

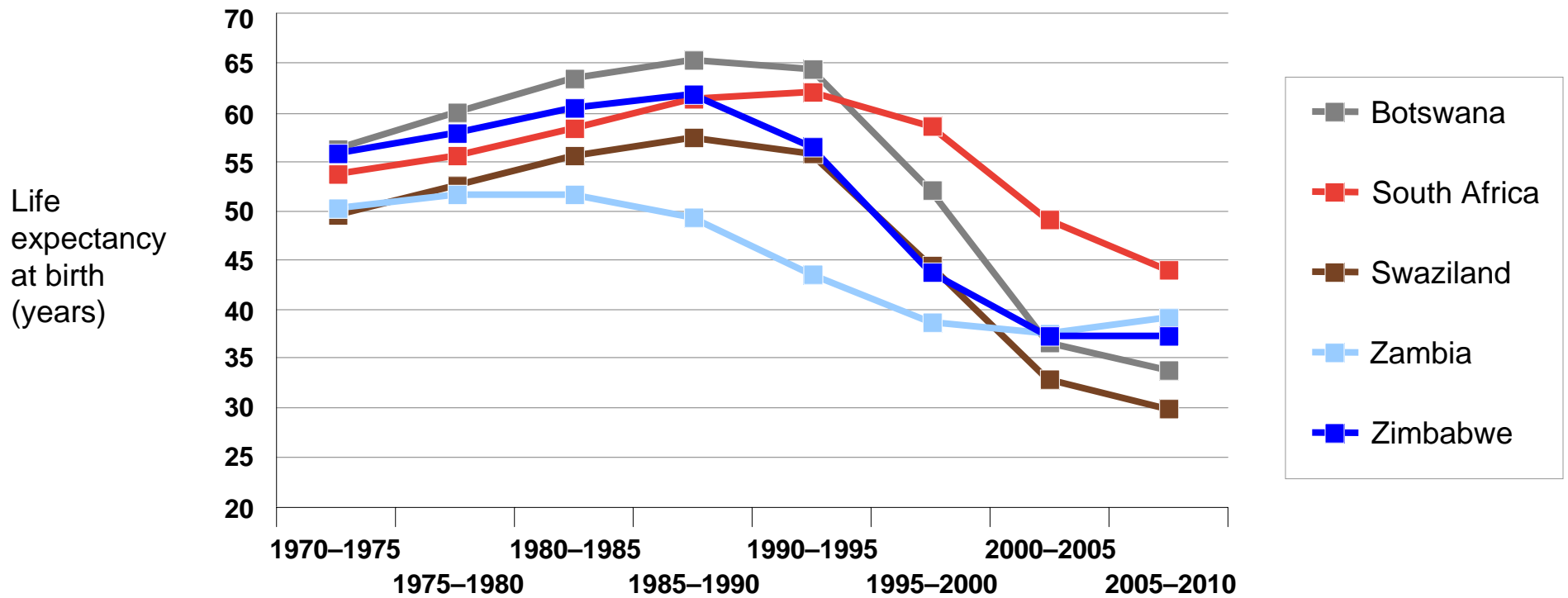
# **HIV/AIDS in Transport Sector Impact, Global Experiences in the Response and the Role of Transport Sector in China**

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# **HIV/AIDS: a current major public health problem in the world**

- **Over 38 million people are living with HIV/AIDS**
- **A major threat to public health & economic development**
- **Effects at various levels (household, community, sectoral and national)**

## Impact of AIDS on life expectancy in five African countries, 1970–2010



Source: UNAIDS slide

# HIV/AIDS in Transport Sector

**Transport sector include:**

- Trade, Tourism and Transport**
- Air transport, railway, water transport and road**
- Goods, labor, and tourists moving in large numbers**
- Migrant workers, construction workers, truck drivers and helpers, sex workers**

# HIV/AIDS in Transport Sector

- **People at high risk *and their families* include**
  - **Construction workers**
  - **Employees who maintain infrastructure**
  - **Workers in railways, roads, airlines**
  - **Professionals engaged in maintenance**
  - **Population living along roads, highways and tourist destinations.**
  - **sex workers**
  - **Mobile and migrant populations**

# Transport and spread of HIV/AIDS

- Transport is major vector for HIV spreading:
  - Movement of people
  - Behaviors associated with transport sector workers and transportation hubs

# Transport and spread of HIV/AIDS

- In many developing countries, the first populations found to be affected by the virus were those living and working along truck routes.
- Researchers following trends in the HIV epidemic, particularly of the developing world, noticed that the virus traveled from high- to low-prevalence areas along the same routes that trucks traveled.
- Changes in prevalence were also documented from urban to rural areas along truck routes.

# Transport and spread of HIV/AIDS

- HIV transmission was discovered along truck routes from Zambia, Zimbabwe, Malawi, and Mozambique to South Africa

# Transport and spread of HIV/AIDS

***42% of truck drivers report indulging in commercial sex while traveling; 33% of those who have casual sex don't use condoms***

Survey results, Poland and Lithuania border areas (World Bank, 2003)

***Truck drivers (and assistants) were known to have unprotected sex with multiple sex workers during their travels.***

# Transport and spread of HIV/AIDS

- **For Kenyans, 19% of drivers tested positive for HIV compared to 3% of the general group.**
- **For Ugandans, 36% of drivers tested positive compared to 15% of the general group.**
- **For Rwandans, 51% of the drivers tested positive vs. 21% of the general group.**

# Transport and spread of HIV/AIDS

- **Truckers have high rates of STIs and HIV. A recent study of 320 male truckers in South Africa found that 56% were HIV-positive and 60% reported having had a different STI in the previous six months**
- **While the percentages are smaller in Asia and Latin America, where the epidemic started later, the numbers are growing rapidly**
- **India, the number of truck drivers who are HIV positive increased by about 30% between 1997 and 1999.**

Source: The Synergy Project and University of Washington. Putting on the brakes. Preventing HIV transmission along truck routes

# Transport and spread of HIV/AIDS

- In Bangladesh, a national surveillance study found that the people with the highest prevalence of HIV were sex workers, long-distance truck drivers, people who had a history of sexually transmitted infections, and sailors.
- A study of truckers in China found that the rates of chlamydia and gonorrhoea were 10.2% and 7.8% respectively, compared with 5.6% and 1.9% for the general population

Source: The Synergy Project and University of Washington. Putting on the brakes. Preventing HIV transmission along truck routes

# Transport and spread of HIV/AIDS

- **The risk behaviors observed among truck driver and assistants are observed in other populations within the transport sector: construction workers, workers in railways, roads, airlines, mobile and migrant populations, tourists.**
- **There are groups of population bridging the HIV virus from the transport sector groups to the general public: population living along roads, highways and tourist destinations, sex workers.**

## HIV Prevalence prior to and post construction/ improvement transport corridors

Highway routes	HIV prevalence	
	prior to activity	post activity
Myanmar: 1997 Mandalay-Muse Highway	Injecting drug users HIV+, 1996	Injecting drug users HIV+, 1998
Mandalay	51%	88%
Lashio	34%	74%
Muse	86%	92%
China: 1996 construction Yunnan-Nanning, Guangxi Guangxi	Number of HIV+ cases 1995 10	Number of HIV+ cases 1998 525
Viet Nam: Highway one: Ho Chi Minh City (HCMC)-Hanoi highway improvement	Number of HIV+ cumulative cases <b>1997</b>	Number of HIV+ cumulative cases <b>1998</b>
Hanoi	51-100	101-1,000
Hai Phong	11-50	101-1,000
HCMC	>1,000	>1,000

## Impact of HIV/AIDS on the Transport Sector

- **Reduction in labor supply: loss of young adults who are most productive people in the society. This affects the overall economic output.**
- **Increased costs:**
  - **Direct cost particularly on expenditures incurred for medical care, drugs and funeral costs.**
  - **Indirect cost, which includes among others, loss of time to illness, recruitment as well as training costs of replacing new workers and care of orphans.**

## Impact of HIV/AIDS on the Transport Sector

### The economic impact of HIV/AIDS in Tanzania Railway Authority

- **Medical costs for Tanzania – Zambia Railway Authority (TAZARA) workers associated with HIV/AIDS-related illness increased over a one-year time frame from Tshs 2.8 million in January to Tshs 2.6 Million in December. This is a 63% increase.**
- **Funeral costs increased from Tshs 1.3 Million in 1988/89 to Tshs 5.8 million in 1992/93. The report indicates that 50% of all deaths were due to HIV/AIDS.**
- **Generally the organizations are losing employees at the rate of 0.5 – 1.5% every year due to AIDS-related diseases.**

Source: International Labour Organization

# HIV Prevention in the Transport Sector

# HIV Prevention in the Transport Sector

- **HIV prevention efforts designed for specific occupational groups, often targeting the purchase of sex while on the road, have met with considerable success.**
- **There is ample evidence that HIV prevention programmes aimed at truck drivers can reduce their frequency of unprotected sex.**

# HIV Prevention in the Transport Sector

- **In Tamil Nadu, research carried out after an HIV prevention programme for truck drivers found the percentage of drivers reporting that they had had commercial sex declined from 14% in 1996 to 2% in 2003.**
- **Moreover, the percentage of drivers whose last instance of commercial sex was unprotected fell from 45% to 9% in the same period**

# HIV Prevention in the Transport Sector

- **Programmes targeting truck drivers are most effective if carried out with the agreement of both employers and employees.**
- **In South Africa, an agreement between representatives of workers and employers has led to the establishment of a network of roadside clinics that provide general health services and HIV prevention interventions.**

# HIV Prevention in the Transport Sector

- **In Malawi, the World Food Programme is in partnership with private companies, non-governmental organizations and the government to provide HIV prevention information, condoms, treatment of sexually transmitted infections, voluntary HIV counselling and testing and referrals for HIV treatment to truck drivers and sex workers in two locations in the country.**

# HIV Prevention in the Transport Sector

**Projects that aim to reduce HIV transmission in transport sector should consider including the following components:**

- 1. Targeted communication efforts to promote supportive and reinforcing environments for behavior change, including peer education;**
- 2. Condom promotion, including social marketing;**
- 3. Condom provision, including female and male condoms;**
- 4. STI treatment services, including targeted presumptive treatment;**
- 5. Workplace interventions;**
- 6. Active community involvement;**
- 7. Advocacy with policy makers, government institutions, and transport business companies.**

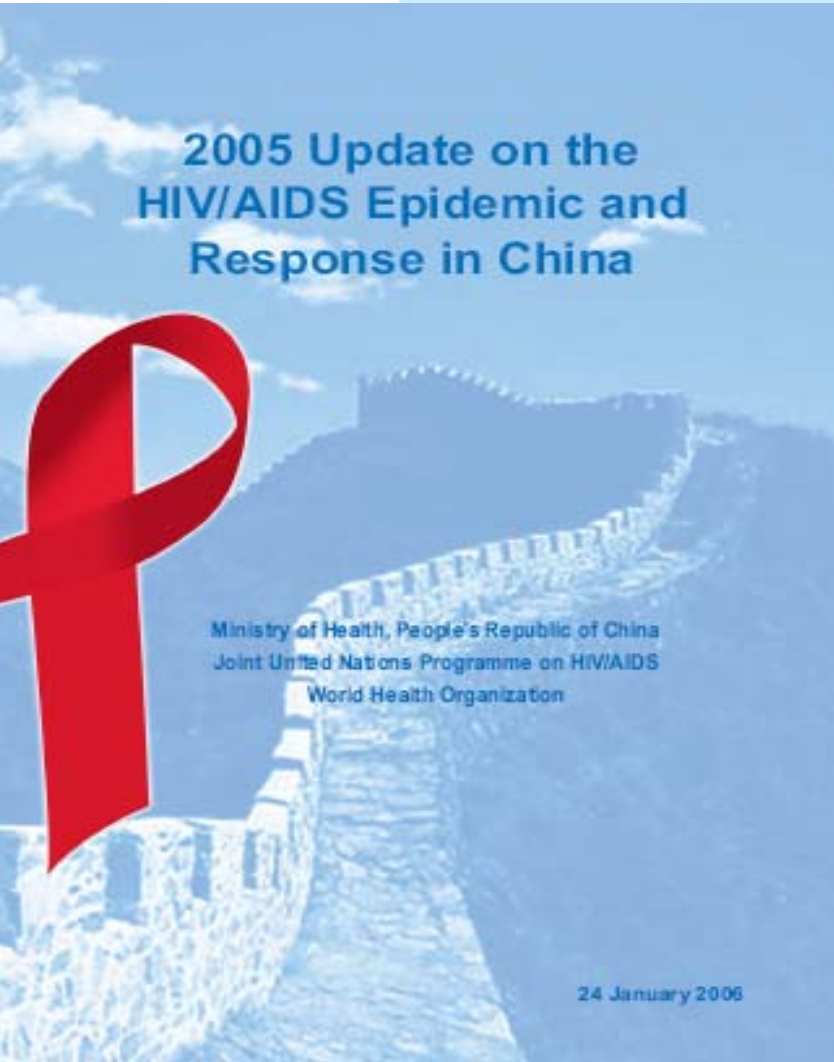
# HIV Prevention in the Transport Sector

## Stakeholders within transport sector

- Government, as represented by ministries of transportation and commerce;
- Trucking companies – local, national, or international;
- Trucking associations, trade unions, and training institutions;
- Health providers (treating STIs and other illnesses);
- Community members.

# China: the Role of Transport Sector in HIV Prevention

# China's HIV/AIDS Situation



2005 Update on the  
HIV/AIDS Epidemic and  
Response in China

Ministry of Health, People's Republic of China  
Joint United Nations Programme on HIV/AIDS  
World Health Organization

24 January 2006

**~0.05%** overall HIV prevalence

**~650,000** people living with  
HIV/AIDS (range: 540,000 to  
760,000)

**~75,000** people with clinical  
AIDS

**~25,000** AIDS deaths

**~70,000** new HIV infections

# China's Major HIV/AIDS Challenges

- Continuous increases in HIV incidence (new cases) and prevalence (living cases)
- Risk of spread from groups at high risk to the general population via sex
- Barriers to reversing the epidemic:
  - Low coverage of interventions
  - Inadequate quality of services delivery

# Large Populations at Risk of HIV

- 30 to 50 million people at risk of HIV (2005 estimate)
  - **Large population of drug users, high levels of drug injection and needle/syringe sharing**
    - Number of ‘registered’ drug users: 1.14 million
    - Estimated number much higher: 1.8 to 2.9 million
  - **Growing sex industry and sexual revolution, low levels of condom use**
    - Number of ‘registered’ sex workers: ~0.9 million
    - Estimated number of sex workers: 2.8 to 4.5 million
    - Estimated number of clients of sex workers: 10+ million
    - Estimated number of men who have sex with men: 5-10 million
- Larger social trends: rises in migration, premarital sex, and sexually transmitted infections (STIs)

# China: vulnerability and risk factors

- Ⓡ Low awareness of AIDS among the general public
- Ⓡ Low condom use
- Ⓡ Mobility and migration
- Ⓡ High prevalence of narcotic drug use
- Ⓡ Wide availability and affordability of commercial sex
- Ⓡ Limited access to prevention and care services for people at risk
- Ⓡ IEC and awareness raising but less emphasis on behaviour change strategies

# Mobility in China

- **Most of the major cities in China are tourist destination, and millions of tourists come to these cities- both domestic and national.**
- **There are 126,000 operational vehicles in Guangxi, including 26,000 buses with 500,500 seats and 100,000 trucks. As many as 10 million people are directly or indirectly involved in the transportation sector of Guangxi.**

# China Transport system

- China has 486 airports
- Over 74,000 km railways, one of the largest in the world
- Over 1,800,000 km roadways, and at least 29,745 km of expressways
- 123,000 km waterways
- 7 major ports (Dalian, Guangzhou, Nanjing, Ningbo, Qingdao, Qinhuangdao, Shanghai)

# China: Role of Transport Sector in HIV Prevention

Government main stakeholders:

- Ministry of Communication
- Ministry of Railways
- Bureau of Aviation

All three organizations are the members of the State Council AIDS Working Committee

# China: Role of Transport Sector in HIV Prevention

**The main activities include:**

- **Workplace programmes**
- **Campaigns to raise public awareness:  
AIDS awareness message boards at the airports (18) and public places within the transport system**

# China: Role of Transport Sector in HIV Prevention

**More roles are needed within the sector:**

- **Advocacy;**
- **Participation and involvement of private sector**
- **Behavioral change communications targeting workers and clients of the transport business;**
- **Workplace interventions;**
- **Condom promotion, including condom distribution;**
- **Mobilization of resource for HIV prevention and care;**
- **Increased coverage and quality of interventions**

# Sex Workers: an important mobile population group

# Sex Work in China

## 1. DIRECT SEX WORKERS

- Brothel-like

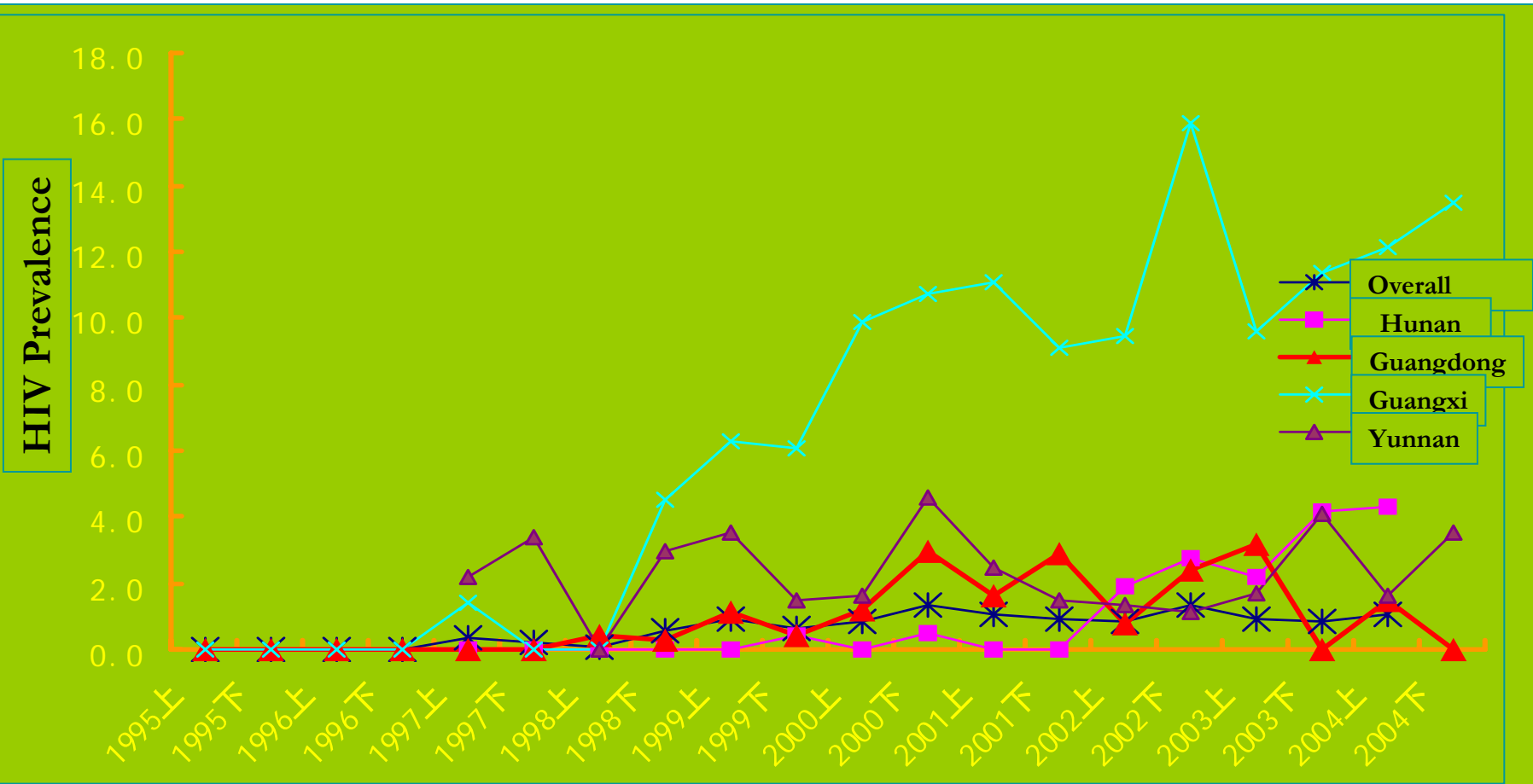
## 2. INDIRECT SEX WORKERS

- Estimated at between 2.8 to 4.5 million in China
- Higher risk of introducing infection into an area
- Easier to identify and access
- Bars, Nightclubs, Massage Parlors, Karaoke Lounges, Beauty Parlors, Saunas...

## 3. FREELANCE SEX WORKERS

- Work on street (organized or self-employed)
- Relatively small population, but at highest risk
- Not easy to access and cover for intervention

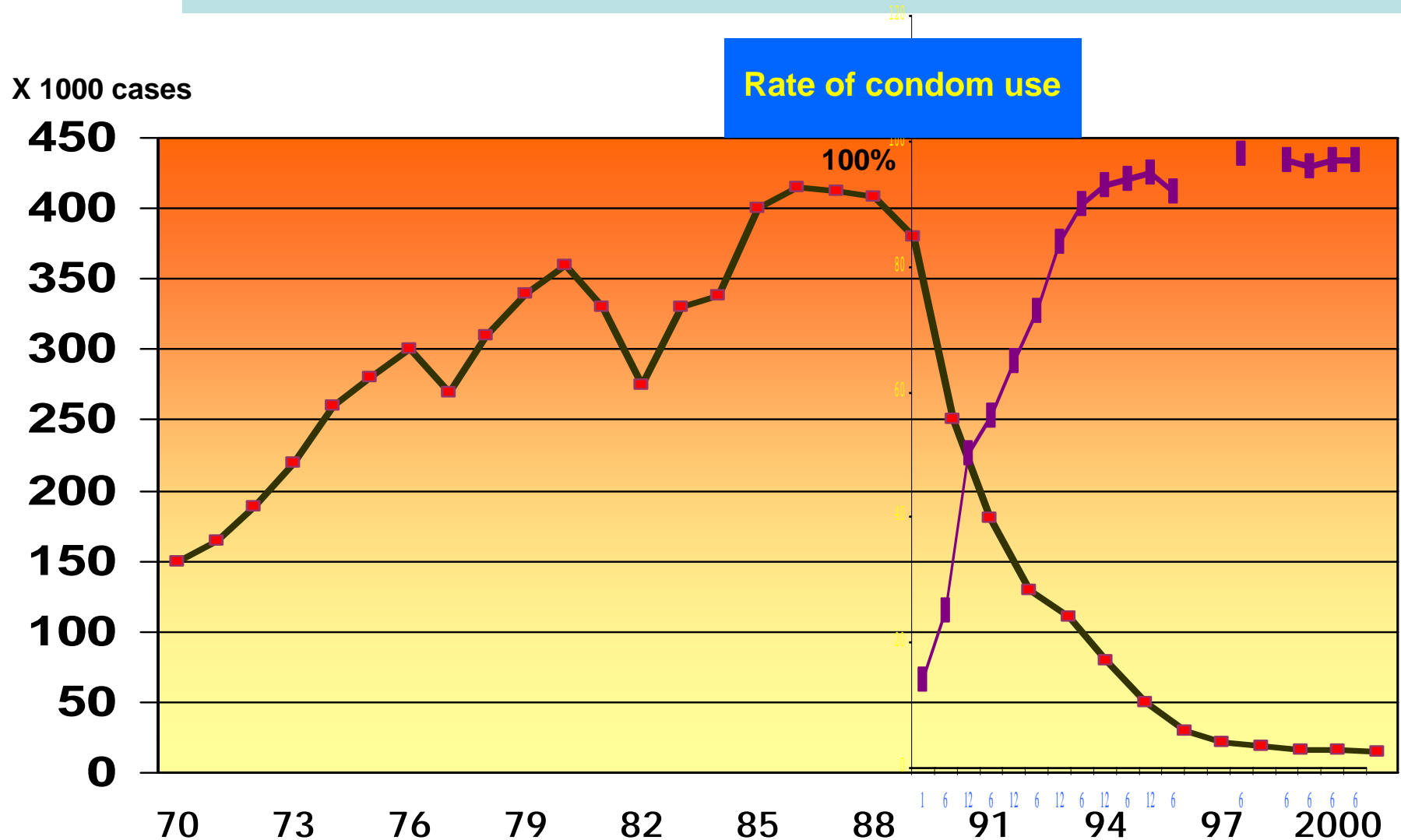
# China: HIV Prevalence among Sex Workers, 1995-2004



## **An Effective Approach: The 100% Condom Use Programme**

**The 100% Condom Use Programme (CUP) is a programme to prevent sexual transmission of HIV in the general population by ensuring high level of condom use among sex workers and their clients**

# Number of STI Cases, 1970-2001, and Condom Use Rate in Sex Establishments



# HIV Prevalence Among Young Thai Men Entering Royal Thai Army, Nov.89 - Nov. 99

