

**THE RESULTS OF HIV-INFECTION
SURVEILLANCE IN IRKUTSK REGION
DURING FIRST TEN YEARS AFTER
START OF EPIDEMIC (1999-2008)**

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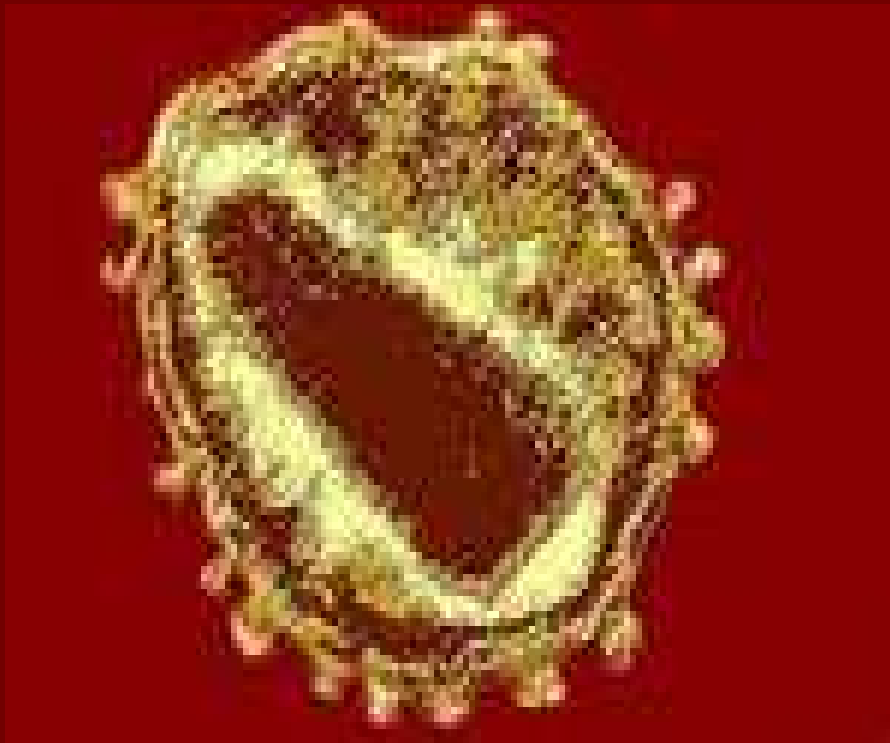
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HIV-infection in Irkutsk region and in Russian Federation

(prevalence per 100.000 of population)

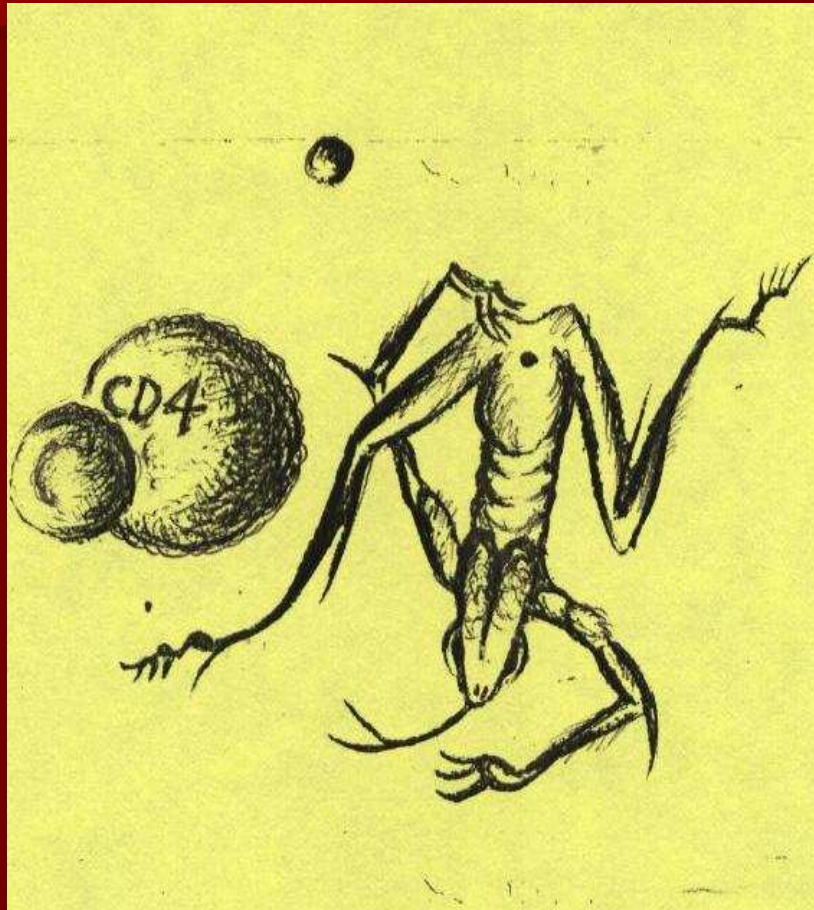
	1999	2008
Irkutsk Region	128.8	723.6
Russian Federation	19.8	128.9

HIV-infection in Irkutsk region



- First case of HIV-infection was confirmed in 1993
- In total 26,4 thousands cases were reported till January,1, 2009
- In 2008 prevalence – 0.72%

START OF THE EPIDEMIC IN IRKUTSK REGION

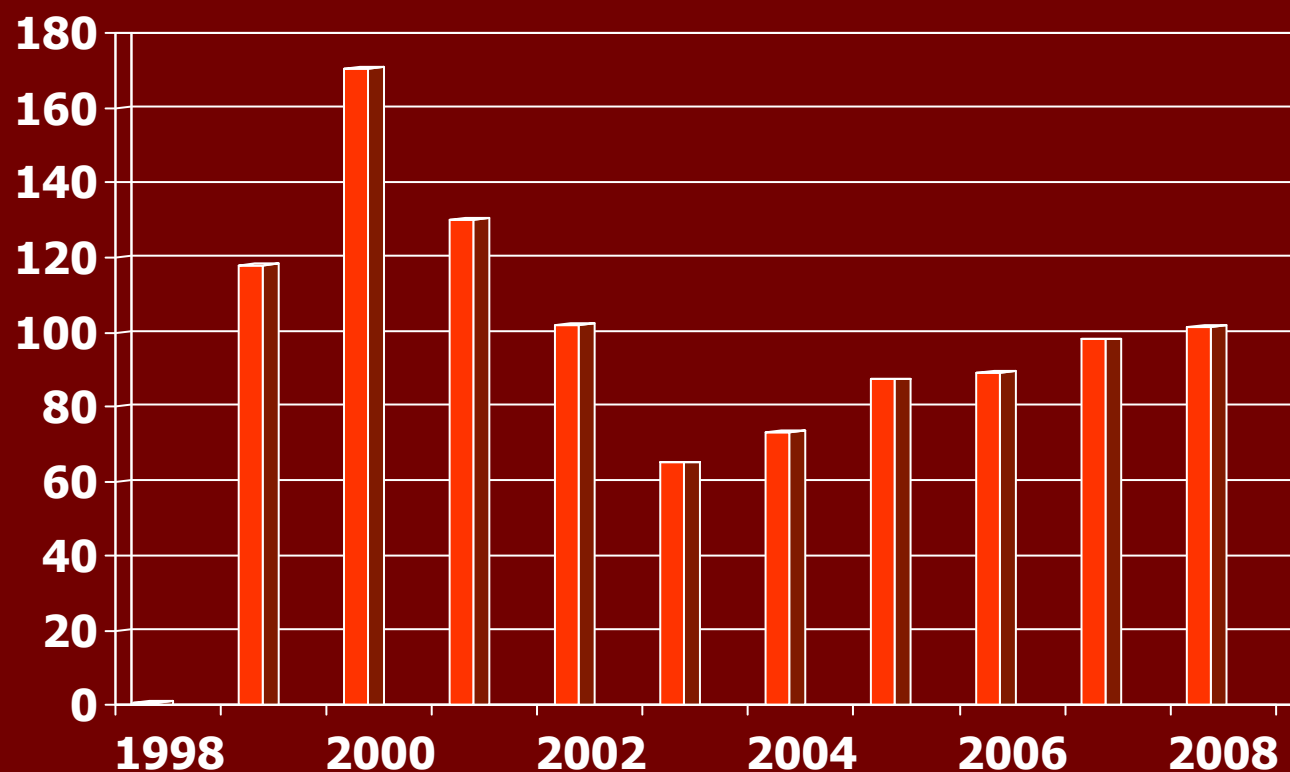


- In 1993-1998 only sporadic HIV-cases were reported ($n=37$, preferably introduced cases)
- In 1999 suddenly 3428 new cases were confirmed (preferably among local drug users - 95%)

*Zaznobova et. al. (2000),
J. Epidemiol., Microbiol. Immunobiol.*

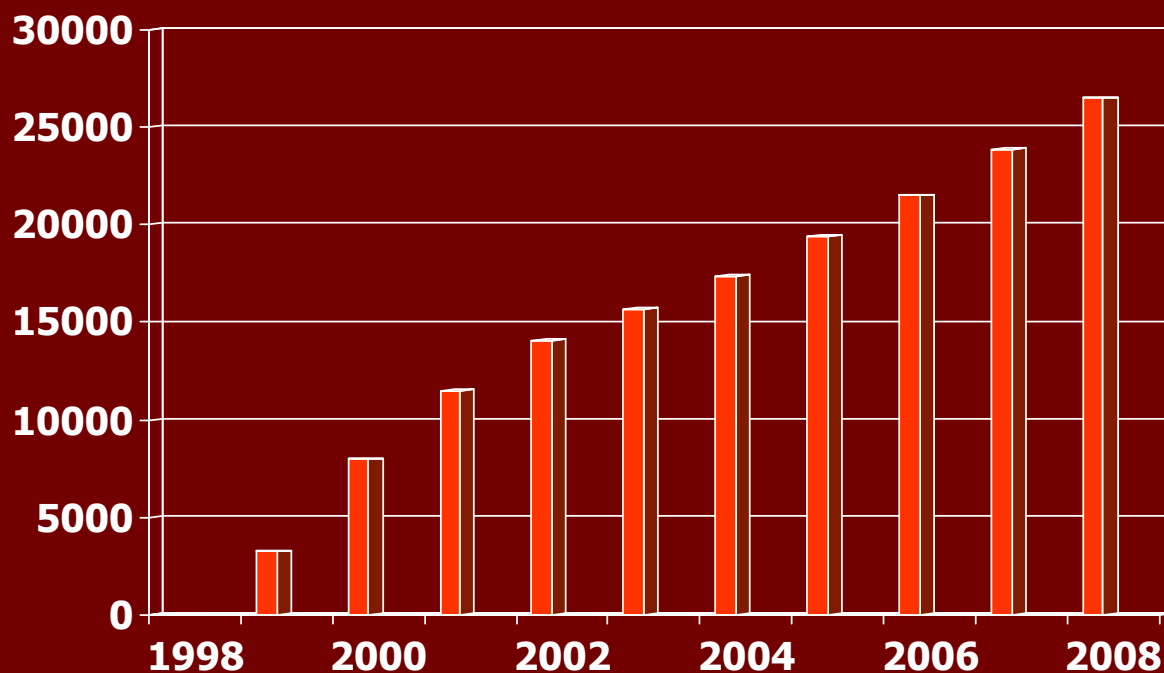
Incidence of HIV-infection in Irkutsk region (index per 100.000, 1999-2008)

In average: ~ 2500 cases per year; ~100.0 per 100.000 local population



Official registration of HIV-infection in Irkutsk region

(total case number 1999-2008, **n=26.454**)

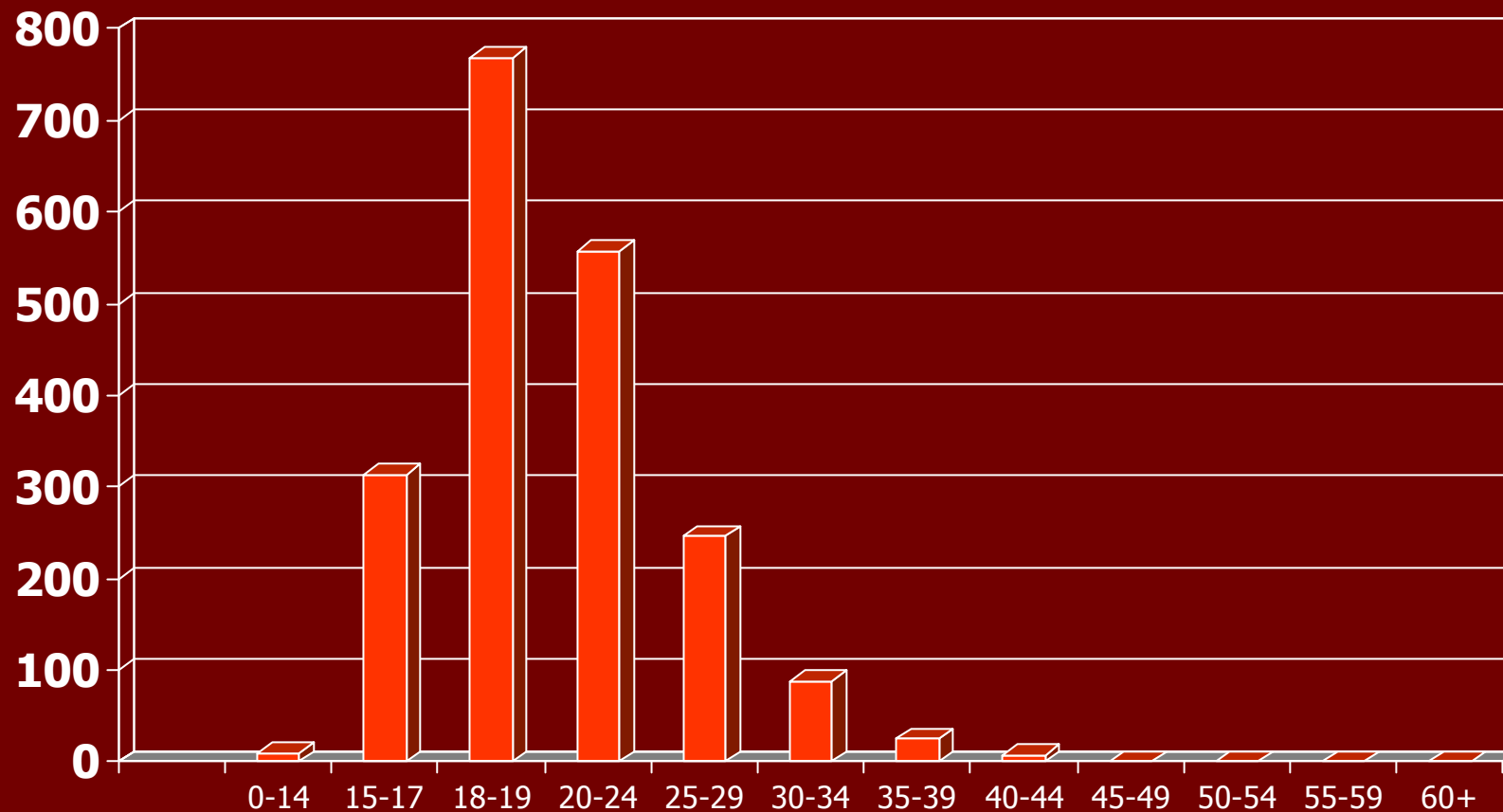


Total case number: who is who?

Total	26.454
Foreign and other regions of Russia	357
Local	26.097
Dead or departure	7.906
Prevalence in local population, 2008	18.191 723.6 per 100.000

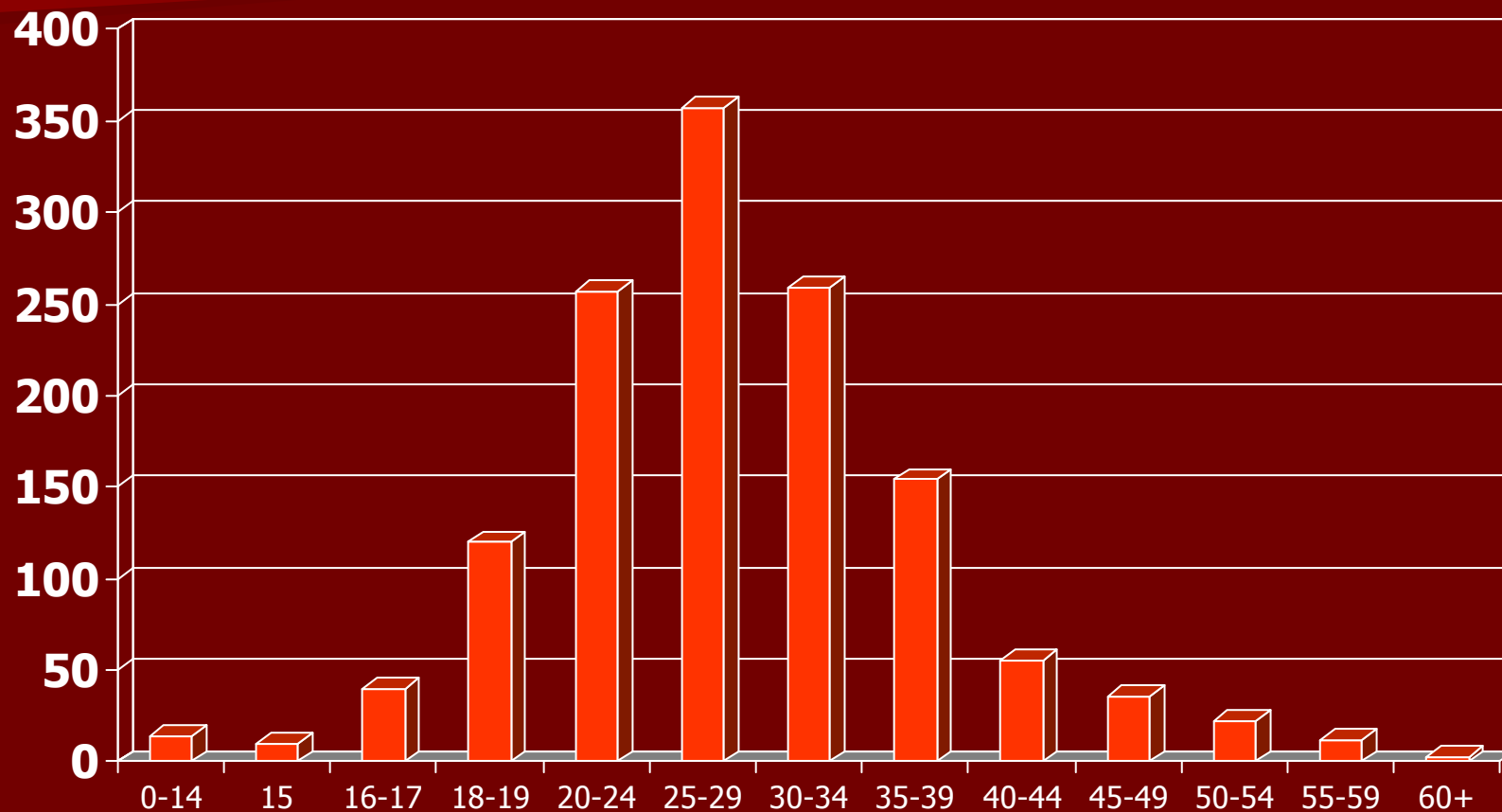
HIV-positive patients in different age groups, 1999

(incidence per 100.000 of age group)



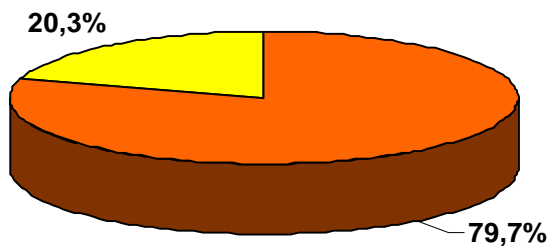
HIV-positive patients in different age groups, 2008

(incidence per 100.000 of age group)

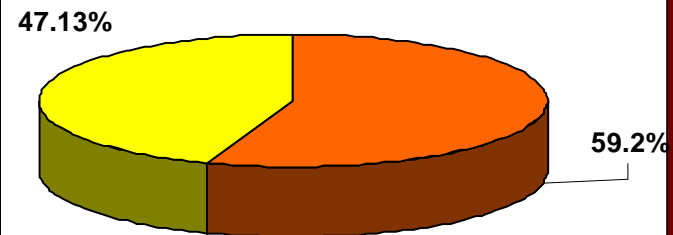


Changing of risk groups (start of epidemic and current situation)

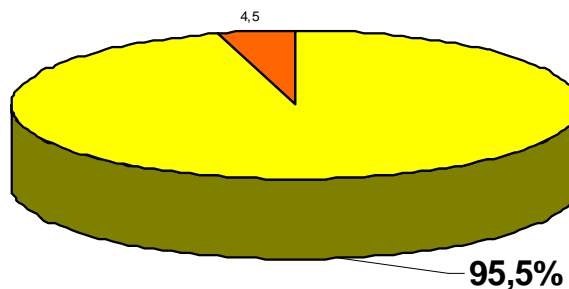
1999 female / male 1:4



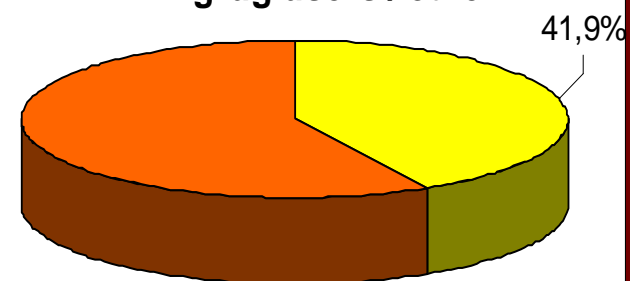
2008 female /male 1:1.1



1999 drug users / other



2008 drug users / other



HIV-infection in different risk groups (recent years)

Groups	HIV+ (%)
Total population	0.7
Drug users	5.8
Pregnant women	1.3
Children were born by HIV-positive mothers	7.4
Patients of TB hospitals	1.2
Patients of somatic hospitals	0.1-1.3

Recent time target groups

- Principal HIV-infection risk group is young people 20-29 years old, male and female in equal proportions
- Principal AIDS vulnerable cohort was born in 1975-1985, preferably male (infected 7-10 years ago)

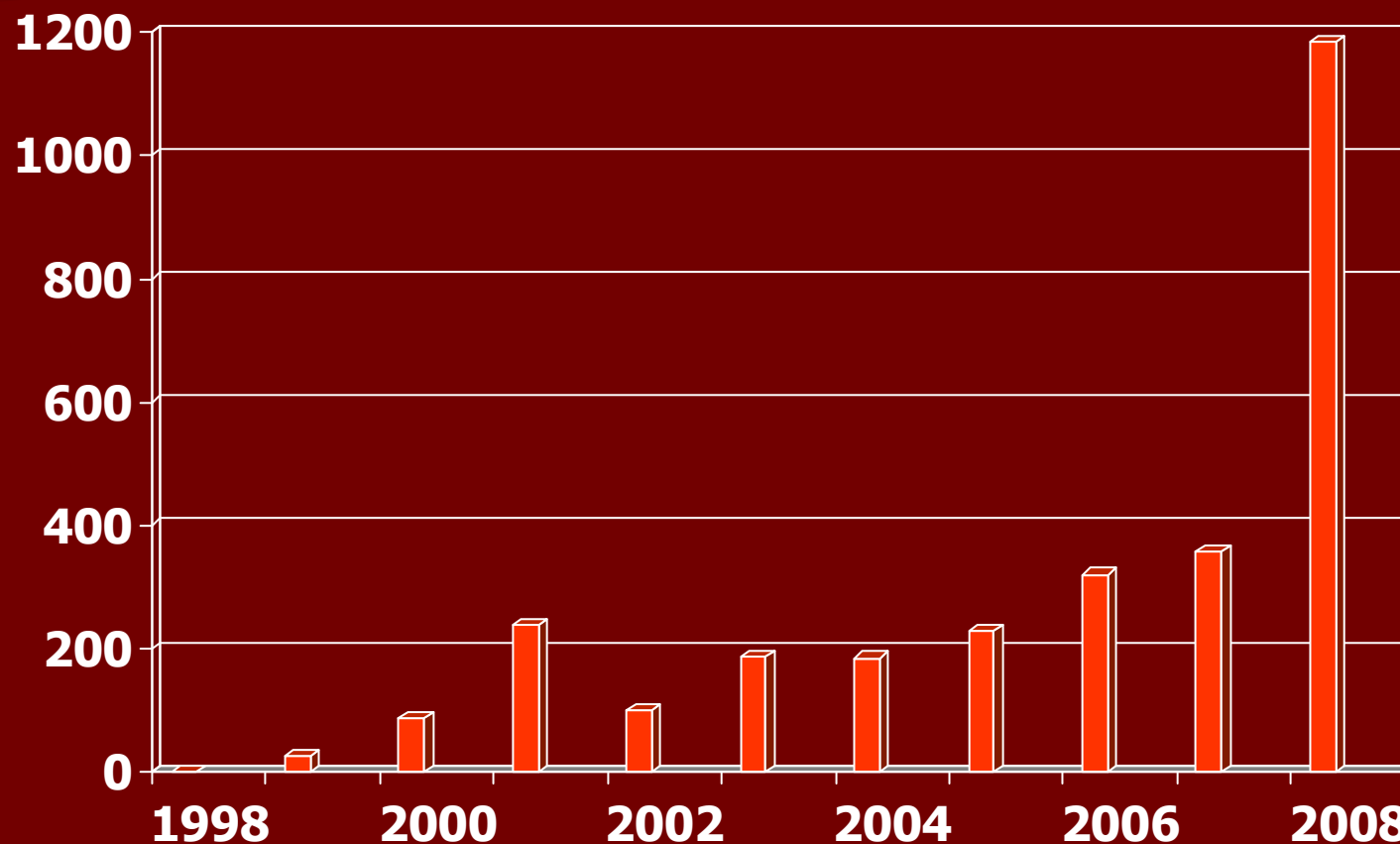
HIV transmission from mothers to new born children

	1999	2008	Total
Children were born by HIV-positive mothers	29	651	3572
HIV-positive children	15 (51.7%)	8 1.2%	263 (7.4%)

Mortality of HIV-positive patients in Irkutsk region

(case number, 1999-2008, official reports)

n= 2910 (11.0%)



Death rate of HIV-positive patients in Irkutsk region

(% among HIV cases confirmed in certain year)



Hospital lethality of HIV-positive patients in Irkutsk regional infectious hospital (2002-2006)

Baynova et al. (2007). Siberian Medical J.,

	2002	2003	2004	2005	2006	total
Patients admitted to the hospital	338	354	479	584	540	2295
Lethality (%)	1,8	5,9	7,3	9,2	14,8	8,6

**Hospital lethality of HIV-positive patients in
Irkutsk regional infectious hospital (2002-2006)**
The principal diagnosis

Baynova et al. (2007). Siberian Medical J.

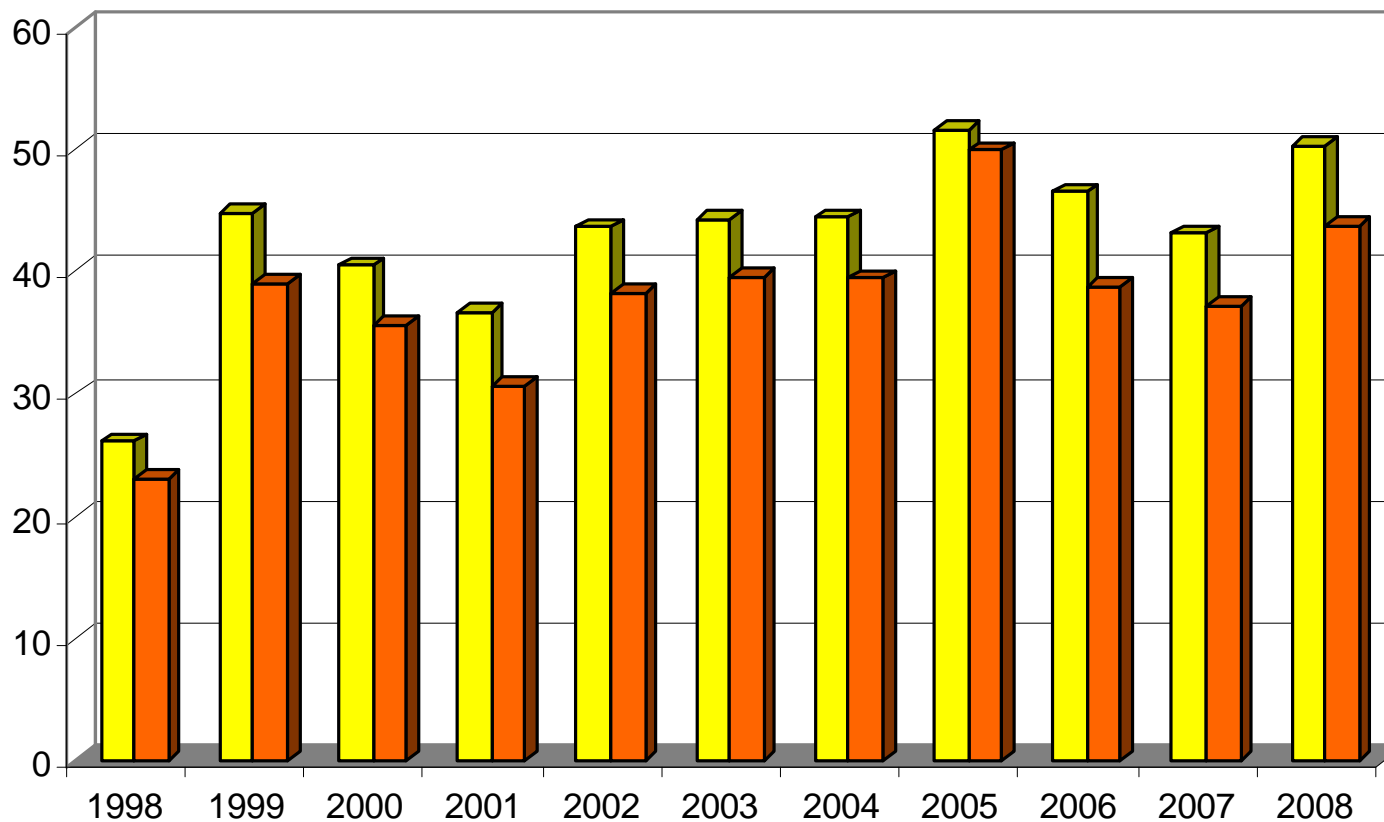
- TB, different forms..... 96 (50,0%)
- Pneumonia.....43 (21,9%)

n=196

Mortality in Irkutsk region

TB and infectious diseases in total

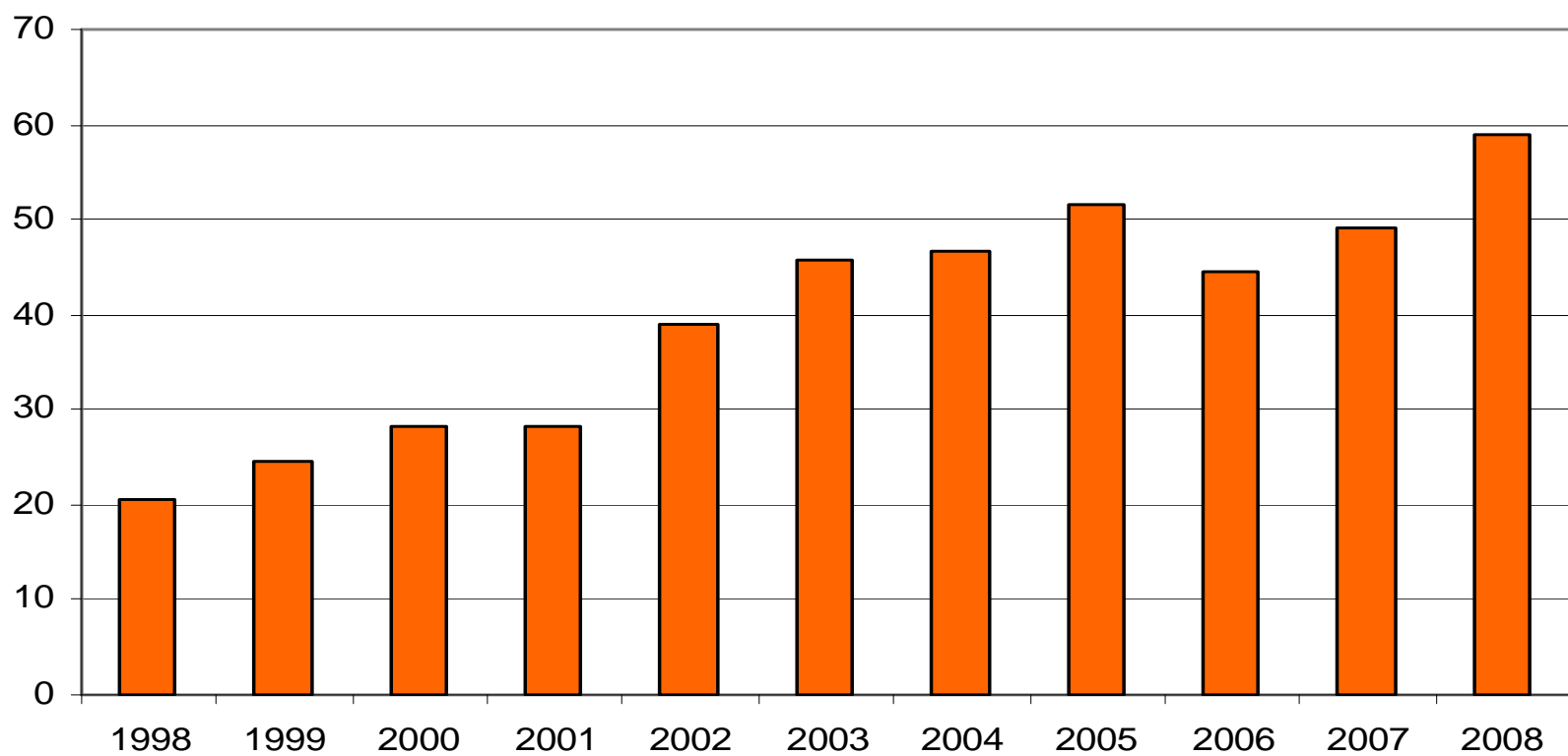
(index per 100.000 of population)



Mortality in Irkutsk region

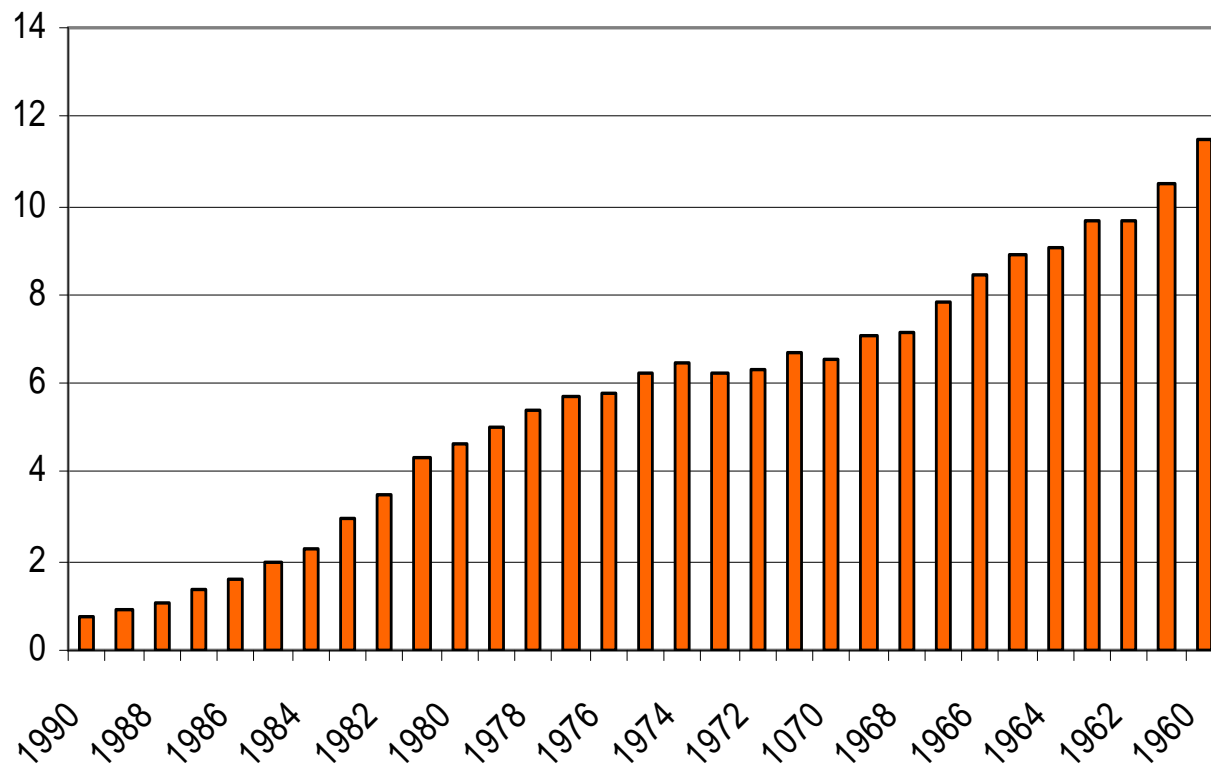
pneumonia

(index per 100.000 of population)



Total mortality in Irkutsk region in cohorts were born in 1960-1990.

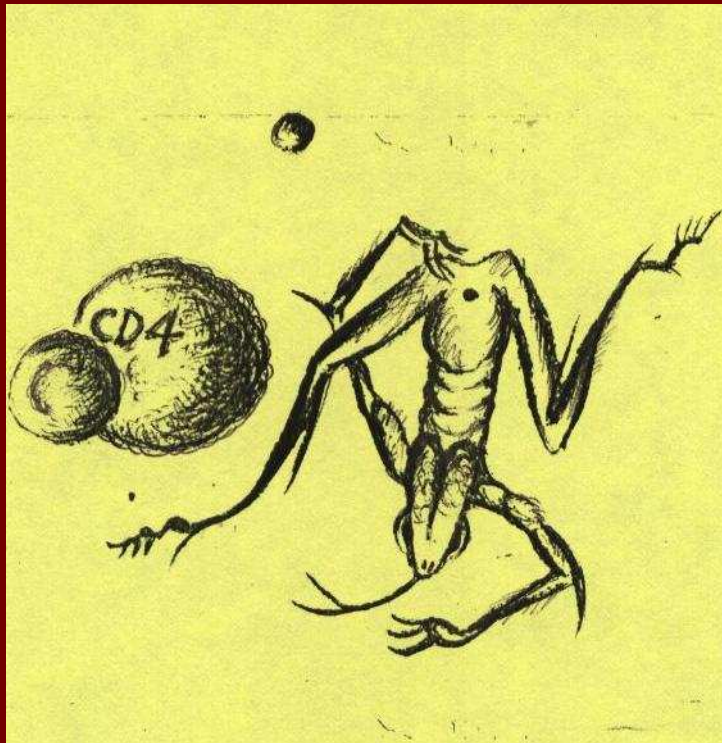
Rate of mortality of each cohort (%)
in general population in 1998-2007



Conclusions

- Ten years after start of epidemic, the HIV-infection, together with other risk factors (drugs, alcohol), had exerted negatively on the population health and demography of Irkutsk region

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