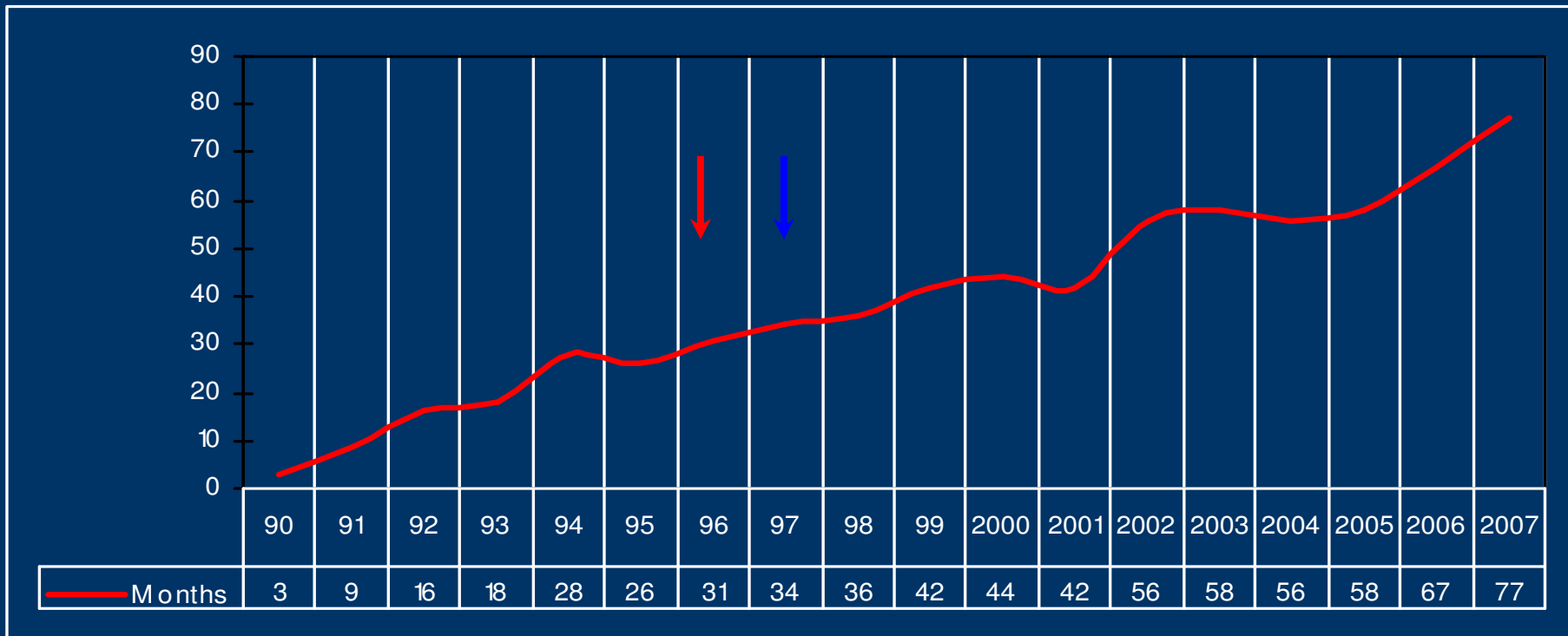
# Co-infection with HBV, HCV and HBV+HCV in children with HIV/AIDS (1989-2007)



# Co-infection with HBV, HCV and HBV+HCV in adults with HIV/AIDS (1985-2007)



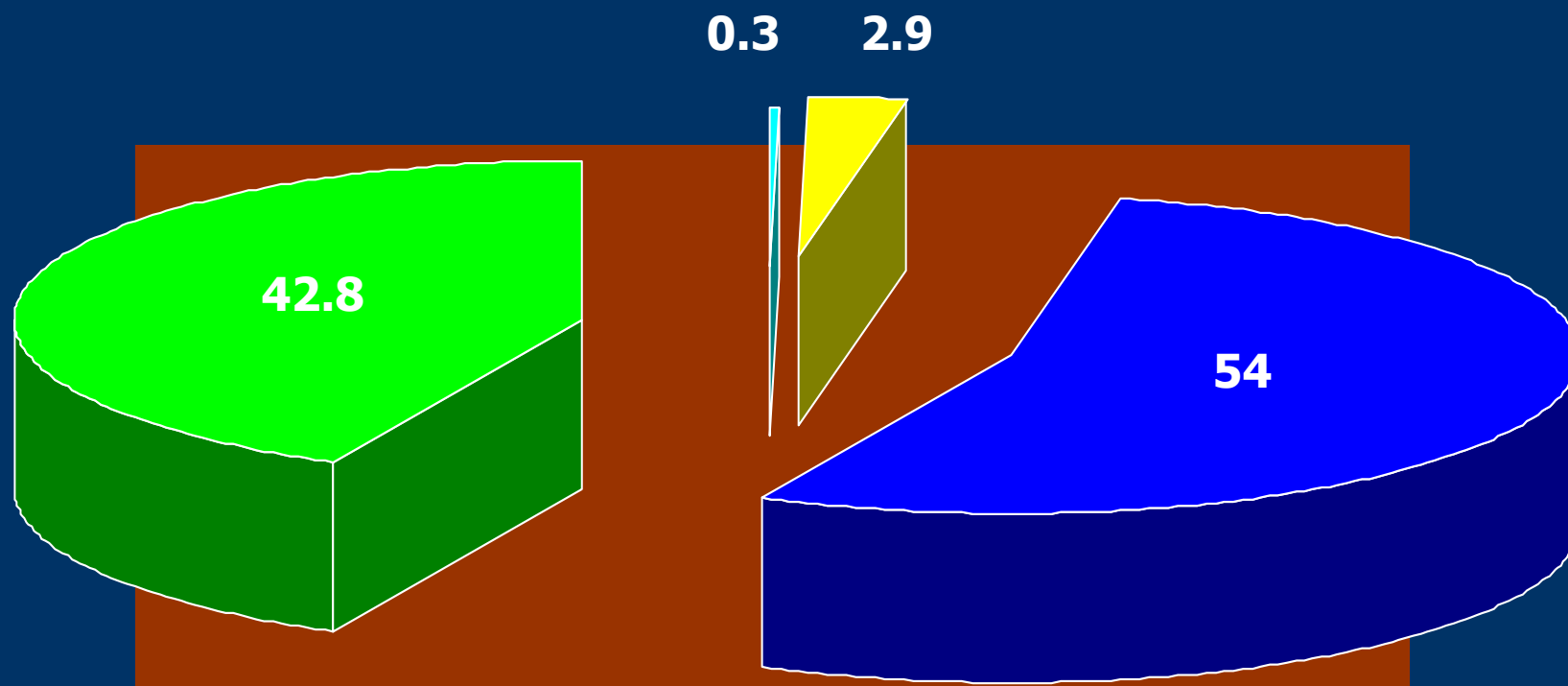
# Median life expectancy (months) for people living with AIDS (1990 - 2007)



→ Introducing the double therapy

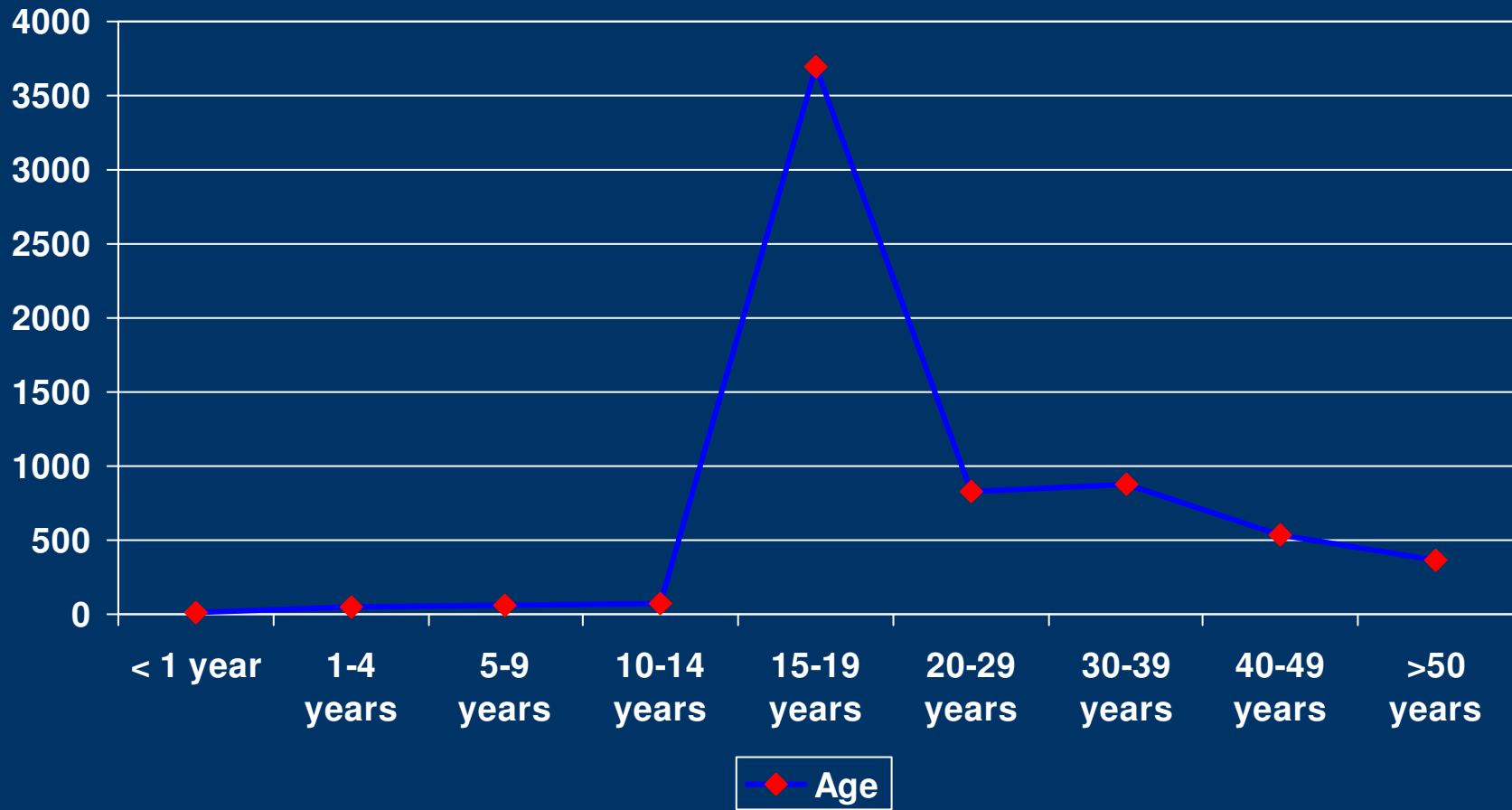
→ Introducing the triple therapy

# Persons with HIV/AIDS, under active medical surveillance, by age groups (%)

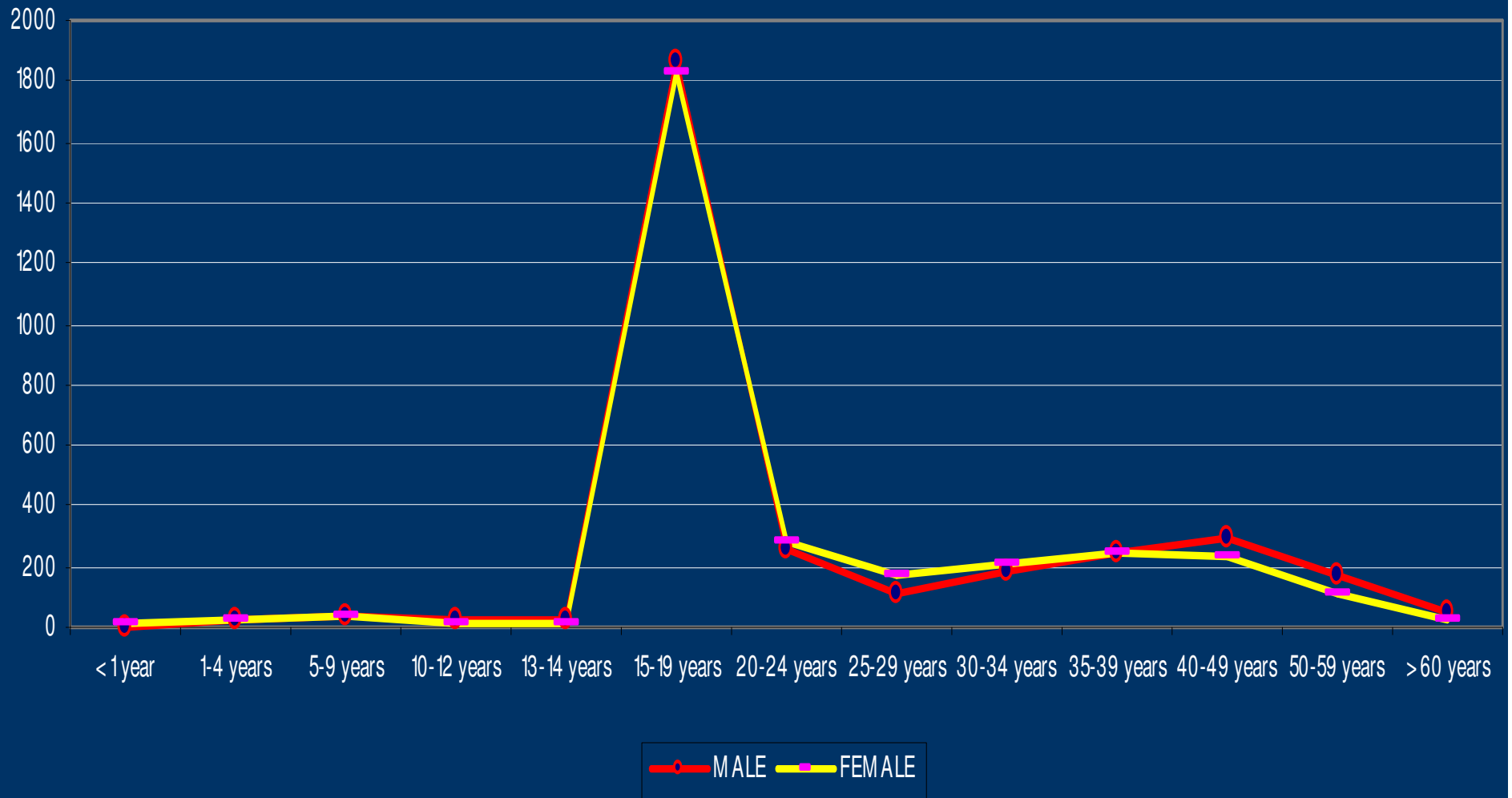


■ < 1 year ■ 1-14 years ■ 15-19 years ■ ≥ 20 years

## Patients with HAART by age groups



# Patients with HAART by age groups and sex



# HIV tests by groups of risk in 2007

Risk groups	Total tests	Positive tests
TB patients	11832	94
STIs patients	5632	35
IDUs	620	6
Prisoners	530	0
Commercial sex workers	55	3
Drivers	54	0
Sailors	970	1
Work abroad	389	2
Travelers that enter the country after at least 6 months of absence	220	0
Prenuptial control	10725	4
Pregnant women	81439	86
Maternity hospital	219	3
HIV contacts	704	35
Hemodialysed/transfused	1402	1
On request	99524	1098
MSM	17	0
Medical personnel	5894	0
<b>TOTAL</b>	<b>220226</b>	<b>1368</b>



# HIV tests among pregnant women in 2007

<b>Aged groups</b>	<b>Total tests</b>	<b>Positive tests</b>
<b>0-14 years</b>	250	0
<b>15-19 years</b>	9698	28
<b>20-24 years</b>	21491	18
<b>25-29 years</b>	24289	20
<b>30-34 years</b>	15742	5
<b>35-39 years</b>	5870	7
<b>&gt; 40 years</b>	1127	0
<b>Undetermined age</b>	2972	8
<b>TOTAL</b>	<b>81439</b>	<b>86</b>

## HIV tests in blood donors\* in 2007

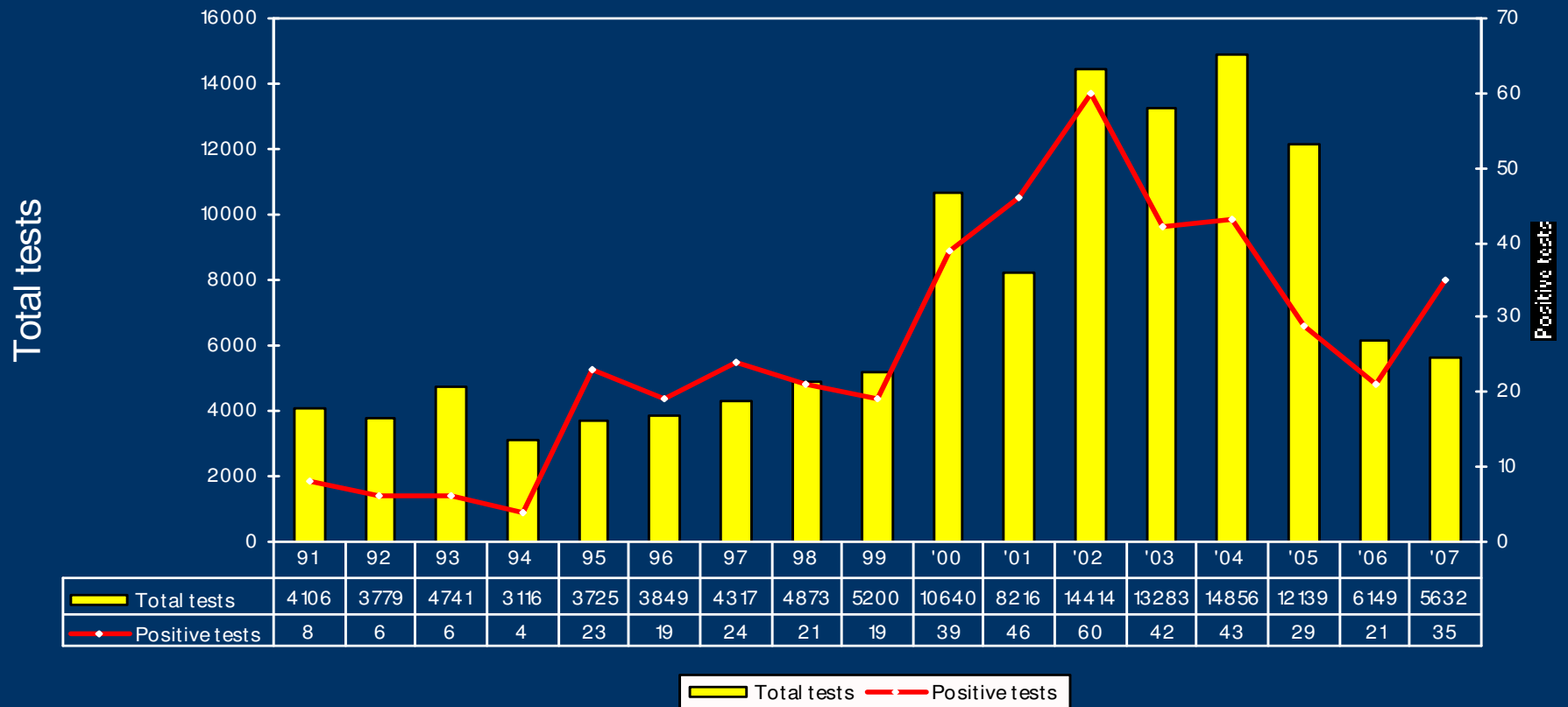
<b>Donor group</b>	<b>Positive</b>	<b>Negative</b>	<b>TOTAL</b>
<b>First donors</b>	22	99639	99661
<b>Usually donors</b>	1	199327	199328
<b>Occasionally donors</b>	2	48834	48836
<b>TOTAL</b>	25	347800	347825

\*Data collected by the National Institute of Hematology and Transfusion "PROF.C.T.NICOLAU"

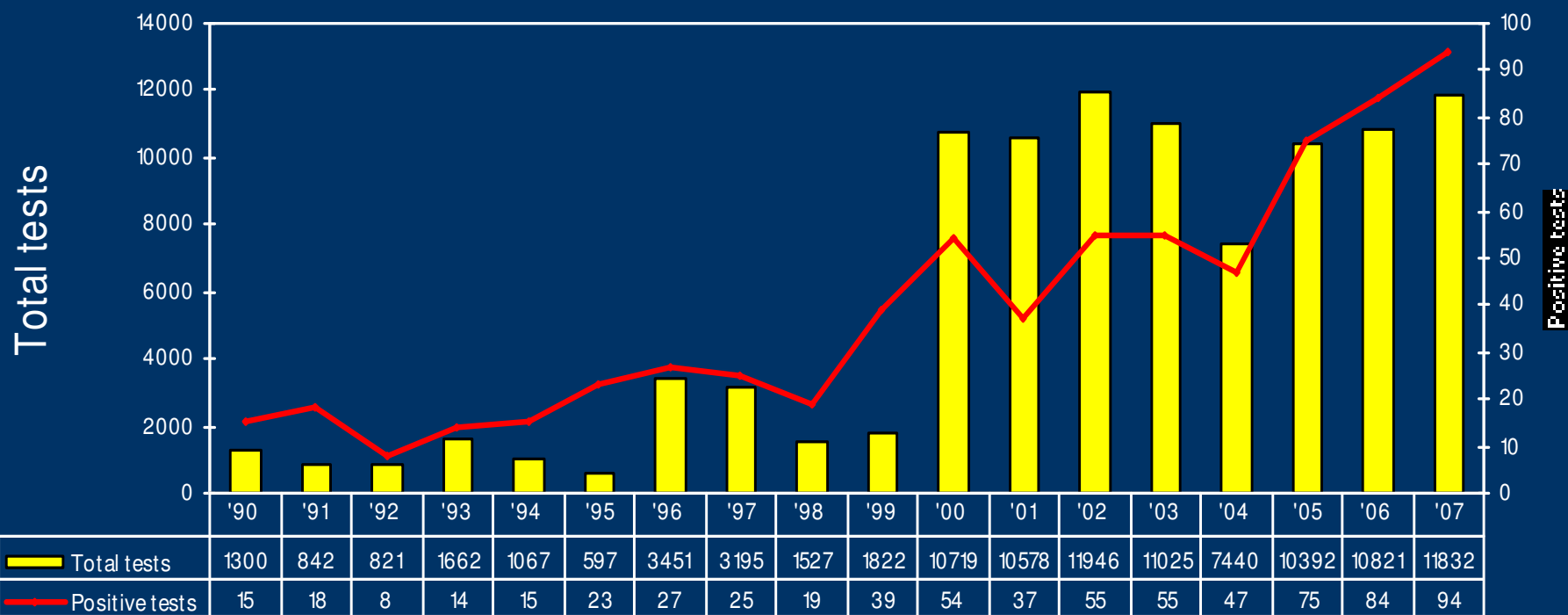
## *HIV tests performed between 2001 –2007*

Year	2001		2002		2003		2004		2005		2006		2007	
	No. tests	Positive tests	No. tests	Positive tests	No. tests	Positive tests	No. tests	Positive tests	No. tests	Positive tests	No. tests	Positive tests	No. tests	Positive tests
Counties Health Authorities	65009	653	92797	1466										
TB patients	10578	37	11946	55	11025	55	9001	49	10392	75	10821	84	11832	94
STIs patients	8216	46	14414	60	13283	42	15121	44	12139	29	6149	21	5632	35
IDUs	6		651		392	4	311	2	510		715	1	620	6
Prisoners	88				1043	2	1043	2	621	2	709	1	530	
Commercial sex workers	88		114	7	92	5	151	2	38		47		55	3
Drivers	2		7								155	1	54	
Sailors	2		42		5	1	341		302	1	284		970	1
Work abroad	169		902	2	84	1	125	2	144		173		389	2
Travelers abroad > 6 months	23		165		43		22		66	1	54	2	220	
Preuptial control	2271		5272	2	6249	5	4719	11	2460	1	6414	1	10725	4
Pregnant women	26064	15	43024	33	51978	27	77435	44	63494	63	78020	81	81439	86
Maternity hospital	7515	3	1769	4	334	5	539	3	386	11	339	17	219	3
HIV contacts	769	7	655	19	977	36	600	26	419	43	569	17	704	35
Hemodialysed/transfused			1113		1148		1248		234		603		1402	1
On request					78915	1349	103695	1951	91348	900	81099	945	99524	1098
MSM					19	2	35		30		32	2	17	
Medical personnel			2239	4	5612	4	6348	2	5646	2	5040		5894	
Blood donors	364739	35	365455	15	235384	67	362486	28	352837	17	327050	19	347825	25
<b>TOTAL</b>	<b>485539</b>	<b>796</b>	<b>540565</b>	<b>1667</b>	<b>406583</b>	<b>1605</b>	<b>583220</b>	<b>2166</b>	<b>541066</b>	<b>1145</b>	<b>518273</b>	<b>1192</b>	<b>568051</b>	<b>1393</b>

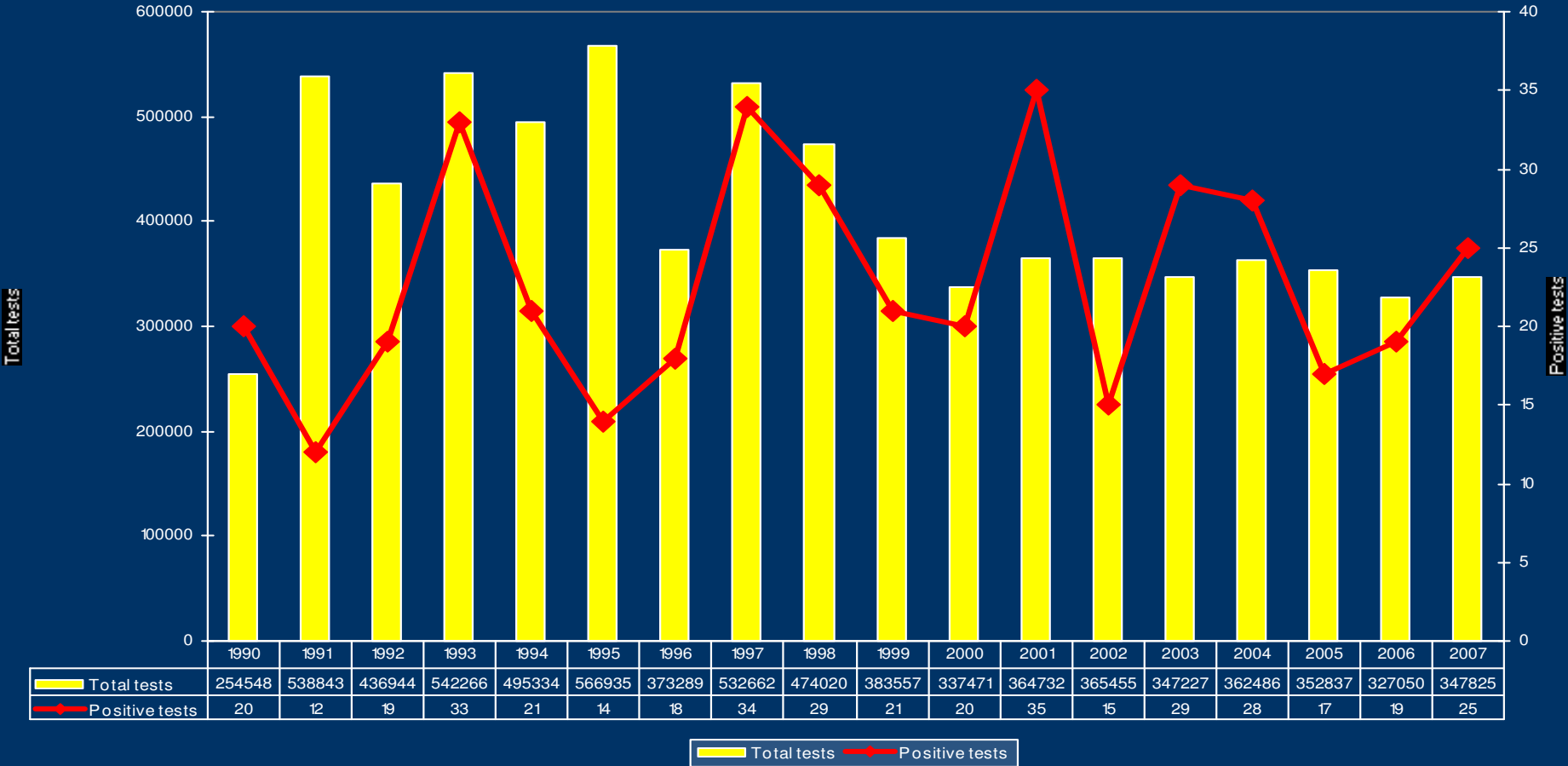
# HIV tests in STI patients, between 1991 - 2007



## HIV tests in TB patients, between 1990 – 2007



# HIV tests in blood donors, between 1990 - 2007



# Trends for Romania

- the **nosocomial transmission** has been eliminated;
- the **vertical transmission** is increasing;
- the **heterosexual transmission in adults** (especially in young adults) is increasing;
- an overall increase in the number of HIV positive persons who seek **medical care and ARV therapy**.

- Romania has the biggest number of PLWHA under treatment in all Central and Eastern Europe (6500), reported at the total number of HIV persons.
- High number of long term survivors with age between 14-17 years, belonging to the age group born between 1987-1990;
- Increasing number of new HIV cases among IDUs (27 at 31 December 2007);



# Health Care System

- **In Romania the sanitary system is coordinated by the Public Health Ministry and financed by the National Assurance Department;**
- **The HIV/AIDS evaluation is assured by 41 Infectious Diseases Hospitals from 41 counties, day clinics, the University Clinics out of the nine centers of surveillance, the National Institute for Infectious Diseases “Matei Bals” from Bucharest;**
- **The ARV treatment costs are covered from the National Program funds, being provided free of charge.**

# National HIV / AIDS Strategy

## Guiding principles

1. HIV / AIDS is more than a public health priority. It is a complex problem, which affects all components of the society.
2. The strategy is mainly focused on prevention and reducing the social impact of HIV / AIDS. The resources allocated have to address vulnerable groups and affected communities.
3. The multisectorial and interdisciplinary involvement is essential for an appropriate response to HIV epidemic.

# National HIV / AIDS Strategy

## Guiding principles

4. The general population and especially the high risk groups have to have the necessary knowledge in order to prevent the infection with HIV.
5. Equal and continuous access to treatment, care and elementary services is guaranteed to all people infected / affected by HIV / AIDS.
6. The rights of people living with HIV / AIDS (PLWHA) as well as the ones of the people belonging to vulnerable groups are guaranteed according to the national legislation and international treaties, in which Romania is the signatory part, with the special focus on the right to confidentiality.

# National HIV / AIDS Strategy

## Guiding principles

7. The HIV testing is voluntary, providing full guarantee of confidentiality and the pre and post counseling, both in the public and private sector.
8. All the necessary conditions for Universal Precautions implementation must be ensured in order to prevent any possibility of HIV transmission, within the sanitary system.
9. The individual responsibilities of the people infected with HIV or living with AIDS are stated.

# Main areas of intervention

1. Prevention of HIV transmission - the main goal is to maintain the HIV incidence in 2013 at the 2006 level.
2. Access to treatment and care for people infected, affected or groups vulnerable to HIV/AIDS aiming to: ensure universal access treatment and care for PLWHA.
3. Development of the integrated social and psychological support services towards increased social integration of PLWHA
4. Surveillance of HIV and associated risk factors aiming to develop and maintain efficient surveillance systems for HIV/AIDS and associated risk factors, to provide timely information regarding the epidemic and the determinants of its evolution and to allow development of appropriate programmes and interventions, including social intervention for PLWHA and vulnerable groups.

# **1. Priorities in prevention of HIV transmission**

- 1. Prevent the transmission among young people**
- 2. Prevention of HIV transmission associated with the commercial sex**
- 3. Prevention of HIV transmission among IDUs**
- 4. Prevention of HIV transmission among men having sex with men (MSM)**
- 5. Prevention of HIV transmission in the prisons**
- 6. HIV/AIDS prevention in disadvantaged communities**
- 7. Prevention of vertical transmission**
- 8. Workplace prevention including prevention in health system**

## **1.1. Prevent the transmission among young people**

**Goal for 2010:** reduce the incidence among young people with 20% compared to 2007

### **Key facts:**

- **almost 100% of young people (both males and females) heard about HIV/AIDS, and over 82% condom use as the main HIV prevention**
- About 10.30% started their sexual life before the age of 15
- 66,2% of the men who are sexually active and 61,4% of the women declared to have used the condom during the first intercourse

### **Key programmes:**

- Health education in schools (85% of schools had trained teachers in 2007)
- National prevention campaigns
- Condom promotion campaigns

## **1.2. Prevention of HIV transmission associated with the commercial sex**

**Goal for 2010:** 20 major urban areas to have well established HIV prevention programmes among SW and clients

### **Key facts: (small scale studies 2005)**

- 36% of female SWs interviewed reported condom use during their last sexual intercourse and only 20% reported regular condom use
- 11% injected drugs and of these almost half (40%) shared injection equipment
- No national estimation available, low access to HIV testing

### **Key programmes:**

- Outreach interventions covered Bucharest, surrounding Ilfov county and other 9 locations (exclusively NGO implemented and donor funded)
- 2.667 female SWs and clients were targeted in 2006 and 3.016 in the first 3 quarters of 2007.



## 1.3. Prevention of HIV transmission among IDUs

**Goal for 2010:** 60% of IDUs in Bucharest area and other 5 major urban areas to have access to needle exchange programmes

### **Key facts:**

- total estimated number of injecting drug users in capital city that was of 24,000 in 2006, low access to HIV testing
- Only few (less than 1%) of HIV registered are IDUs
- 12% of IDUs under 18, HCV infection rate 40 – 60%,
- 73% of the heroin injectors used non-sterile injecting equipment during the last injection and over 90% injected with used needle within the last month

### **Key programmes:**

- Outreach needle exchange covering 27% of IDUs in Bucharest (exclusively NGOs and donor funding)
- Methadone maintenance covering only 9%

## 1.4. Prevention of HIV transmission among men having sex with men (MSM)

**Goal for 2010:** well established prevention interventions, including outreach and peer programmes to exist in 10 of the 43 districts of the country

**Key facts:** (small scale BSS in 2007)

- Condom use at last anal sex is of 72.66%, with older MSM (<25) having increased risky behaviour (68.63%) if compared to younger ones (75.32%).
- 46.88% of the respondents made an HIV test in the last 12 months and know the result
- 68% have been discriminated when accessing health services
- No estimation and no incidence study

**Key programmes:**

- Outreach and peer education programmes in Bucharest and other few urban areas (exclusively NGO implementation and donor funding)

## 1.5. Prevention of HIV transmission in the prisons

**Goal for 2010:** well established prevention programmes in all the prisons with access to condoms, needle exchange and substitution

**Key facts:** (study 2006)

- 44 penitentiaries with total 44,000 average number of prisoners
- Overcrowded, large 40 – 80 people dormitories
- Over 5% of prisoners are drug users
- Low condom use rate (lower than general population)

**Key programmes:**

- peer education programmes in 90% of the prisons
- Condom distribution started in 2007
- Prison administration implementing programmes with donor funds and domestic resources

## 1.6. HIV/AIDS prevention in disadvantaged communities

**Goal for 2010:** reducing the HIV vulnerability determined by low access to basic social services

### **Key facts:**

- Large roma population, 0.5 million according to statistics but over 2 million according to estimations, with limited access to social and health services
- Increasing population of street children and youngsters
- Large compact group of young people having to leave child protection institutions when turning 18

### **Key programmes:**

- peer education programmes in child protection institutions
- Increased number of health mediators (community nurses) having competence in HIV

# 1.7. Prevention of vertical transmission

**Goal for 2010:** reducing the vertical HIV transmission to 1 – 3%

## **Key facts:**

- Complete programme of PMTCT available in 18 of the 43 districts
- 45% of pregnant women were tested for HIV in 2007
- 97% of the pregnant women diagnosed with HIV received ARV treatment in the framework of PMTCT services

## **Key programmes:**

- Programme of universal access to PMTCT funded by Ministry of Health and Health Insurance
- Large number of family practitioners (4500) and nurses (2300) having competencies in PMTCT

## **1.8. Workplace prevention including prevention in health system**

**Goal for 2010:** eliminate any possibility of HIV transmission in relation with health services and introduce national policies of HIV at workplace

### **Key facts:**

- Universal precaution programmes in health services still incomplete
- Blood safety ensured
- No workplace programmes and policies

### **Key programmes:**

- Universal precaution as part of the health services accreditation and licensing

## 2. Priorities in access to treatment and care

1. Ensuring ARV treatment and treatment of opportunistic infections
2. Ensuring access to general health care services and nutritional programmes

## 2.1. Ensuring ARV treatment and treatment of opportunistic infections

**Goal for 2010:** maintain the universal access to ARV and non ARV treatment and to the biological monitoring programme according to the national treatment guideline

### **Key facts:**

- Universal free access to ARV achieved since 2003
- 6500 patients under ARV treatment from 8000 patients in active medical surveillance
- Over 7000 patients being the long term survivors of the epidemiological accident that affected children in period 1985 - 1991

### **Key programmes:**

- Treatment and monitoring programme covered entirely by Health Insurance and MoH
- opportunistic infection treatment covered by Health Insurance



## 2.2. Ensuring access to general health care services and nutritional programmes

**Goal for 2010:** universal access of the HIV/AIDS patients to the adequate health support services and nutritional support services

### **Key facts:**

- Universal access to nutrition allocation for people living with HIV since 2003
- Limited specialized services for terminal care or prolonged care for chronic patients

### **Key programmes:**

- Nutrition programme covered by Ministry of Labor

# Priorities in development of the integrated social and psychological support services

1. Access of PLWHA to psycho-social support services
2. Access of PLWHA to education
3. Access of PLWHA to jobs
4. Rights of the PLWHA

## 3. Social and psychological support services

**Goal for 2010:** universal access of people living with HIV/AIDS to adequate social services, education, employment and human rights enjoyment

### **Key facts:**

- Increasing number of long time survivors in the age group 18 to 20
- Limited experience and services for them
- Generous legal framework but limited local level implementation capacity
- Significant discrimination

### **Key programmes:**

- Education tailored programmes included in the MOE strategies
- Social integration programmes for young people living with HIV/AIDS implemented by their associations
- National anti-discrimination campaigns
- Anti-discrimination measures related to HIV implemented by the National Council for Fighting Discrimination

### **3. Priorities in surveillance of HIV and associated risk factors**

- 1. Surveillance of HIV transmission**
- 2. Surveillance of risk associated behavior**

# 3. Priorities in surveillance of HIV and associated risk factors

**Goal for 2010:** developing and maintaining an simple and efficient surveillance system of transmission and risk associated behavior

## **Key facts:**

- Limited data due to low access of vulnerable groups to testing
- Lack of public resources allocated to adequate surveillance systems
- Lack of an adequate surveillance programme at the level of MoH

## **Key programmes:**

- Patient data base maintained by Matei Bals Institute
- Risk behavior surveillance done by NGOs with donor support

# Funding situation

- Treatment care and support services entirely covered by national resources through national and local budgets
- HIV testing covered by MoH
- Prevention among vulnerable groups especially covered by Global Fund grant (2007 – 2010) and UN support

# Measures Taken by Authorities

- The ARV drugs - available in Romania;
- Laboratories for immune and virus monitoring – of international standards;
- Well-trained medical staff involved in PLWHA assistance and care;
- Developing of the psychosocial network.

# Strategy for ARV Therapy in Romania

- Triple therapy:
  - 2 NRTI + 1 IP or 2 NRTI + 1 NNRTI, is used in 80% of the cases;
- Salvage therapy;
- Double boosting.



# Where is ARV Therapy Initiated and Given?

- In 9 Regional Centers for control and monitoring of the HIV infections and ARV treatment;
- These units perform the evaluation of the patient's clinical and immunological status, and decide the opportunity of initiating the ARV therapy;
- All of these units have the ability to perform hematological, biochemical, immunological, and routine bacteriological tests, CD4 count, viral load and resistance.
- Medication is released by the hospital for infectious diseases in each district and starting with 2008 also released by pharmacies.

# Factors Ensuring Adequate ARV Therapy

- The political commitment, stated in the program of the current government, to increase access to ARV therapy for the HIV positive population;
- Reinforcement of the national capacity to provide preventive and therapeutic strategies;
- Involvement of all social segments (government, non-governmental organizations, pharmaceutical industry, local administration, etc.);
- Adequate financing from national and international sources in order to ensure continuity and access for the newly diagnosed cases;

# Psychological perspective on priorities and needs in HIV / AIDS

- pre-testing counseling
- post-testing counseling
- psychotherapy – specific interventions to factors causing behavioural disturbances
- family counseling throughout the entire disease process
- preparing the family and the infected child for disclosure
- supportive counseling in the terminal stage, continued after the child's death / loss and grieving

# Disclosure the diagnosis

- **criteria to disclosure the diagnosis:**

- age and psychological maturity
- family dynamics
- signs of communication with the parents
- optimal age for disclosure the diagnosis is around 8 – 10 yers old and should under no circumstances be postponed towards adolescence or terminal stage
- children expect these answers from the ones close to them, whom they trust: parents, psychologist and physician.

# Treatment Guidelines

## ARV Therapy in Romania

- **ARV therapy was introduced in 1995;**
- **1996 - double therapy;**
- **1997 - triple therapy (2 NRTI+1IP);**
- **1998 - the 1<sup>st</sup> edition of "*Guide to HIV/AIDS Therapy for adults and children*".**
- **2002 - the 1<sup>st</sup> edition of "*Guide to HIV/AIDS Therapy for children*".**
- **2004 – the 2<sup>nd</sup> edition of "*Guide to HIV/AIDS Therapy for children*".**
- **2006 - the 2<sup>nd</sup> edition of "*Guide to HIV/AIDS Therapy for adults and adolescents*".**
- **2008- working on the new editions for children, adolescents and adults.**

# Principles of ARV Therapy

- **non-discrimination**
- **cost-effectiveness**
- **optimum quality**
- **increasing life expectancy;**
- **decreasing mortality;**
- **improving the quality of life in HIV/AIDS patients**
- **increasing adherence to therapy;**
- **increasing compliance to therapy;**

# Antiretroviral Agents Approved in Romania

NRTIs	NNRTIs	PIs
<u>zidovudine</u> (AZT, ZDV) – <i>Retrovir</i>	<u>nevirapine</u> (NVP) – <i>Viramune</i>	<u>saquinavir</u> (SQV) – <i>Invirase, Fortovase</i>
<u>didanosine</u> (ddI) – <i>Videx, Videx EC</i>	<u>efavirenz</u> (EFV) – <i>Sustiva</i>	<u>indinavir</u> (IDV) – <i>Crixivan</i>
<u>zalcitabine</u> (ddC) – <i>Hivid</i>	<b>Fusion Inhibitors</b>	<u>ritonavir</u> (RTV) – <i>Norvir</i>
<u>stavudine</u> (d4T) – <i>Zerit, Zerit XR</i>	<u>enfuvirtide</u> (ENF, T20) – <i>Fuzeon</i>	<u>nelfinavir</u> (NFV) – <i>Viracept</i>
<u>lamivudine</u> (3TC) – <i>Epivir</i>	<b>Entry inhibitors – CCR5 co-receptor antagonist</b>	<u>fosamprenavir</u> - <i>Telzir</i>
<u>abacavir</u> (ABC) – <i>Ziagen</i>	Maraviroc - <i>Selzentry</i>	<u>lopinavir/ritonavir</u> (LPV/r) – <i>Kaletra</i>
<u>AZT/3TC</u> - <i>Combivir</i>	<b>Integrase strand transfer inhibitors</b>	<u>atazanavir</u> (ATV) - <i>Reyataz</i>
<u>AZT/3TC/ABC</u> - <i>Trizivir</i>	Raltegravir - <i>Isentress</i>	<u>tipranavir</u> (TPV) - <i>Aptivus</i>
<u>3TC/ABV</u> - <i>Kivexa</i>		<u>darunavir</u> (DRV) - <i>Prezista</i>



# Monitoring tools

- In Romania there are 9 Regional Centers for control and monitoring HIV infections and ARV treatment;
- These units perform the evaluation and monitoring of the patient's clinical and immunological status, and decide the opportunity of initiating the ARV therapy;
  - All of these units have the ability to perform hematological, biochemical, immunological, and routine bacteriological tests, CD4 count, viral load and resistance.
- Medication is released by the hospital for infectious diseases in each district.

***What are we dealing with?***

- **Over 10 years of ARV therapy in Romania in different schemes:**
  - **Monotherapy**
  - **Bitherapy**
  - **Tritherapy**
- **Quadruple therapy**
  - **Salvage therapy**
  - **Sequential therapy!!!**
  - **Etc.**
- **Resistance/ multi-resistance to ARV!?!?!?**

***“PROF.DR.MATEI BALS” NATIONAL INFECTIOUS DISEASES  
INSTITUTE***

***HIV/AIDS MONITORING AND EVALUATING DEPARTMENT***

***Manager: Prof.Dr.Adrian Streinu-Cercel, MD, PhD***

***Coordinator: Dr.Mariana Mardarescu  
Dr.Otilia Benea  
Dr.Sorin Petrea***

***Statistical Data operators: Marieta Iancu  
Daniela Vitelaru  
Sanda Vintila***

***Epidemiologist: Dr.Ionel Iosif***