

# **Trends in HIV/AIDS epidemic in Asia, and its challenge**

Taro Yamamoto

Institute of Tropical Medicine

Nagasaki University

# **Millennium Development Goals**

**Goal 1. Eradicate extreme poverty and hunger**

**Goal 2. Achieve universal primary education**

**Goal 3. Promote gender equality and empower women**

**Goal 4. Reduce child mortality**

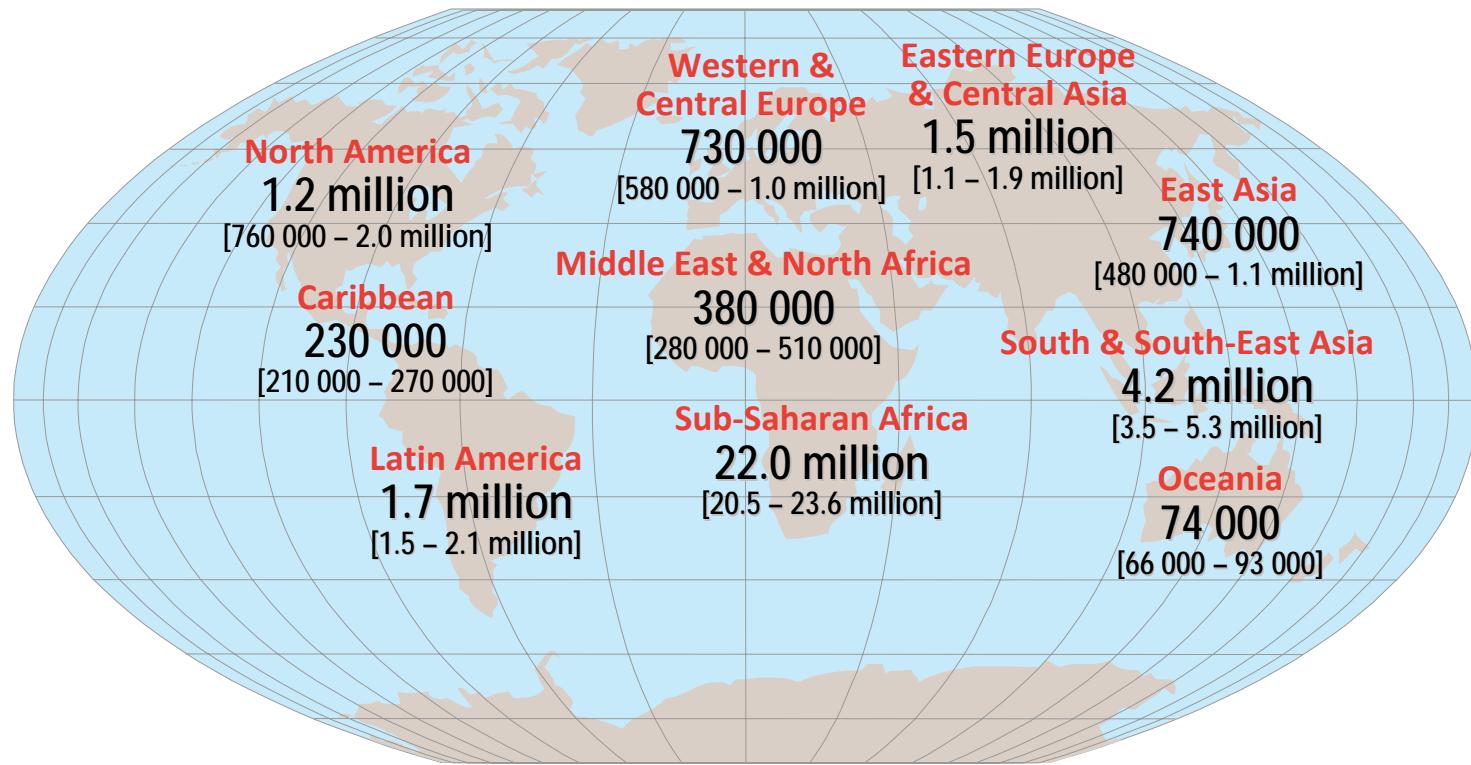
**Goal 5. Improve maternal health**

**Goal 6. Combat HIV/AIDS, malaria and other diseases**

**Goal 7. Ensure environmental sustainability**

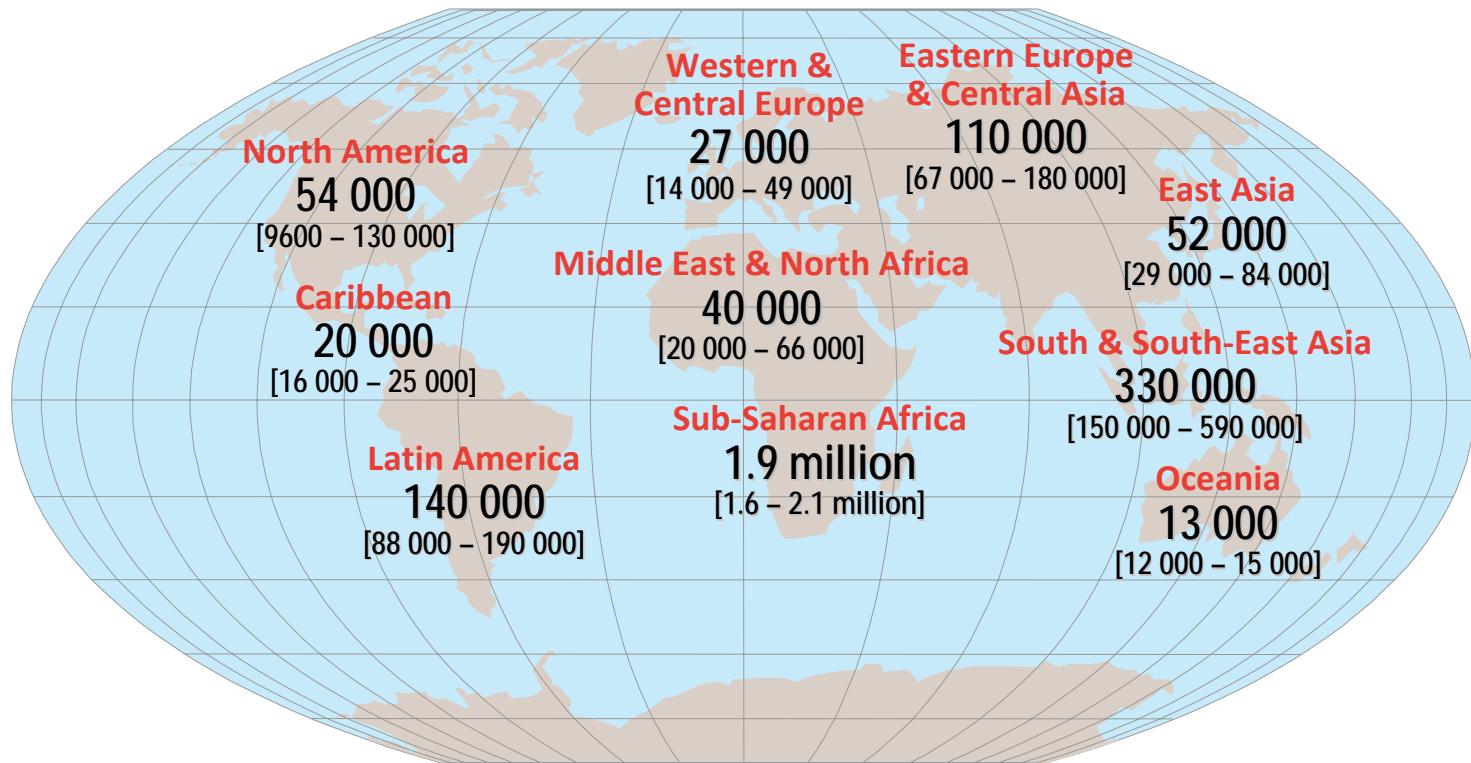
**Goal 8. Develop a global partnership for development**

# Adults and children estimated to be living with HIV



**Total: 33 million (30 – 36 million)**

# Estimated number of adults and children newly infected with HIV

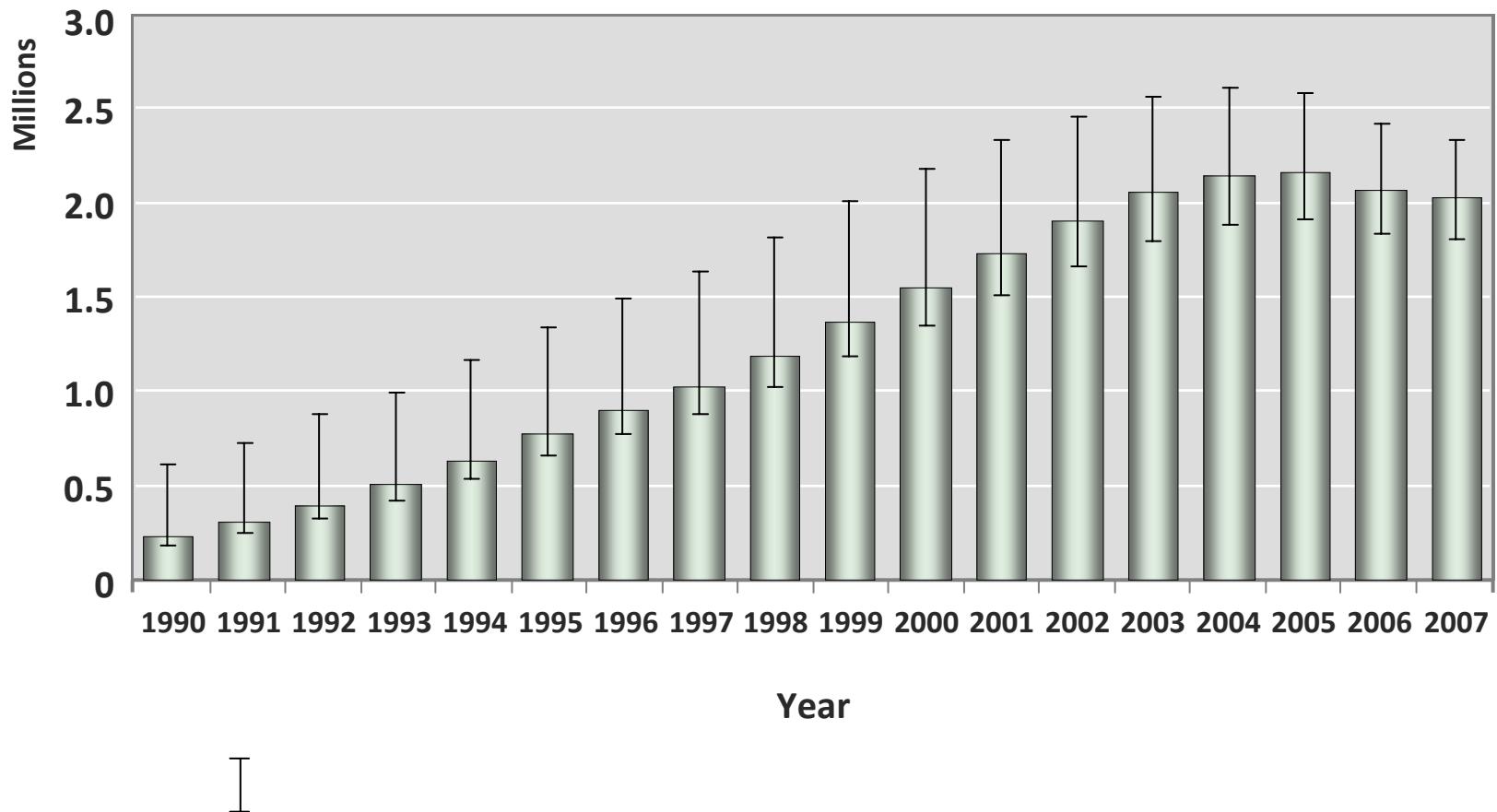


**Total: 2.7 million (2.2 – 3.2 million)**

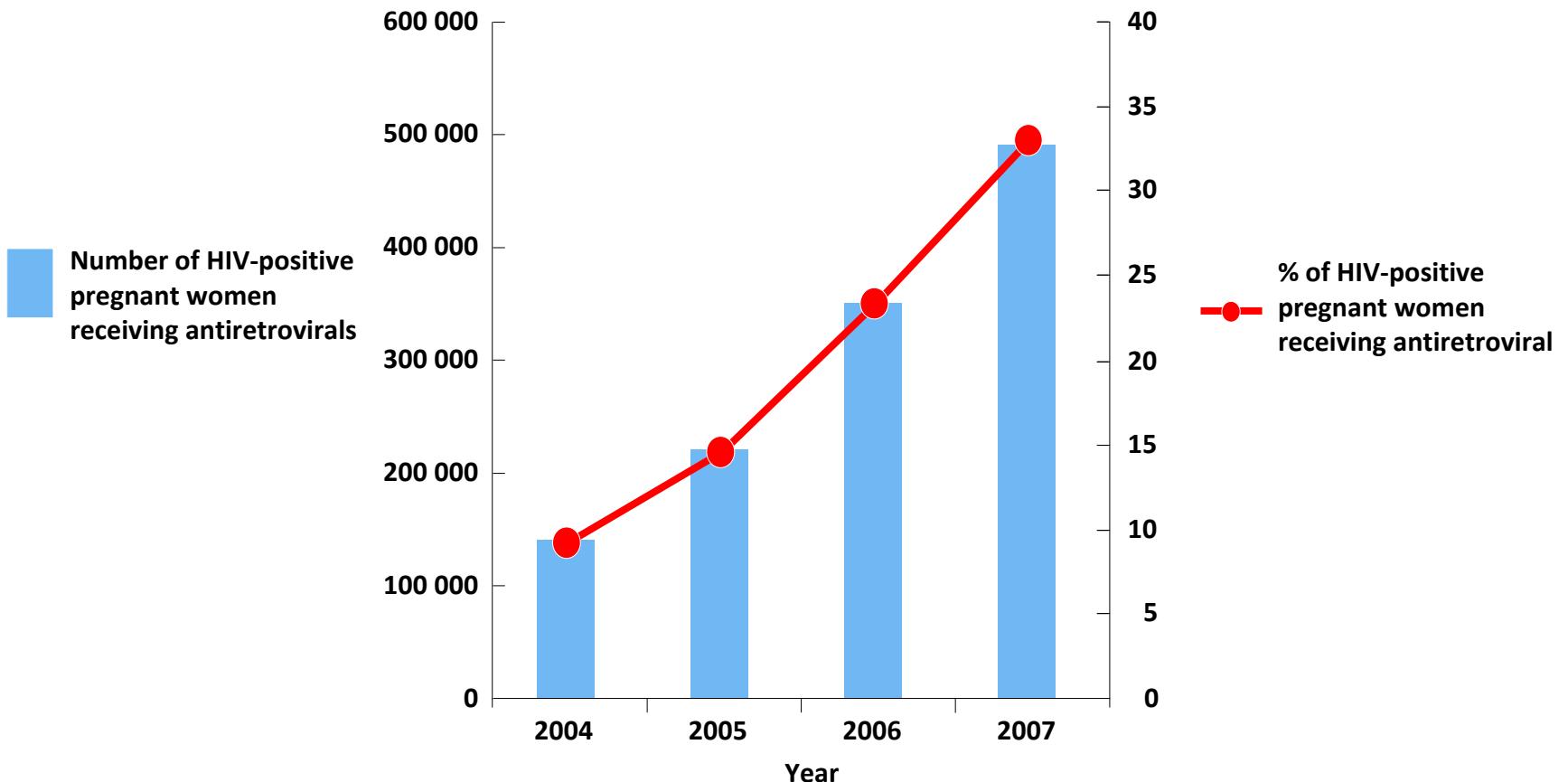
# **Over 7400 new HIV infections a day**

- More than 96% are in low and middle income countries
- About 1000 are in children under 15 years of age
- About 6300 are in adults aged 15 years and older of whom:
  - almost 50% are women
  - about 45% are young people (15-24)

# Estimated number of adult and child deaths due to AIDS globally, 1990–2007

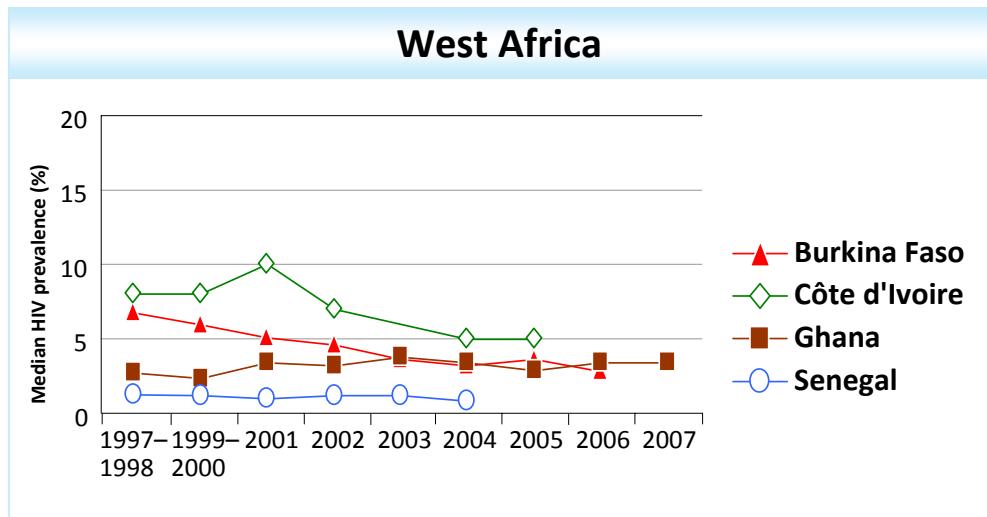
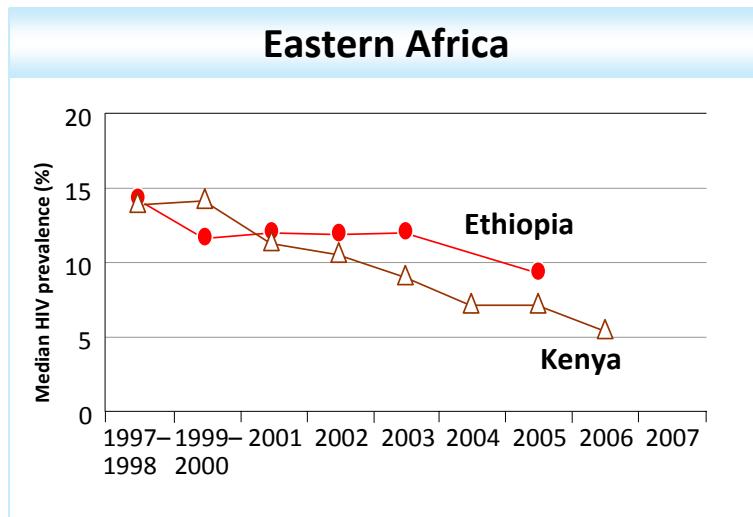
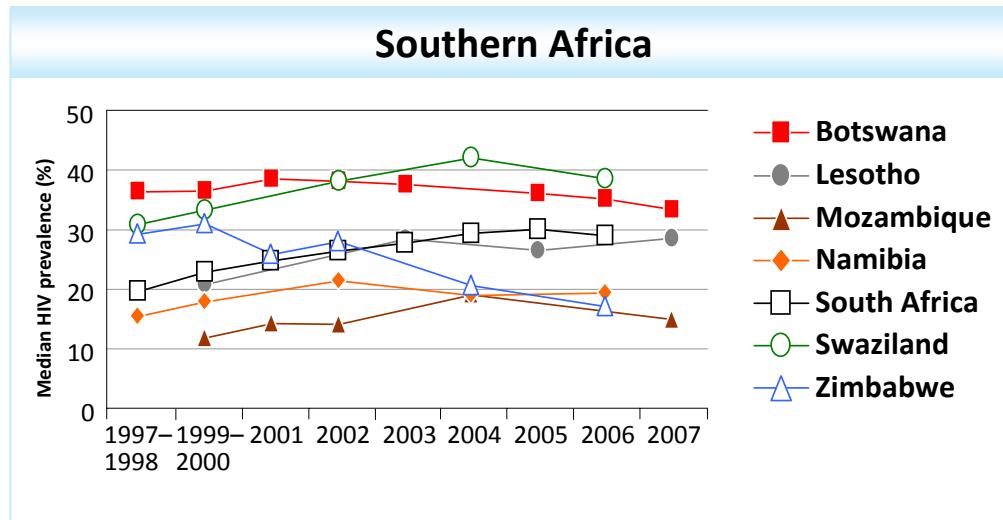


## Number and percentage of HIV-positive receiving antiretroviral treatment, 2004–2007



Source: UNAIDS, UNICEF & WHO, 2008; data provided by countries.

# HIV prevalence (%) among pregnant women attending antenatal clinics in Sub-Saharan Africa, 1997–2007

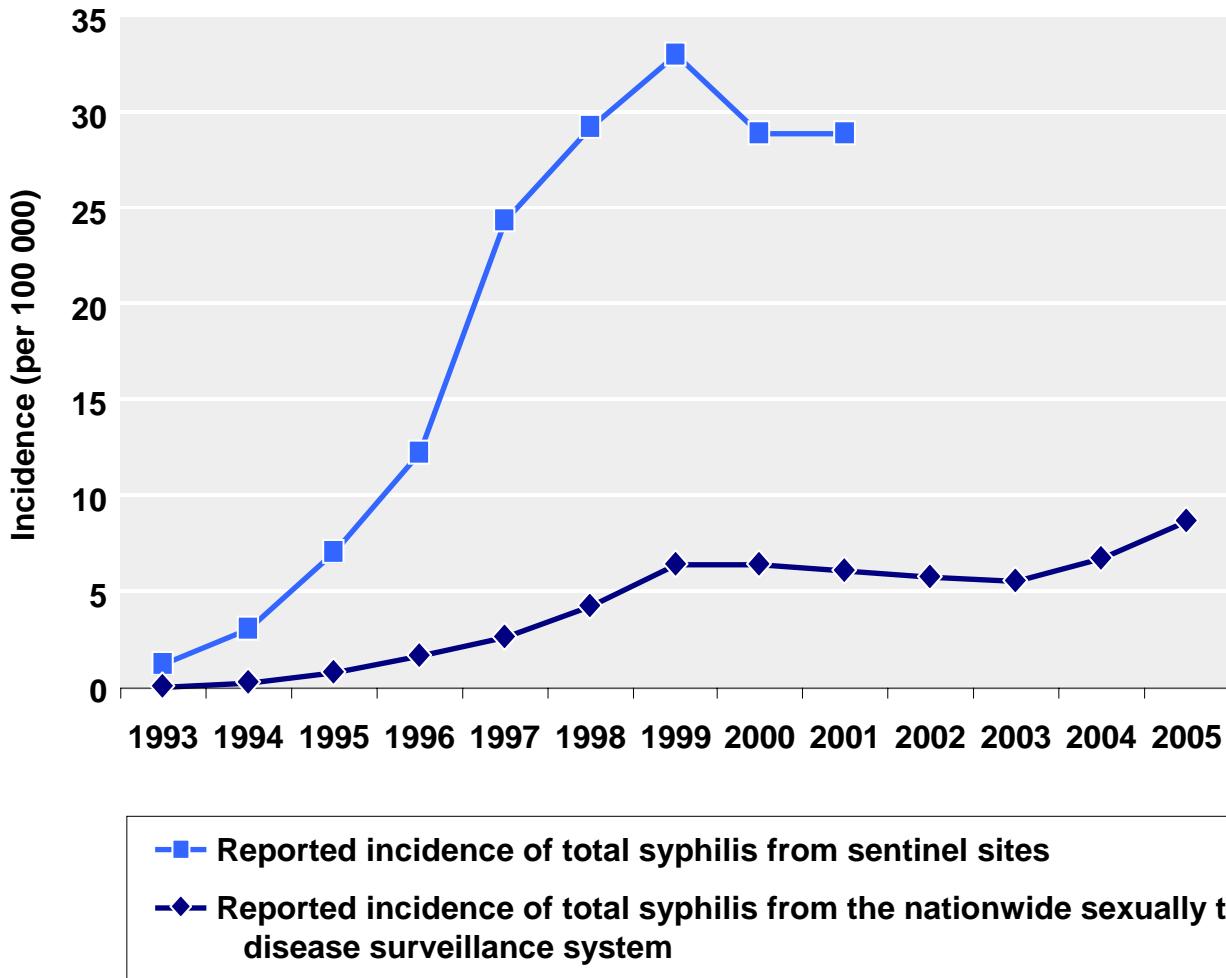


# Regional HIV and AIDS statistics

## 2008 and 2001

	Adult prevalence (%)		Adult & child deaths due to AIDS	
	2008	2001	2008	2001
Sub-Saharan Africa	5.2% [4.9% – 5.4%]	5.8% [5.5% – 6.0%]	1.4 million [1.1 – 1.7 million]	1.4 million [1.2 – 1.7 million]
Middle East & North Africa	0.2% [<0.2% – 0.3%]	0.2% [0.1% – 0.2%]	20 000 [15 000 – 25 000]	11 000 [7800 – 14 000]
South and South-East Asia	0.3% [0.2% – 0.3%]	0.3% [<0.3% – 0.4%]	270 000 [220 000 – 310 00]	260 000 [210 000 – 320 000]
East Asia	0.1% [<0.1%]	<0.1% [<0.1%]	59 000 [46 000 – 71 000]	22 000 [18 000 – 27 000]
Latin America	0.6% [0.5% – 0.6%]	0.5% [<0.5% – 0.6%]	77 000 [66 000 – 89 000]	66 000 [56 000 – 77 000]
Caribbean	1.0% [0.9% – 1.1%]	1.1% [1.0% – 1.2%]	12 000 [9300 – 14 000]	20 000 [17 000 – 23 000]
Eastern Europe & Central Asia	0.7% [0.6% – 0.8%]	0.5% [0.4% – 0.5%]	87 000 [72 000 – 110 000]	26 000 [22 000 – 30 000]
Western & Central Europe	0.3% [0.2% – 0.3%]	0.2% [<0.2% – 0.3%]	13 000 [10 000 – 15 000]	6500 — 9700
North America	0.6% [0.5% – 0.7%]	0.6% [0.5% – 0.7%]	25 000 [20 000 – 31 000]	19 000 [16 000 – 23 000]
Oceania	0.3% [<0.3% – 0.4%]	0.2% [<0.2% – 0.3%]	2000 [1100 – 3100]	<1000 [<500 — 1200]
TOTAL	0.8% [<0.8% 0.8%]	0.8% [<0.8% 0.8%]	2.0 million [1.7 2.4 million]	1.9 million [1.6 2.2 million]

# The incidence of syphilis in China



# Country Profiles of China

		Year		
		2000	2005	2006
Population, total (millions)		1,262.65	1,304.50	1,311.80
Population growth (annual %)		0.7	0.6	0.6
Surface area (sq. km) (thousands)		9,598.10	9,598.10	9,598.10
Life expectancy at birth, total (years)		70	72	72
Mortality rate, under 5 (per 1,000 live births)		37	25	24
Adult Literacy rate (%)		90.9	92.6	93
Fertility rate, total (births per women)		1.9	1.8	1.8
Immunization, measles (% of children ages 12-23 months)		85	86	93
GNI, Altas method (current US\$) (billions)		1,168.88	2,275.67	2,620.95
GNI per capita, Atlas method (current US\$)		930	1,740	2000

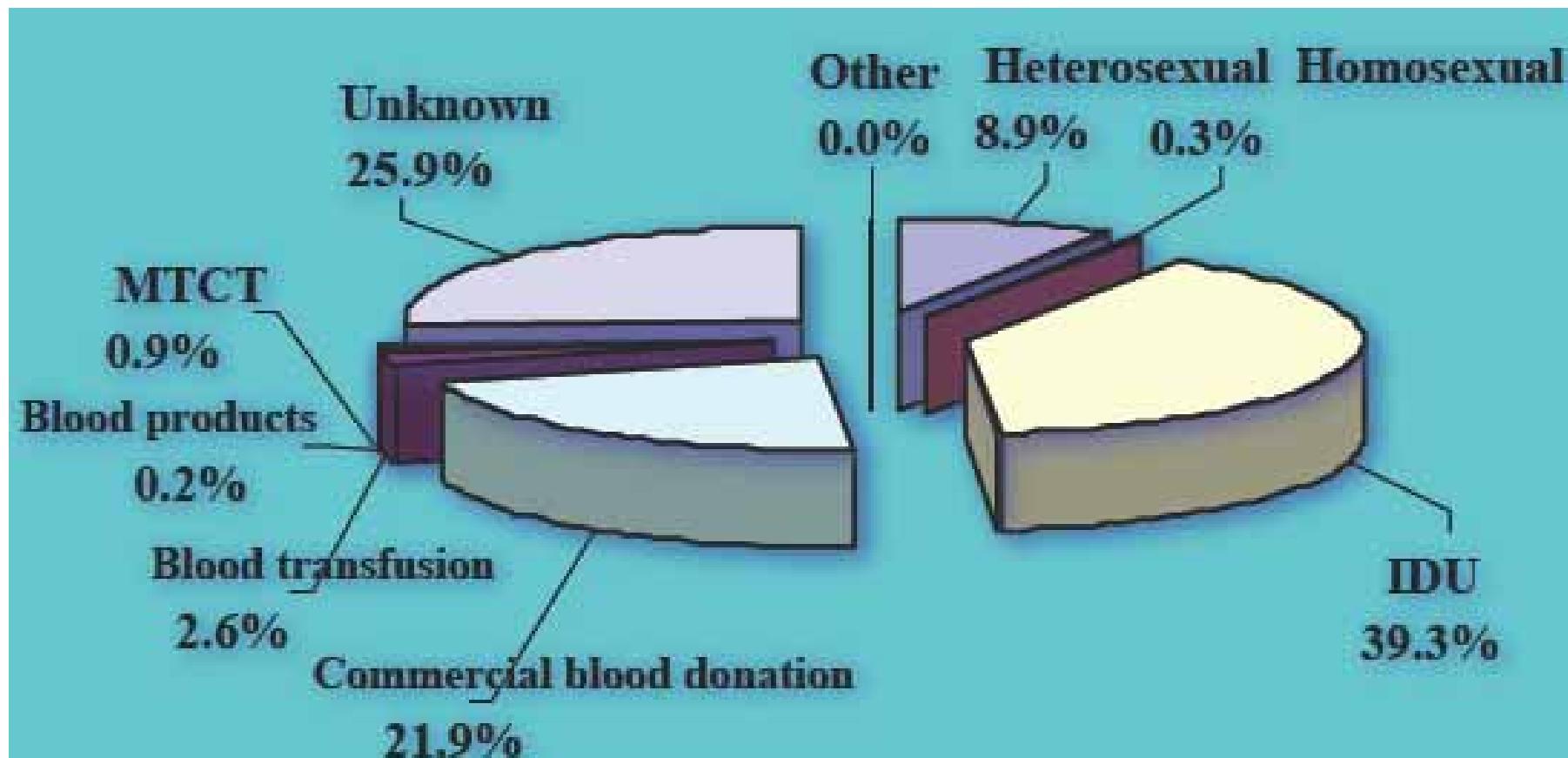
<b>Population:</b>	male/female	urban/rural
	<b>51.46/48.54</b>	<b>37.66/62.34</b>
<b>% of age group</b>	<b>0-14</b>	<b>15-64</b>
	<b>22.89</b>	<b>70.15</b>
<b>Ethnicity:</b>	<b>(10 thousands)</b>	
Han	<b>115940</b>	
Minority	<b>10643</b>	

# Current situation of HIV/AIDS epidemic in China

	Cumulative Reported cases	Estimated cases
People living with HIV	223,501	700,000 (550,000~850,000)
AIDS cases	62,838	85,000 (80,000~90,000)
New HIV infections	-	50,000 (40,000~60,000)
AIDS deaths	22,205	20,000 (15,000~25,000)
Prevalence of HIV infection (%)	-	0.05 (0.04~0.07)

(Derived from: "A joint assessment of HIV/AIDS prevention, treatment and care in China 2007", UNAIDS)

# Modes of transmission among cumulative HIV cases by the end of December 2005



Data from: Ministry of Health of the People's Republic of China

# HIV/AIDS epidemiologic survey in China



# The Review of HIV/AIDS Epidemic in Mainland China



**1985-1988: The entry phase**

**1989-1994: The spreading phase**

**1995-Present: The expansion phase**

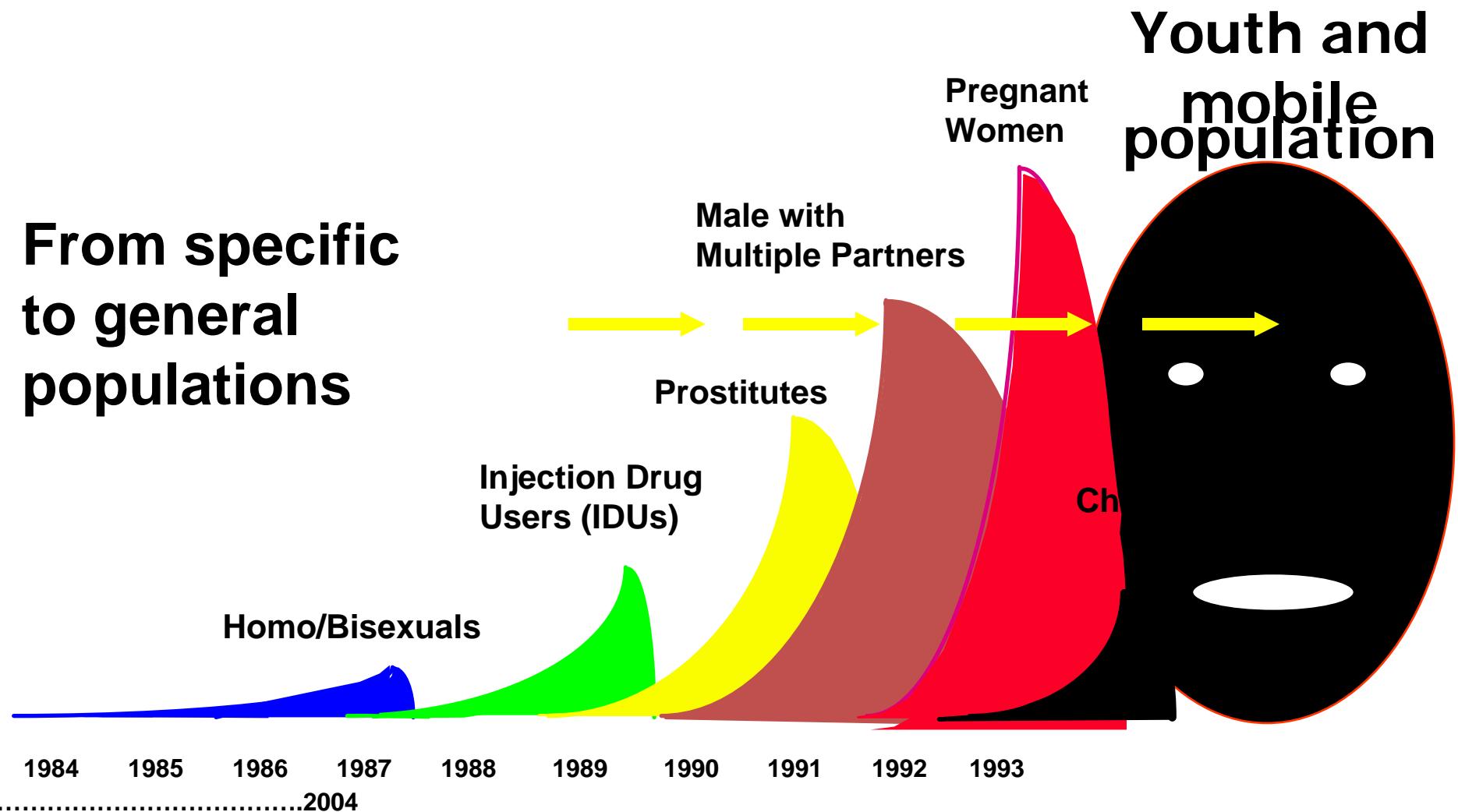
# Eastern and Western China



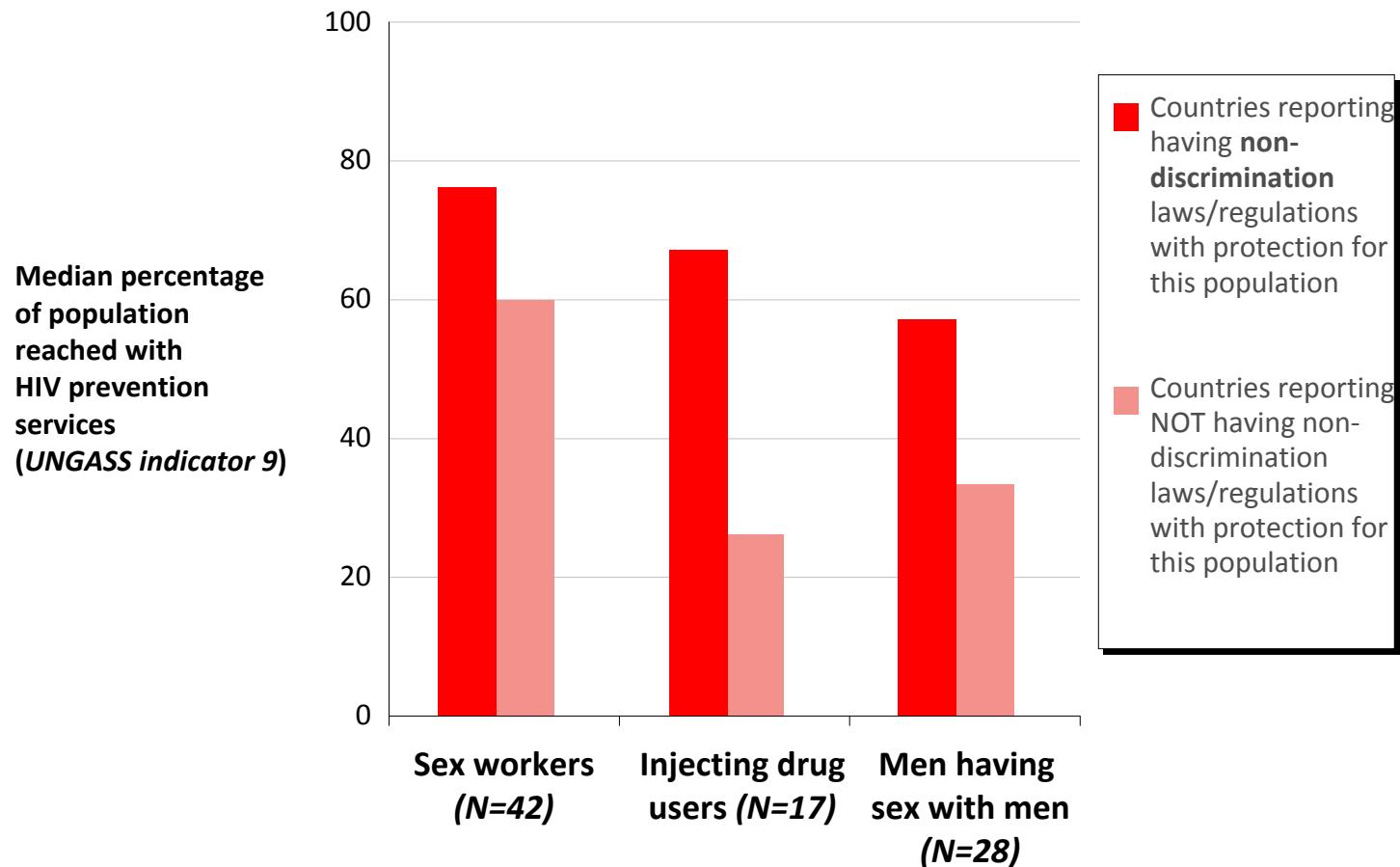
	Eastern	Western
Population (10,000)	47,922	36,447
birth rate (%)	9.86	14.80
Growth rate (%)	3.96	8.42
GDP (Yuan) US\$ (100 million)	61,393.17 7,396.77	1,8248.44 2,198.61
Household income (Yuan)	urban: 8,677.81 rural: 3,686.74	urban: 6,775.04 rural: 1,692.96
Illiteracy rate	30,339,344 (6.3%)	31,610,599 (8.7%)
No. of beds (10,000)	134.4	83.5
Health workers (10,000)	235.2	119.6

# Thailand HIV/AIDS Epidemics

From specific  
to general  
populations

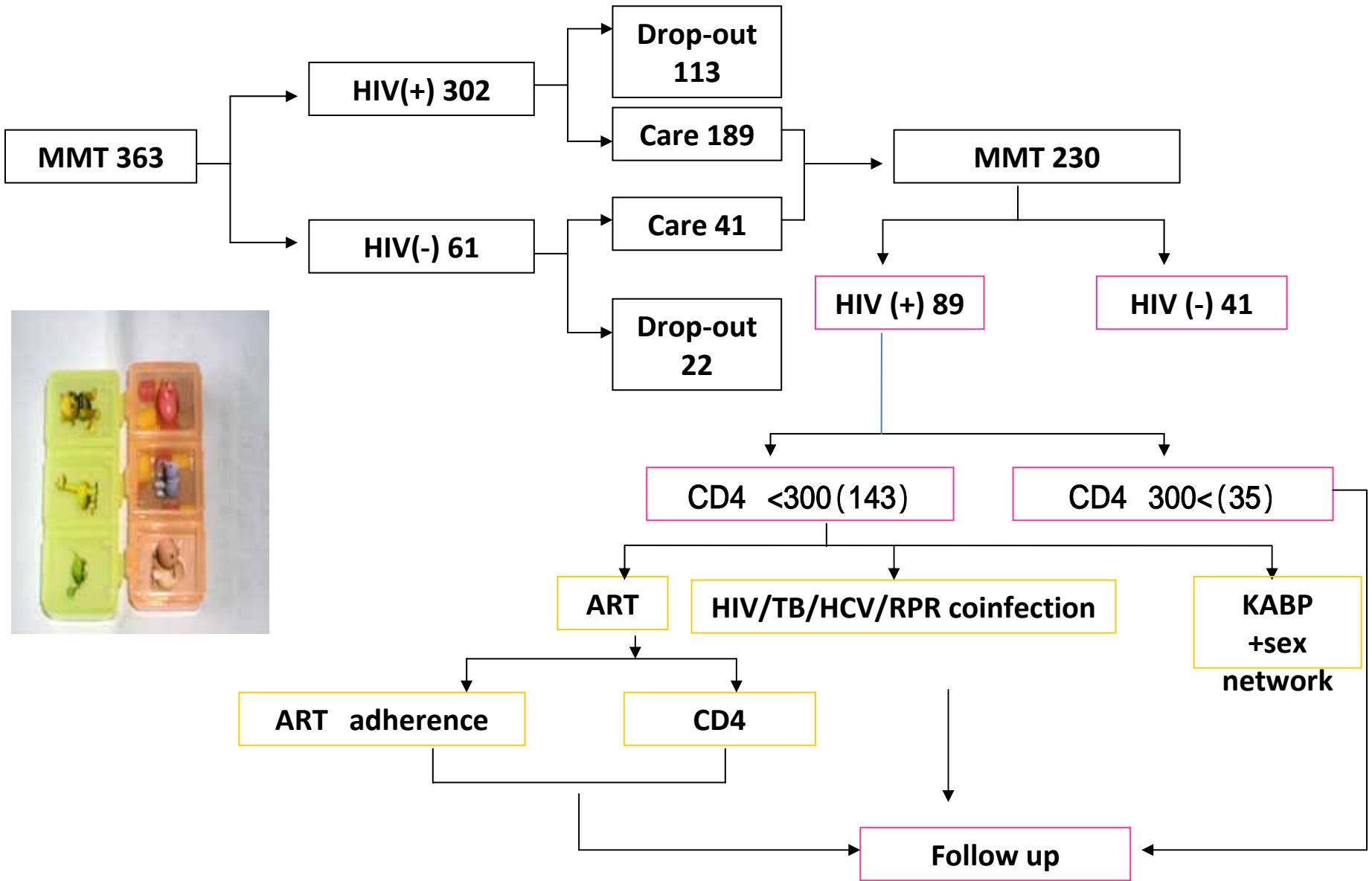


# Median percentage of population reached with HIV prevention services within the specified legal environment



Source: UNGASS Country Progress Reports 2008

# MMT patients in Lingcan county, China (20100531-)



# HIV and HCV in MMT, in Lingcan

	2005	2006	2007	2008	2009	2010
HIV tested	3	67	90	65	78	16
HIV (+)	3	58	14	56	50	10

	2005	2006	2007	2008	2009	2010
HCV tested	3	51	55	60	75	16
HCV (+)	3	48	62	57	63	11

# Methadone Maintenance Treatment

## Methadone

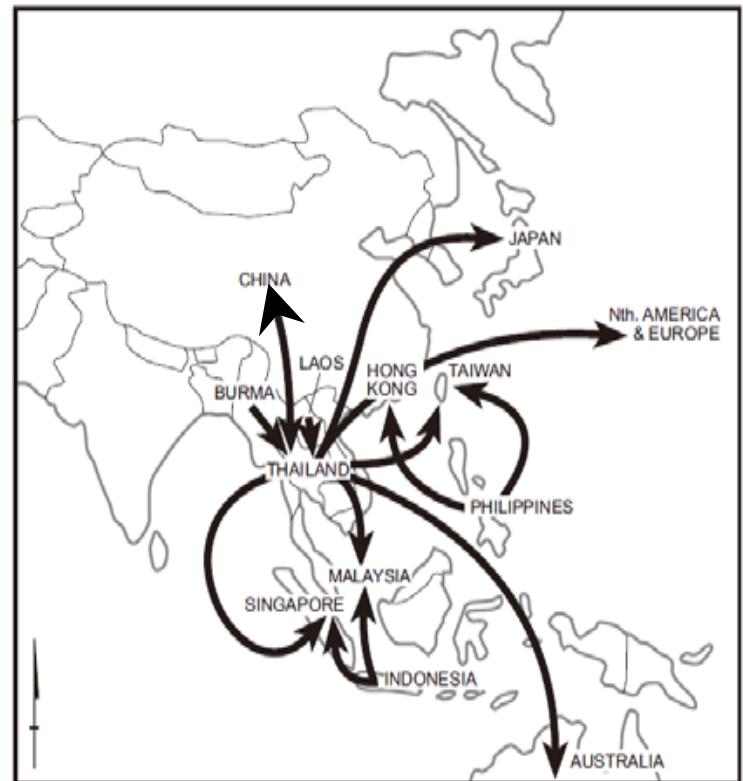
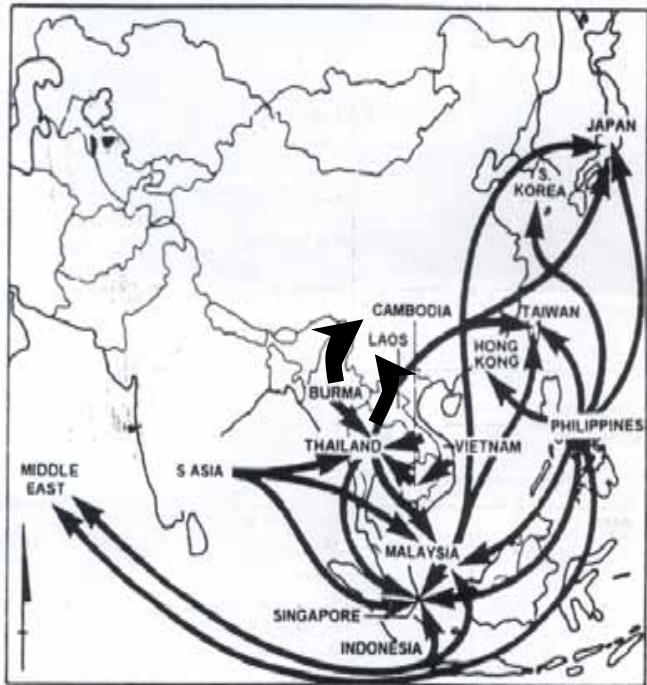


## Heroin



## Migration of sex workers in Asia

### Migration of workers without visa in Asia



Source: Global Commission on International Migration.  
Migration in the Asia-Pacific region, available at:  
<http://www.gcim.org/mm/File/Regional%20Study%202.pdf>