



HIV AND AIDS EPIDEMIOLOGY IN POLAND

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HIV /AIDS POLAND 1985 – 2010

FIRST CASE - 1985

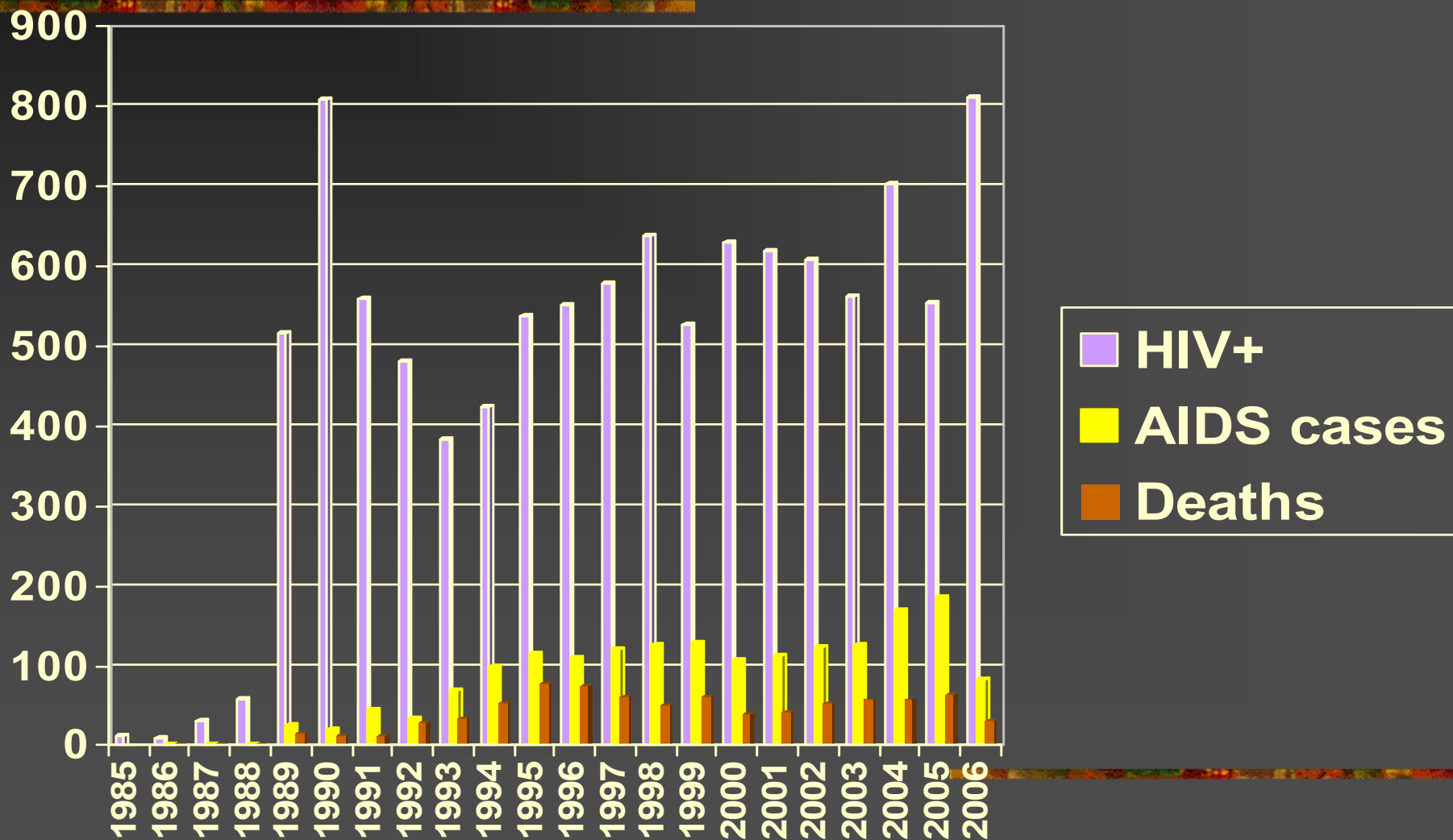
TILL 1988 - 52 CASES



OCT 1988 - FIRST IVDU

1989- 500 CASES

1990 900 CASES

HIV epidemic in Poland, 1985- 2006



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- HIV Epidemic course similar in Poland & Eastern European countries
 - Sporadic infections
 - Introduction into IVDU community
 - Lack of proper systemic solutions for infected
 - A need to create new structures
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Cost of non- investment in health

Two main fields of activity

- prevention
 - proper health care system
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Cost of non- investment in health

It is much cheaper and better for all to prevent than treat

Healthcare system for PWA

- Proper organizational scheme
 - Limited number of centers
 - Full equipment
 - Centralized laboratories

 - Separate prevention programs
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Healthcare system for PWA

- Creating new medical staff
 - Physicians
 - Nurses
 - others

 - securing the safety of personnel is a must
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Healthcare system for PWA

- Main targets of healthcare for HIV+ persons
 - Social care
 - Psychological care
 - Primary care medicine
 - Specialized medicine
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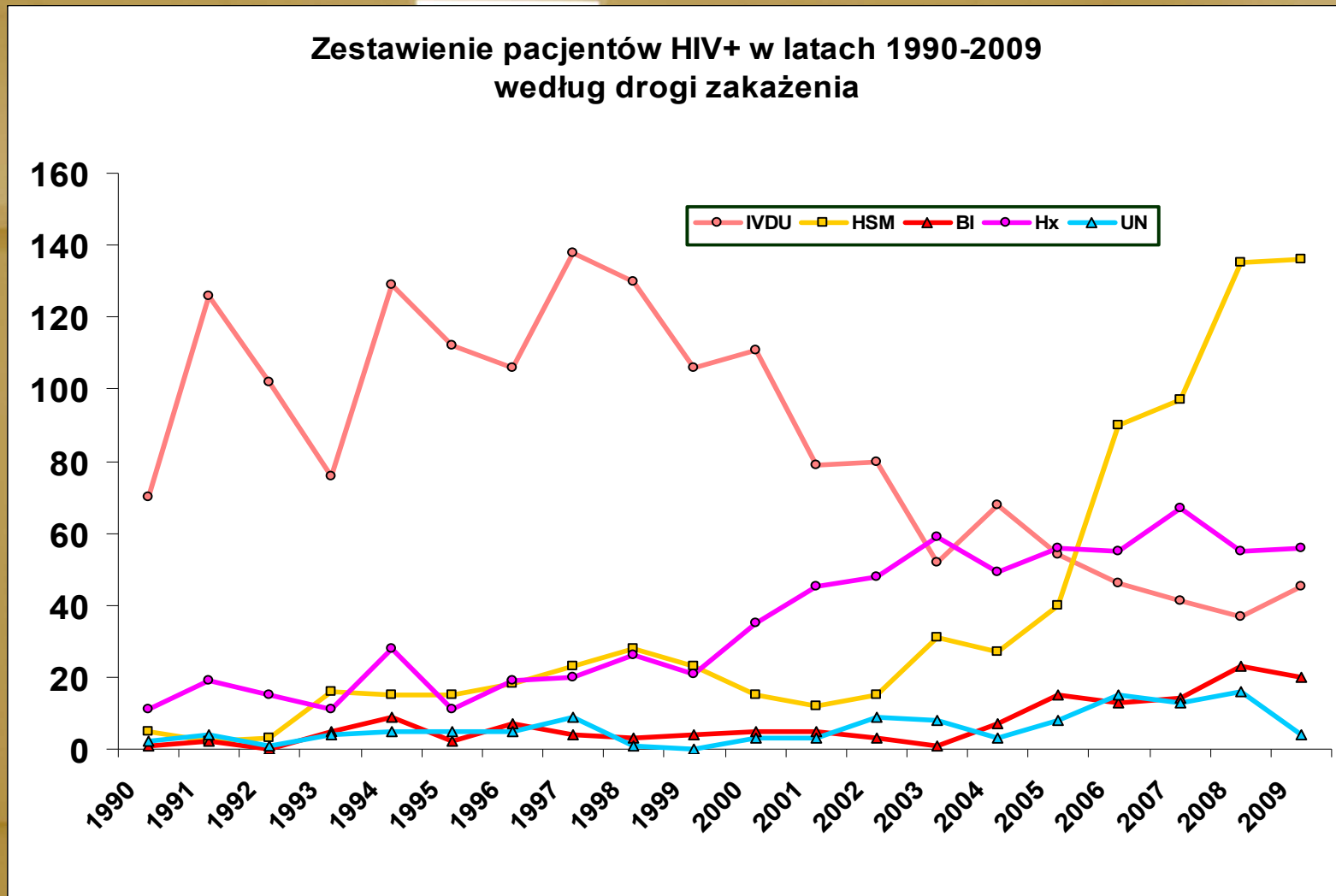
Healthcare system for PWA

- Specialty care medicine
 - IVDUs
 - Methadone programs
 - Rehabilitation programs
 - Other harm reduction programs
 - Needles & syringe exchange programs
 - Other prevention programs
 - Condom promotion
 - Reintroduction to society program for homeless

Comparison of routes of infection

	1990		2000	
	N=	%	N=	%
HOMOSEXUAL	42	5.2	31	4.9
IV DUs	680	84.1	333	52.9
BLOOD DONORS	3	0.4	0	0
HAEMOPHILIACS	1	0.1	0	0
HETEROSEXUAL	18	2.2	35	3.5
CHILDREN	1	0.1	1	0.2
OTHERS	2	0.2	1	0.2
N/D (MOSTLY SEXUAL)	62	7.7	229	36.3
TOGETHER	809	100.0	630	100.0

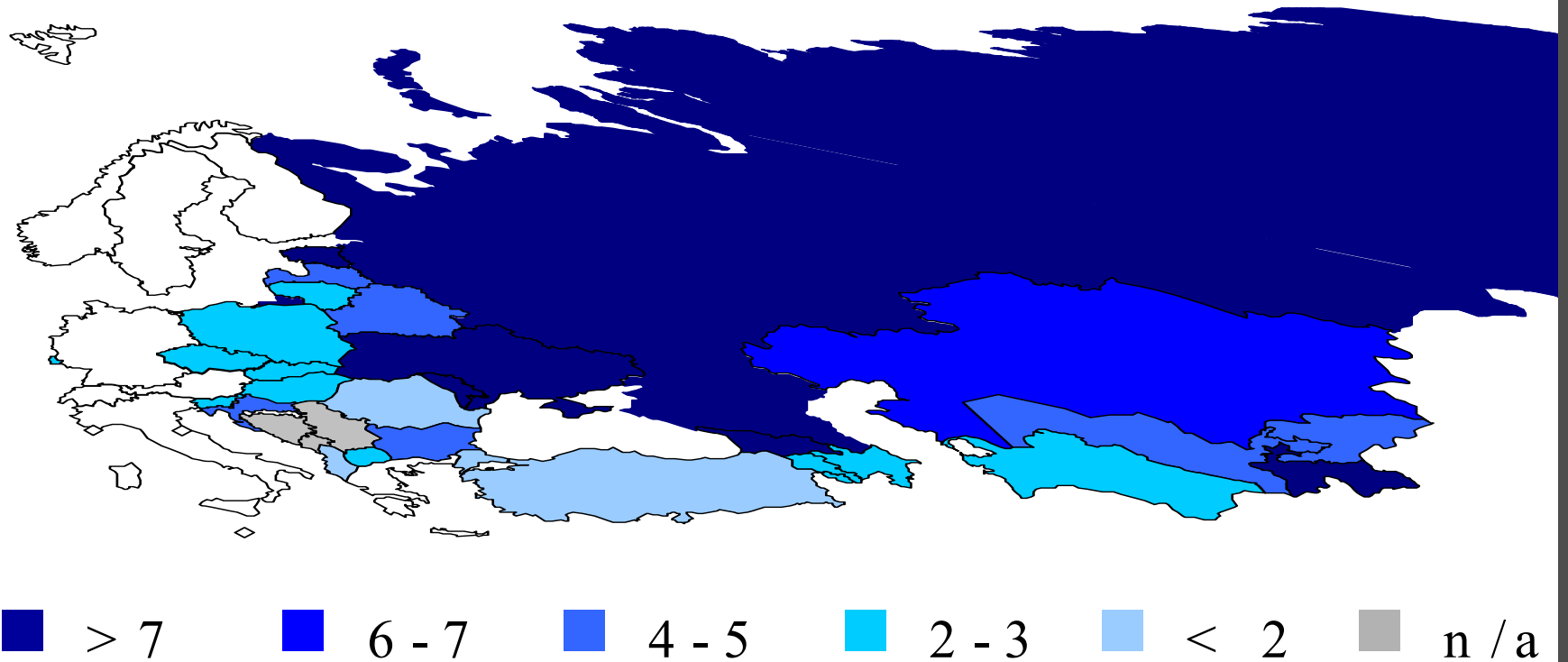
Pacjenci w Wojewódzkim Szpitalu Zakaźnym



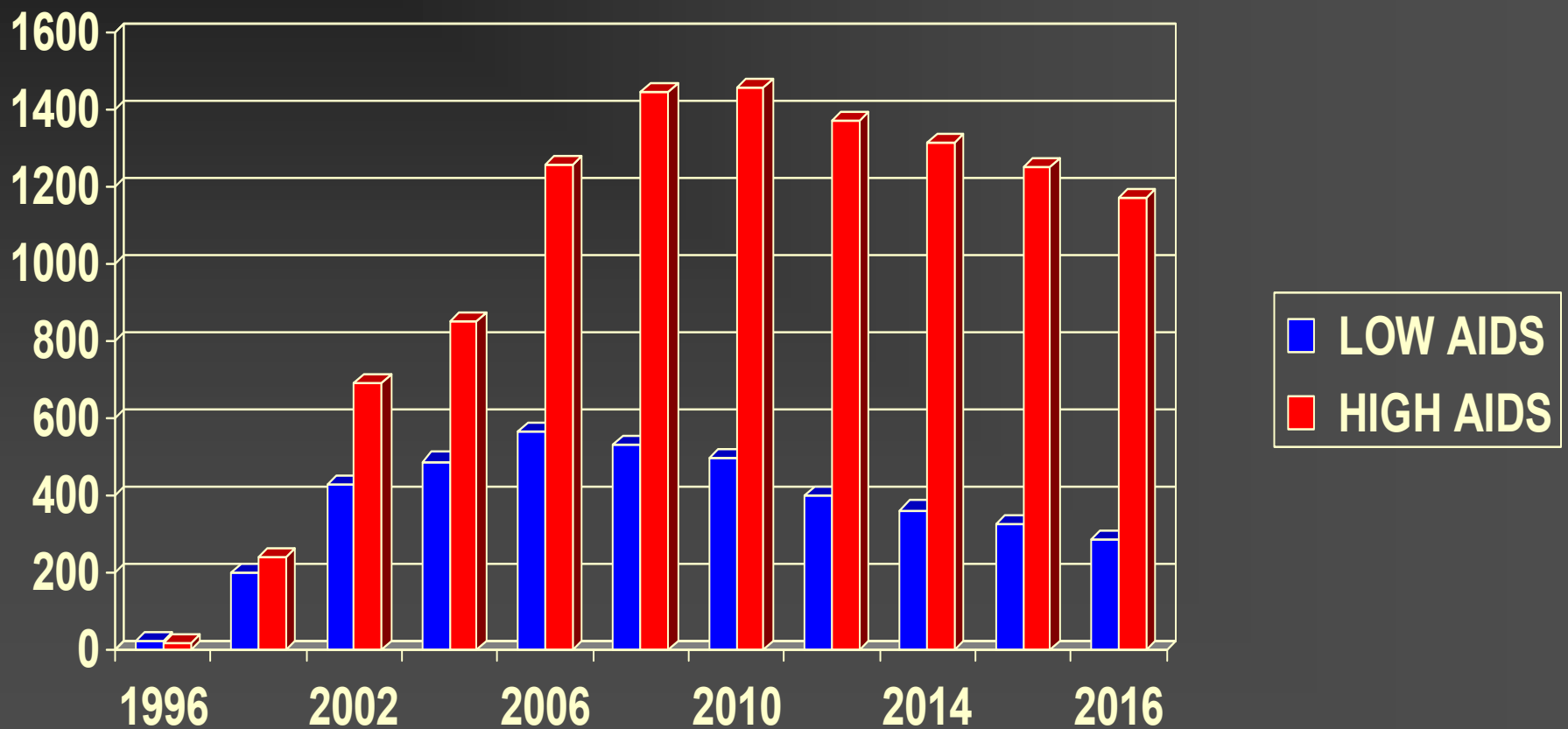
Healthcare system for PWA

- HIV Epidemic course is not similar to easternmost European countries ...
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Prevalence of injecting drug use in Central & Eastern Europe and Central Asia (per 1000 population)

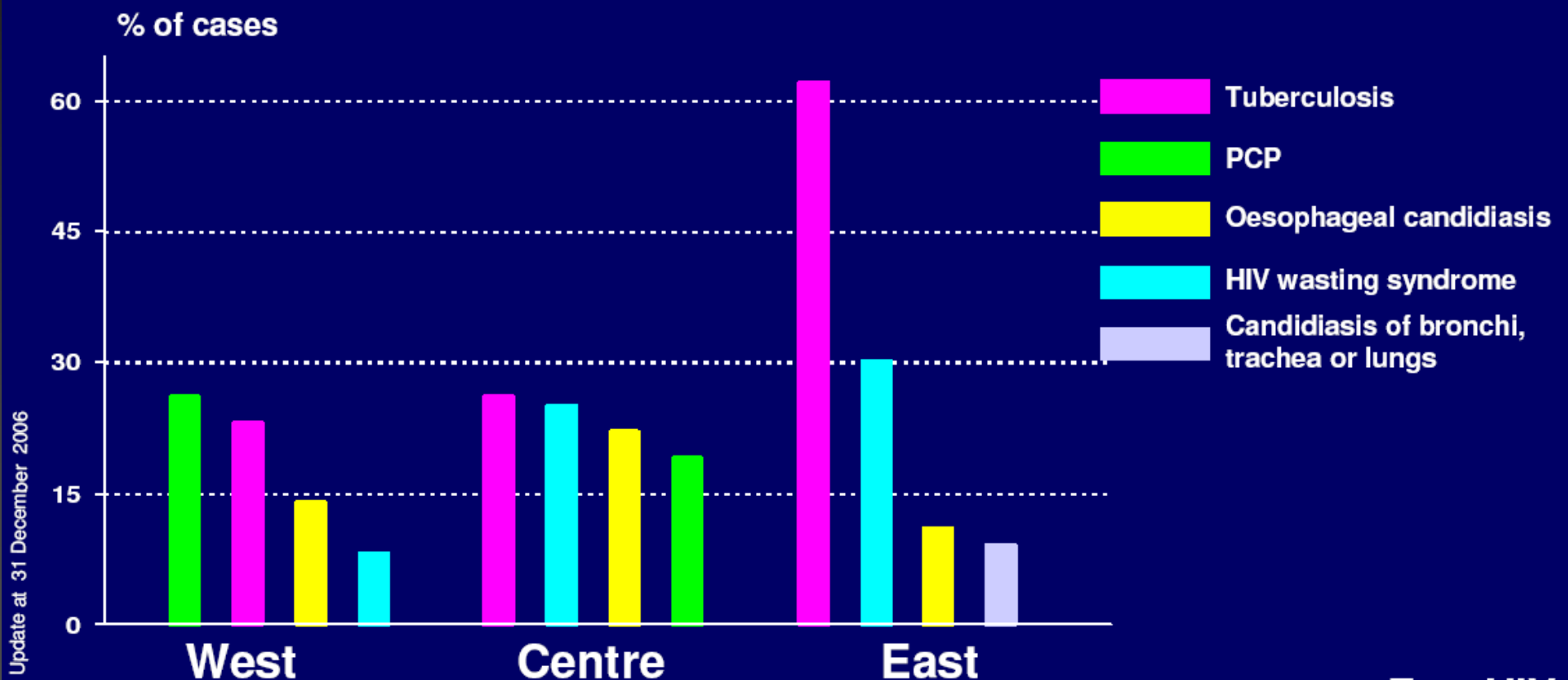


Ukraine, British Council's prognosis of HIV infections 1996-2016 (x 1000)



*Estimate of June 2000: By end of 1999 240,000 HIV cases

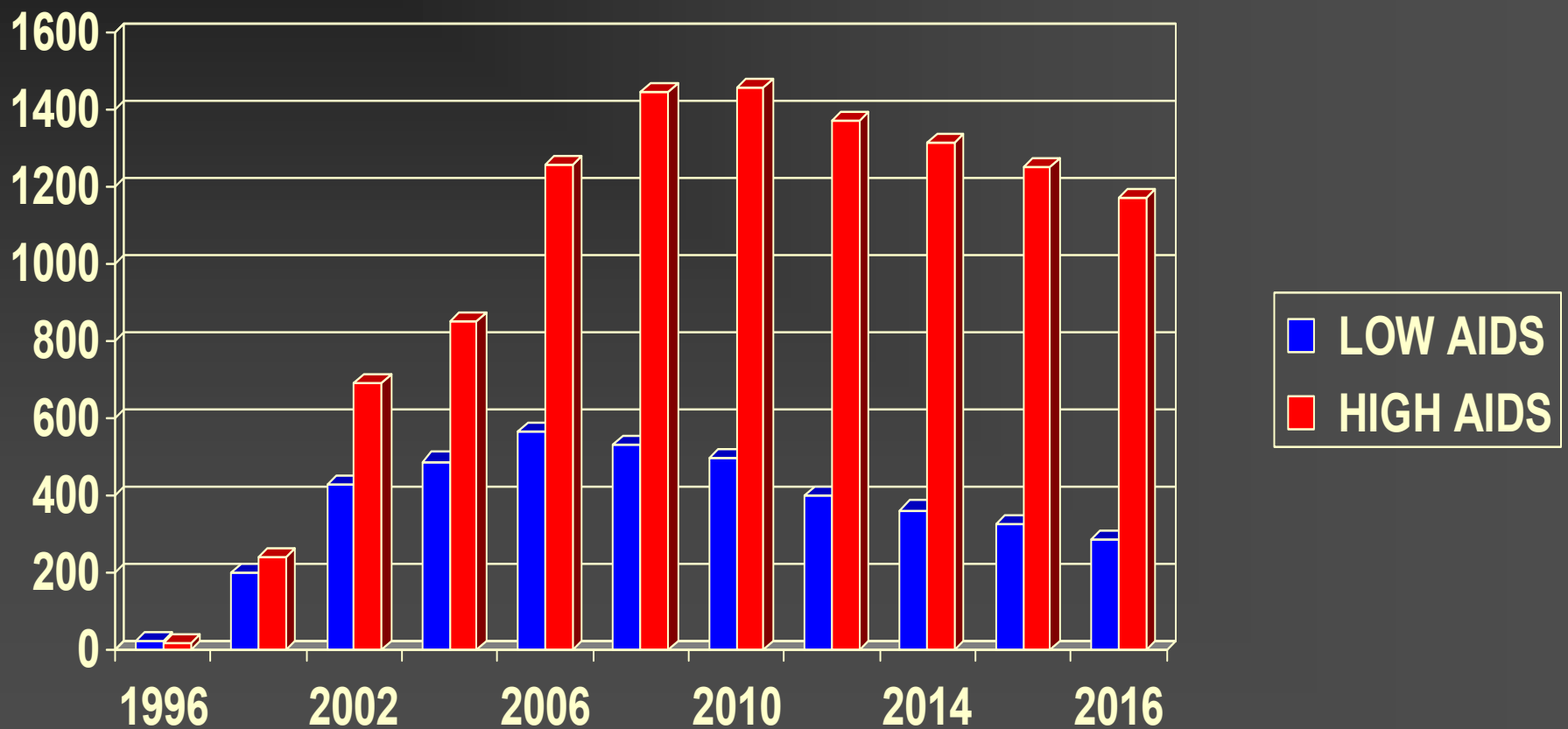
The four most common AIDS indicative diseases (%) among AIDS cases diagnosed in 2006 West, Centre and East, WHO European Region



Update at 31 December 2006

EuroHIV

Ukraine, British Council's prognosis of HIV infections 1996-2016 (x 1000)



*Estimate of June 2000: By end of 1999 240,000 HIV cases

Healthcare system for PWA

Current status:

■ 15 Centers

- Updated antiretroviral recommendations, according to IAS-USA Panel and Euroguidelines
- Primary and secondary prophylaxis OI, according to Euroguidelines
- 5 200 ART treated (all eligible),
- Drug-related expense in 2010: 210 million PLN
- Drugs funded by the state

Poland: Anti-HIV campaign background

- Free, anonymous HIV testing / counselling for public
- Access to treatment
- Prevention of vertical transmission

HIV/AIDS medical care for IVDU's

- **An Inpatient Hospital Department for Drug Addicts with HIV infection has been functioning since 1993 in the Hospital of Infectious Diseases in Warsaw, Poland, within the Center for AIDS Diagnosis & Therapy**
on the strength of
Methadone Substitution during hospitalization
 - **5640 individuals hospitalized (Nov.1993-Dec.2010)**
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Medical problems among HIV+ IVDUs

■ HIV infection	100%
■ AIDS	44%
■ HCV	91%
■ HBV	79%
■ Skin bacterial infections	65%
■ Systematic bacterial infections	50% (CNS, lungs, sepsis)
■ Tuberculosis	38%
■ Psychiatric disorders	15%
■ STD`s	4%

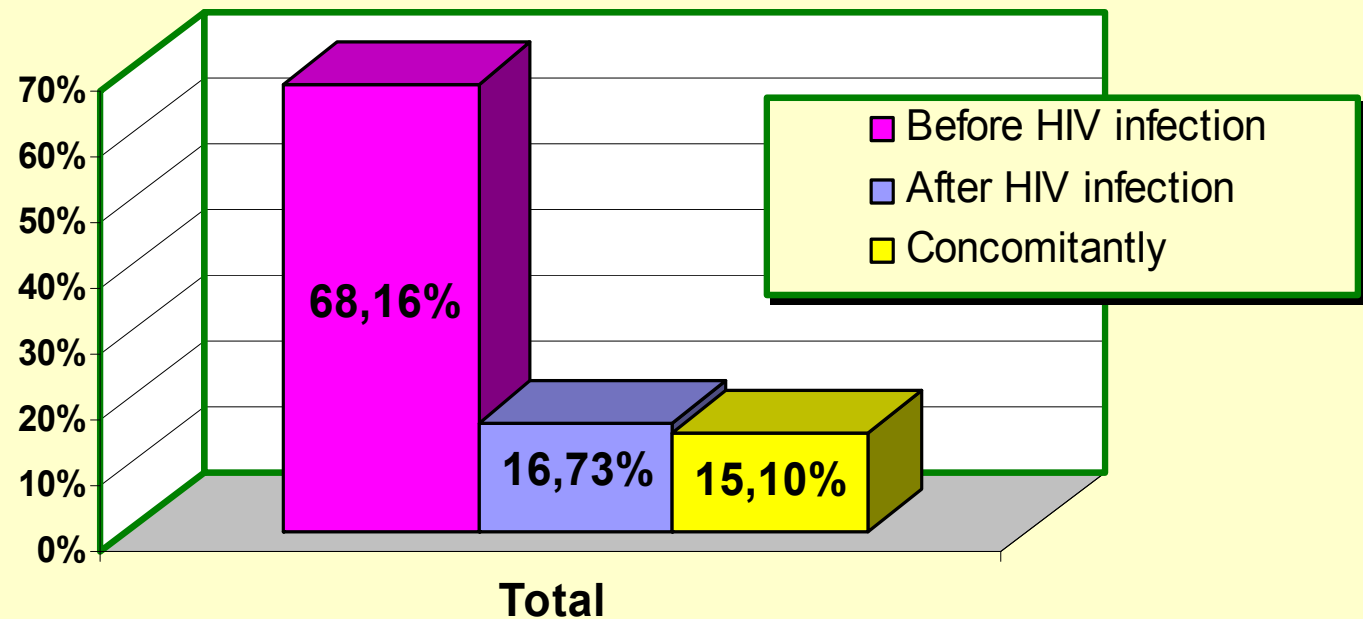
Study results

Syphilis and gonorrhoea

were found in **12.4%** of **1968** patients

- **7.5 %** had only syphilis
- **2.1 %** had syphilis and gonorrhoea
- **1.3 %** had only gonorrhoea

Syphilis and gonorrhoea in HIV-positive patients by moment of HIV infection (1990 - 2002)



Syphilis and gonorrhoea in men in risky behaviour groups

- homo- and bisexual men – 40.7%
- heterosexual men – 13.9%
- men addicted to intravenous narcotic substances – 8.2%

Changes in the pattern of HIV-1 subtypes in Poland

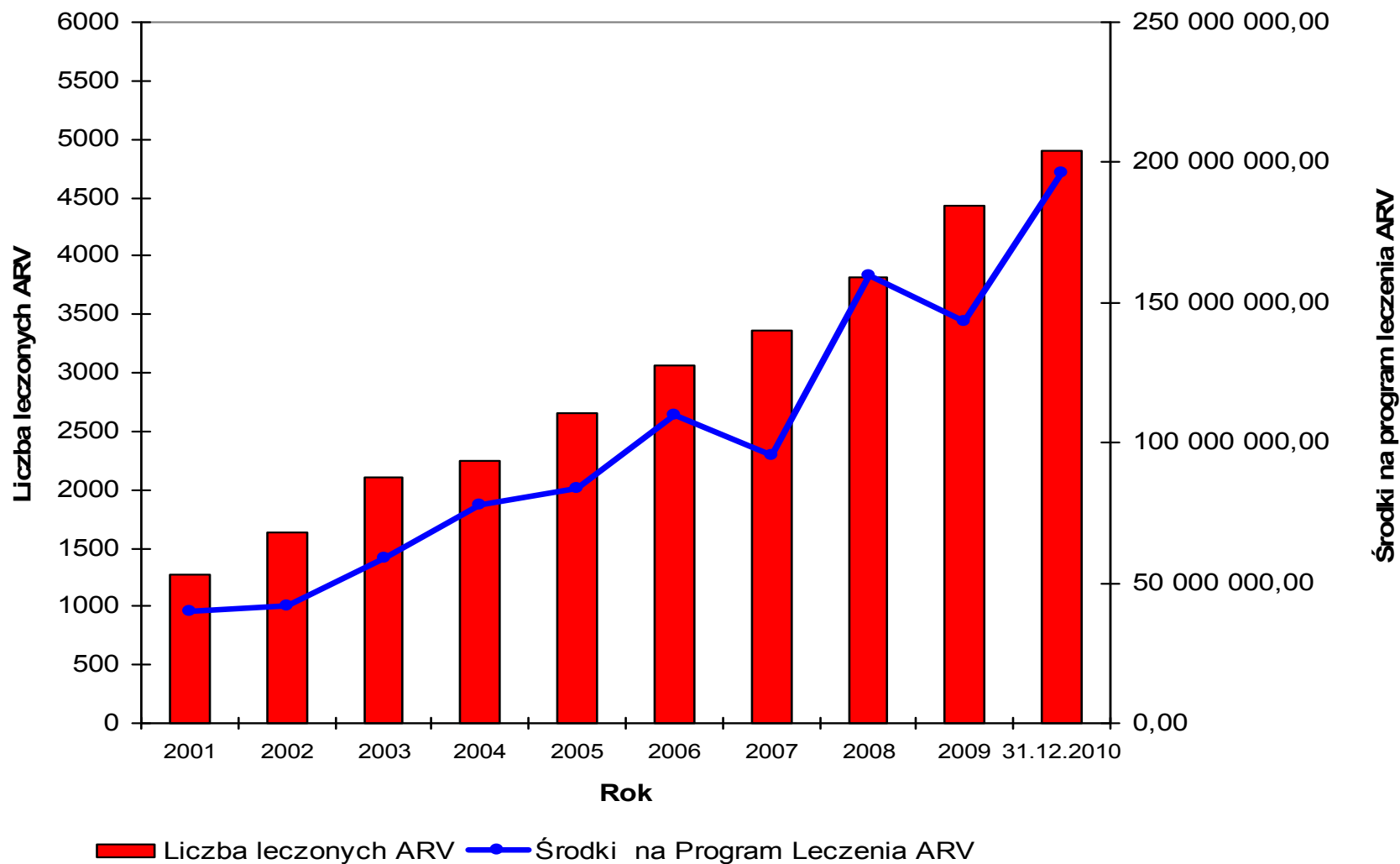
	HIV-1 B	HIV-1 non-B
1997 study ¹	100%	0%
2002 study ²	88,3%	11,7% (in majority CRF03_AB)

1 Lipniacki A et al. Sixth European Conference on Clinical Aspects and Treatment of HIV Infection, Hamburg, 1997

2 Stańczyk GP et al. Sixth International Congress on Drug Therapy in HIV Infection, Glasgow, 2002

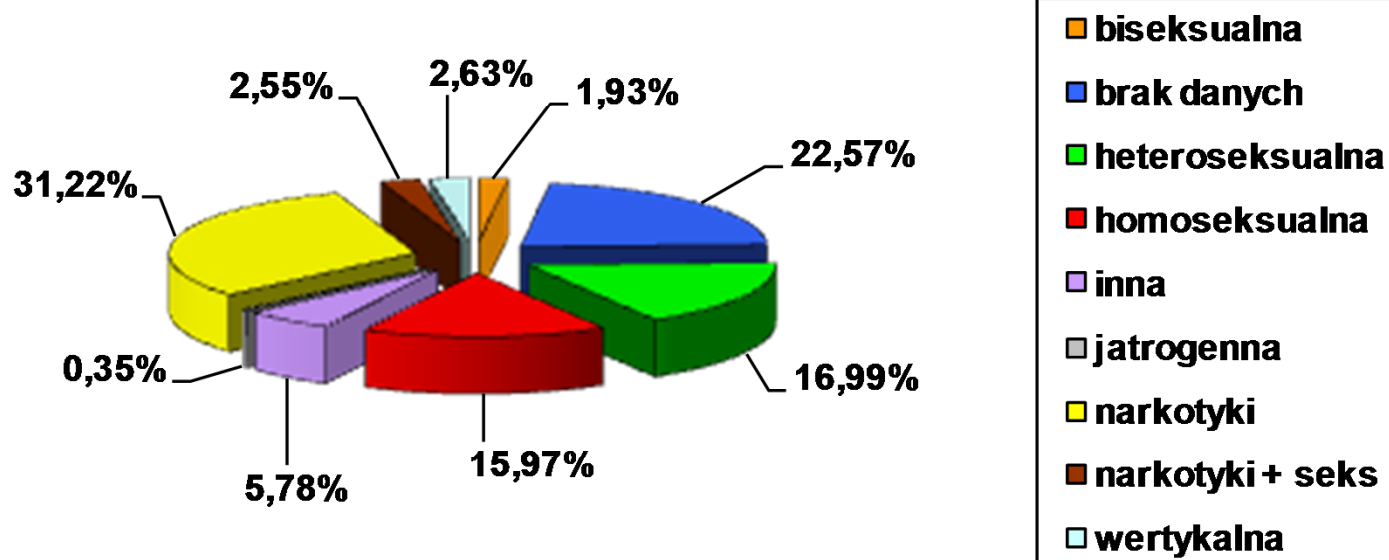


Number of treated and expenditures





Route of transmission HIV among ARV treated (27.10.2011 r. = 5483 patients)



ORGANIZATION OF HEALTH CARE FOR HIV- INFECTED PATIENT IN POLAND

CENTRALIZATION

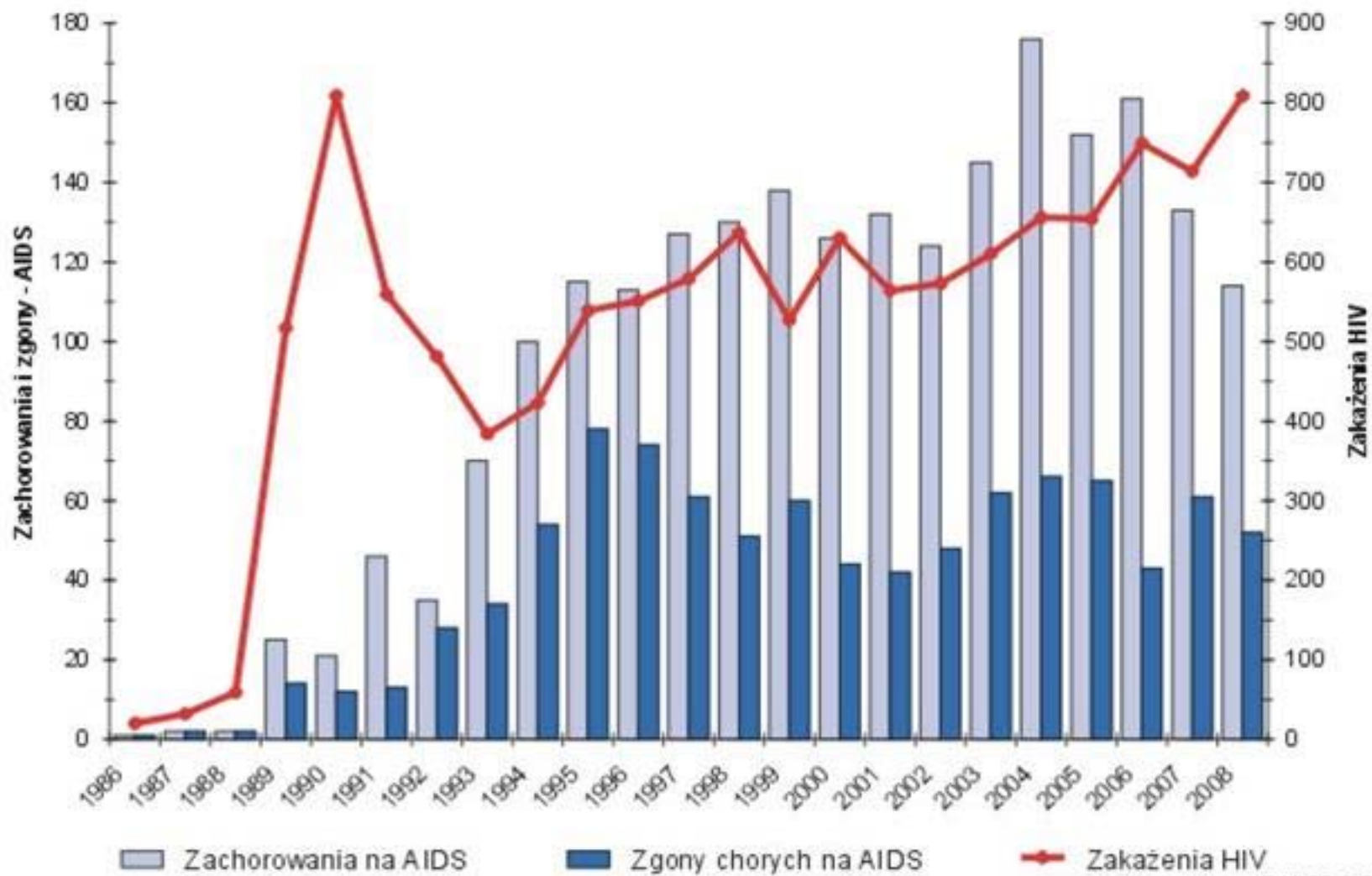
- **15 HIV CENTERS**
- **DRUGS - DISTRIBUTED BY AGENDA
of the Ministry of Health**
- **PATIENTS' VISITS AND LABORATORY
TESTS PAID BY NATIONAL HEALTH
FUND**



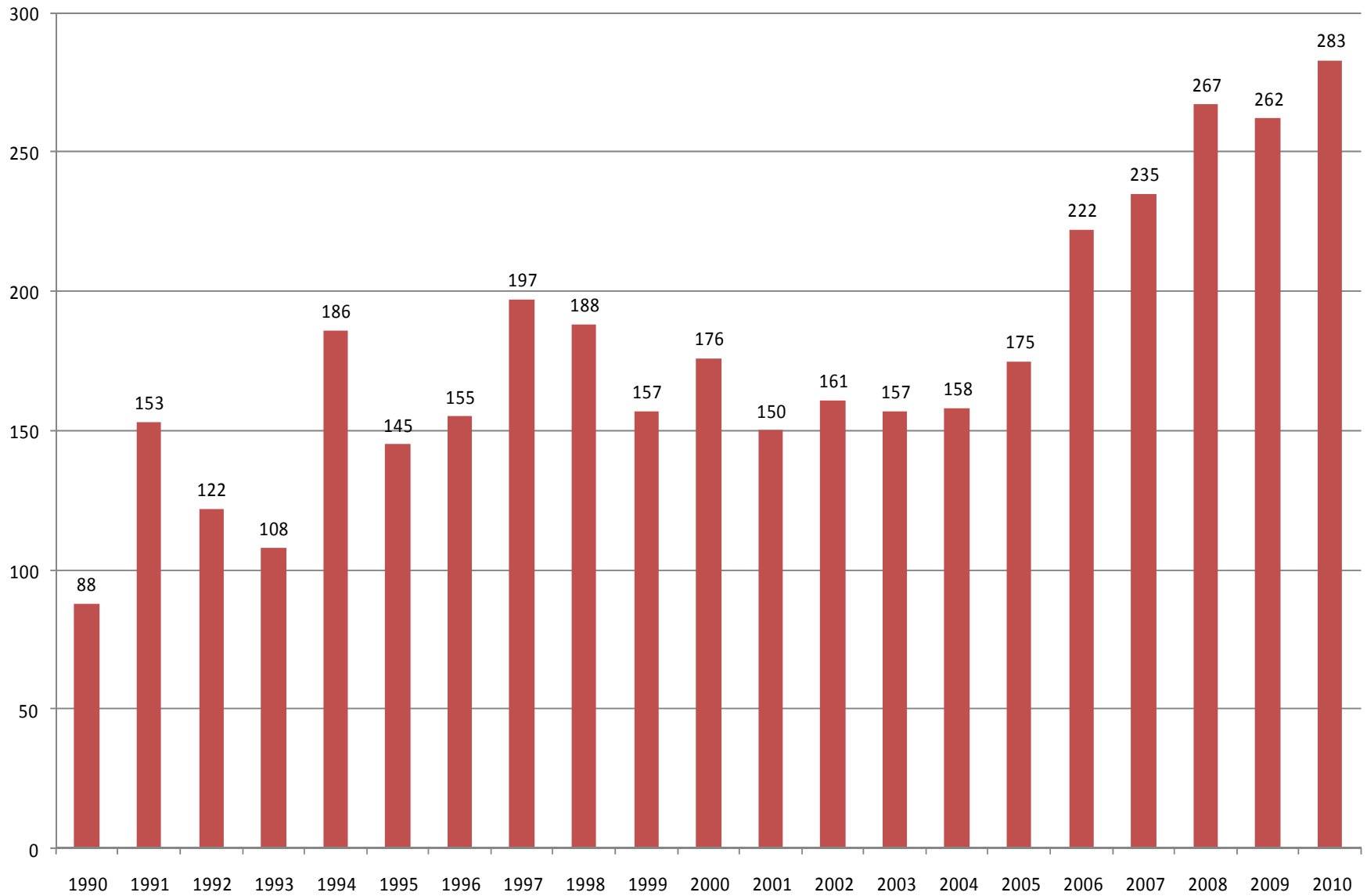
Opieka nad kobietami zakażonymi HIV i dziećmi w latach 2005 – 2010

	2006	2007	2008	2009	2010
Treated arv	3071	3358	3822	4434	4897
children	109	123	126	134	130
Pregnant women	62	73	70	81	67
newborn	41	54	69	69	54

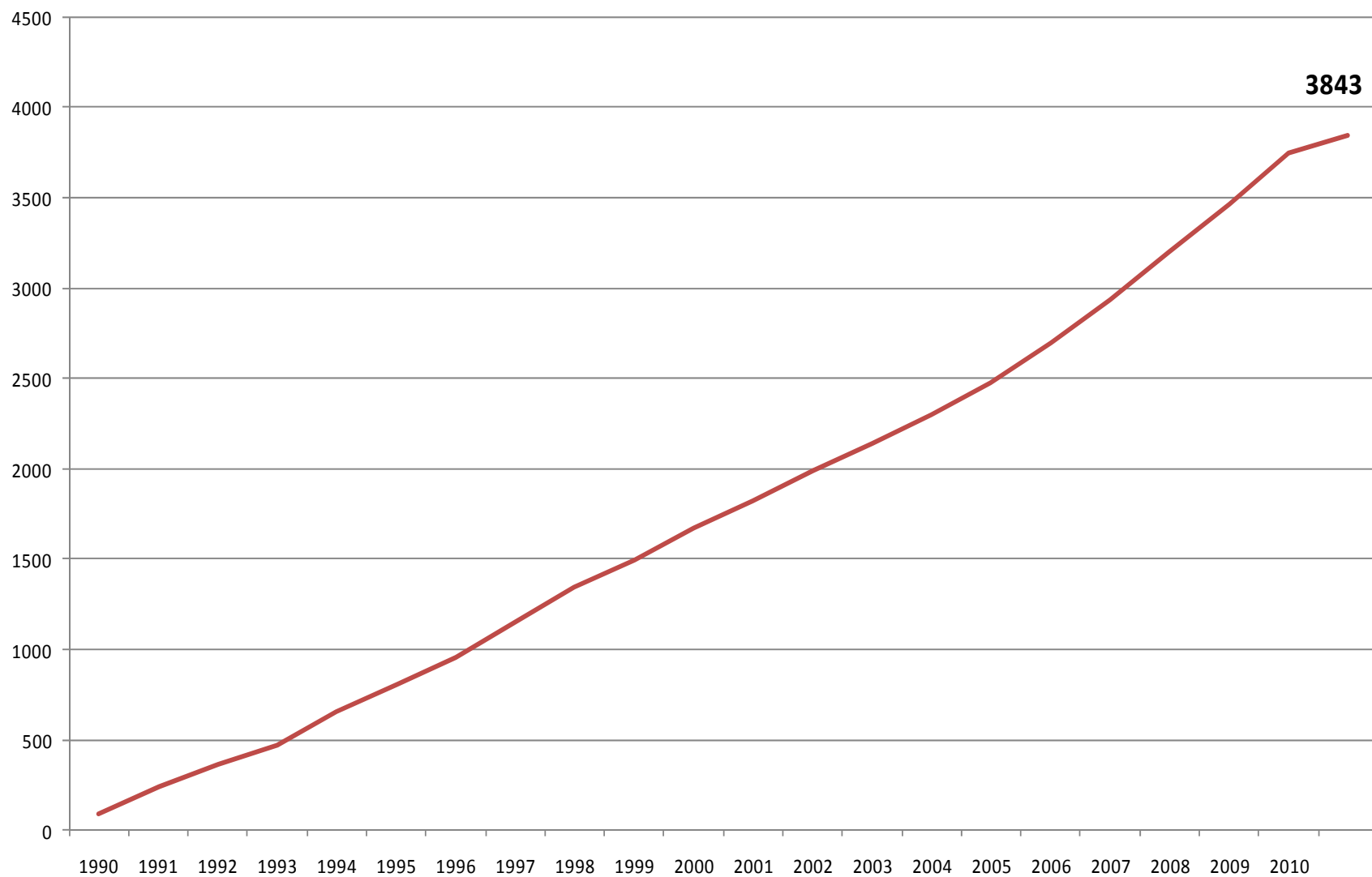
EPIDEMIOLOGICAL SITUATION IN POLAND



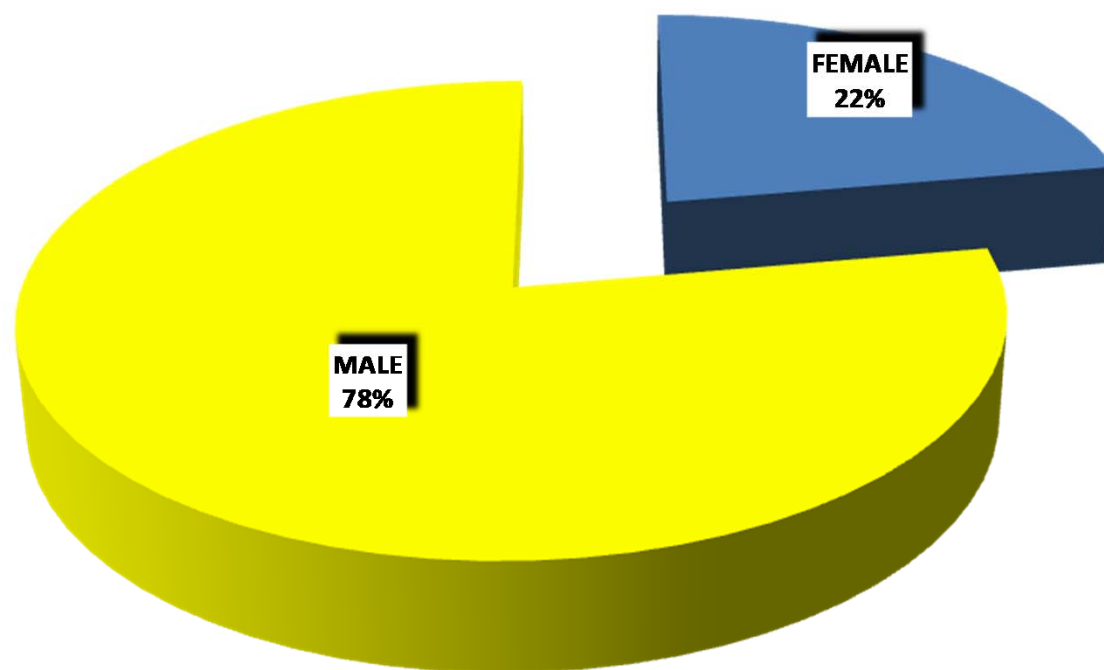
NEWLY REGISTERED PATIENTS IN OUTPATIENT CLINIC IN WARSAW



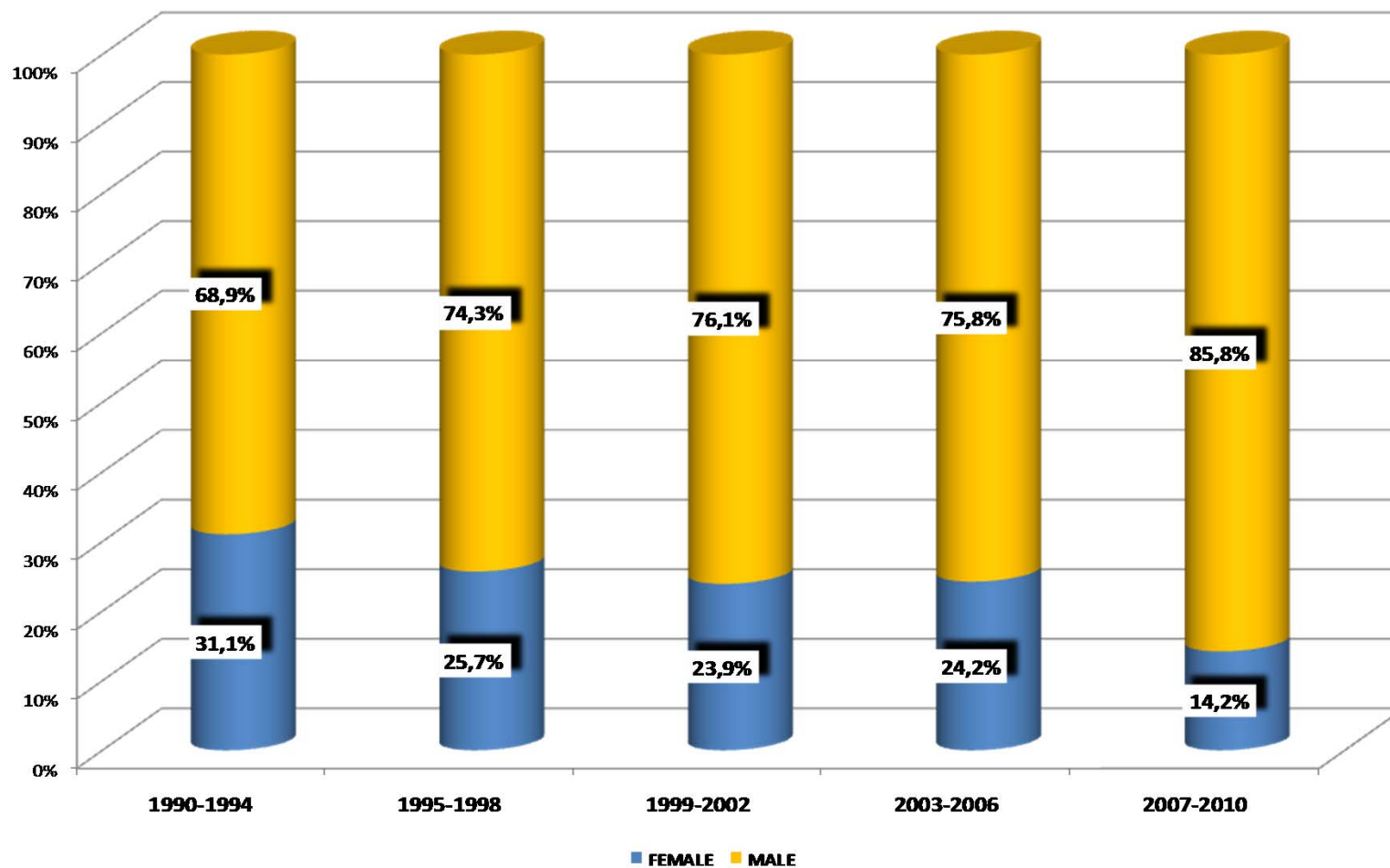
CUMULATIVE NUMBERS OF PATIENTS REGISTERED IN OUT-PATIENT CLINIC IN WARSAW



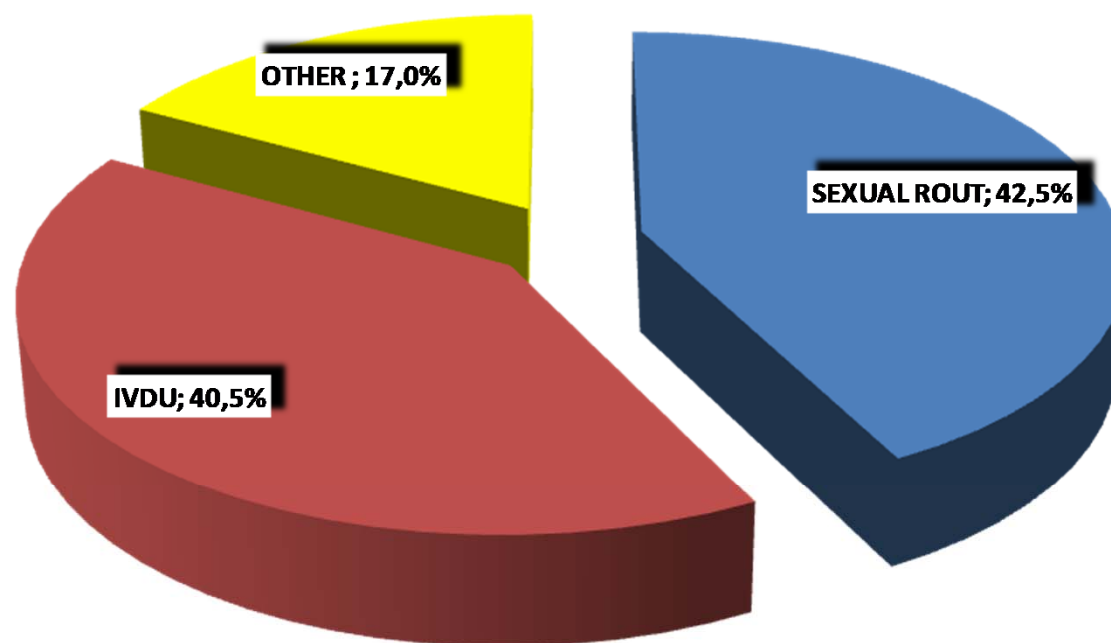
GENDER STRUCTURE OF PATIENTS IN WARSAW



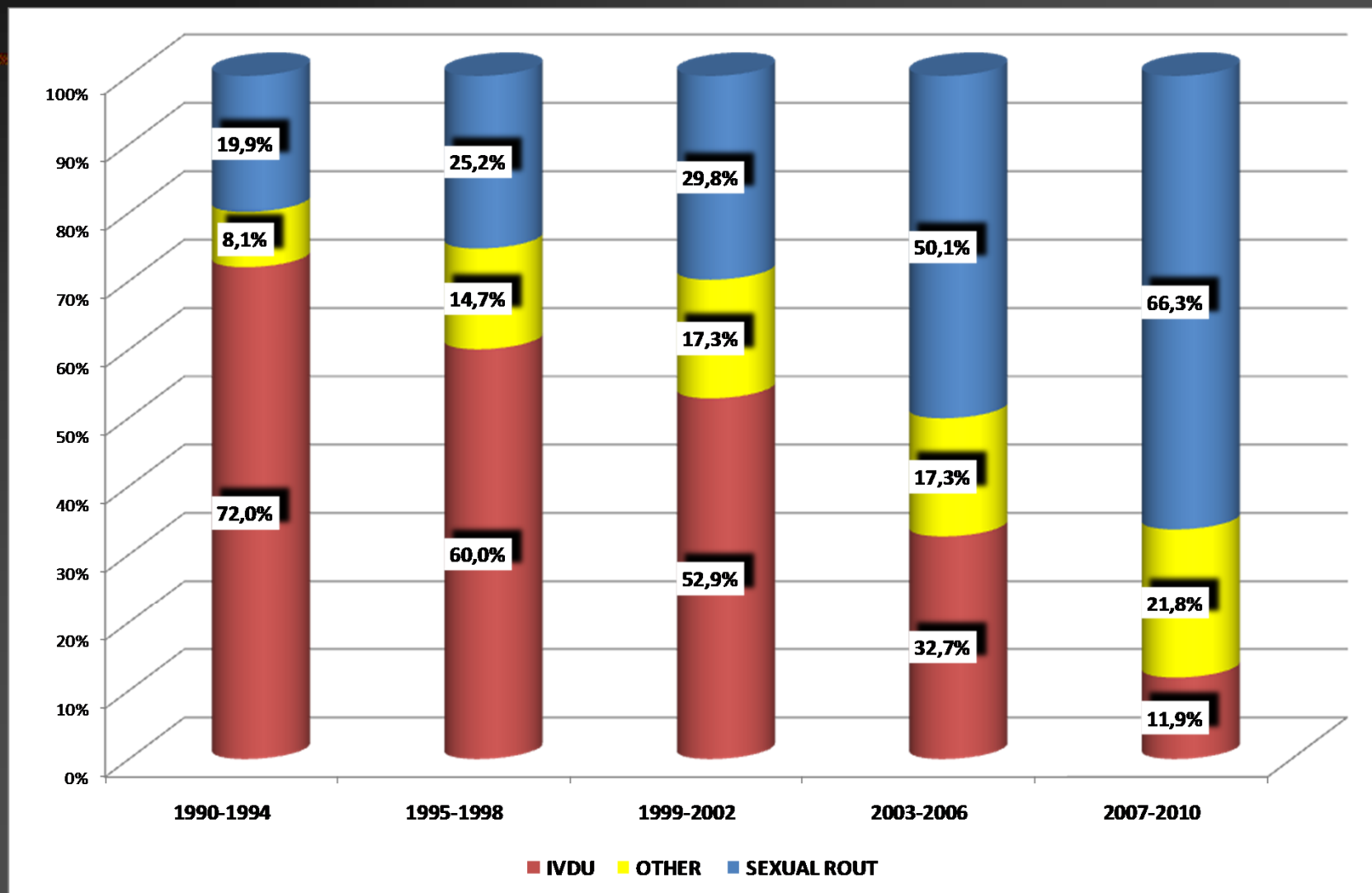
CHANGE OF GENDER STRUCTURE OF PATIENTS IN WARSAW



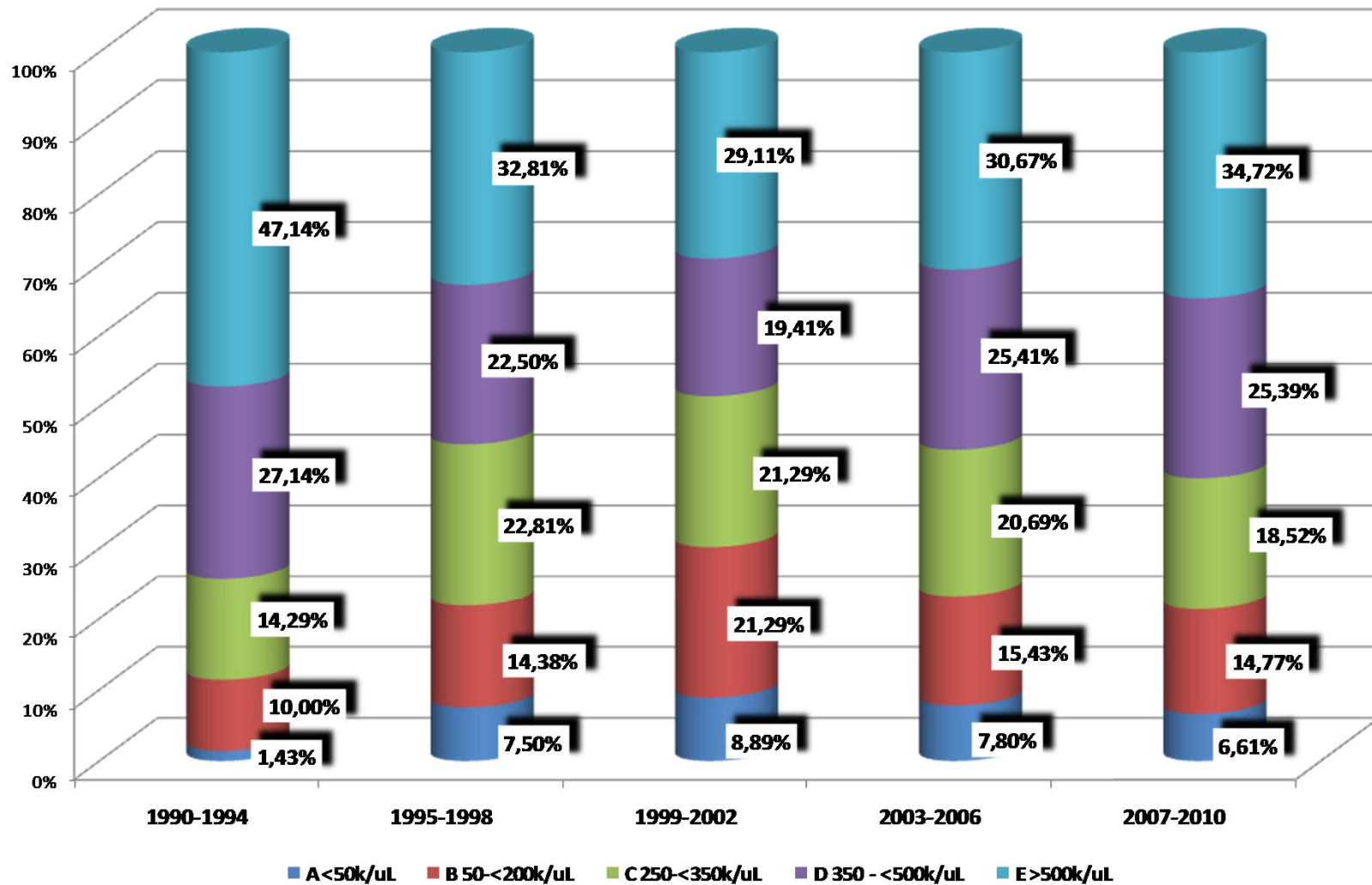
MODE OF HIV INFECTION OF PATIENTS in WARSAW



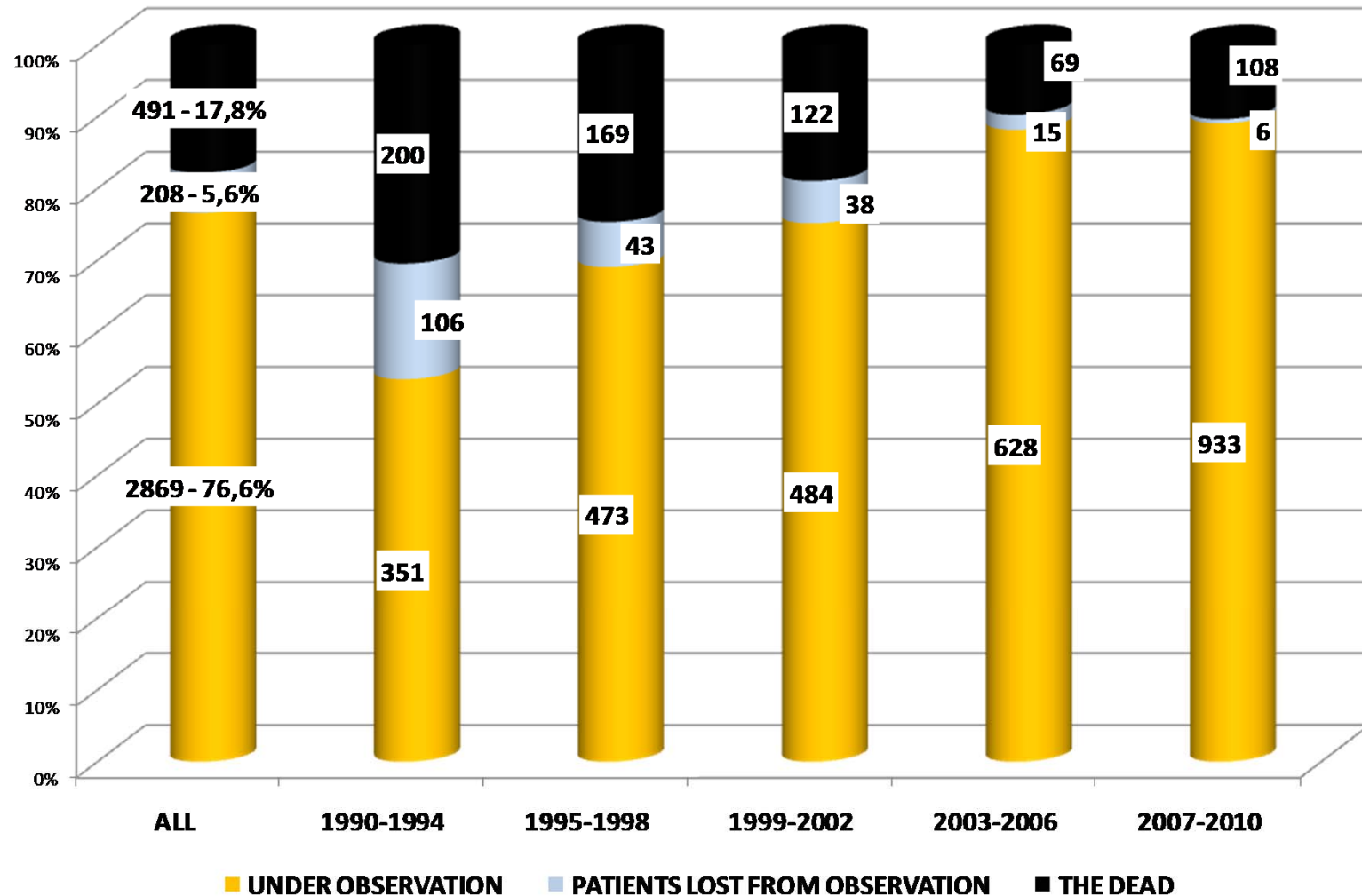
CHANGE OF MODE OF INFECTION IN WARSAW OVER YEARS



CD4 count AT REGISTRATION



AIDS AND NON – AIDS DEATHS



Drugs Available for HIV Therapy in 2012

NRTIs

- Abacavir
- Didanosine
- Emtricitabine
- Lamivudine
- Stavudine
- Tenofovir
- Zidovudine

NNRTIs

- Efavirenz
- Nevirapine
- **Etravirine**

Protease Inhibitors

- Atazanavir
- **Darunavir**
- Fosamprenavir
- Indinavir
- Lopinavir
- Nelfinavir
- Ritonavir
- Saquinavir
- Tipranavir

New Classes

Fusion Inhibitors

- Enfuvirtide

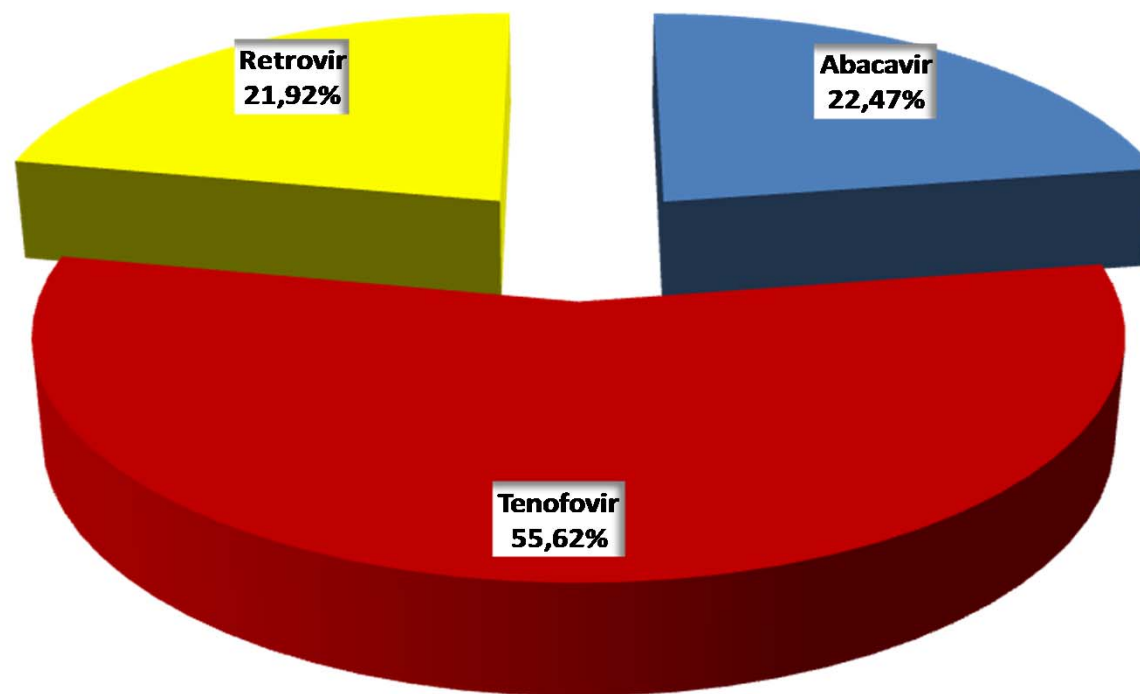
R5 Inhibitors

- Maraviroc

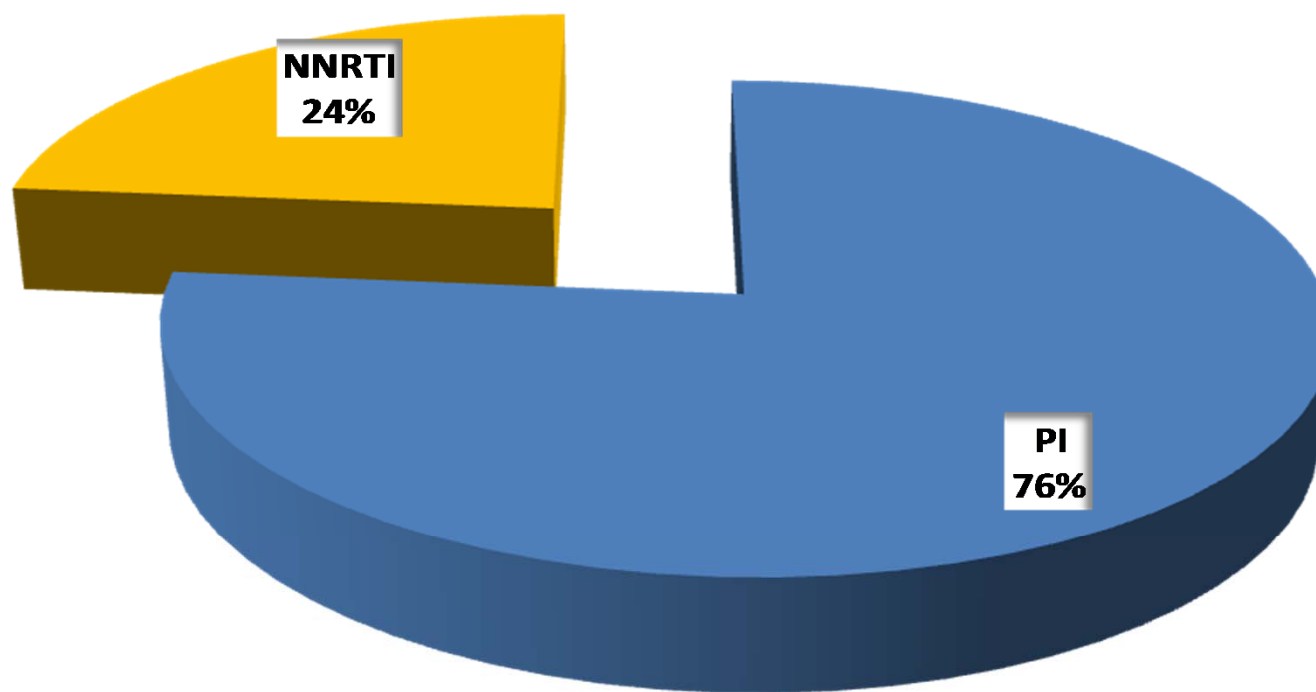
Integrase Inhibitors

- Raltegravir

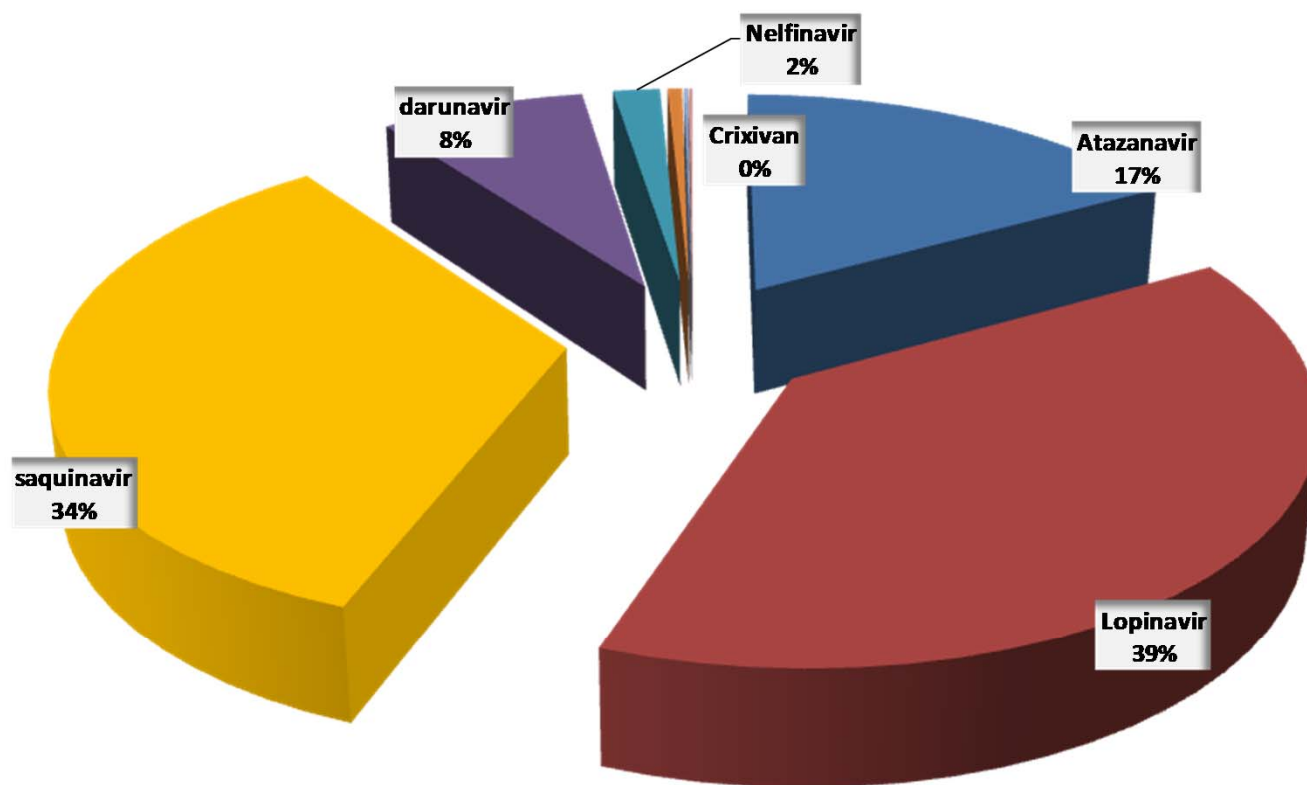
NRTIs in POLCA COHORT – Polish Observational Cohort of HIV and AIDS Patients in Warsaw



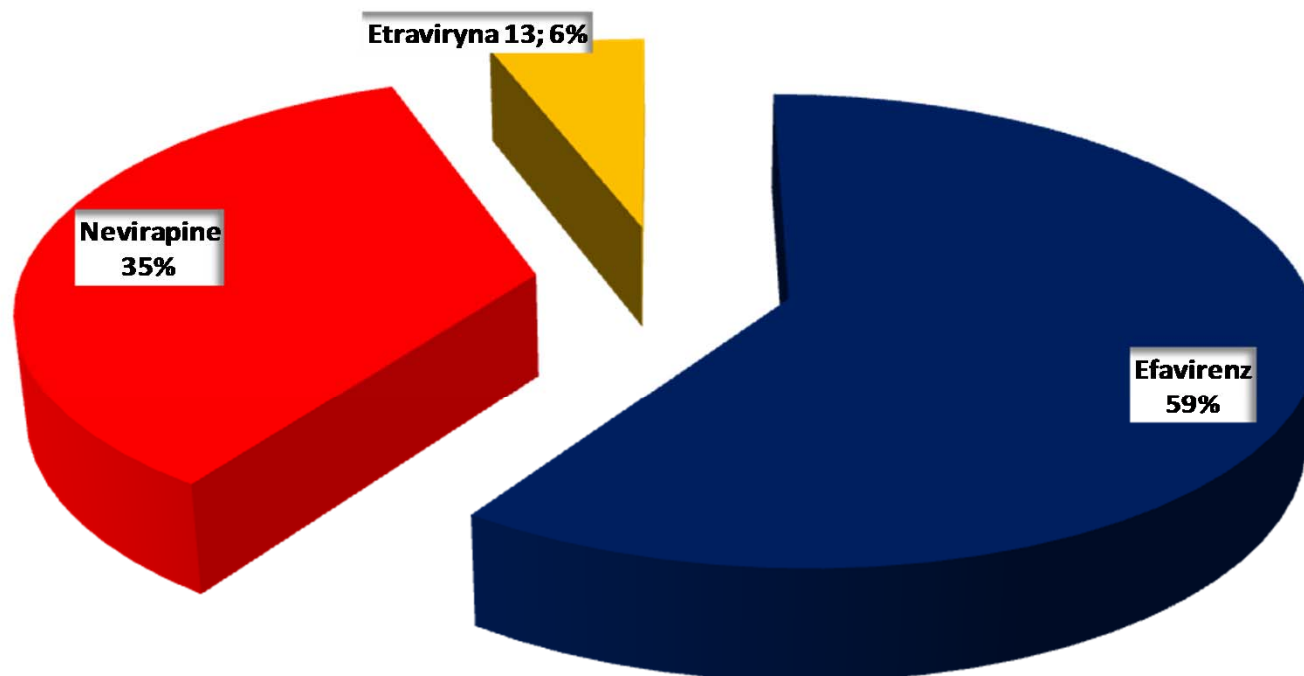
NNRTIs vs PIs from POLCA COHORT – Polish Observational Cohort of HIV and AIDS Patients in Warsaw



PIs in POLCA COHORT – Polish Observational Cohort of HIV and AIDS Patients in Warsaw

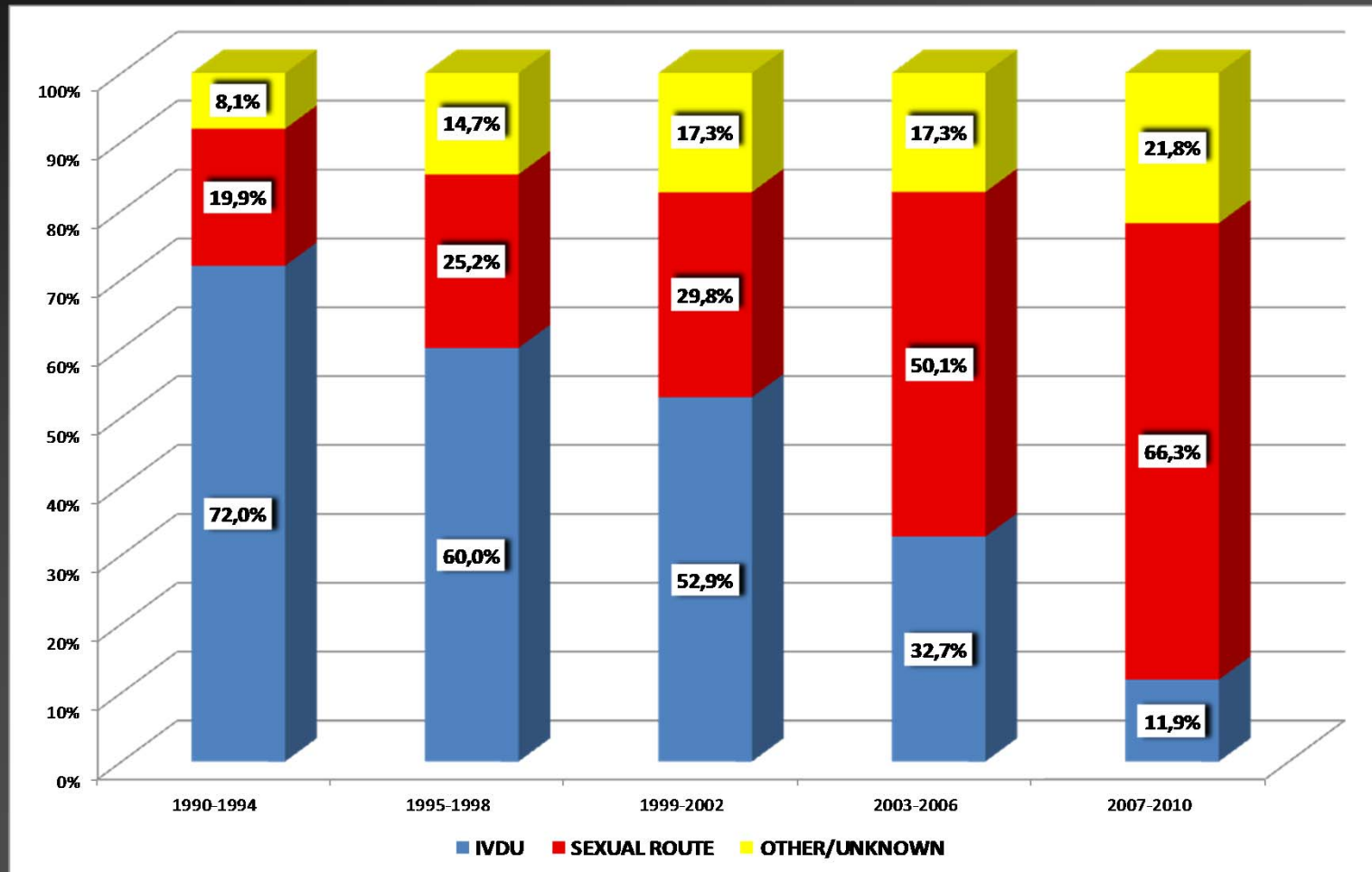


NNRTIs from POLCA COHORT – Polish Observational Cohort of HIV and AIDS Patients in Warsaw

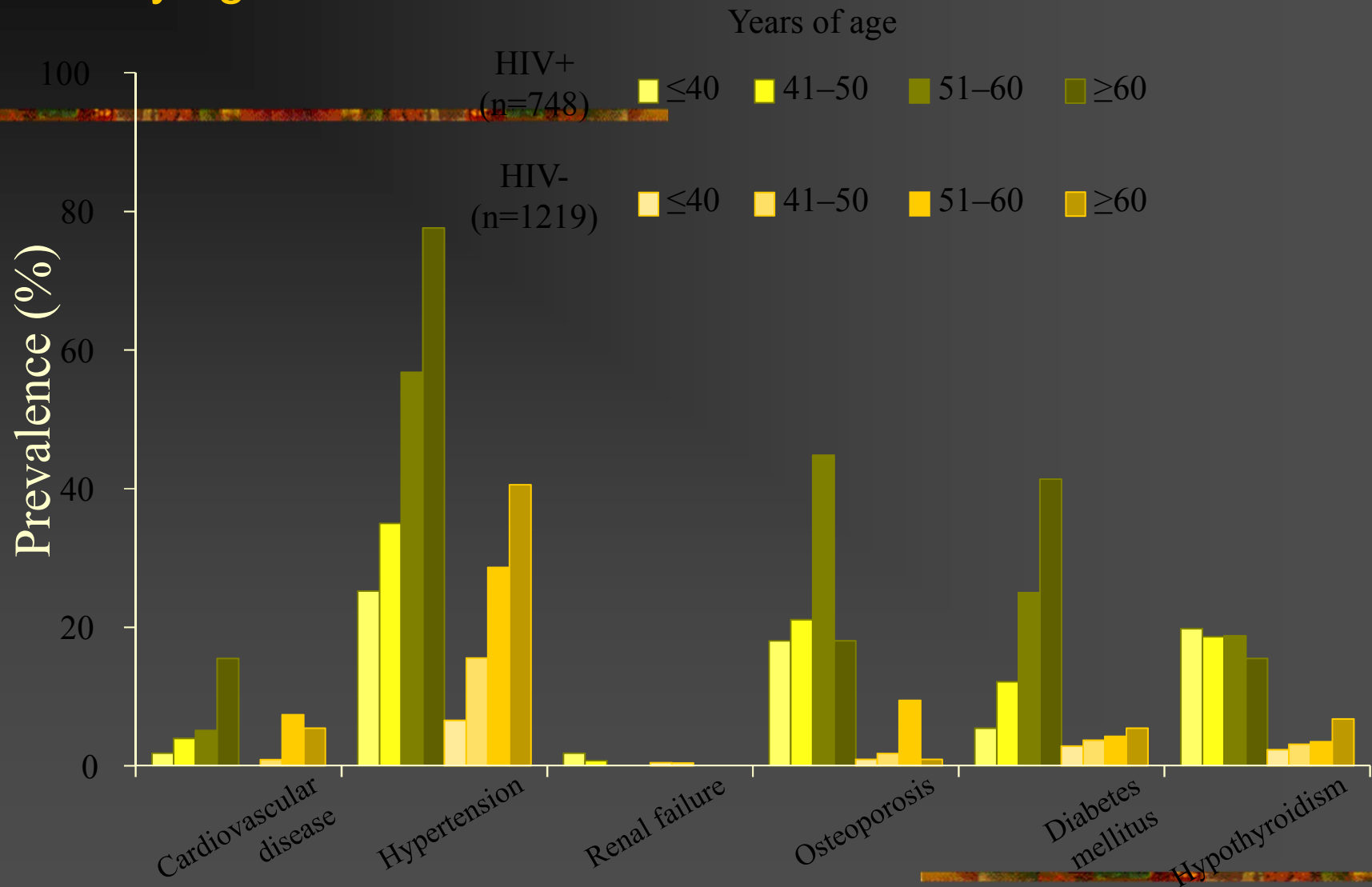


Changes in HIV transmission mode in POLAND over time

Data from Polish Observational Cohort of HIV Patients - POLCA



Prevalence of non-infectious co-morbidities by age and HIV serostatus



ORGANIZATION OF HEALTH CARE FOR HIV- INFECTED PATIENT IN POLAND

■ Problems

- limit of expenditure (800€ /per month)
- New strategy
 - generics ?
 - monotherapy ?
 - dual therapy ?