

# **HIV/AIDS Topics in Tokyo**

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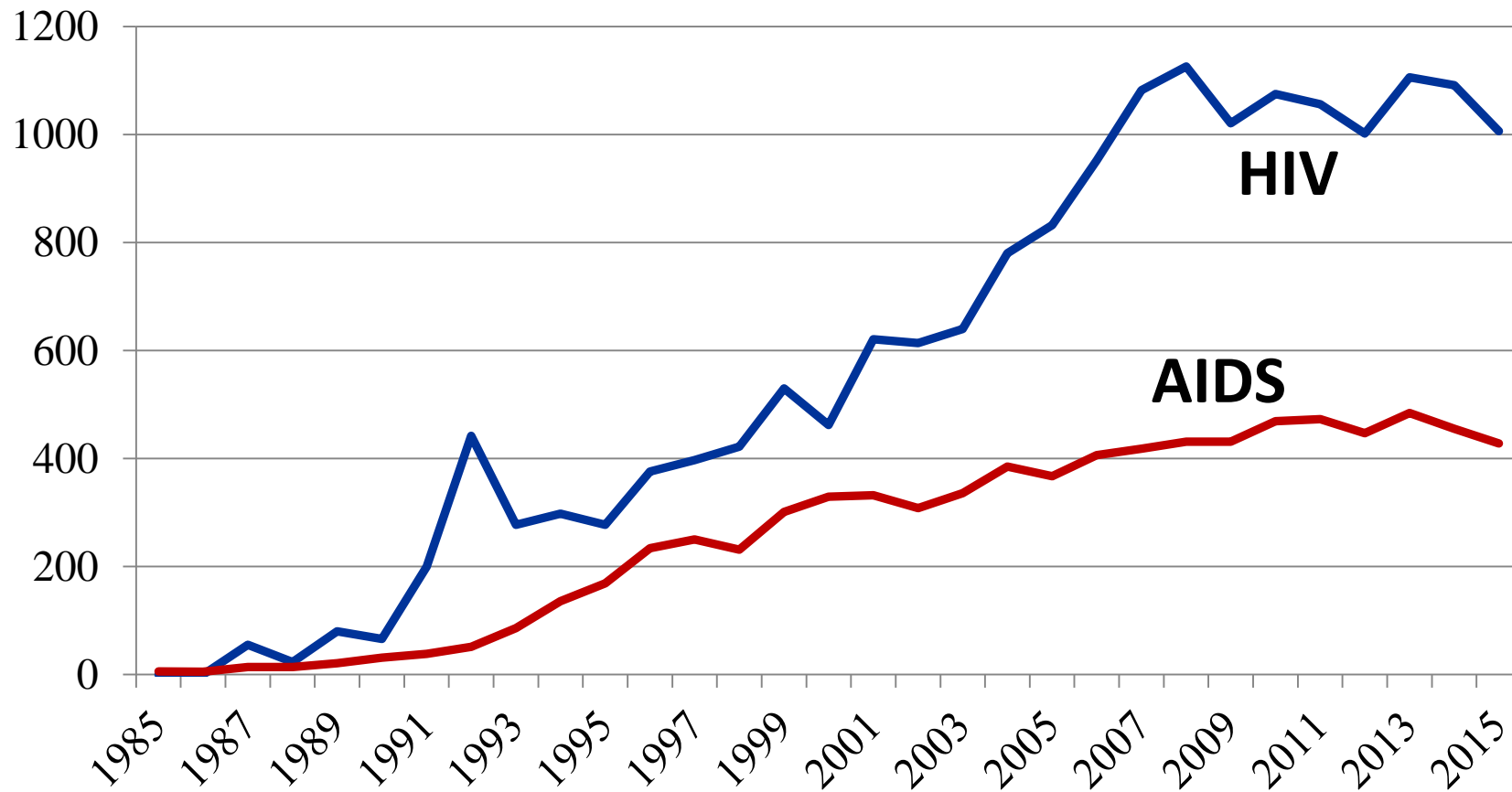
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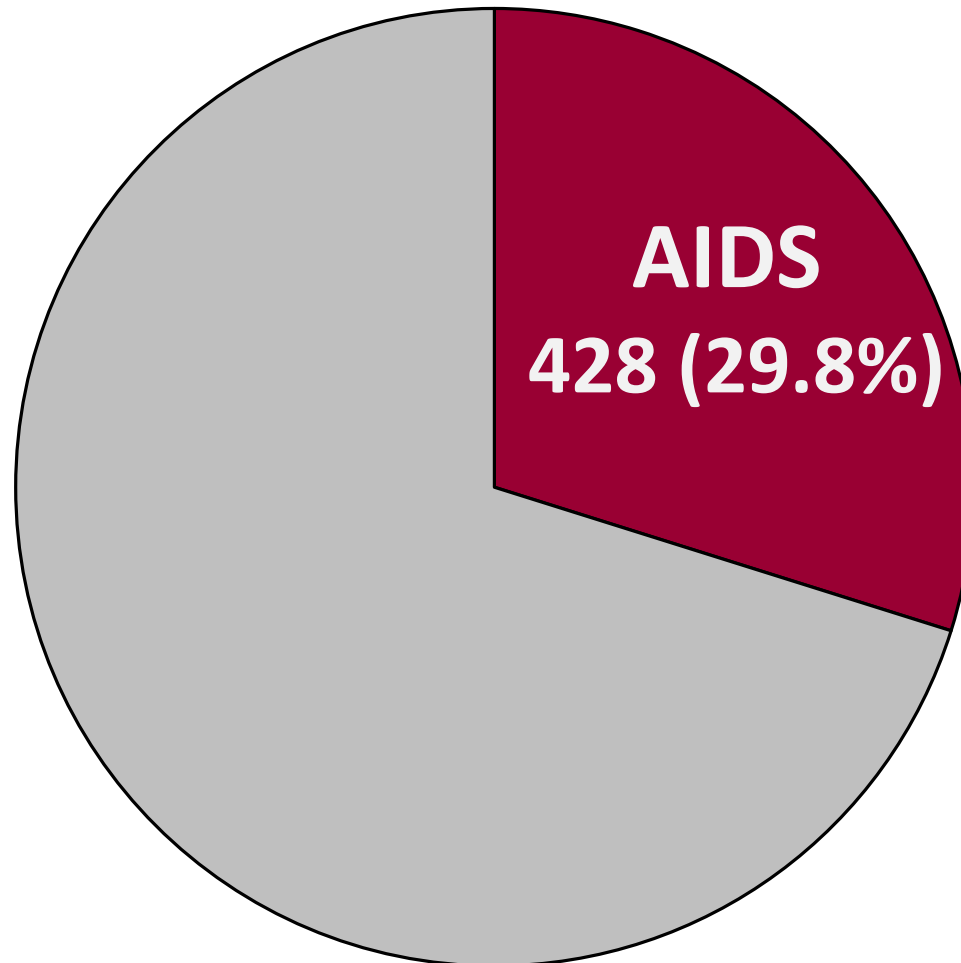
1. Trend of HIV/AIDS in Japan
2. Trend of HIV/AIDS in Tokyo
3. HIV testing facility
4. Antiretroviral Therapy (ART)
5. Aging and Non-AIDS Comorbidities

# **1. Trend of HIV/AIDS in Japan**

# Trend of newly registered HIV/AIDS cases in Japan



**The number of HIV/AIDS cases  
newly registered in Japan (2015) = 1434**



## The number of HIV/AIDS cases (**1434**) by Transmission Category in 2015

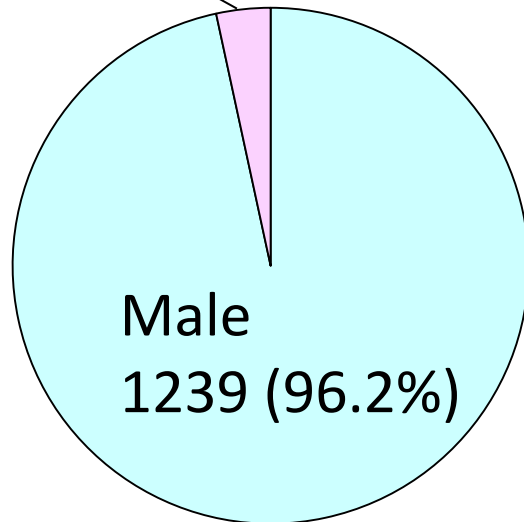
Transmission Category	Cases (%)
Heterosexual sexual contact	291 (20.3%)
<b>Same-sex sexual contact*</b>	<b>941 (65.6%)</b>
Injection Drug User	5 (0.3%)
Mother to Child Transmission	1 (0.1%)
Others	27 (1.9%)
Unknown	169 (11.8%)

\* All cases are MSM (men who have sex with men)

# The number of HIV/AIDS cases (**1434**) by Nationality, Gender in 2015

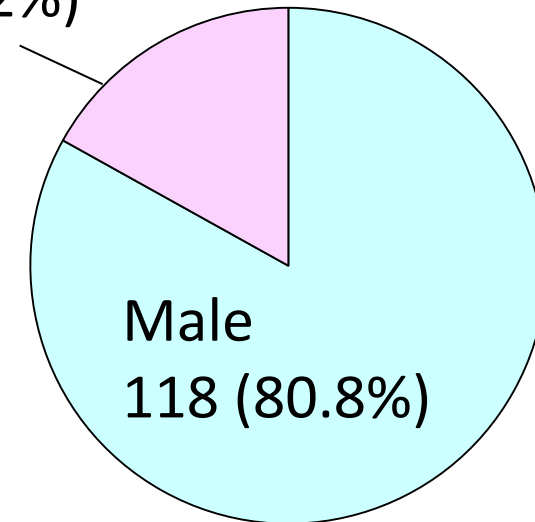
Japanese = **1288**

Female  
49 (3.8%)



Non- Japanese = **146**

Female  
28 (19.2%)



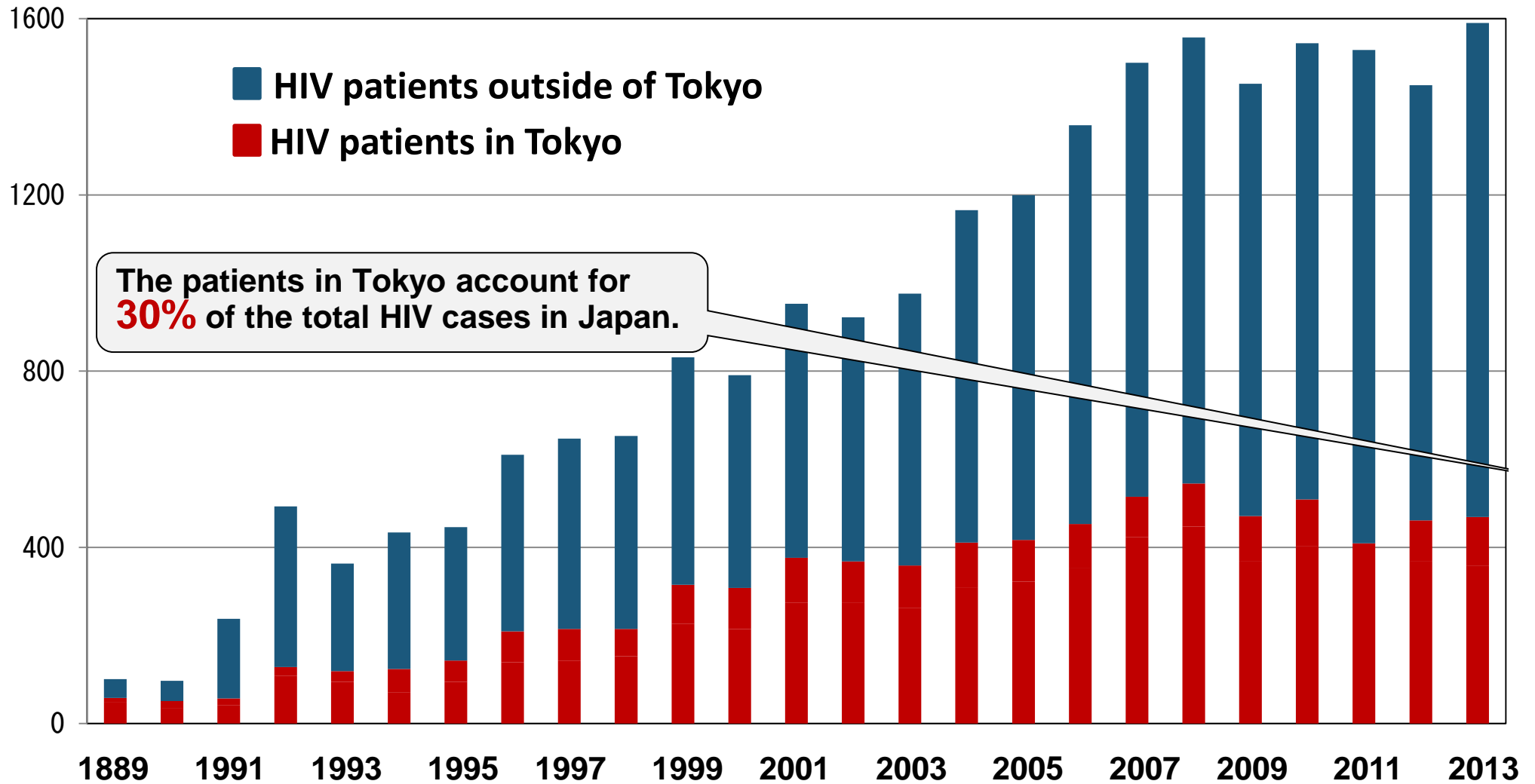
**The number of HIV/AIDS infection among Japanese has been still increasing mainly with MSM.**

**MSM** = men who have sex with men

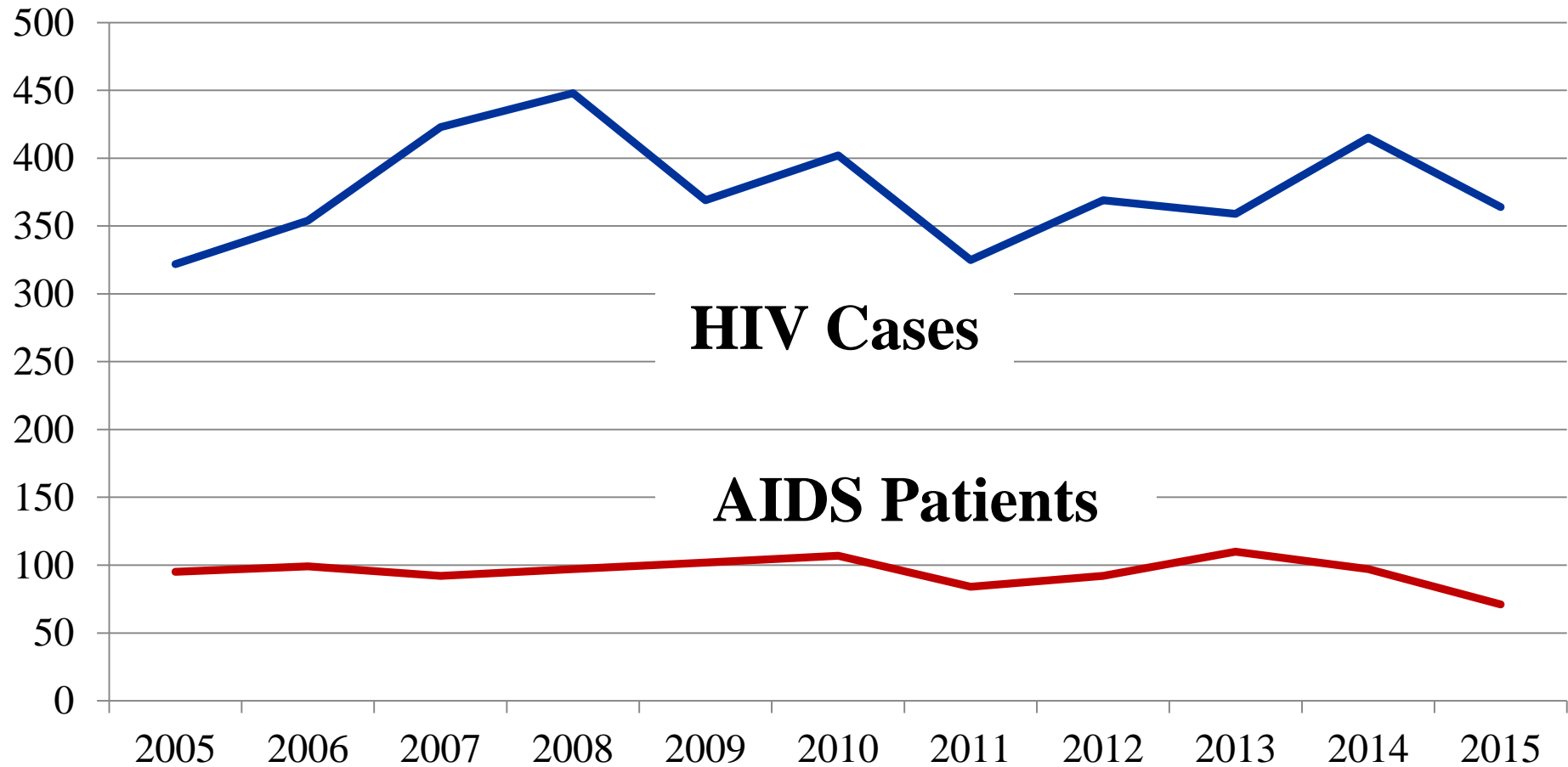


## **2. Trend of HIV/AIDS in Tokyo**

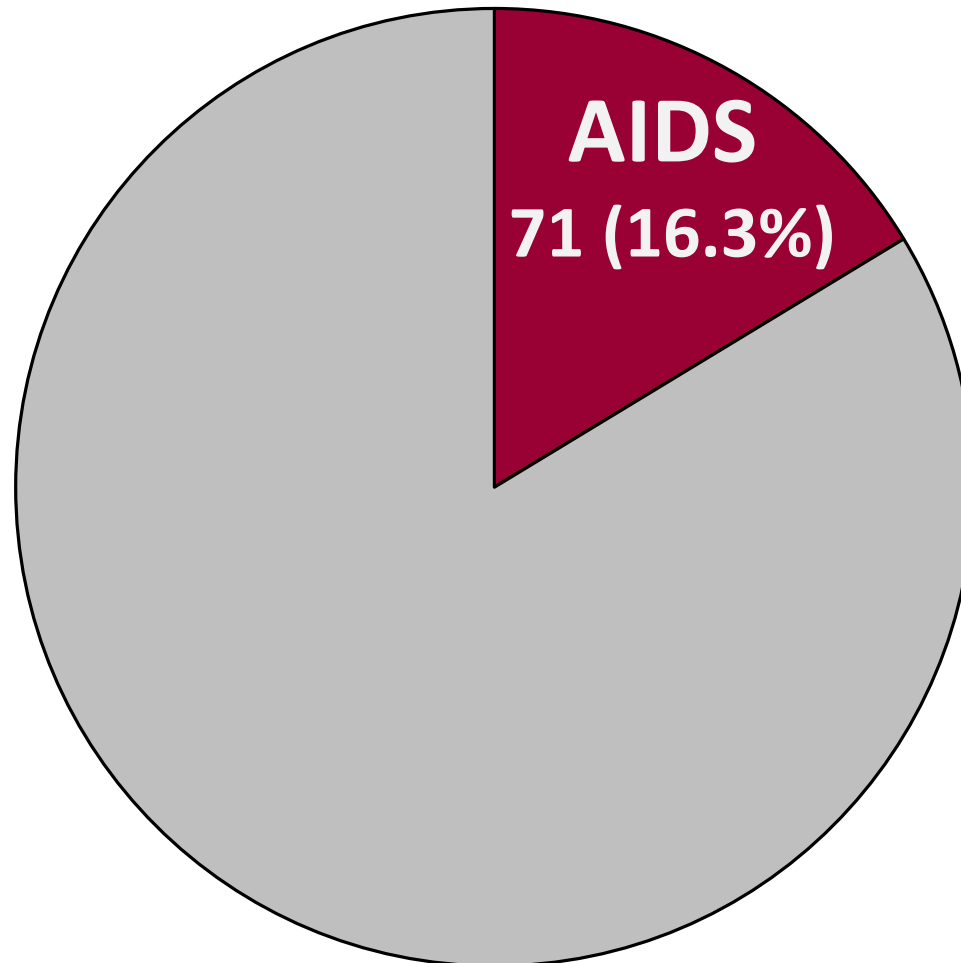
# HIV patients in Tokyo and Japan



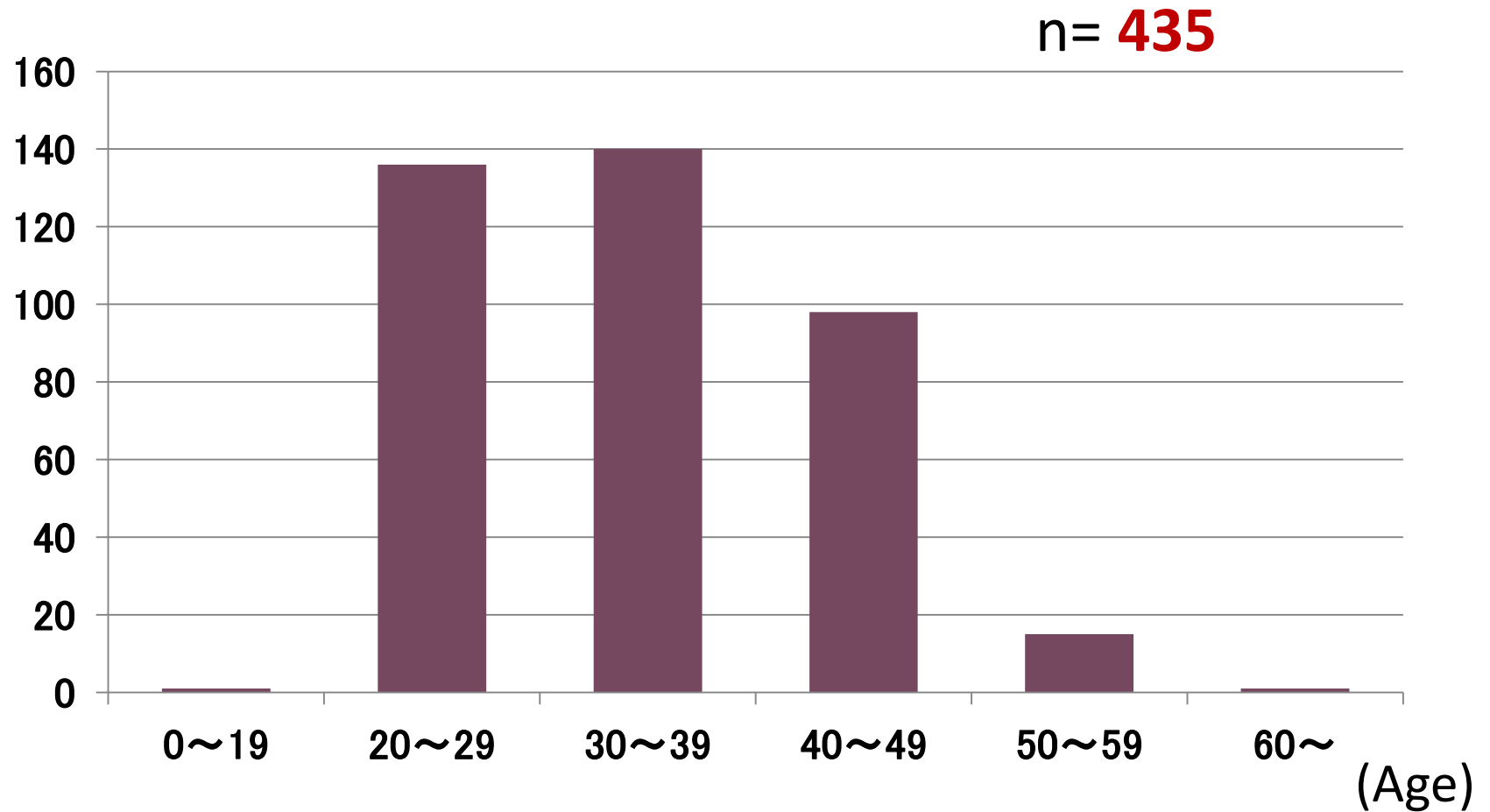
# Trend of newly registered HIV/AIDS cases in Tokyo



**The number of HIV/AIDS cases newly registered  
in Tokyo (2015) = 435**

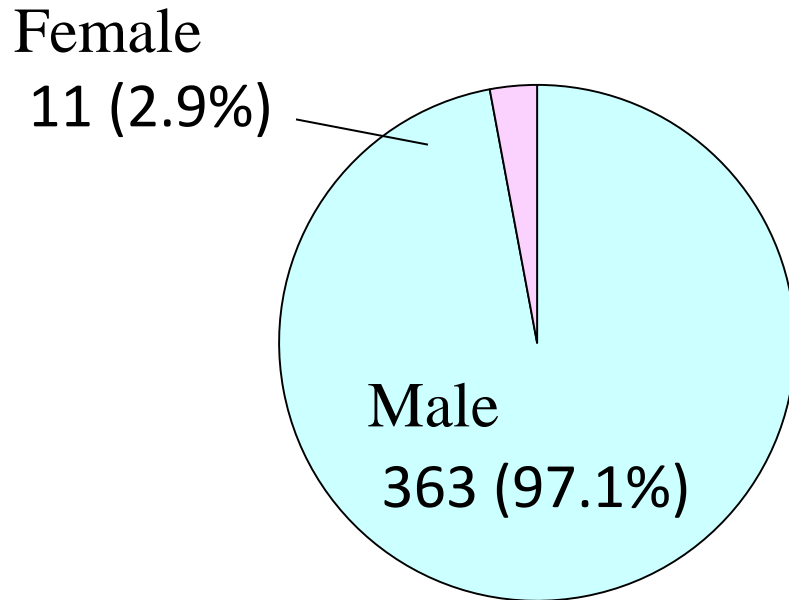


# Age distribution of HIV patients in Tokyo (2015)

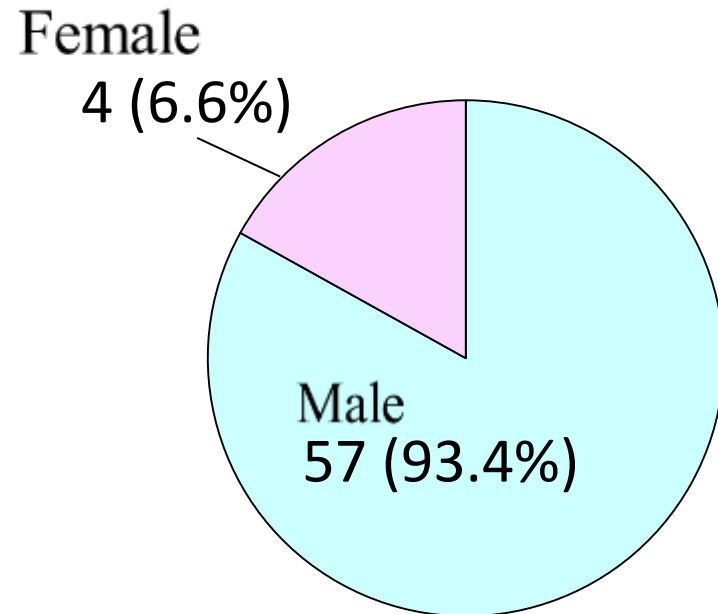


# The number of HIV/AIDS cases (**435**) by Nationality, Gender in Tokyo, 2015

Japanese **374**



Non-Japanese **61**



## **3. HIV testing and facility**

## HIV testing medical facility in Tokyo

### Testing and Counseling facility (Free of charge, anonymous)

- Public Health Centers
- Minami-Shinjuku Testing and Counseling Office

### Hospitals and Clinics

- Core Hospitals (44 Hospitals)
- Other Medical Facilities ( Hospitals and Clinics )

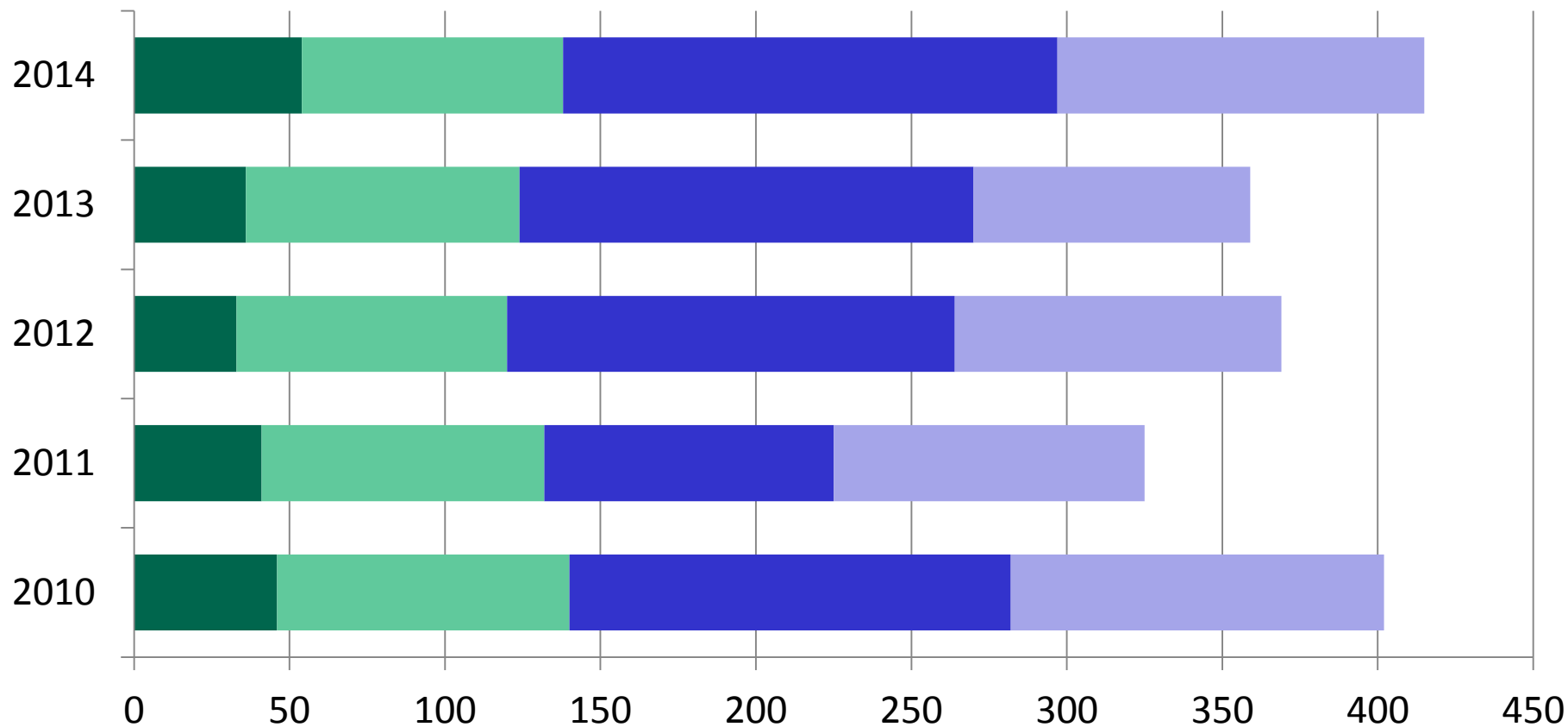


# Minami-Shinjuku Testing and Counseling Office



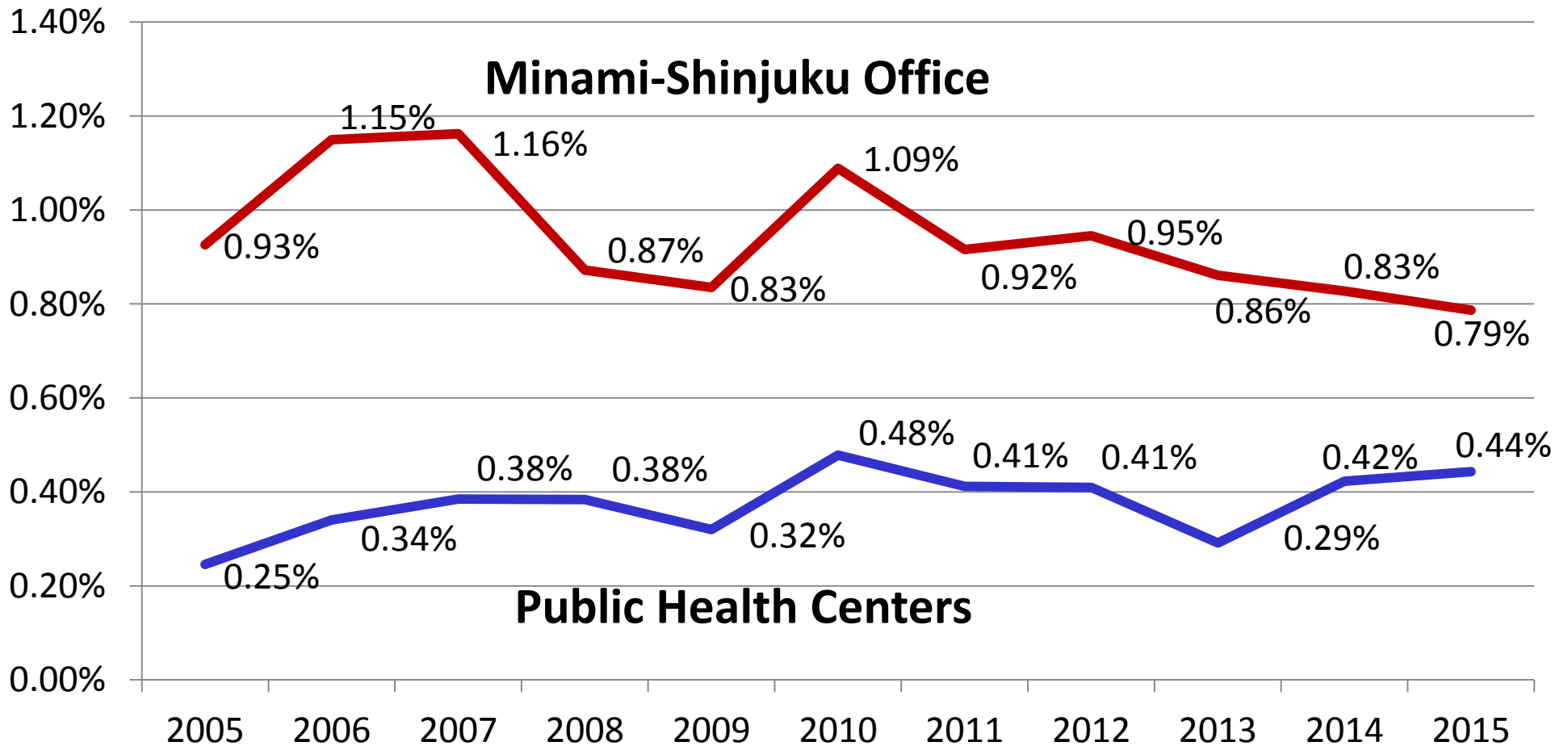
- 3 min. walk from south exit of Shinjuku station
- Testing Hours  
Mon – Fri: 15:30 – 19:30 Sat, Sun: 13:00 – 16:30
- Free of charge, anonymous
- Reservations possible from mobile phone site

# Reported cases according to medical facility in Tokyo



**Public Health Centers**   **Minami-Shinjuku Office**   **Core Hospitals**   **Other Medical Facilities**

# HIV positive rate at public health centers in Tokyo



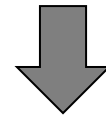
# HIV testing by postal mail

- One of the HIV–self testing.
- All procedures from application to checking the result are available at website.
- This service is offered by several companies.
- HIV testing by postal mail is not authorized by the Ministry of Health and Welfare, Japan.

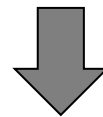
# HIV testing by postal mail



Application of the HIV testing through website and the testing kits is delivered.



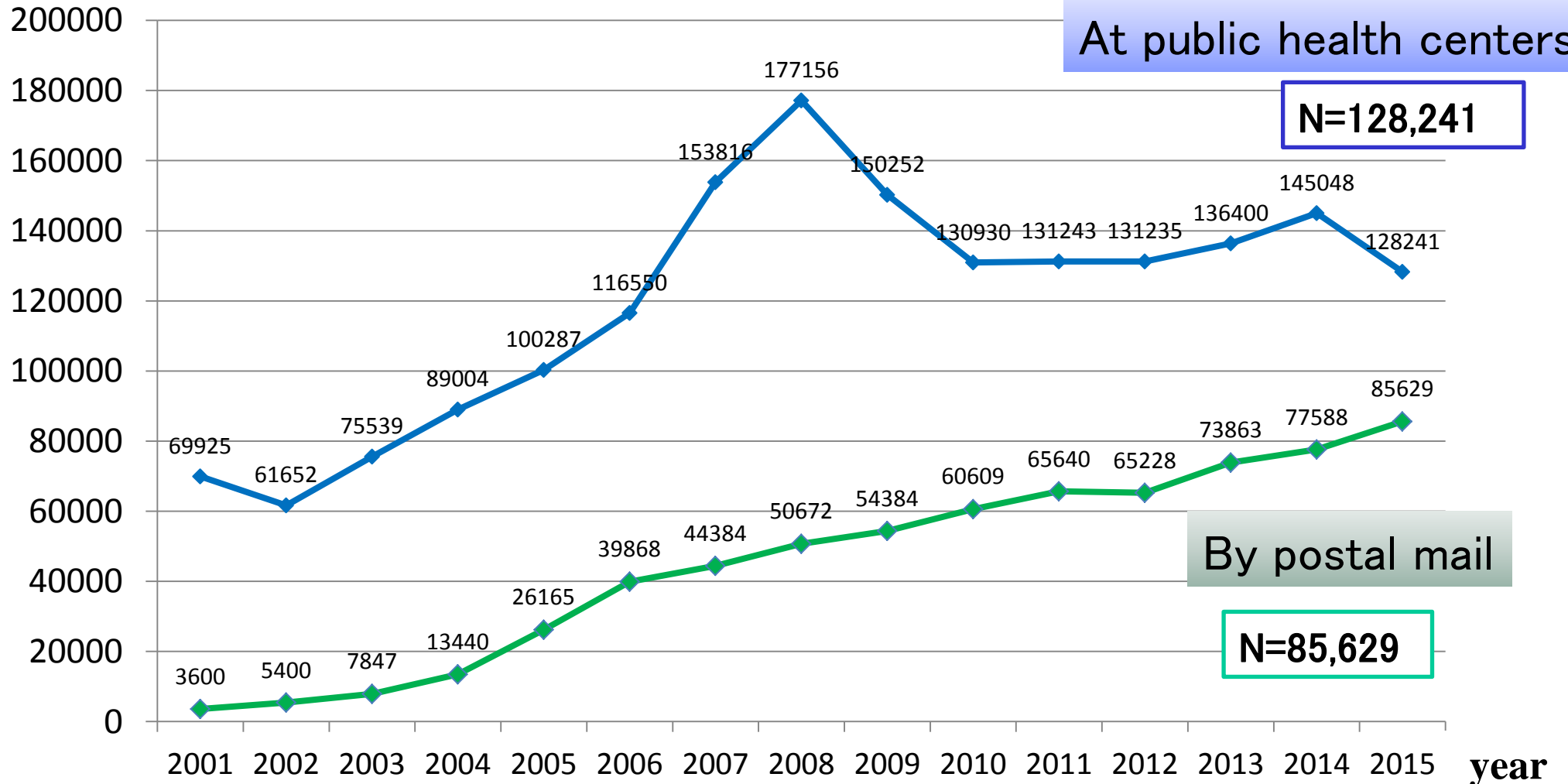
Taking a blood sample by yourself and return it anonymously.



Checking the result at website.

# Trend of the number of HIV testing by postal mail and at public health centers

Number of testing



# **Problems of HIV testing by postal mail**

- **Differences in correspondence or support by companies.**
- **Accuracy control is not mandatory.**
- **Possibility of false negative.**
- **Mass examination for sex workers without privacy.**

# Challenges of recommendation for taking HIV test

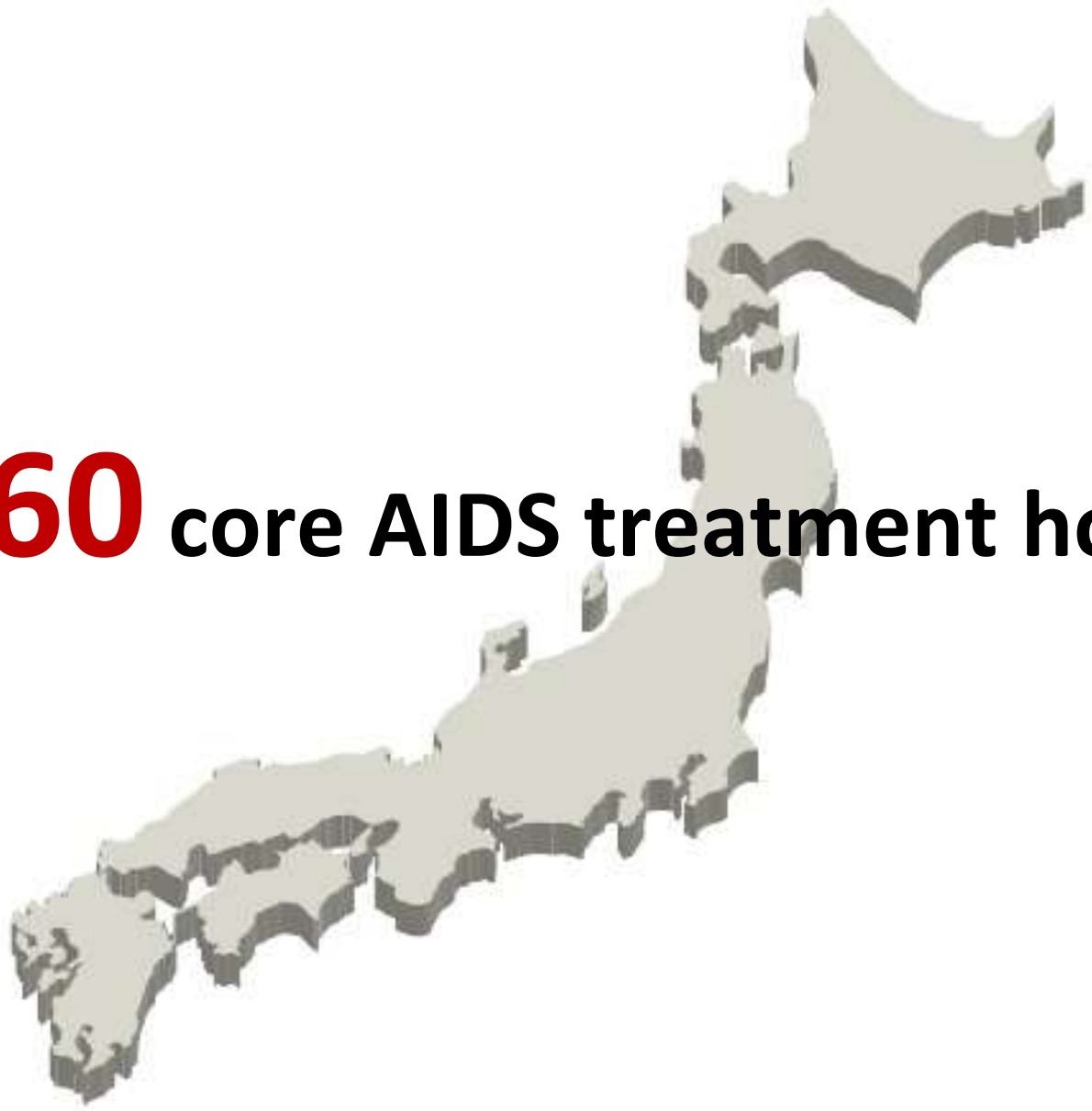
- **MSM living in rural areas**
- **MSM in middle and old ages**
- **Infected patients  
by heterosexual contact**

**MSM: men who have sex with men**



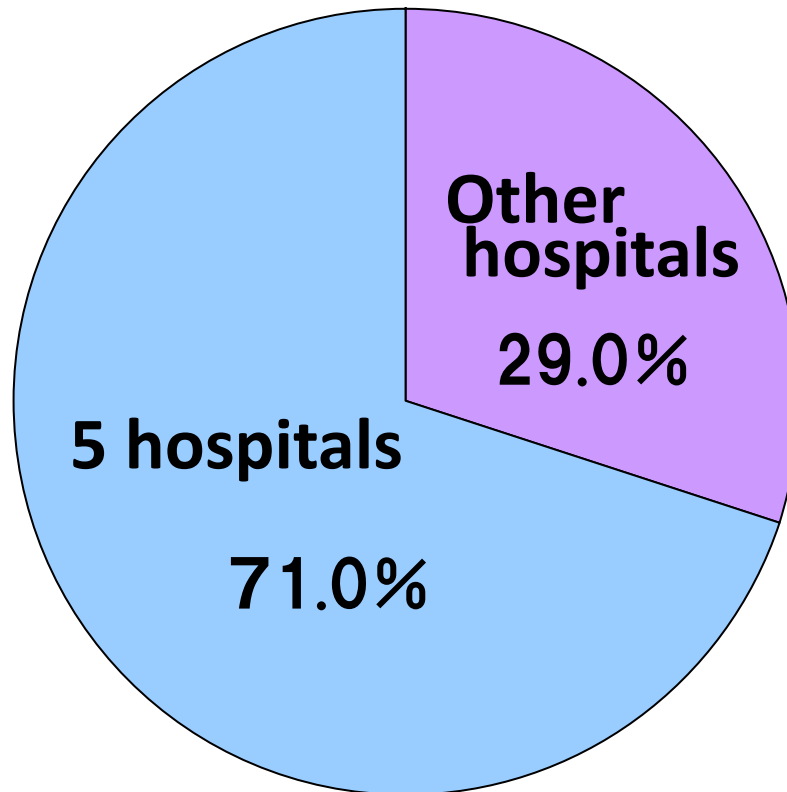
## **4. Antiretroviral Therapy (ART)**

**360** core AIDS treatment hospitals

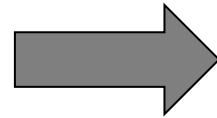


# Current situation of core AIDS hospitals in Tokyo

Of the **44** core hospitals in Tokyo, approximately **70%** of outpatients are concentrated at **5** particular hospitals .



# AntiRetroviral Therapy (ART)



Side effect ↓

Drug Resistance ↓

**STR** is selectable

( **STR** : single tablet regimen )

## **STR** (single tablet regimen)



**RPV/TDF/FTC**



**DTG/ABC/3TC**










**EVG/COBI/FTC/TDF**



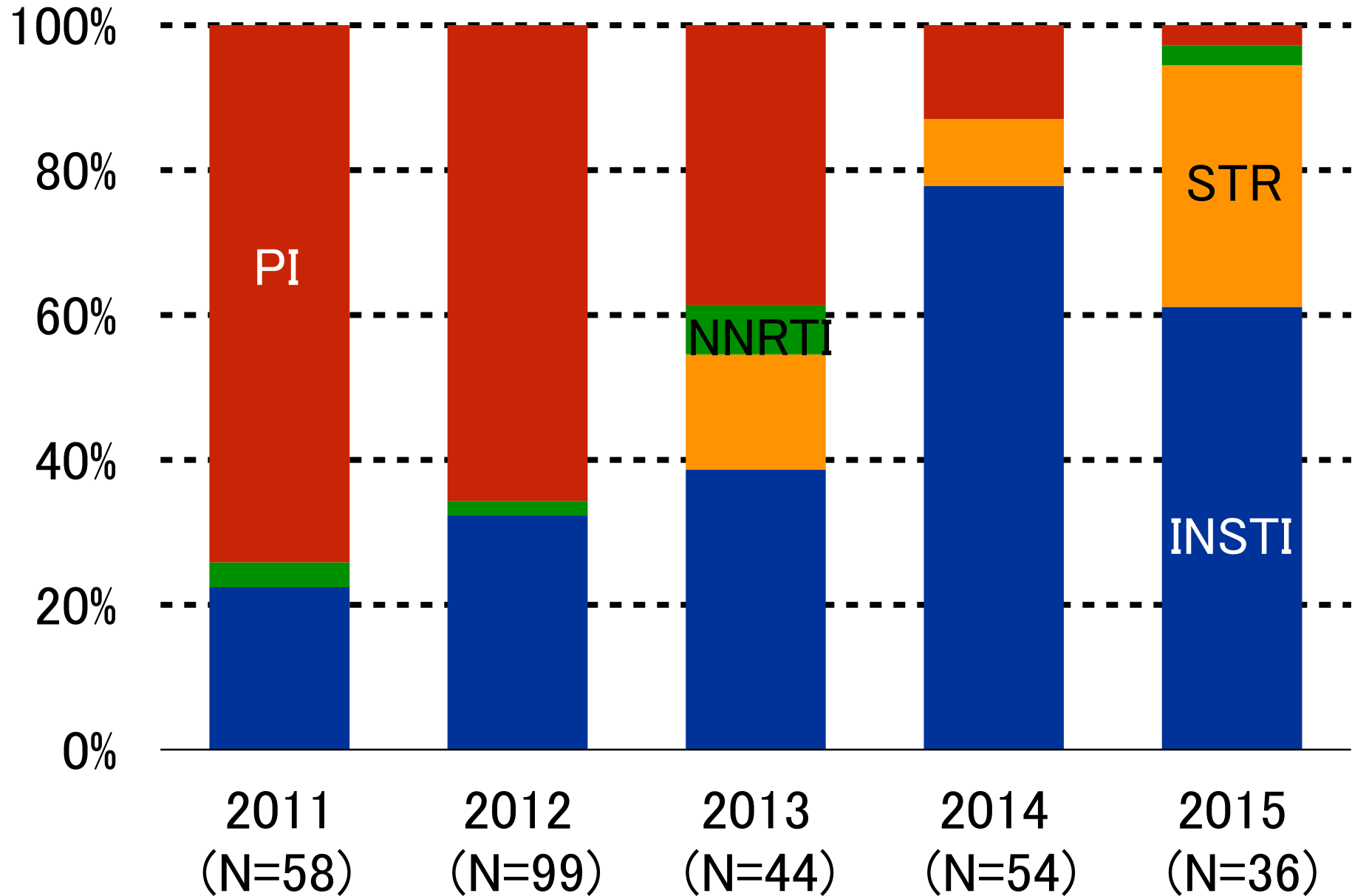
**EVG/COBI/FTC/TAF**

# Combinations of ART recommended in Japan(2016)

Recommended combinations	Tablets taken in one day
DRV+RTV+TDF/FTC	
RAL+TDF/FTC	
DTG+TDF/FTC	
DTG/ABC/3TC	
EVG/cobi/TDF/FTC	
EVG/cobi/TAF/FTC	
RPV/TDF/FTC	

Category	Anti-HIV Drugs
NRTI	AZT
	3TC
	ABC
	TDF
	FTC
	ABC/3TC (EZC)
	TDF/FTC (TVD)
NNRTI	EFV
	RPV
PI	RTV
	LPVr
	ATV
	DRV
INSTI	RAL
	DTG
STR	EVG/COBI/FTC/TDF (STB)
	RPV/TDF/FTC (CMP)
	DTG/ABC/3TC (TRI)
	EVG/COBI/FTC/TAF (GEN)

# Trend of newly introduced ART(Key drug)





**TasP**

**Treatment as Prevention**

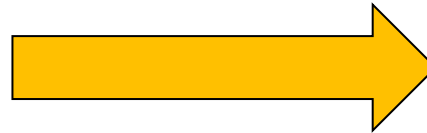
# Global condition of HIV/AIDS

**2000**

Number of newly  
infected patients

**3.1 million**

**35%  
reduced**



**2014**

Number of newly  
infected patients

**2 million**

**The number of patients receiving treatment : increased 22folds.**

**The number of death related to AIDS : decreased by 40%.**

# “Cascade” Strategy

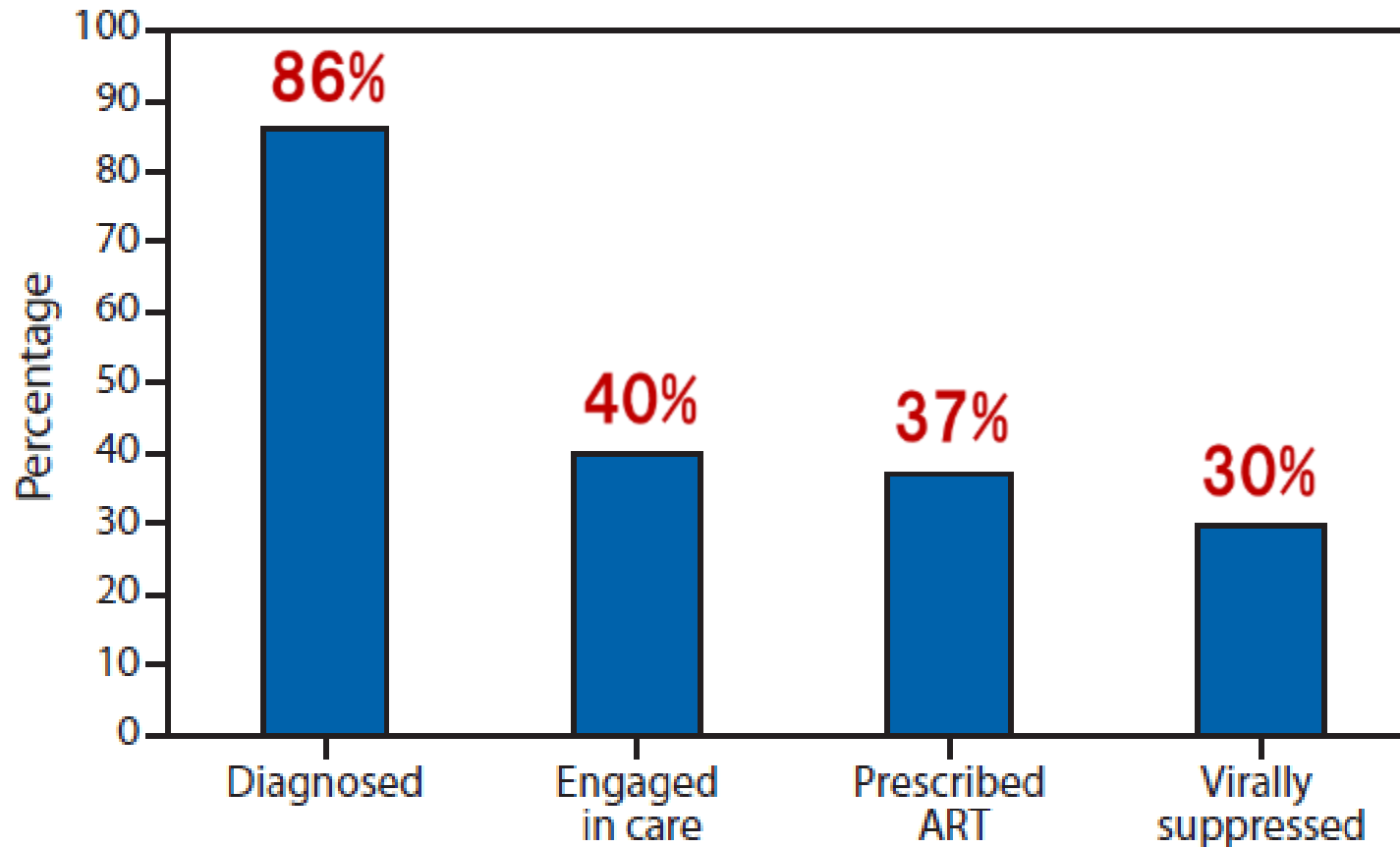
The goal is  
achievement of **90–90–90**

- **Diagnostic rate of all patients** **90%**
- **Regular visit at HIV clinic** **90%**
- **Effective treatment** **90%**

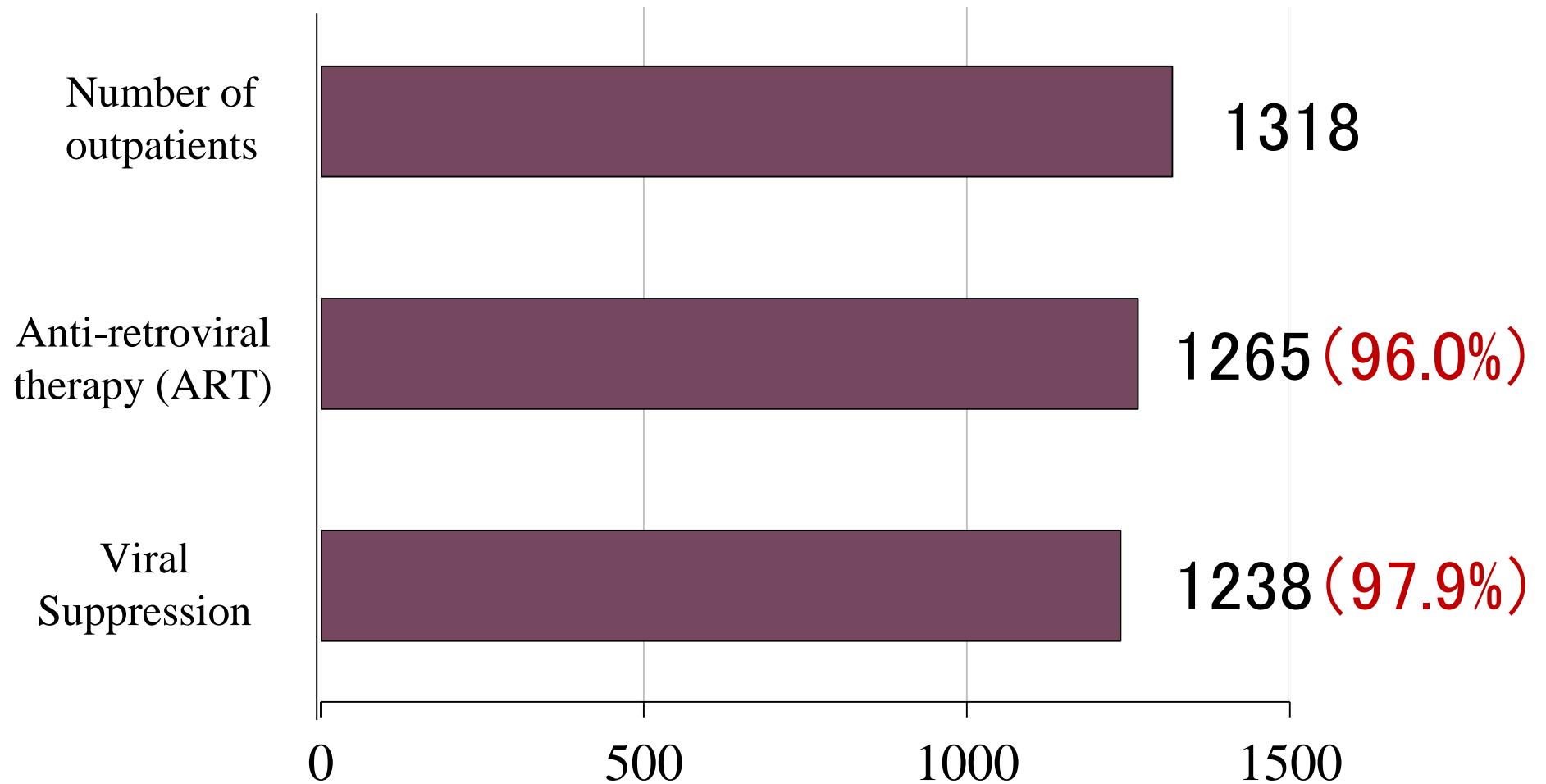
# “Cascade” in the US

The number of HIV infected patients: 1.2 million

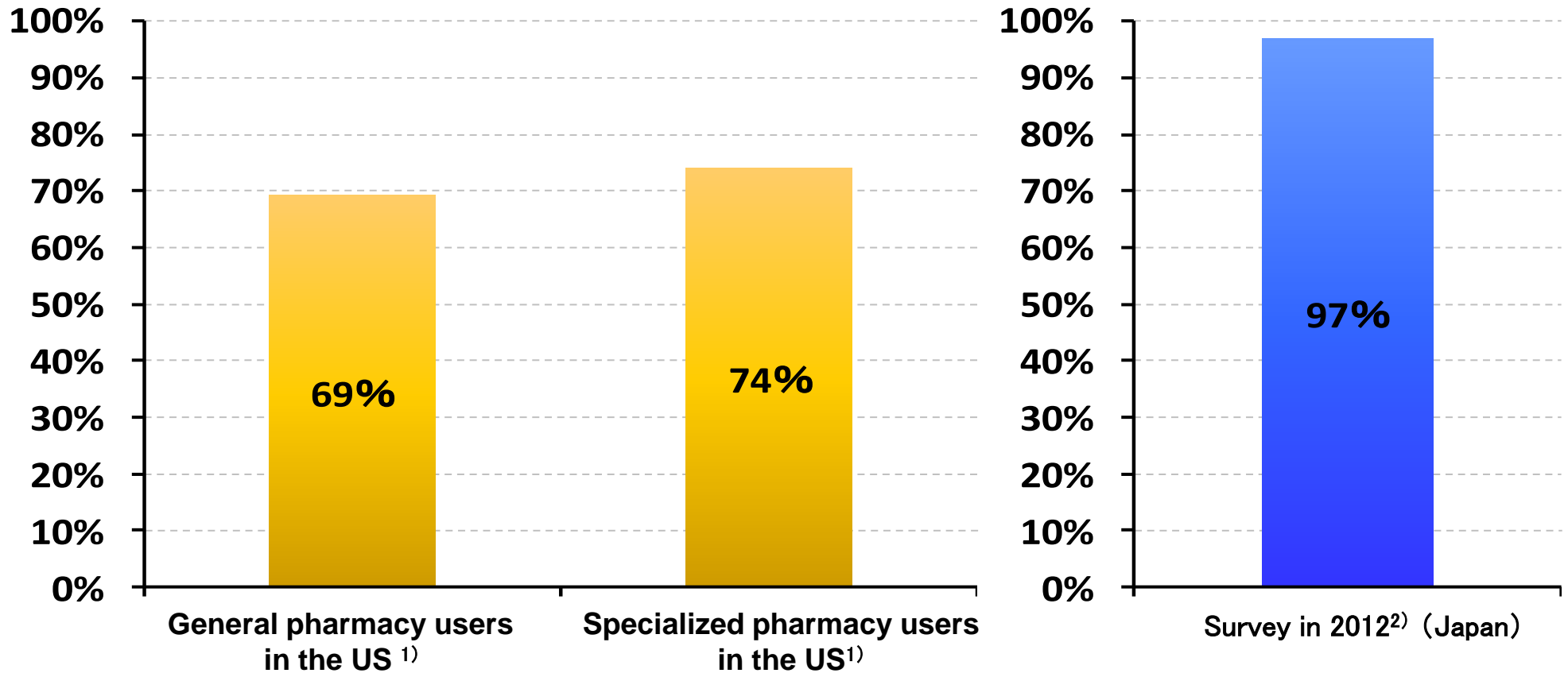
(estimate in 2011 )



# Anti-retroviral therapy: ART in Komagome hospital (2015)



# Drug adherence rates between the US and Japan



1). Patricia Murphy, et al. AIDS PATIENT CARE and STDs. 2012 ;26:526-531.

2). 「Questionnaires regarding life and compliance. 」 2012

**PrEP**

**Pre-Exposure Prophylaxis**

## Medical cost and Insurance in Japan

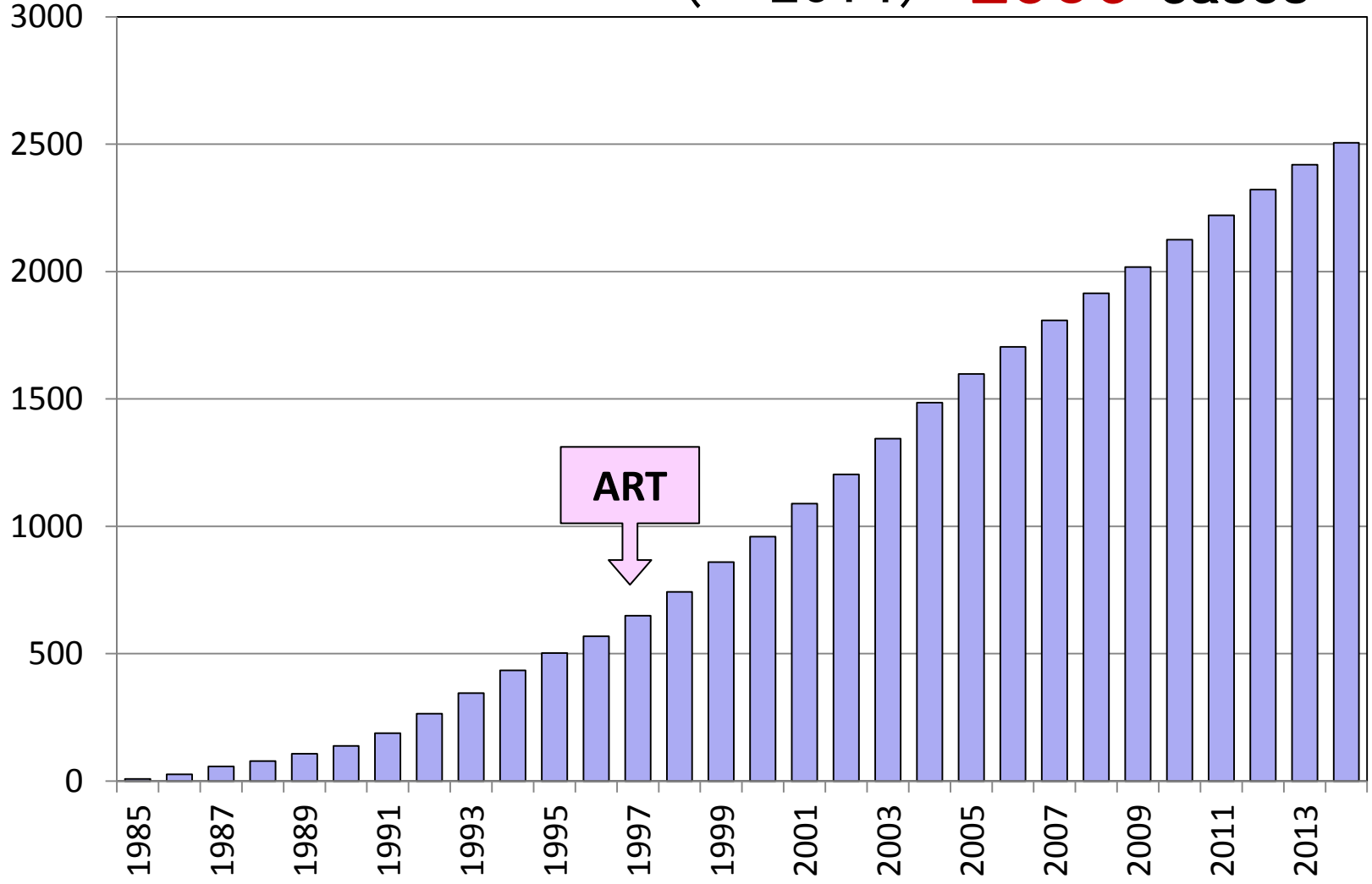
- Medical cost for Antiretroviral therapy(ART) is Approximately 200,000 Yen (1,800 US \$ )/Month
- 70% of medical cost is covered by insurance
- We have a system for subsidizing the remained cost
- Final costs is 0~20,000 Yen (0~180 US \$ )/Month
  - \* The payments are decided by income.



## **5. Aging and Non-AIDS Comorbidities**

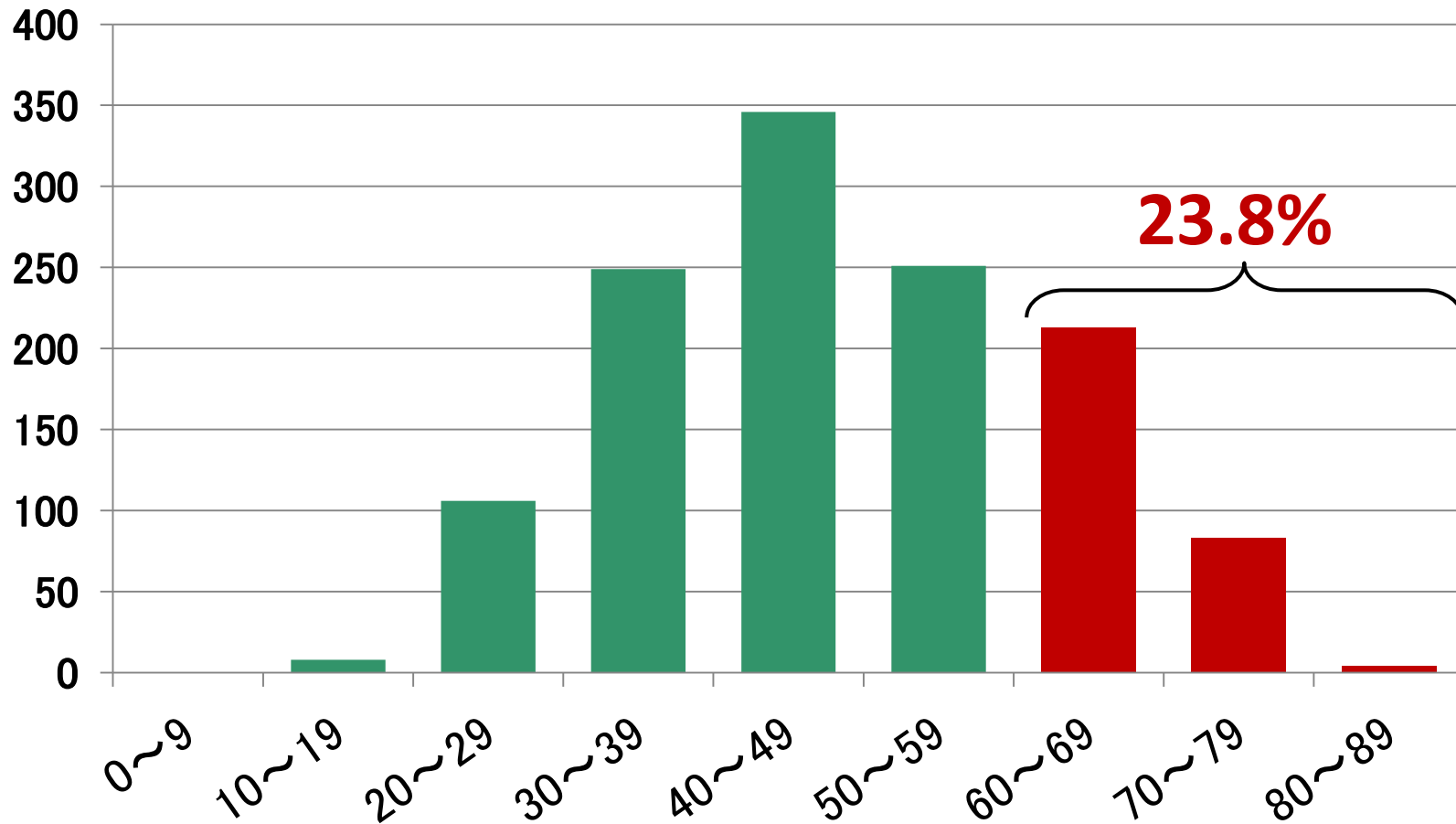
# Cumulative HIV+ cases (Komagome Hospital)

(~2014) **2506** cases



# Age distributions of outpatients (Komagome Hospital)

2014 n=1260



## Non-AIDS Comorbidities

**Cardiovascular disease**

**Liver disease**

**Chronic kidney disease**

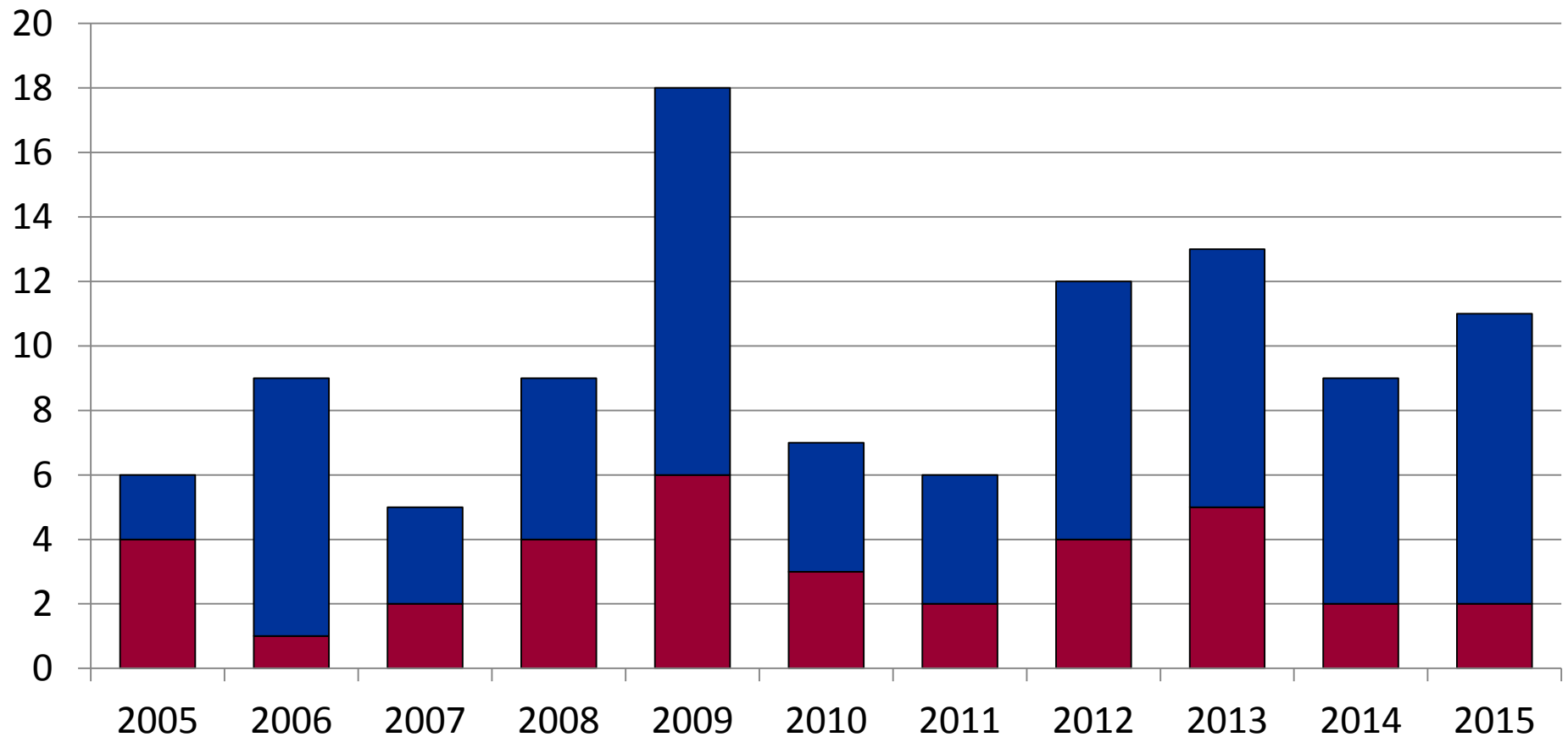
**Osteoporosis**

**HIV associated neurocognitive disorders (HAND)**

**Non-AIDS-Defining Malignancies (NADM)**

# Causes of death of HIV outpatients at Komagome hospital

- AIDS-related illness
- Other cause of death



## **AIDS-defining malignancies (ADM)**

**Kaposi's sarcoma**

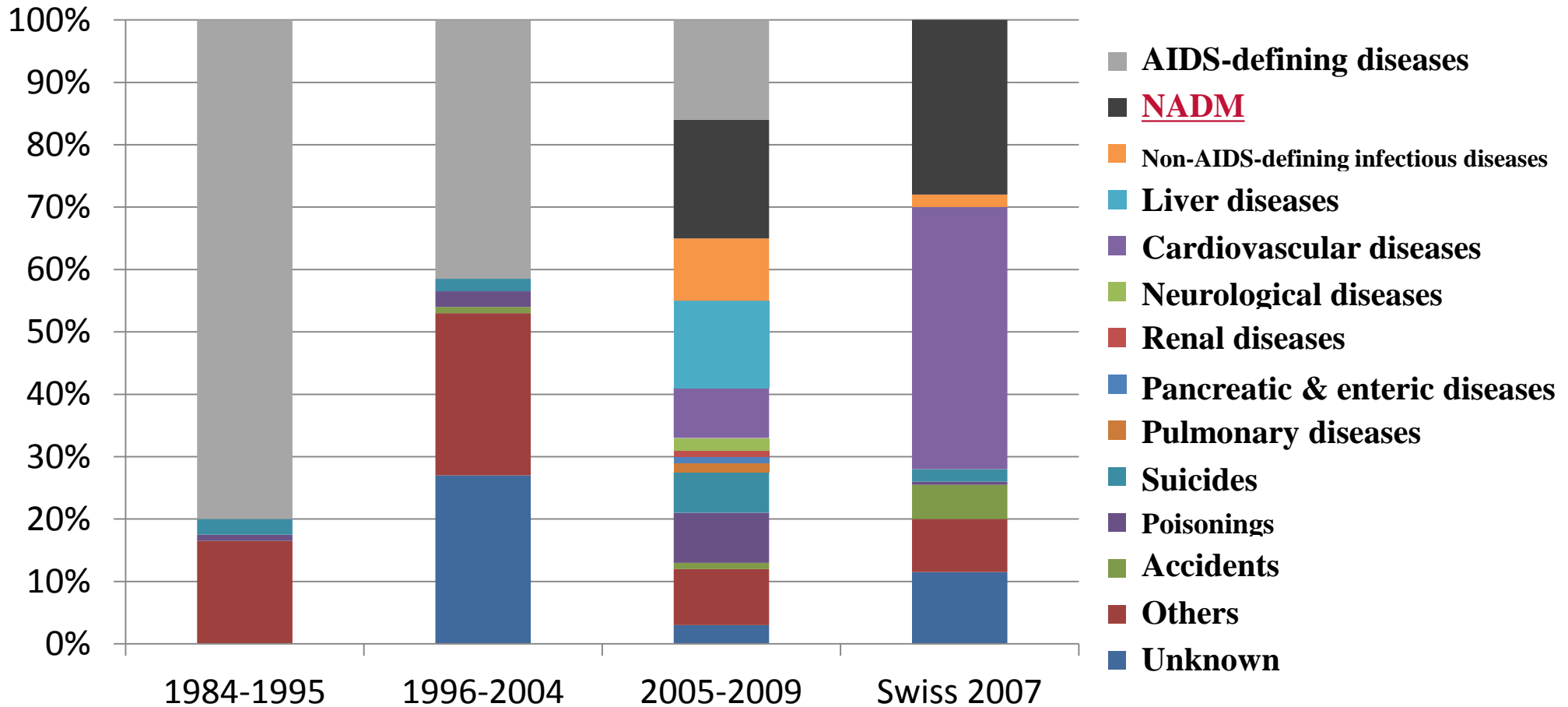
**Non-Hodgkin lymphoma**

**Cervical cancer**

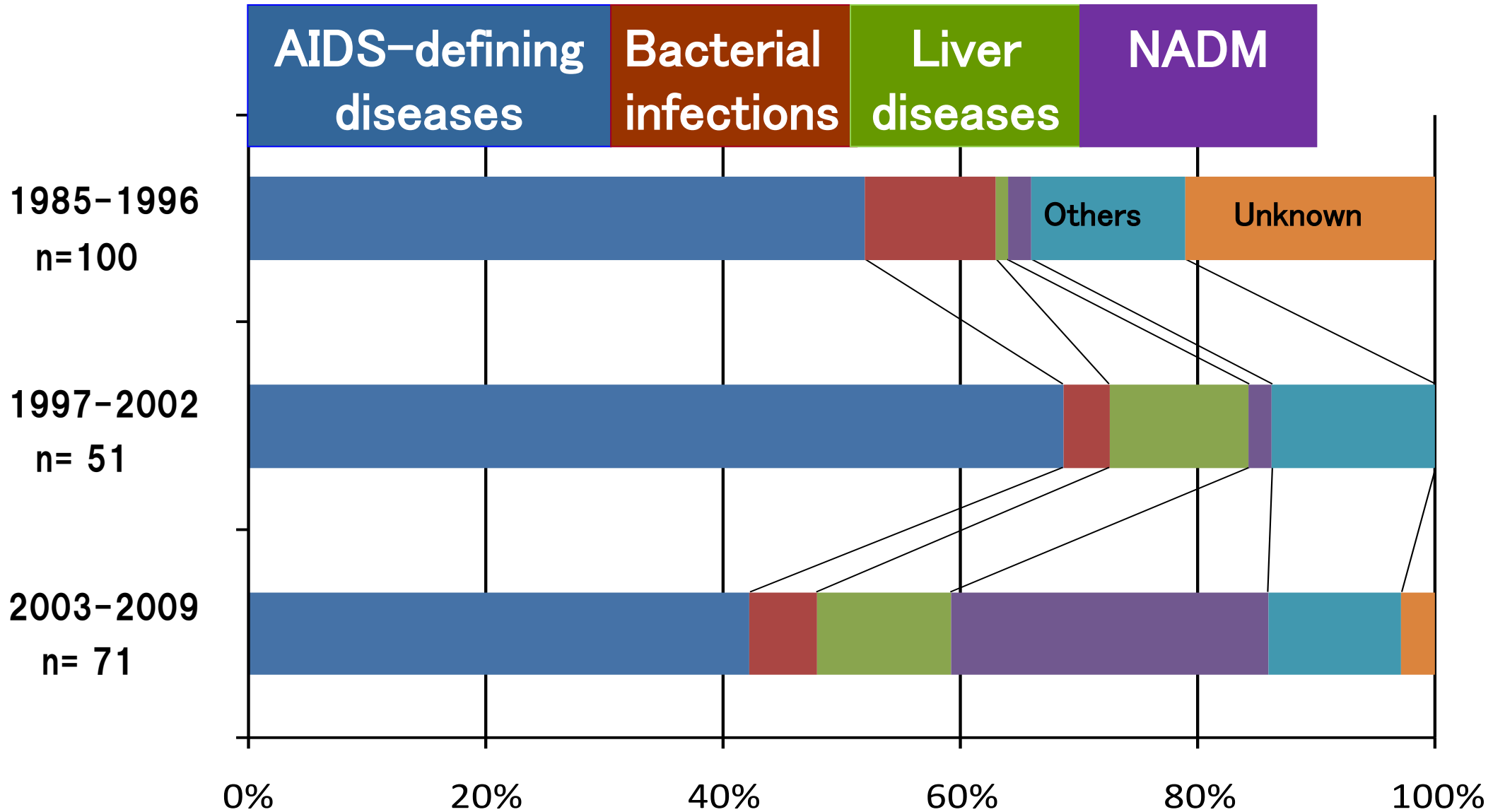
## **non-AIDS-defining malignancies (NADM)**

**Other malignancies**

# Changes in causes of death (A Cohort Study in Switzerland)

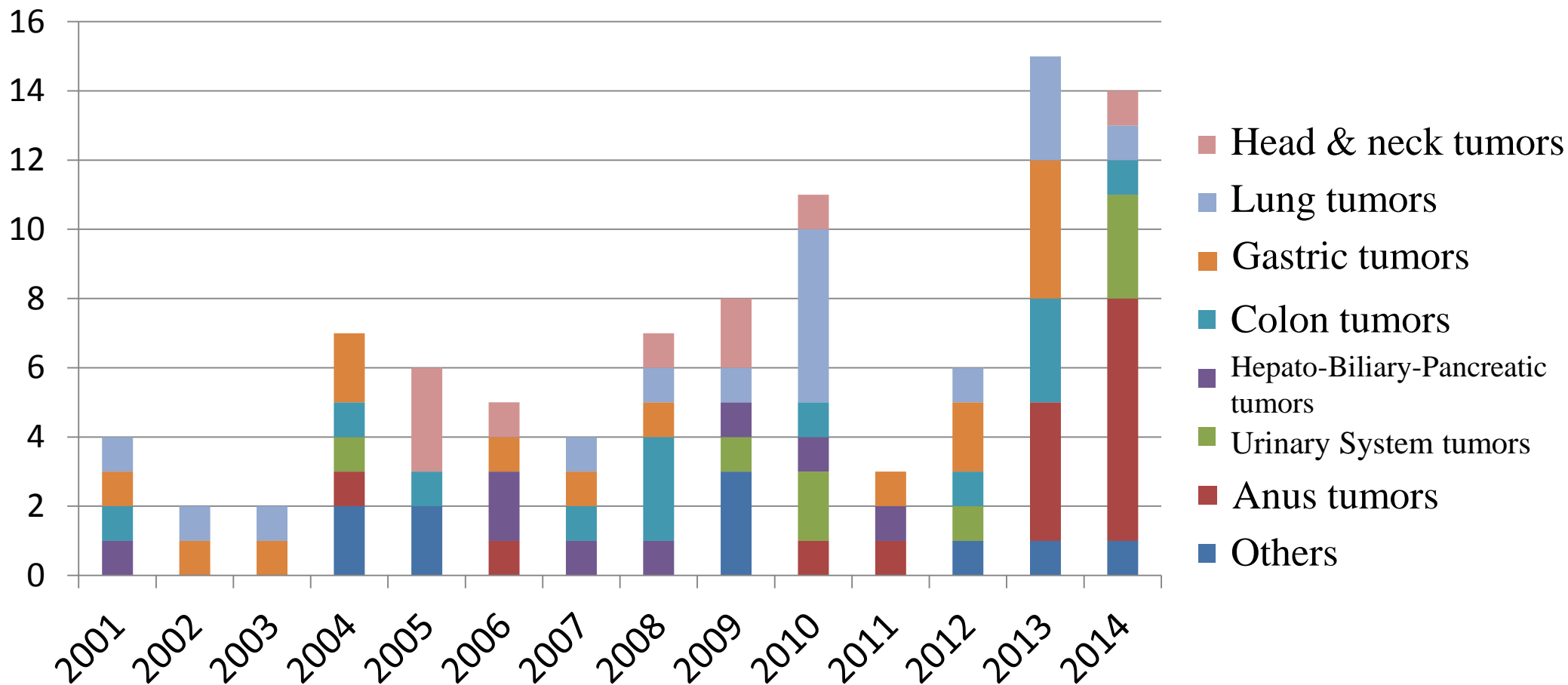


# Changes in causes of death (Komagome hospital)





# Trend of non-AIDS-defining malignancies (NADM)

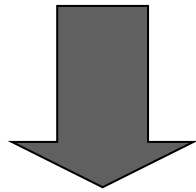


# Causes of death in 2015 at Komagome hospital

■ AIDS-related illness
 ■ Other cause of death

Case	Age	First Visit	Cause of Death	Place
1	71	1997.3.31	unknown	Home
2	68	2006.10.31	Liver-related	Home
3	60	1997.7.15	Cerebral hemorrhage	Other hospital
4	68	2004.3.4	Liver-related	Home
5	63	2015.6.1	AIDS-related illness (PCP, CMV)	Hospital
6	58	1999.6.29	Chronic kidney disease ( Dialysis )	Home
7	56	2015.4.10	AIDS-related illness (PML)	Hospital
8	30	2015.3.16	Nasal cancer	Hospital
9	48	2010.1.21	unknown	Home
10	44	2005.5.9	Gastric cancer	Hospital
11	89	2000.6.23	unknown	Home

**Many of the HIV/AIDS patients  
are MSM.**



**Increase of elderly patients  
living alone.**

# **Needs for medical system supporting aging society.**

- **Cooperation with other departments  
in community**
- **Hospitals possible for long stay**
- **Medical care service at home**

**Thank you for your attention**

