

# **HIV SURVEILLANCE REPORT – 2008 UPDATE**

**Special Preventive Programme  
Centre for Health Protection  
Department of Health  
Hong Kong Special Administrative Region  
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Surveillance Team  
Special Preventive Programme  
Centre for Health Protection  
Department of Health  
Hong Kong Special Administrative Region

**Team members:**

Dr KH Wong  
Dr Raymond Ho  
Dr Kenneth Chan  
Ms WK Chan  
Ms SL Cheng

**Correspondence:**

Special Preventive Programme  
c/o 5/F, Yaumatei Jockey Club Clinic  
145 Battery Street  
Kowloon, Hong Kong  
Tel: (852) 2780 8622    Fax: (852) 2780 9580  
Website: <http://www.aids.gov.hk>  
E-mail: [aids@dh.gov.hk](mailto:aids@dh.gov.hk)

## CONTENTS

|                                                                                                                                               | Pages |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-------|
| Preface                                                                                                                                       | 4     |
| Acknowledgements                                                                                                                              | 5     |
| 1. Summary review                                                                                                                             | 6-15  |
| 2. Tabulated results of HIV/AIDS reporting                                                                                                    | 16-37 |
| 3. Tabulated results of serosurveillance studies                                                                                              | 38-53 |
| 4. Tabulated results of statistics on sexually transmitted infections (STI)                                                                   | 54-61 |
| 5. Tabulated results on behavioural monitoring                                                                                                | 62-74 |
| <u>Appendix I:</u> HIV/AIDS report form (DH2293)                                                                                              | 75    |
| <u>Appendix II:</u> Classification system for HIV infection and surveillance case definition for AIDS in adolescents and adults in Hong Kong. | 76    |
| <u>Appendix III:</u> Condom distribution for the prevention of HIV and STI by the Department of Health                                        | 77    |

## PREFACE

Hong Kong, located in Asia the new burning place of HIV infection, is still having a relatively low prevalence of HIV infection. While sexual transmission is the predominant route of transmission in Hong Kong, an upsurge of infection in injecting drug users is a concern from the experience in other Asian localities. Various public health measures in Hong Kong have kept the HIV prevalence of drug users at low level, as compared with neighbouring cities.

A rising trend has been detected in men who have sex with men (MSM) in Hong Kong in recent years and the increase persisted last year. The *HIV Surveillance Report* of last year analysed the attributes of the increase of HIV infections in MSM observed. The number of HIV reports in MSM community was still increasing. These signified that the risk of local transmission of HIV among MSM community still persisted.

With the expansion of community-based HIV voluntary testing service, non-governmental organisations were playing a more significant role in understanding the HIV epidemiology in hard-to-reach populations. Through their service networks, many non-governmental organisations are contributing to the conduct of seroprevalence and behavioural surveys and data collection in different targeted populations.

This *annual surveillance report on HIV/AIDS* is an initiative of Special Preventive Programme (SPP), Centre for Health Protection of the Department of Health. This report serves to provide information for strategic planning of services and intervention activities for the prevention, care and control of HIV/AIDS. Following a commentary, data collected from the four main components of our surveillance programme (the HIV/AIDS voluntary reporting system, serosurveillance studies, Social Hygiene Service caseload statistics and risk behaviour studies) are presented as tables and graphs.

Electronic copy of this report is accessible in our website [www.aids.gov.hk](http://www.aids.gov.hk), so are the quarterly bulletins, factsheets, and other information relating to HIV surveillance and epidemiology. Your comments and suggestions are always welcome.

Surveillance team  
Special Preventive Programme  
Centre for Health Protection  
Department of Health  
December 2009

## **ACKNOWLEDGEMENTS**

The synthesis of this report is only made possible with the concerted efforts contributed by many people. First and foremost, we must thank our colleagues of the Social Hygiene Service, the Methadone Treatment Programme, TB & Chest Service, and the Government Virus Laboratory of the Department of Health who have provided the necessary information over the years. For data collected in the prison setting, we are indebted to the staff of the Correctional Services Department for their invaluable assistance in carrying out HIV risk behaviours questionnaire surveys and prevalence studies on a regular basis.

Next come the many agencies including the Hong Kong Red Cross Blood Transfusion Service, the Society for the Aid and Rehabilitation of Drug Abusers, the Narcotic Division of the Security Bureau, the Department of Microbiology of the University of Hong Kong, the Centre for Epidemiology and Biostatistics of the Chinese University of Hong Kong, many of our local AIDS non-governmental organisations and various public hospitals, in particular Queen Elizabeth Hospital, Prince of Wales Hospital and Princess Margaret Hospital, which have helped collect and update the relevant statistics referred by this report.

Finally, this update would not have been possible without the usual excellent support from the SPP staff in terms of collating and compiling the information as well as the design and production of the report.

## 1. SUMMARY REVIEW

### Background

1. The HIV surveillance system comprises 4 main programmes to provide a detailed description of HIV/AIDS situation in Hong Kong. They are (a) voluntary HIV/AIDS case-based reporting; (b) seroprevalence studies; (c) sexually transmitted infections (STI) caseload statistics; and (d) behavioural studies. The data is collected, analyzed and disseminated regularly by staff of the Surveillance team of Special Preventive Programme (SPP), Centre for Health Protection (CHP), Department of Health (DH). At present, the latest HIV/AIDS statistics are released at quarterly intervals at press media briefings and in electronic format ([www.aids.gov.hk](http://www.aids.gov.hk)). Data from various sources are compiled annually and released in this Report.

2. The following paragraphs highlight the main findings from HIV/AIDS surveillance activities undertaken in 2008. Please refer to the following pages for the details of the programmes. Surveillance information gathered from two large public health HIV testing programmes (namely universal urine testing programme at methadone clinics and universal antenatal testing programme) is also included in the report.

| HIV Surveillance system       | Page Number  |
|-------------------------------|--------------|
| (a) HIV/AIDS reporting system | Page 16 – 17 |
| (b) Seroprevalence studies    | Page 38 – 39 |
| (c) STI caseload statistics   | Page 54      |
| (d) Behavioural studies       | Page 62 – 63 |

## HIV/AIDS reporting system

3. The Department of Health has implemented a voluntary anonymous HIV/AIDS reporting system since 1985. The system received reports from doctors and laboratories. Medical doctors report newly diagnosed positive cases by a standard form (DH2293). In the past, only cases with Western Blot confirmed HIV antibody positive laboratory result were counted as HIV infection for cases aged above 18 months. Since the 4<sup>th</sup> quarter of 2006, cases with a PCR positive result and clinical or laboratory indication of recent infections were also counted as HIV infection in the reporting system, in view of the increasing regular detection of such cases.

4. In 2008, the department received 435 HIV reported cases and 96 AIDS reports, which increased respectively by 5.1% in HIV cases and 21.5% in AIDS cases as compared with 2007. It made the cumulative totals reached 4047 and 1030 for HIV and AIDS reports respectively. Under the revised definition, 13 cases of PCR positive with clinical or laboratory indication of recent infections were included as HIV infection in 2008. Public hospitals/clinics/laboratories were still the commonest source of HIV reports in 2008, which accounted for 39.5% of the reports. Private hospitals/clinics/laboratories were another common source of HIV reports (23.2%). Notably, the AIDS service organisations played a more significant role in HIV reporting in 2008 (8.3%). The number of reports from other sources has remained stable. (Box 2.2)

### HIV Surveillance at a glance (2008)

- 435 HIV reports and 96 AIDS reports
- Gender: 80.2% male
- Ethnicity: 60.9% Chinese
- Age: Median 36
- Risks:
  - 30.1% Heterosexual contact
  - 33.3% Homo/bisexual contact
  - 9.2% Injecting drug use
  - 0.7% Blood contact
  - 26.7% undetermined
- CD4 at reporting: Median 190
- Subtypes: commonest are CRF01\_AE and B
- Primary AIDS defining illness: Commonest PCP
- Seroprevalences
  - Blood donors: < 0.01%
  - Antenatal women: < 0.01%
  - STI clinic attendees: 0.23%
  - Methadone clinics attendees: 0.47%
  - Men who have sex with men: 4.31%

5. Around eighty percent of reported HIV cases were male. The male-to-female ratio was 4.1:1 in 2008, slightly lower than that in 2007 of 4.8:1. About 60% of reported cases were Chinese. Asian accounted for 17.2% of reports. The median age of reported HIV cases was 36. Over 63% of reported cases were believed to acquire the virus through sexual transmission in 2008. Injecting drug use accounted for 9.2% of HIV infections in 2008. There was no report of HIV transmission through perinatal contact in 2008. The suspected routes of transmission were not reported in about a quarter of cases. This means that sexual transmission has accounted for about 87% of HIV reports with defined risks.

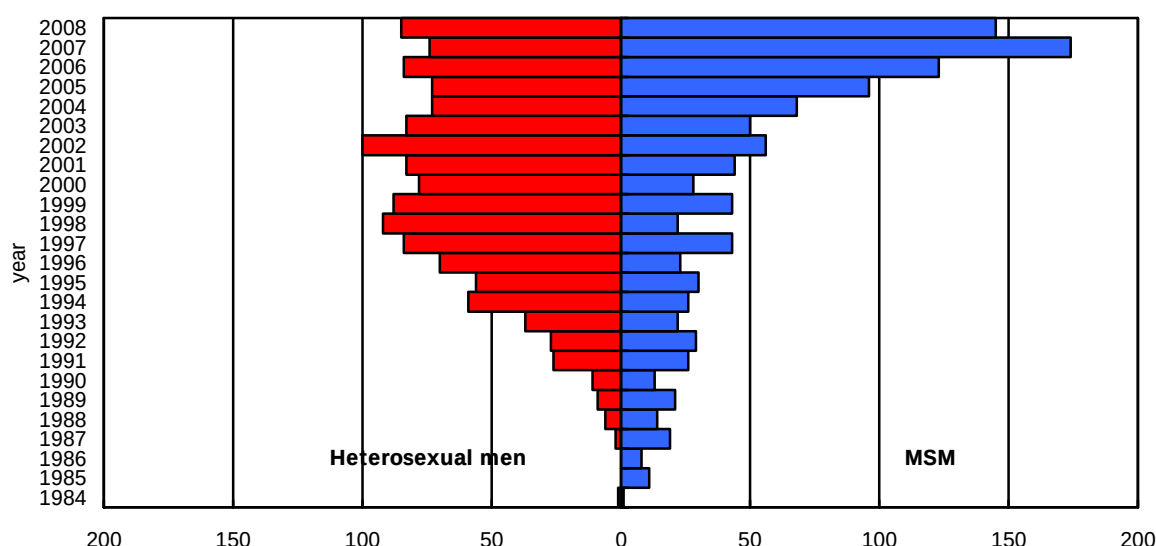
### **Rising trend in men who have sex with men persisted**

6. Sexual contact remained the commonest route of HIV transmission in Hong Kong. Both heterosexual and homosexual/bisexual contacts were important risk factors. In 1980s and early 1990s, the early years of AIDS epidemic in Hong Kong, it used to report more cases from men who have sex with men, including both homosexual and bisexual contacts. The trend then reversed with more heterosexual transmission reported since 1993. A rising trend in

MSM has been observed since 2004 and the situation was consistent this year with 145 MSM cases identified out of 319 cases with defined risks. (Box 2.5(a)).

7. A high weighting of MSM in HIV reports continued in 2008 despite being a drop compared to that of 2007. Over 40% of male HIV reports in 2008 contracted the virus through homosexual or bisexual contact. Heterosexual contact in male cases accounted for about 24%, whereas the routes of transmission were not reported in the rest of the 23% male cases. The ratio of heterosexual men against MSM dropped from its peak of 4.2:1 in 1998 to 0.6:1 in 2008 with the lowest ratio recorded at 0.4:1 in 2007 during the period. (Box 1.1 and 2.7(c)) That still indicated more men continued to be infected through homosexual/bisexual contact than heterosexual contact.

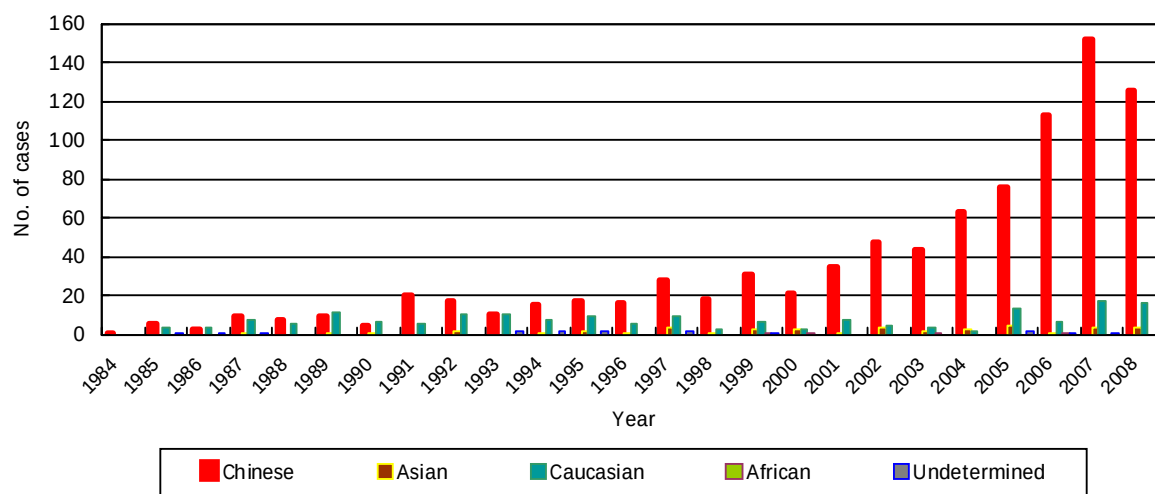
Box 1.1 The number of MSM cases is taking over heterosexual men cases in the reporting system again.



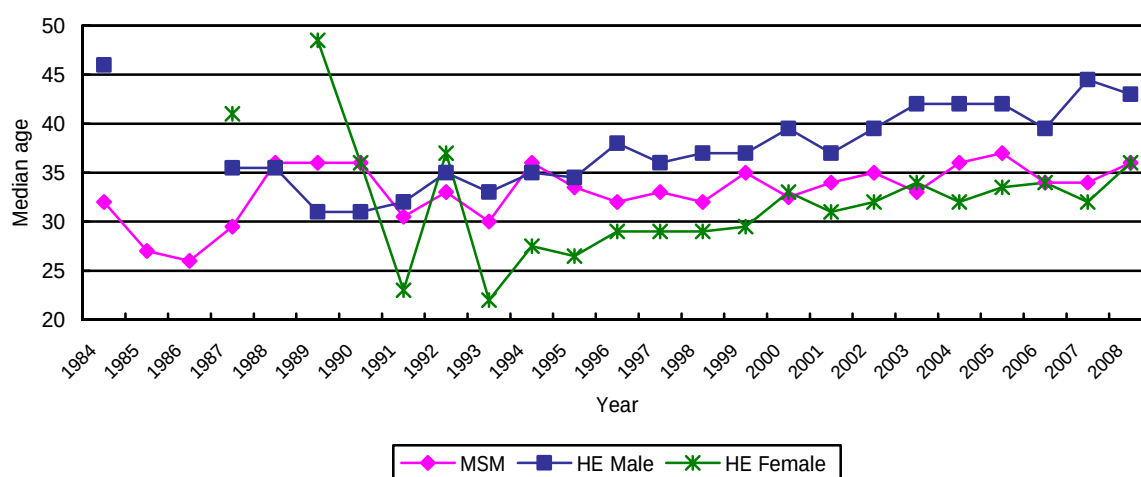
8. The major attributes of the rise in MSM were Chinese and of age group 20-39. Over 86% of MSM cases in 2008 were Chinese. Caucasians accounted for only 11%. A rising trend in the number of reported Chinese MSM cases was observed in recent years despite a modest drop this year. (Box 1.2) The median age of MSM cases at report was 36, as compared to 43 of heterosexual man cases. Moreover, the median age of HIV infected MSM population has been relatively stable in the last decade whereas that of heterosexual men was on a rising trend. (Box 1.3) Age group 30-39 remained the commonest age of reporting in MSM, which accounted for 38% in 2008, followed by 26% in the age group 20-29. (Box 1.4)



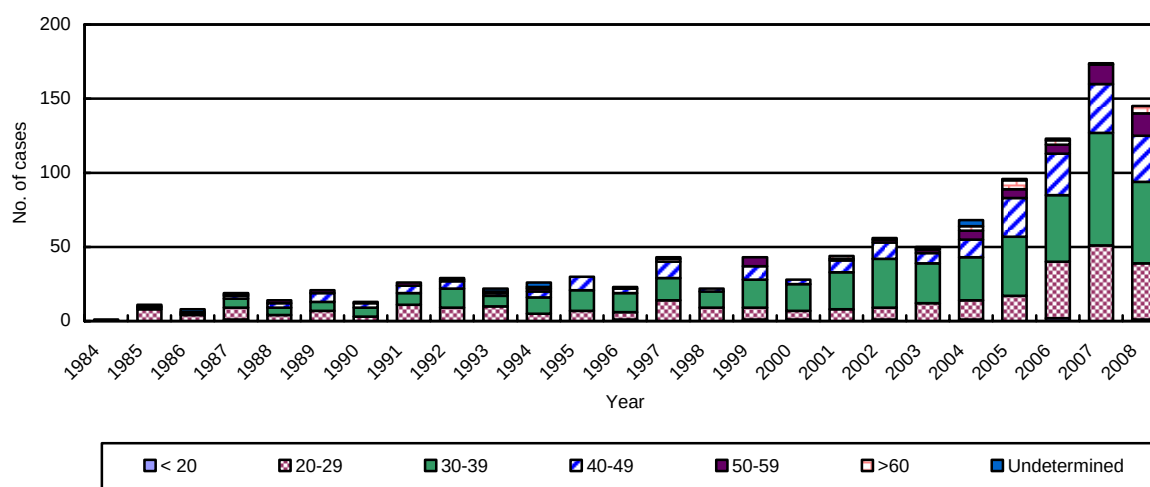
Box 1.2 Ethnicity Breakdown of HIV-infected MSM cases (1984-2008)



Box 1.3 Median age of HIV-infected MSM cases, heterosexual man and heterosexual women (1984-2008)



Box 1.4 Age breakdown of HIV-infected MSM cases (1984 - 2008)



9. Efforts have been made to estimate the HIV prevalence among MSM in Hong Kong, including the second community-based survey (PRISM) in gay saunas, bars and clubs which was conducted in 2008 and revealed a HIV prevalence of 4.31% among MSM attending these venues. The level of consistent condom use with regular sex partners and non-regular sex partners were 45% and 75% respectively, which were very similar to those figures of 2006 survey. On the other hand, rate of HIV testing within the last one year increased from 24% in 2006 to 36% in 2008. AIDS Concern's voluntary HIV testing service targeting MSM was another source to estimate the prevalence in MSM, although the data was affected by participant bias to a larger extent. A rising trend in prevalence was observed since 2004 but it seemed to be stable in recent years. This may be affected by the expansion of AIDS Concern's service from higher-risk MSM settings to general-risk MSM populations in recent years.

Box 1.5 HIV seroprevalence in AIDS Concern's MSM voluntary HIV testing service

| Year  | No. of blood samples | No. of samples tested anti-HIV+ | Prevalence (%) | 95% C.I. for prevalence (%) |
|-------|----------------------|---------------------------------|----------------|-----------------------------|
| 2000  | 38                   | 0                               | 0              | ( --- - --- )               |
| 2001  | 107                  | 1                               | 0.93           | ( 0.024 - 5.207 )           |
| 2002  | 130                  | 1                               | 0.77           | ( 0.019 - 4.286 )           |
| 2003  | 223                  | 2                               | 0.90           | ( 0.109 - 3.240 )           |
| 2004  | 332                  | 6                               | 1.81           | ( 0.663 - 3.934 )           |
| 2005  | 483                  | 12                              | 2.48           | ( 1.284 - 4.340 )           |
| 2006  | 610                  | 10                              | 1.64           | ( 0.786 - 3.015 )           |
| 2007* | 723                  | 17                              | 2.35           | ( 1.370 - 3.765 )           |
| 2008  | 905                  | 15                              | 1.66           | ( 0.928 - 2.734 )           |

\* figures in 2007 revised

10. The regular condom use rate of MSM attending AIDS Counselling and Testing Service was observed to be higher in recent two years for both regular partners and casual partners, although the trends observed for condom use in last anal sex among MSM were relatively less obvious. On the other hand, the trends derived from MSM attending AIDS Concern's testing service remained static for both regular condom use and condom use for last anal sex. (Box 5.5)

### **The number of heterosexual contact cases increased in 2008**

11. The number of heterosexual cases, after an obvious drop from 130 in 2006 to 109 in 2007, appeared to rebound to the similar level in 2006, back up to 131 this year. Because of this rebound in the number of heterosexual contact, the proportion accounted by heterosexual contact jumped back from 26.3% in 2007 to 30.1% in 2008. (Box 2.5(a)) The male to female ratio for heterosexual cases was 1.8:1. The median age of heterosexual cases in 2008 was 40. Heterosexual male cases were mainly (75% in year 2008) Chinese whereas Chinese accounted for less than half (46% in year 2008) of female cases.

12. A majority of Social Hygiene Clinics attendees reported unprotected heterosexual contact. The seroprevalence of Social Hygiene Clinic attendees remained stable at below 0.3% (0.23% in 2008). On the other hand, the trend of sexually transmitted infections (STI) provides information for the understanding of risk of HIV infection in the community. Although it was estimated that Social Hygiene Clinics took care of only 20% of STI cases in the territory, it was still a very important sentinel site. It continued to record a decrease in the total number of STI cases in Social Hygiene Clinics, an aggregate of 13,867 in 2008 as compared with 14,305 cases in 2007. A 3% drop was observed in all the common STI diagnosis. The decrease of cases was more obvious in non-specific genital infection / non-gonococcal urethritis from 6,761 cases in 2007 to 6,518 cases in 2008. (Box 4.2)

13. The regular condom use rate with commercial partners remained stably high among adult heterosexual men attending Social Hygiene Clinics and AIDS Counselling and Testing Service. The level was over 80% among those attending AIDS Counselling and Testing Service and about 70% in Social Hygiene Clinic attendees. (Box 5.4)

#### **Small but significant numbers of infection in injecting drug users reported**

14. In 2008, the reporting system recorded 40 cases of HIV transmission through injecting drug use. The number was similar to that of 2007, but still remaining at a relatively higher level as compared with several years ago. Most of the cases were Asian, non-Chinese. The median age was 30. 10% of injecting drug user cases was reported from methadone clinics.

15. The Universal HIV Antibody (Urine) Testing Programme (MUT) replaced the unlinked anonymous screening (UAS) in methadone clinic as the seroprevalence study in 2004. 7723 attendees participated in the programme in 2008 with a coverage rate of 83%, a better coverage than in 2007 of 80%. The programme tested 7942 urine samples, 24 positive cases in 2008 and with the 13 previously known positive cases still attending methadone clinics, totally there were 37 HIV positive drug users attending methadone clinic this year. The seroprevalence over the year, was stable at below 1%. The seroprevalence of methadone clinic attendees in 2008 was 0.47%, which remained at a similar level as in previous years. (Box 3.3)

16. Although a significant proportion of drug users were injectors, various surveys revealed that the proportion of needle sharing was relatively low. The trend remained stable over the years, with sharing rate revealed from street survey generally higher than from treatment and rehabilitation services. (Box 5.7)

#### **No case of perinatal transmission recorded**

17. In 2008, three cases reported blood contact transmission. Actually no HIV infection from local contaminated blood or blood product was found in the recent several years. The seroprevalence of new blood donors at Hong Kong Red Cross Blood Transfusion Service was at a low level of 0.012% in 2008 (Box 3.1(b)).

18. In 2008, there was no perinatal HIV infections reported. The Universal Antenatal HIV Testing was implemented in September 2001. Over 40,000 pregnant women attending public

antenatal services were tested every year and the coverage of the programme reached 98.2% in 2008 and revealed the seroprevalence of HIV infection in pregnant women to be 0.004%, which remained at a low level as in previous years. Two pregnant women were tested positive in the programme this year. One woman terminated her pregnancy and one woman delivered her baby by Caesarean Section.

### **Cases with undetermined risk factor was significant**

19. The information of voluntary reporting was becoming incomplete as there are an increasing proportion of cases reported without a risk factor. Slightly more than past years, around a quarter of cases reported without a suspected route of transmission. These cases were usually those without a physician's reporting. Undetermined risk is commoner in cases reported by private hospitals/clinics/laboratories. Although this was a voluntary reporting system, physicians were strongly encouraged to make the system comprehensive. The data is of paramount importance for understanding the local HIV epidemiology and its evolution.

### ***Pneumocystis* Pneumonia and Tuberculosis remained the commonest Primary AIDS Defining Illness**

20. The annual number of reported AIDS cases was dropping since 1997, the year of introducing highly active antiretroviral therapy (HAART) in Hong Kong but a slow increasing trend was observed since 2005. Ninety-six AIDS cases, the highest annual number, were reported in 2008 as compared with 79 cases in 2007. The increase was compatible with increase in newly reported and cumulative HIV cases. 90 cases (94%) of the AIDS reports this year has their AIDS reported within 3 months of HIV reporting.

21. The primary AIDS defining illness (ADI) pattern of the reported cases also changed slightly in recent years. *Pneumocystis jirovecii* pneumonia (previously named *Pneumocystis carinii*) was the commonest ADI in Hong Kong in 2008 which accounted for 37 cases (38.5%), an increase of over 3% in terms of the proportion of ADI as compared with 2007. This year, 32 cases (33.3%) reported *Mycobacterium tuberculosis* as the primary ADI which was following right after *Pneumocystis jirovecii* pneumonia as the second commonest ADI. They were followed by Penicilliosis (6, 6.3%), and Cytomegalovirus diseases (6, 6.3%). (Box 2.8) On the other hand, unlinked anonymous testing in tuberculosis patients demonstrated a HIV seroprevalence of 0.511% in 2008 while universal voluntary testing showed a seroprevalence of 1.165%. HIV positivity rate in TB patients was consistently higher than many at-risk populations over the years.

22. The median CD4 of newly reported HIV cases in 2008 was 190. Reporting of CD4 level was becoming a routine practice in physician. It provided useful information on the timing of diagnosis in the course of HIV infection. 61.4% of HIV cases in 2008 reported the CD4 level at diagnosis. (Box 1.6) The median CD4 for those aged less than 55 has been stable at around 200 (158 – 278) for the past 5 years. On the other hand, there was a continued decreasing trend in median CD4 count among those who are aged 55 and above. It suggested that more patients reported at age 55 or above were diagnosed at a late disease stage. (Box 1.7)

Box 1.6 – Reported CD4 levels at HIV diagnosis

| Year | No. of HIV reports | No. of CD4 reports (%) | Median CD4 (cell/ul) | CD4 ≥ 200 (cell/ul) (%) |
|------|--------------------|------------------------|----------------------|-------------------------|
| 2001 | 213                | 162 ( 76.1% )          | 233.5                | 85 ( 52.5% )            |
| 2002 | 260                | 201 ( 77.3% )          | 197                  | 100 ( 49.8% )           |
| 2003 | 229                | 166 ( 72.5% )          | 205                  | 85 ( 51.2% )            |
| 2004 | 268                | 179 ( 66.8% )          | 208                  | 95 ( 53.1% )            |
| 2005 | 313                | 224 ( 71.6% )          | 194                  | 110 ( 49.1% )           |
| 2006 | 373                | 278 ( 74.5% )          | 224                  | 150 ( 54.0% )           |
| 2007 | 414                | 301 ( 72.7% )          | 241                  | 170 ( 56.5% )           |
| 2008 | 435                | 267 ( 61.4% )          | 190                  | 128 ( 47.9% )           |

Box 1.7 – CD4 Reports by age group

| Age  | Year | No. of HIV reports | No. of CD4 reports (%) | Median CD4 (cell/ul) | % of CD4 ≥ 200 (cell/ul) |
|------|------|--------------------|------------------------|----------------------|--------------------------|
| <55  | 2001 | 190                | 146 (76.8%)            | 258.5                | 54.1%                    |
|      | 2002 | 230                | 183 (79.6%)            | 196                  | 49.7%                    |
|      | 2003 | 190                | 139 (73.2%)            | 228                  | 52.5%                    |
|      | 2004 | 225                | 158 (70.2%)            | 220.5                | 55.7%                    |
|      | 2005 | 280                | 201 (71.8%)            | 192                  | 48.8%                    |
|      | 2006 | 341                | 253 (74.2%)            | 241                  | 56.9%                    |
|      | 2007 | 377                | 278 (73.7%)            | 254.5                | 57.9%                    |
|      | 2008 | 380                | 228 (60.0%)            | 217                  | 51.8%                    |
| ≥ 55 | 2001 | 22                 | 16 (72.7%)             | 96                   | 37.5%                    |
|      | 2002 | 24                 | 18 (75.0%)             | 212.5                | 50.0%                    |
|      | 2003 | 32                 | 27 (84.4%)             | 108                  | 44.4%                    |
|      | 2004 | 32                 | 21 (65.6%)             | 82                   | 33.3%                    |
|      | 2005 | 29                 | 23 (79.3%)             | 223                  | 52.2%                    |
|      | 2006 | 28                 | 25 (89.3%)             | 145                  | 24.0%                    |
|      | 2007 | 33                 | 23 (69.7%)             | 104                  | 39.1%                    |
|      | 2008 | 53                 | 39 (73.6%)             | 74                   | 25.6%                    |

**The commonest HIV subtypes were CRF01\_AE and B**

23. In 2008, about 85% of HIV reports had their subtypes documented, at a comparable level as in the past years. CRF01\_AE and Subtype B of HIV-1 strains were the most common subtypes identified in Hong Kong. They together accounted for 73% of all HIV cases. CRF\_01AE was found to be commoner in female, Asian non-Chinese, heterosexuals and IDU.

The subtype B was commoner in Caucasian, MSM and C subtypes in females, Asians and sexually transmitted cases. An increasing diversity of subtypes and its circulating recombinant forms was also noted. (Box 1.8)

Box 1.8 – HIV Subtypes in Hong Kong

|                                 | 2003      | 2004      | 2005      | 2006      | 2007      | 2008      |
|---------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Annual HIV Reports              | 229       | 268       | 313       | 373       | 414       | 435       |
| No of reports with subtypes (%) | 204 (89%) | 203 (76%) | 258 (82%) | 316 (85%) | 354 (86%) | 370 (85%) |
| Subtype (%)                     |           |           |           |           |           |           |
| <i>CRF01_AE</i>                 | 99 (43%)  | 96 (36%)  | 125 (40%) | 149 (40%) | 158 (38%) | 169 (39%) |
| <i>B</i>                        | 60 (26%)  | 71 (26%)  | 101 (32%) | 124 (33%) | 155 (37%) | 150 (34%) |
| <i>C</i>                        | 21 (9%)   | 3 (1%)    | 2 (1%)    | 6 (2%)    | 2 (0%)    | 14 (3%)   |
| <i>CRF07_BC</i>                 | 9 (4%)    | 7 (3%)    | 6 (2%)    | 14 (4%)   | 10 (2%)   | 11 (3%)   |
| <i>CRF08_BC</i>                 | 4 (2%)    | 10 (4%)   | 6 (2%)    | 11 (3%)   | 14 (3%)   | 2 (0%)    |
| <i>Others</i>                   | 11 (5%)   | 16 (6%)   | 18 (6%)   | 12 (3%)   | 15 (4%)   | 24 (6%)   |

## **Discussion**

24. The number of HIV reports was persistently on a rise in 2008. The annual HIV reports used to be less than or around 300 before 2006. The total number of HIV reports in 2008 was 435, which was a 5% increase as compared to 2007. In the last few years, there was 10-20% increase in HIV reports every year except in 2003, when SARS outbreak occurred. The increasing reports from Men who have Sex with Men continued to contribute to the rise in HIV reports, although heterosexual contact appeared to be catching up in 2008. An increase in injecting drug users was observed but mainly in non-Chinese population, which suggested non-local infections.

25. The number of HIV reports among MSM continued to play a significant role and it accounted for consistently the largest proportion this year. The HIV situation in MSM was really worrisome because the increasing trend has persisted and in an escalating fashion. Data suggested that young MSM aged 20-29 was becoming more affected. The second community-based seroprevalence survey in 2008 revealed a slightly higher HIV prevalence of 4.31% when compared with the previous study in 2006. Both condom usage rates of MSM with casual and regular partners remained at a suboptimal level than that of heterosexual men visiting sex workers. Reporting data, prevalence data and behavioural data all suggested a persisting local HIV epidemic in MSM. The observation was in keeping with the regional picture of rising MSM HIV epidemic.

26. Heterosexual transmission appeared to be in a stable trend over the years although it appeared to increase in 2008. A significant proportion of non Chinese female cases might

suggest infections outside Hong Kong. For heterosexual men, only 34% of their contacts were believed to have occurred in Hong Kong. The prevalence in social hygiene clinics attendees and antenatal women were all below 1%. The condom use rates of commercial sex were high as gauged from the reports of sex workers and their clients.

27. Although the number of HIV-infected injecting drug users was persistent at a higher level than a few years back, an escalating growth of HIV infections in injecting drug users was not expected at present. Same as last year, most who reported injecting drug use were Asian non-Chinese. It was believed that those non-Chinese acquired the infection outside Hong Kong. The number of HIV infections in drug users contributed by the local infections was not largely different from previous years.

28. In conclusion, the HIV infections in Hong Kong were increasing and mainly affecting MSM populations. The situation of heterosexual population and local injecting drug user population was relatively stable thus far. The HIV epidemiology in Hong Kong was also affected by the situation of neighbouring countries. A proportion of cases were infections which acquired outside Hong Kong. The number of people living with HIV was estimated to be 3600 as of 2007. Hence, HIV prevalence remained at <0.1% among the general population in Hong Kong.

### **Rounding of Figures**

29. Owing to rounding, there may be a slight discrepancy between the sum of individual items and the total as shown in the tables.

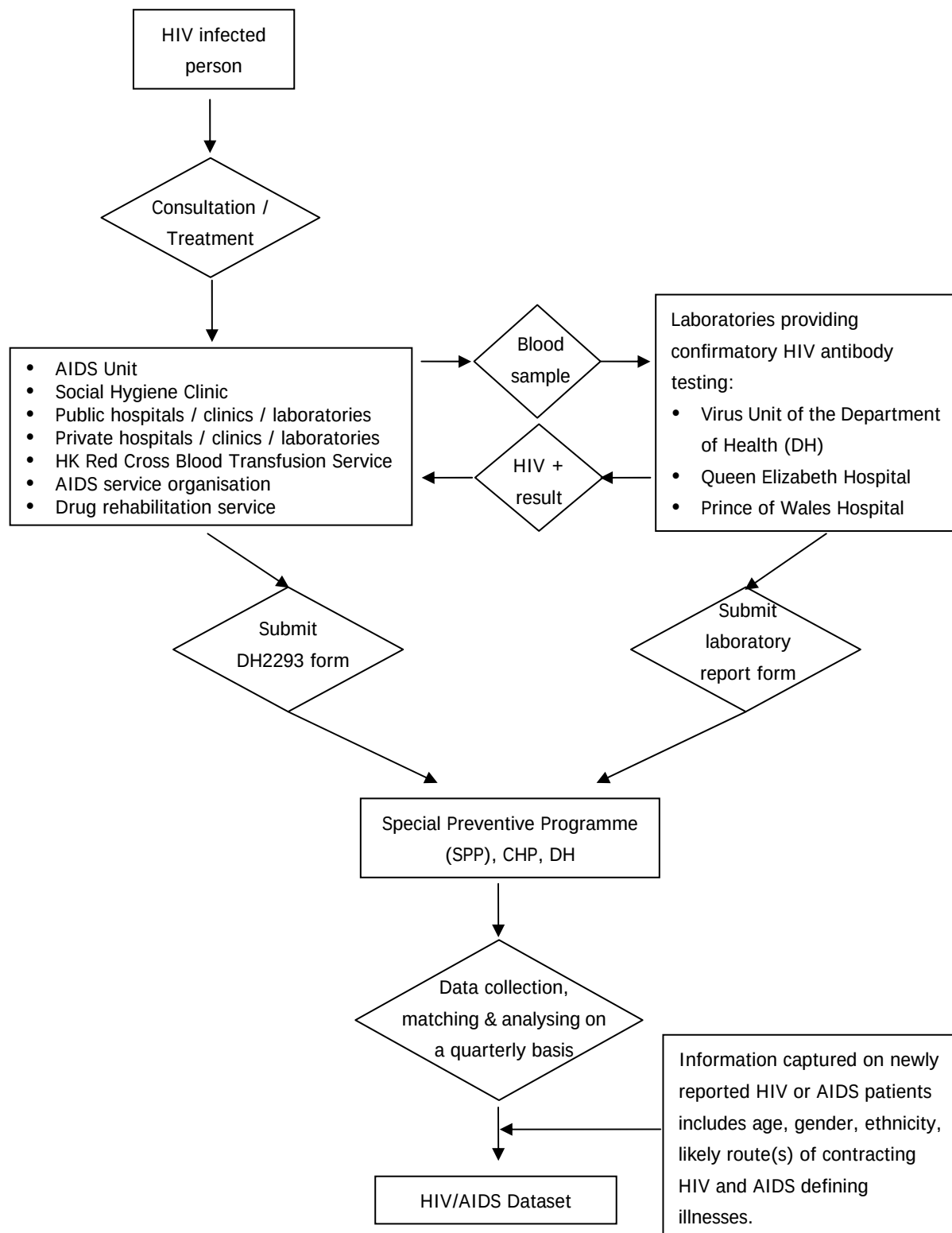
## **2. TABULATED RESULTS OF HIV/AIDS REPORTING**

### **System description**

- The HIV/AIDS reporting system is a case-based notification system conducted on a voluntary basis since 1984, with input from clinicians and laboratories.



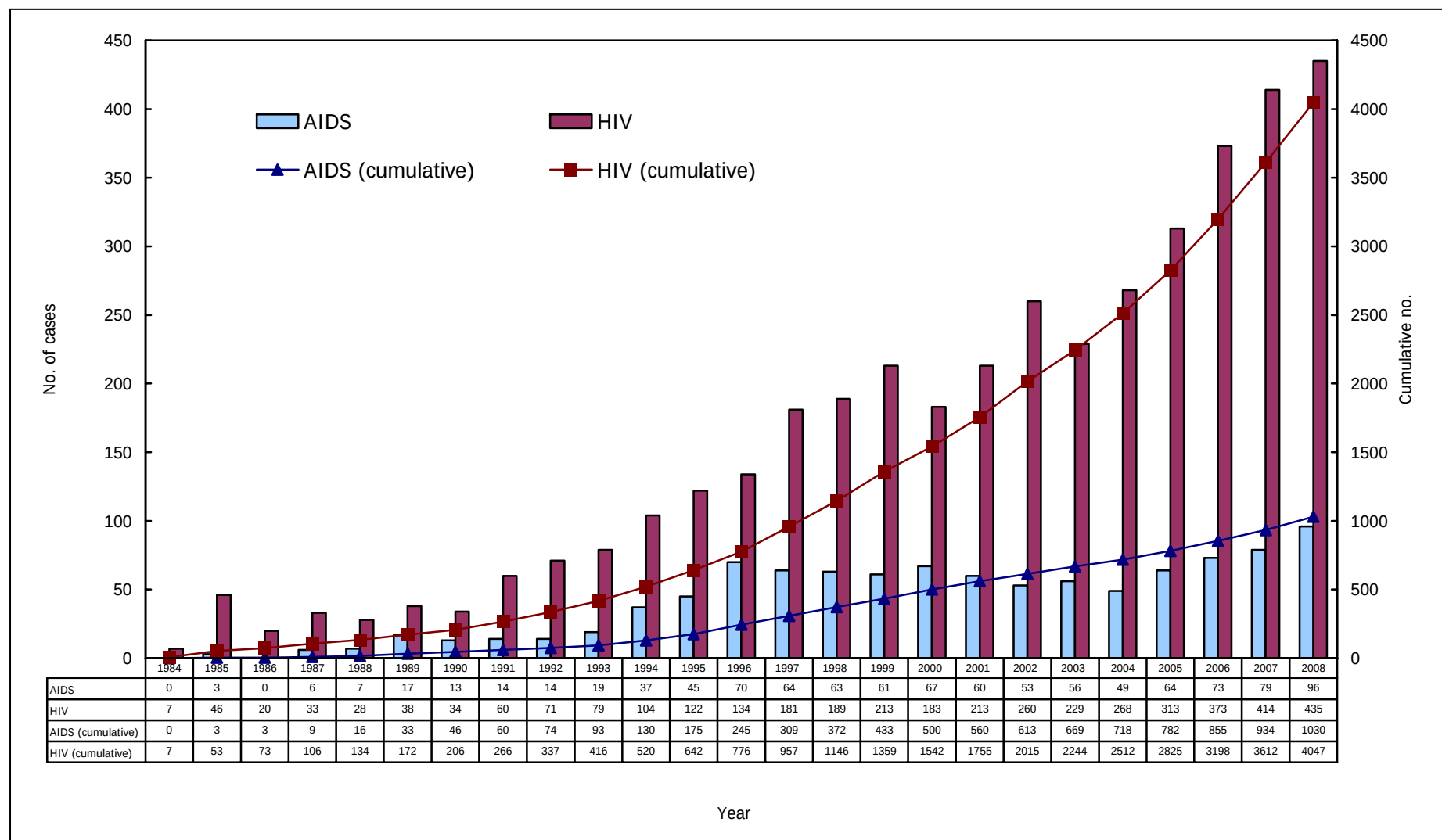
## System layout



## Tables & Figures

| <b>Box</b> | <b>Content</b>                                                           | <b>Page</b> |
|------------|--------------------------------------------------------------------------|-------------|
| Box 2.1    | Annual and cumulative reports of HIV/AIDS cases                          | 19          |
| Box 2.2    | Source of reporting of reported HIV/AIDS cases                           |             |
|            | (a) Year 2008                                                            | 20          |
|            | (b) Cumulative (1984 – 2008)                                             | 21          |
| Box 2.3    | Ethnicity & gender of reported HIV/AIDS cases                            |             |
|            | (a) Year 2008                                                            | 22          |
|            | (b) Cumulative (1984 – 2008)                                             | 23          |
| Box 2.4    | Age distribution of reported HIV/AIDS cases                              |             |
|            | (a) Median age of reported HIV/AIDS cases                                | 24          |
|            | (b) Age & gender of reported HIV cases (Year 2008)                       | 25          |
|            | (c) Age & gender of reported AIDS cases (Year 2008)                      | 26          |
|            | (d) Age & gender of reported HIV cases (cumulative, 1984 – 2008)         | 27          |
|            | (e) Age & gender of reported AIDS cases (cumulative, 1985 – 2008)        | 28          |
|            | (f) Adults & children with reported HIV/AIDS cases in 2008               | 29          |
| Box 2.5    | Exposure category of reported HIV/AIDS cases                             |             |
|            | (a) Distribution of reported HIV cases by exposure category (1984-2008)  | 30          |
|            | (b) Distribution of reported AIDS cases by exposure category (1984-2008) | 31          |
| Box 2.6    | Reported HIV/AIDS cases in injecting drug users                          |             |
|            | (a) Reported HIV-infected injecting drug users - by gender               | 32          |
|            | (b) Reported AIDS cases in injecting drug users - by gender              | 33          |
| Box 2.7    | Reported sexually acquired HIV/AIDS cases                                |             |
|            | (a) Yearly reports of sexually acquired HIV cases                        | 34          |
|            | (b) Yearly reports of sexually acquired AIDS cases                       | 35          |
|            | (c) Ratio of Heterosexual vs. homo/bisexual men reported with HIV/AIDS   | 36          |
| Box 2.8    | Profile of primary AIDS defining illnesses (ADI) (1985 - 2008)           | 37          |

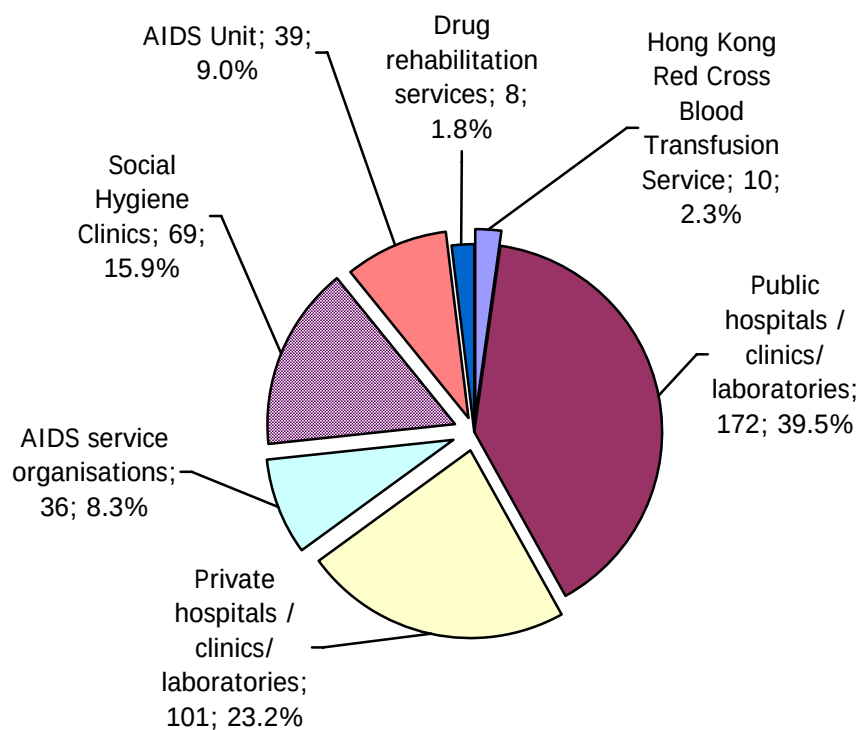
**Box 2.1 Annual and cumulative reports of HIV/AIDS cases**



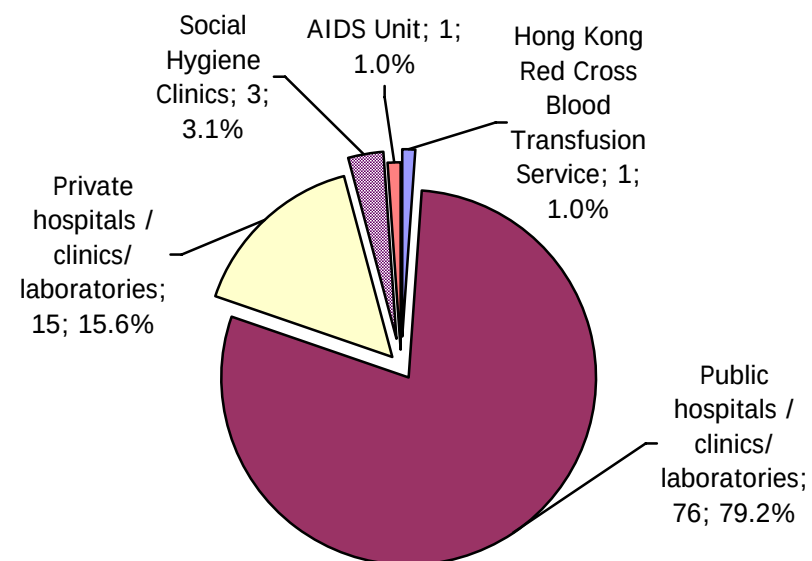
## Box 2.2 Source of reporting of HIV/AIDS cases

(a) Year 2008

(i) HIV

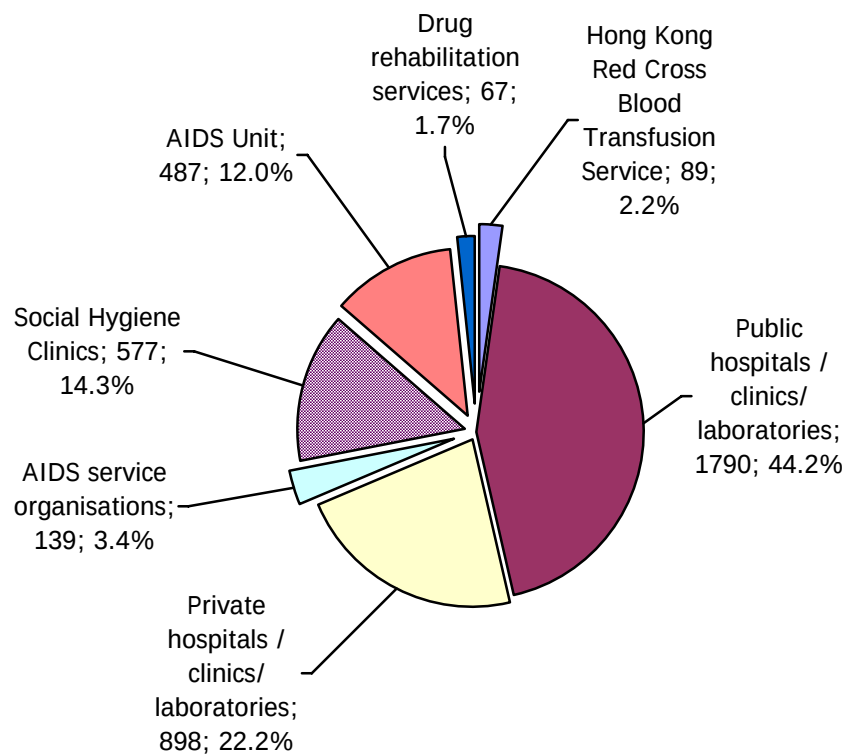


(ii) AIDS

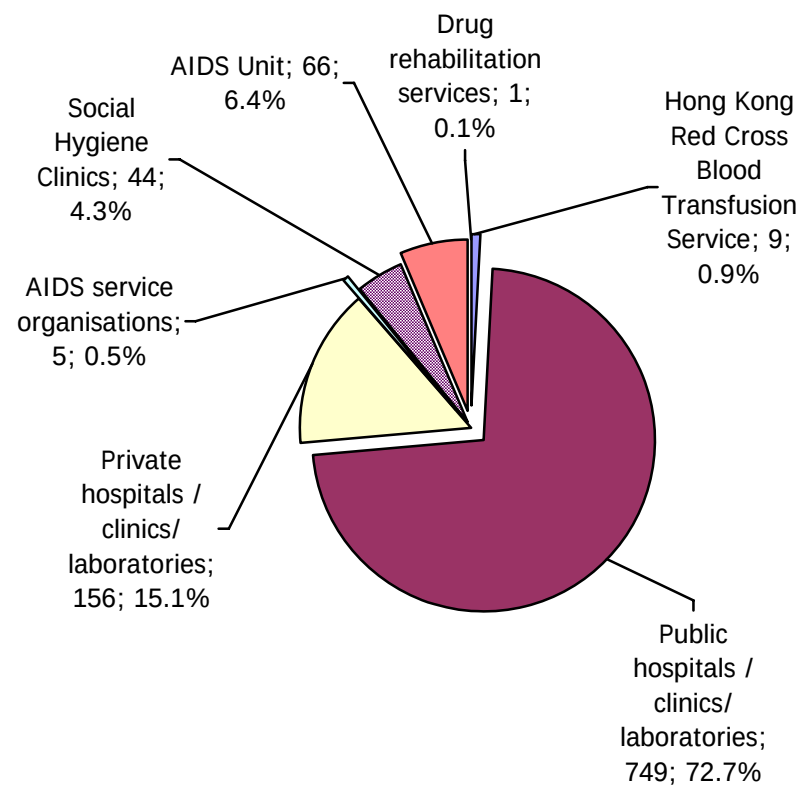


**(b) Cumulative (1984 - 2008)**

**(i) HIV**



**(ii) AIDS**



### Box 2.3 Ethnicity & gender of reported HIV/AIDS cases

#### (a) Year 2008

| Ethnicity | HIV  |          |        |          |       |          | AIDS |          |        |          |       |          |
|-----------|------|----------|--------|----------|-------|----------|------|----------|--------|----------|-------|----------|
|           | Male |          | Female |          | Total |          | Male |          | Female |          | Total |          |
| Chinese   | 235  | (67.3%)  | 30     | (34.9%)  | 265   | (60.9%)  | 66   | (81.5%)  | 10     | (66.7%)  | 76    | (79.2%)  |
| Asian     | 51   | (14.6%)  | 24     | (27.9%)  | 75    | (17.2%)  | 11   | (13.6%)  | 4      | (26.7%)  | 15    | (15.6%)  |
| White     | 23   | (6.6%)   | 0      | (0.0%)   | 23    | (5.3%)   | 2    | (2.5%)   | 0      | (0.0%)   | 2     | (2.1%)   |
| Black     | 6    | (1.7%)   | 3      | (3.5%)   | 9     | (2.1%)   | 2    | (2.5%)   | 1      | (6.7%)   | 3     | (3.1%)   |
| Unknown   | 34   | (9.7%)   | 29     | (33.7%)  | 63    | (14.5%)  | 0    | (0.0%)   | 0      | (0.0%)   | 0     | (0.0%)   |
| Total     | 349  | (100.0%) | 86     | (100.0%) | 435   | (100.0%) | 81   | (100.0%) | 15     | (100.0%) | 96    | (100.0%) |

**(b) Cumulative (1984 - 2008)**

| Ethnicity | HIV  |          |        |          |       |          | AIDS |          |        |          |       |          |
|-----------|------|----------|--------|----------|-------|----------|------|----------|--------|----------|-------|----------|
|           | Male |          | Female |          | Total |          | Male |          | Female |          | Total |          |
| Chinese   | 2373 | (72.6%)  | 333    | (42.7%)  | 2706  | (66.9%)  | 733  | (83.2%)  | 70     | (47.0%)  | 803   | (78.0%)  |
| Asian     | 400  | (12.2%)  | 292    | (37.4%)  | 692   | (17.1%)  | 70   | (7.9%)   | 76     | (51.0%)  | 146   | (14.2%)  |
| White     | 279  | (8.5%)   | 15     | (1.9%)   | 294   | (7.3%)   | 68   | (7.7%)   | 1      | (0.7%)   | 69    | (6.7%)   |
| Black     | 45   | (1.4%)   | 14     | (1.8%)   | 59    | (1.5%)   | 9    | (1.0%)   | 2      | (1.3%)   | 11    | (1.1%)   |
| Unknown   | 170  | (5.2%)   | 126    | (16.2%)  | 296   | (7.3%)   | 1    | (0.1%)   | 0      | (0.0%)   | 1     | (0.1%)   |
| Total     | 3267 | (100.0%) | 780    | (100.0%) | 4047  | (100.0%) | 881  | (100.0%) | 149    | (100.0%) | 1030  | (100.0%) |

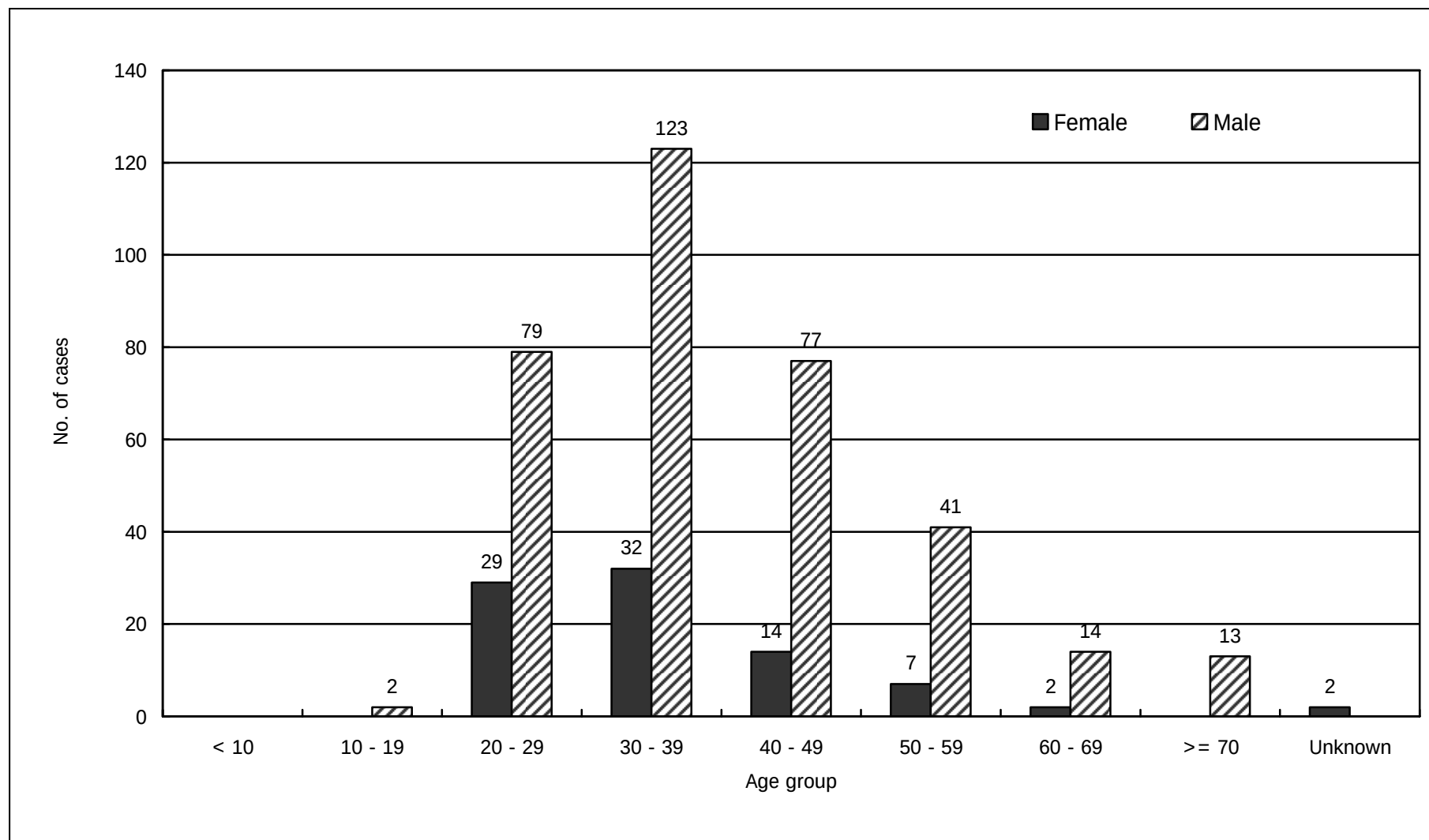
# **Box 2.4 Age distribution of reported HIV/AIDS cases**

## **(a) Median age of reported HIV/AIDS cases**

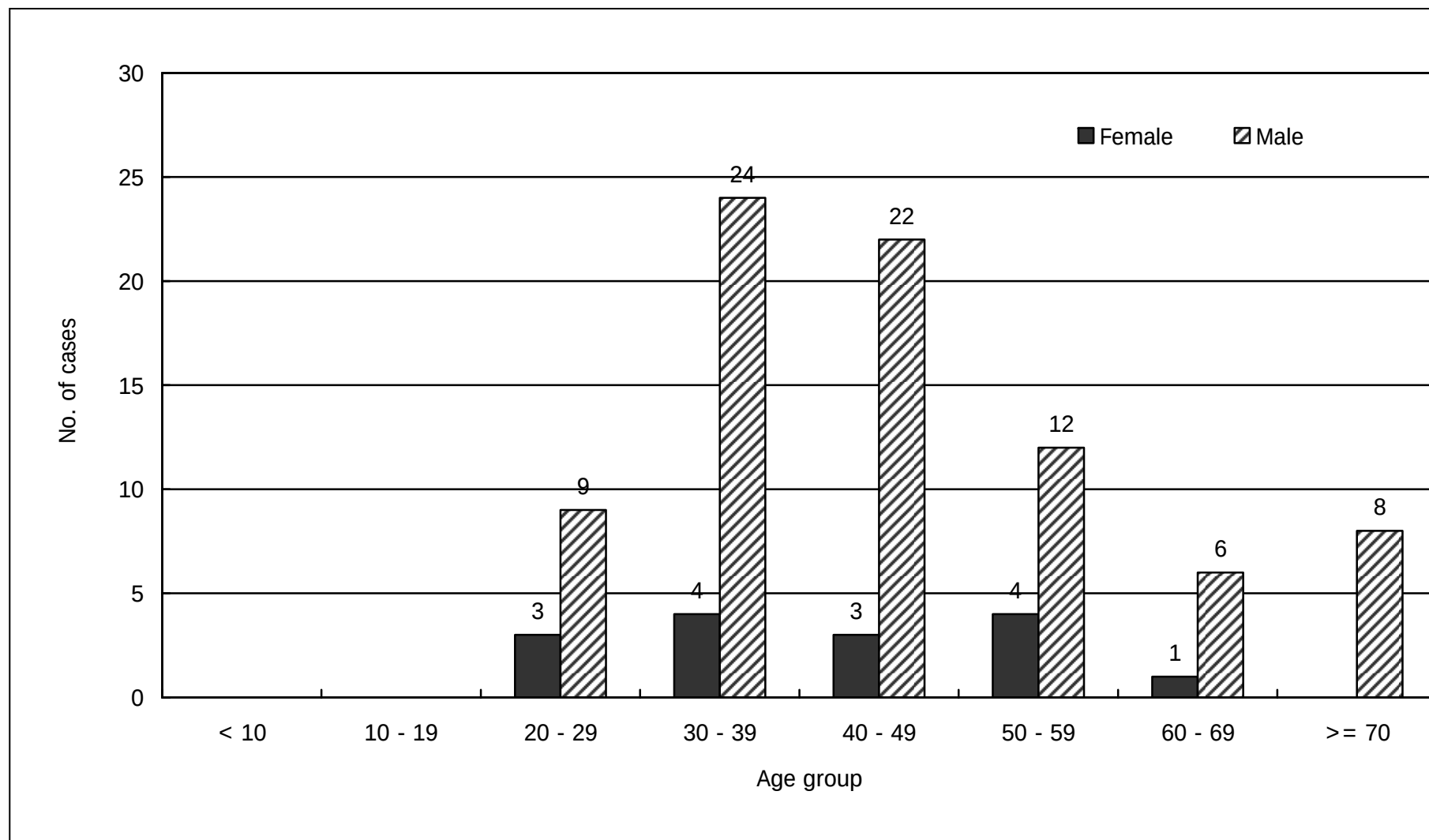
| Year  | HIV        |                      |       | AIDS       |                      |       |
|-------|------------|----------------------|-------|------------|----------------------|-------|
|       | Median age | Inter quartile range |       | Median age | Inter quartile range |       |
|       |            | 25%                  | 75%   |            | 25%                  | 75%   |
| 1984  | 11         | 6                    | 32    | ---        | ---                  | ---   |
| 1985  | 21         | 13.5                 | 28.5  | 33         | 28                   | 46    |
| 1986  | 26         | 15                   | 41    | ---        | ---                  | ---   |
| 1987  | 29         | 24                   | 38.5  | 42.5       | 35.25                | 51.25 |
| 1988  | 35         | 25.75                | 42.25 | 39         | 24                   | 43    |
| 1989  | 36         | 28                   | 46    | 38         | 31.5                 | 46.5  |
| 1990  | 33         | 28                   | 39    | 35         | 28.5                 | 50.5  |
| 1991  | 31.5       | 26                   | 39.75 | 34         | 27                   | 44    |
| 1992  | 34         | 28                   | 40    | 39         | 34.75                | 45.5  |
| 1993  | 33         | 27                   | 39    | 38         | 29                   | 41    |
| 1994  | 34         | 28                   | 40    | 36         | 33                   | 40.5  |
| 1995  | 32         | 26                   | 40    | 36         | 30                   | 44.5  |
| 1996  | 34         | 30                   | 41.5  | 38         | 31.75                | 43    |
| 1997  | 35         | 28.5                 | 42    | 37         | 32                   | 48    |
| 1998  | 34         | 29                   | 40    | 39         | 32                   | 48    |
| 1999  | 35         | 29                   | 43    | 40         | 34                   | 51    |
| 2000  | 35         | 29                   | 43    | 40         | 33                   | 50    |
| 2001  | 34.5       | 29                   | 42    | 38         | 30.25                | 46.75 |
| 2002  | 36         | 30                   | 44    | 41         | 34                   | 48    |
| 2003  | 36         | 30                   | 45    | 39         | 35                   | 49.75 |
| 2004  | 36         | 30                   | 44.5  | 42         | 35                   | 51    |
| 2005  | 36         | 30                   | 44    | 40         | 33.25                | 47.75 |
| 2006  | 34         | 28                   | 42    | 38         | 31                   | 47    |
| 2007  | 34         | 29                   | 41    | 41         | 34                   | 51    |
| 2008  | 36         | 29                   | 45    | 41         | 34                   | 54    |
| Total | 35         | 29                   | 43    | 39         | 33                   | 48    |



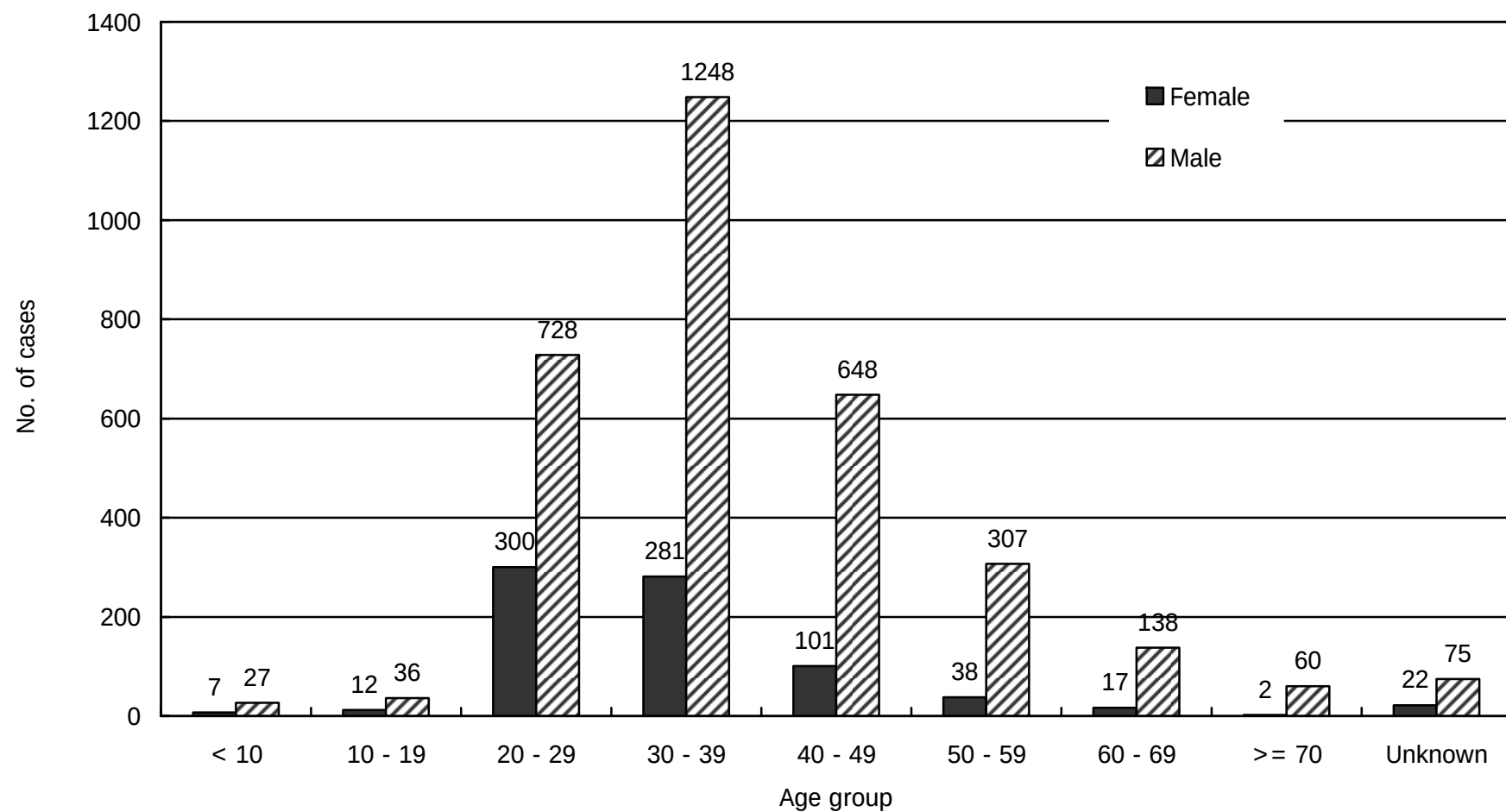
**(b) Age & gender of reported HIV cases (Year 2008)**



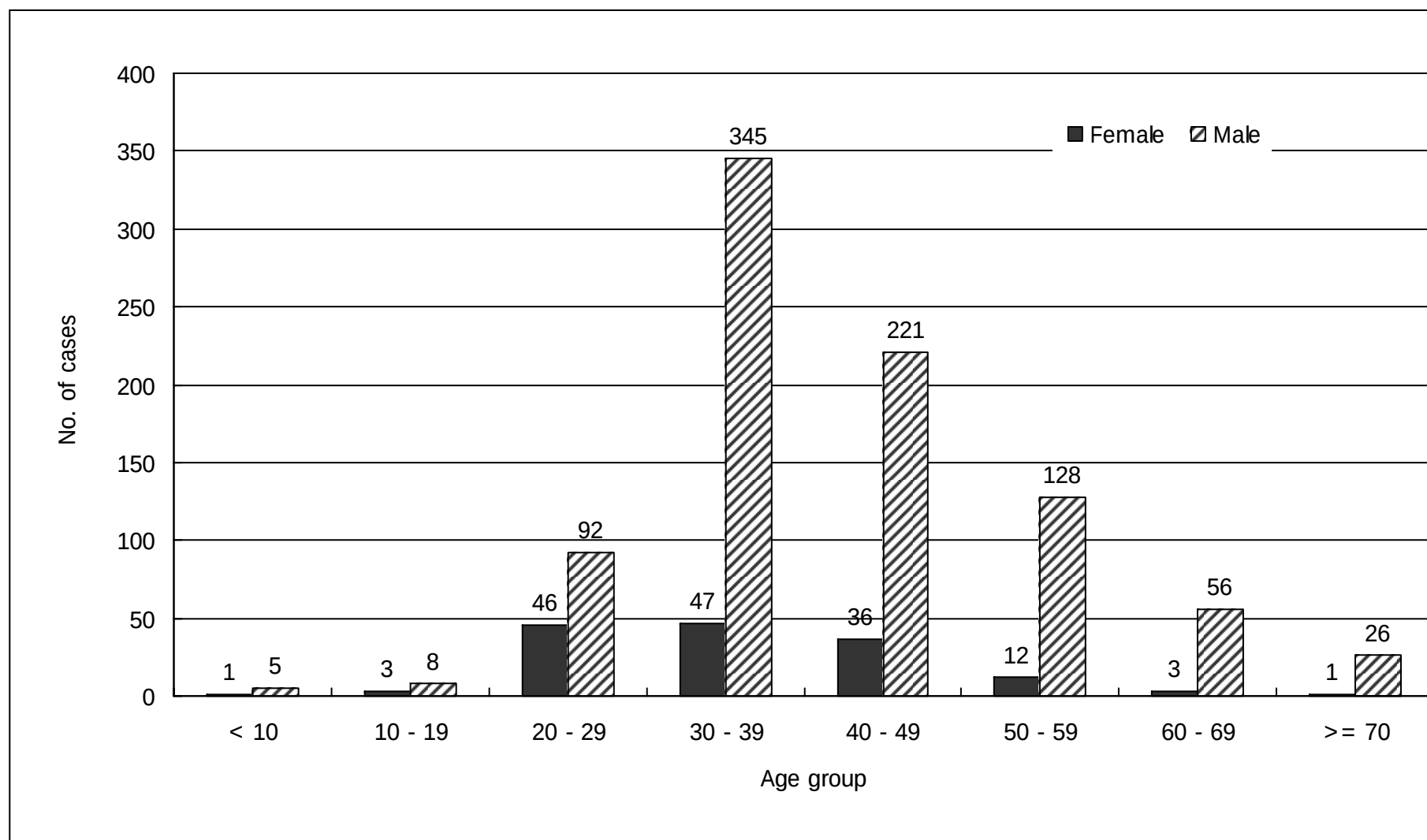
**(c) Age & gender of reported AIDS cases (Year 2008)**



**(d) Age & gender of reported HIV cases (cumulative, 1984 - 2008)**



(e) Age & gender of reported AIDS cases (cumulative, 1985 - 2008)



**(f) Adults & children with reported HIV/AIDS in 2008**

| Age                 | HIV  |        |       | AIDS |        |       |
|---------------------|------|--------|-------|------|--------|-------|
|                     | Male | Female | Total | Male | Female | Total |
| Adult               | 349  | 86     | 435   | 81   | 15     | 96    |
| Children (age <=13) | 0    | 0      | 0     | 0    | 0      | 0     |
| Total               | 349  | 86     | 435   | 81   | 15     | 96    |

## Box 2.5 Exposure category of reported HIV/AIDS cases

### (a) Distribution of reported HIV cases by exposure category (1984 - 2008)

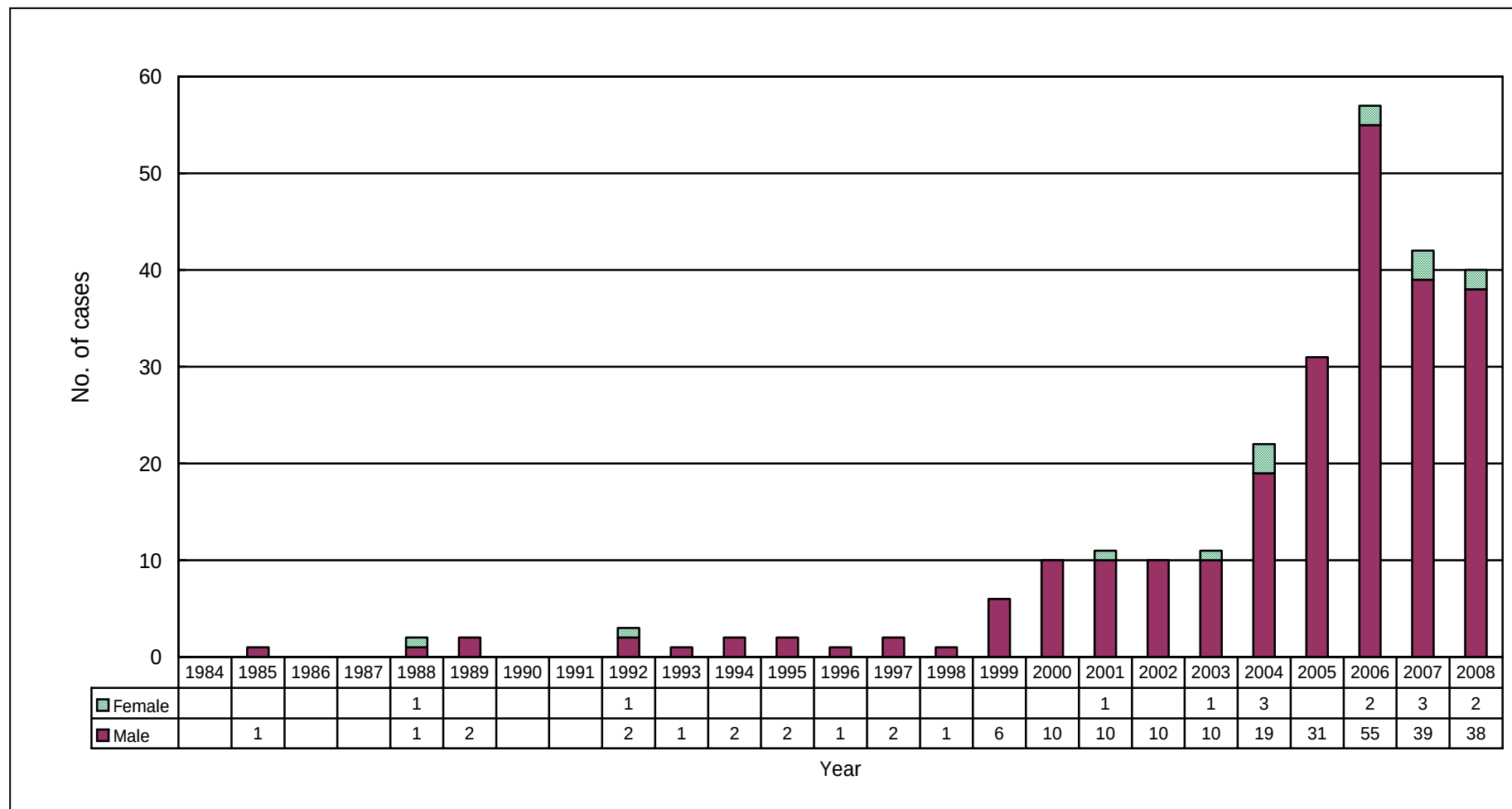
| Year<br>Exposure Category (%) | 1984        | 1985         | 1986         | 1987         | 1988         | 1989         | 1990         | 1991         | 1992         | 1993         | 1994         | 1995         | 1996         | 1997          | 1998          | 1999          | 2000          | 2001          | 2002          | 2003          | 2004          | 2005          | 2006          | 2007          | 2008          | Total          |
|-------------------------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
| Heterosexual                  | 1<br>(14.3) | 0<br>(0.0)   | 0<br>(0.0)   | 3<br>(9.1)   | 6<br>(21.4)  | 11<br>(28.9) | 12<br>(35.3) | 29<br>(48.3) | 32<br>(45.1) | 47<br>(59.5) | 73<br>(70.2) | 81<br>(66.4) | 94<br>(70.1) | 117<br>(64.6) | 133<br>(70.4) | 127<br>(59.6) | 115<br>(62.8) | 127<br>(59.6) | 147<br>(56.5) | 116<br>(50.7) | 112<br>(41.8) | 113<br>(36.1) | 130<br>(34.9) | 109<br>(26.3) | 131<br>(30.1) | 1866<br>(46.1) |
| Homosexual                    | 1<br>(14.3) | 10<br>(21.7) | 6<br>(30.0)  | 12<br>(36.4) | 12<br>(42.9) | 15<br>(39.5) | 8<br>(23.5)  | 18<br>(30.0) | 27<br>(38.0) | 20<br>(25.3) | 22<br>(21.2) | 26<br>(21.3) | 20<br>(14.9) | 33<br>(18.2)  | 16<br>(8.5)   | 33<br>(15.5)  | 21<br>(11.5)  | 37<br>(17.4)  | 47<br>(18.1)  | 45<br>(19.7)  | 62<br>(23.1)  | 86<br>(27.5)  | 108<br>(29.0) | 156<br>(37.7) | 132<br>(30.3) | 973<br>(24.0)  |
| Bisexual                      | 0<br>(0.0)  | 1<br>(2.2)   | 2<br>(10.0)  | 7<br>(21.2)  | 2<br>(7.1)   | 6<br>(15.8)  | 5<br>(14.7)  | 8<br>(13.3)  | 2<br>(2.8)   | 2<br>(2.5)   | 4<br>(3.8)   | 4<br>(3.3)   | 3<br>(2.2)   | 10<br>(5.5)   | 6<br>(3.2)    | 10<br>(4.7)   | 7<br>(3.8)    | 7<br>(3.3)    | 9<br>(3.5)    | 5<br>(2.2)    | 6<br>(2.2)    | 10<br>(3.2)   | 15<br>(4.0)   | 18<br>(4.3)   | 13<br>(3.0)   | 162<br>(4.0)   |
| Injecting drug use            | 0<br>(0.0)  | 1<br>(2.2)   | 0<br>(0.0)   | 0<br>(0.0)   | 2<br>(7.1)   | 2<br>(5.3)   | 0<br>(0.0)   | 0<br>(0.0)   | 3<br>(4.2)   | 1<br>(1.3)   | 2<br>(1.9)   | 2<br>(1.6)   | 1<br>(0.7)   | 2<br>(1.1)    | 1<br>(0.5)    | 6<br>(2.8)    | 10<br>(5.5)   | 11<br>(5.2)   | 10<br>(3.8)   | 11<br>(4.8)   | 22<br>(8.2)   | 31<br>(9.9)   | 57<br>(15.3)  | 42<br>(10.1)  | 40<br>(9.2)   | 257<br>(6.4)   |
| Blood contact                 | 5<br>(71.4) | 32<br>(69.6) | 10<br>(50.0) | 7<br>(21.2)  | 2<br>(7.1)   | 2<br>(5.3)   | 5<br>(14.7)  | 0<br>(0.0)   | 1<br>(1.4)   | 1<br>(1.3)   | 1<br>(1.0)   | 0<br>(0.0)   | 0<br>(0.0)   | 1<br>(0.6)    | 0<br>(0.0)    | 2<br>(0.9)    | 0<br>(0.0)    | 0<br>(0.0)    | 0<br>(0.0)    | 0<br>(0.0)    | 0<br>(0.0)    | 4<br>(1.3)    | 0<br>(0.0)    | 2<br>(0.5)    | 3<br>(0.7)    | 78<br>(1.9)    |
| Perinatal                     | 0<br>(0.0)  | 0<br>(0.0)   | 0<br>(0.0)   | 0<br>(0.0)   | 0<br>(0.0)   | 0<br>(0.0)   | 0<br>(0.0)   | 0<br>(0.0)   | 0<br>(0.0)   | 0<br>(0.0)   | 1<br>(1.0)   | 2<br>(1.6)   | 1<br>(0.7)   | 0<br>(0.0)    | 2<br>(1.1)    | 4<br>(1.9)    | 2<br>(1.1)    | 2<br>(0.9)    | 1<br>(0.4)    | 0<br>(0.0)    | 0<br>(0.0)    | 2<br>(0.6)    | 2<br>(0.5)    | 1<br>(0.2)    | 0<br>(0.0)    | 20<br>(0.5)    |
| Undetermined                  | 0<br>(0.0)  | 2<br>(4.3)   | 2<br>(10.0)  | 4<br>(12.1)  | 4<br>(14.3)  | 2<br>(5.3)   | 4<br>(11.8)  | 5<br>(8.3)   | 6<br>(8.5)   | 8<br>(10.1)  | 1<br>(1.0)   | 7<br>(5.7)   | 15<br>(11.2) | 18<br>(9.9)   | 31<br>(16.4)  | 31<br>(14.6)  | 28<br>(15.3)  | 29<br>(13.6)  | 46<br>(17.7)  | 52<br>(22.7)  | 66<br>(24.6)  | 67<br>(21.4)  | 61<br>(16.4)  | 86<br>(20.8)  | 116<br>(26.7) | 691<br>(17.1)  |
| Total                         | 7<br>(100)  | 46<br>(100)  | 20<br>(100)  | 33<br>(100)  | 28<br>(100)  | 38<br>(100)  | 34<br>(100)  | 60<br>(100)  | 71<br>(100)  | 79<br>(100)  | 104<br>(100) | 122<br>(100) | 134<br>(100) | 181<br>(100)  | 189<br>(100)  | 213<br>(100)  | 183<br>(100)  | 213<br>(100)  | 260<br>(100)  | 229<br>(100)  | 268<br>(100)  | 313<br>(100)  | 373<br>(100)  | 414<br>(100)  | 435<br>(100)  | 4047<br>(100)  |

**(b) Distribution of reported AIDS cases by exposure category (1985 - 2008)**

| Year<br>Exposure<br>Category<br>(%) | 1985        | 1986 | 1987        | 1988        | 1989        | 1990        | 1991        | 1992        | 1993         | 1994         | 1995         | 1996         | 1997         | 1998         | 1999         | 2000         | 2001         | 2002         | 2003         | 2004         | 2005         | 2006         | 2007         | 2008         | Total         |
|-------------------------------------|-------------|------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|
| Heterosexual                        | 1<br>(33.3) | ---  | 1<br>(16.7) | 0<br>(0.0)  | 3<br>(17.6) | 3<br>(23.1) | 2<br>(14.3) | 5<br>(35.7) | 10<br>(52.6) | 16<br>(43.2) | 31<br>(68.9) | 55<br>(78.6) | 44<br>(68.8) | 50<br>(79.4) | 44<br>(72.1) | 56<br>(83.6) | 49<br>(81.7) | 38<br>(71.7) | 46<br>(82.1) | 35<br>(71.4) | 38<br>(59.4) | 30<br>(41.1) | 40<br>(50.6) | 52<br>(54.2) | 649<br>(63.0) |
| Homosexual                          | 1<br>(33.3) | ---  | 3<br>(50.0) | 4<br>(57.1) | 8<br>(47.1) | 2<br>(15.4) | 6<br>(42.9) | 8<br>(57.1) | 7<br>(36.8)  | 13<br>(35.1) | 9<br>(20.0)  | 6<br>(8.6)   | 10<br>(15.6) | 6<br>(9.5)   | 8<br>(13.1)  | 1<br>(1.5)   | 5<br>(8.3)   | 8<br>(15.1)  | 7<br>(12.5)  | 8<br>(16.3)  | 13<br>(20.3) | 21<br>(28.8) | 20<br>(25.3) | 24<br>(25.0) | 198<br>(19.2) |
| Bisexual                            | 1<br>(33.3) | ---  | 0<br>(0.0)  | 1<br>(14.3) | 3<br>(17.6) | 3<br>(23.1) | 2<br>(14.3) | 1<br>(7.1)  | 1<br>(5.3)   | 4<br>(10.8)  | 3<br>(6.7)   | 1<br>(1.4)   | 3<br>(4.7)   | 1<br>(1.6)   | 1<br>(1.6)   | 1<br>(1.5)   | 2<br>(3.3)   | 2<br>(3.8)   | 0<br>(0.0)   | 0<br>(0.0)   | 3<br>(4.7)   | 3<br>(4.1)   | 1<br>(1.3)   | 3<br>(3.1)   | 40<br>(3.9)   |
| Injecting drug use                  | 0<br>(0.0)  | ---  | 0<br>(0.0)  | 0<br>(0.0)  | 1<br>(5.9)  | 0<br>(0.0)  | 0<br>(0.0)  | 0<br>(0.0)  | 1<br>(5.3)   | 0<br>(0.0)   | 1<br>(2.2)   | 1<br>(1.4)   | 1<br>(1.6)   | 0<br>(0.0)   | 1<br>(1.6)   | 2<br>(3.0)   | 1<br>(1.7)   | 1<br>(1.9)   | 0<br>(0.0)   | 3<br>(6.1)   | 1<br>(1.6)   | 11<br>(15.1) | 9<br>(11.4)  | 9<br>(9.4)   | 43<br>(4.2)   |
| Blood contact                       | 0<br>(0.0)  | ---  | 0<br>(0.0)  | 1<br>(14.3) | 2<br>(11.8) | 3<br>(23.1) | 3<br>(21.4) | 0<br>(0.0)  | 0<br>(0.0)   | 3<br>(8.1)   | 0<br>(0.0)   | 2<br>(2.9)   | 1<br>(1.6)   | 1<br>(1.6)   | 2<br>(3.3)   | 1<br>(1.5)   | 0<br>(0.0)   | 0<br>(0.0)   | 1<br>(1.8)   | 0<br>(0.0)   | 1<br>(1.6)   | 0<br>(0.0)   | 1<br>(1.3)   | 2<br>(2.1)   | 24<br>(2.3)   |
| Perinatal                           | 0<br>(0.0)  | ---  | 0<br>(0.0)  | 0<br>(0.0)  | 0<br>(0.0)  | 0<br>(0.0)  | 0<br>(0.0)  | 0<br>(0.0)  | 0<br>(0.0)   | 1<br>(2.7)   | 1<br>(2.2)   | 0<br>(0.0)   | 0<br>(0.0)   | 1<br>(1.6)   | 1<br>(1.6)   | 1<br>(1.5)   | 1<br>(1.7)   | 0<br>(0.0)   | 0<br>(0.0)   | 0<br>(0.0)   | 0<br>(0.0)   | 0<br>(0.0)   | 0<br>(0.0)   | 0<br>(0.0)   | 6<br>(0.6)    |
| Undetermined                        | 0<br>(0.0)  | ---  | 2<br>(33.3) | 1<br>(14.3) | 0<br>(0.0)  | 2<br>(15.4) | 1<br>(7.1)  | 0<br>(0.0)  | 0<br>(0.0)   | 0<br>(0.0)   | 0<br>(0.0)   | 5<br>(7.1)   | 5<br>(7.8)   | 4<br>(6.3)   | 4<br>(6.6)   | 5<br>(7.5)   | 2<br>(3.3)   | 4<br>(7.5)   | 2<br>(3.6)   | 3<br>(6.1)   | 8<br>(12.5)  | 8<br>(11.0)  | 8<br>(10.1)  | 6<br>(6.3)   | 70<br>(6.8)   |
| Total                               | 3<br>(100)  | ---  | 6<br>(100)  | 7<br>(100)  | 17<br>(100) | 13<br>(100) | 14<br>(100) | 14<br>(100) | 19<br>(100)  | 37<br>(100)  | 45<br>(100)  | 70<br>(100)  | 64<br>(100)  | 63<br>(100)  | 61<br>(100)  | 67<br>(100)  | 60<br>(100)  | 53<br>(100)  | 56<br>(100)  | 49<br>(100)  | 64<br>(100)  | 73<br>(100)  | 79<br>(100)  | 96<br>(100)  | 1030<br>(100) |

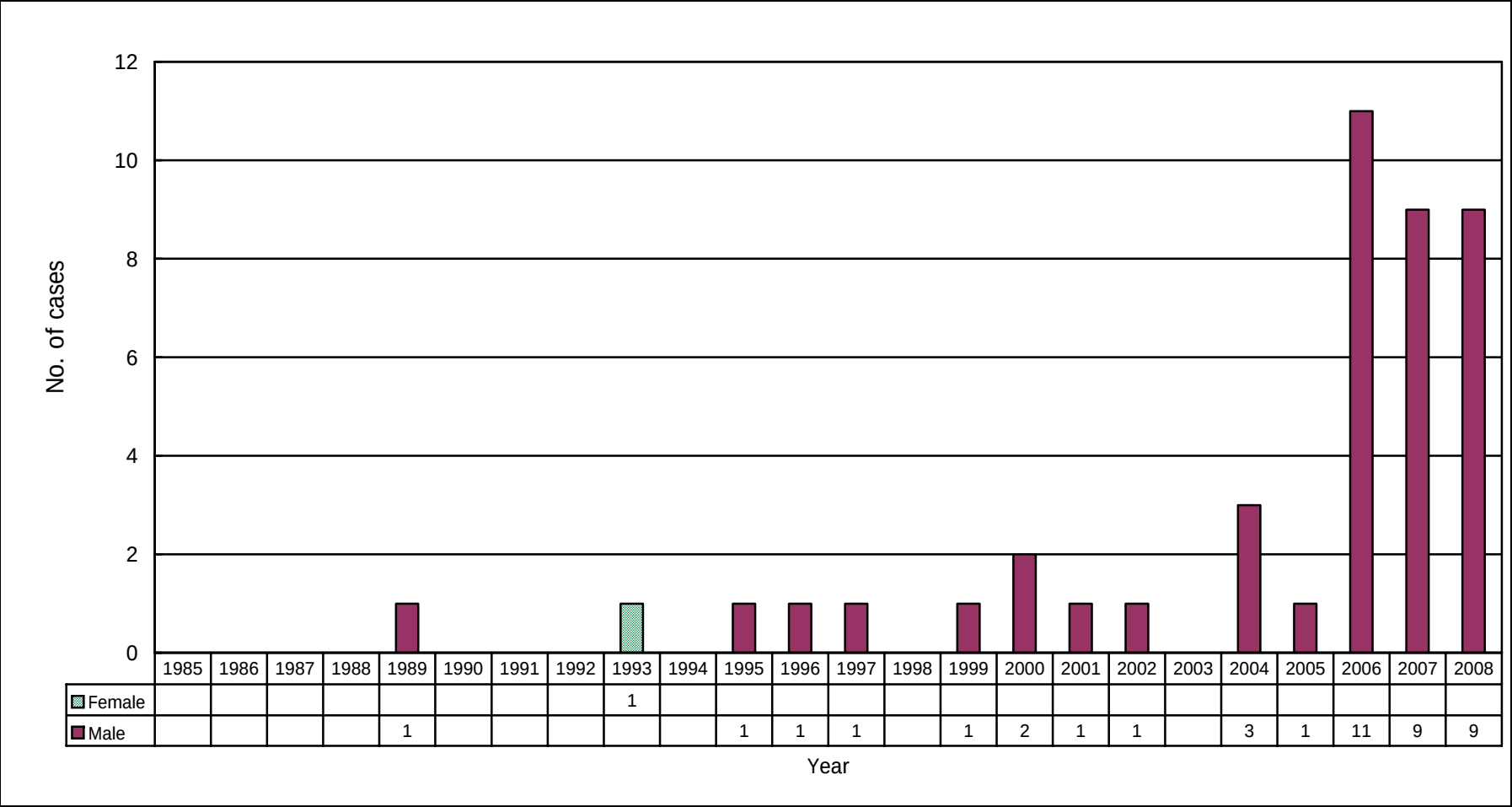
## Box 2.6 Reported HIV/AIDS cases in injecting drug users

### (a) Reported HIV-infected injecting drug users - by gender



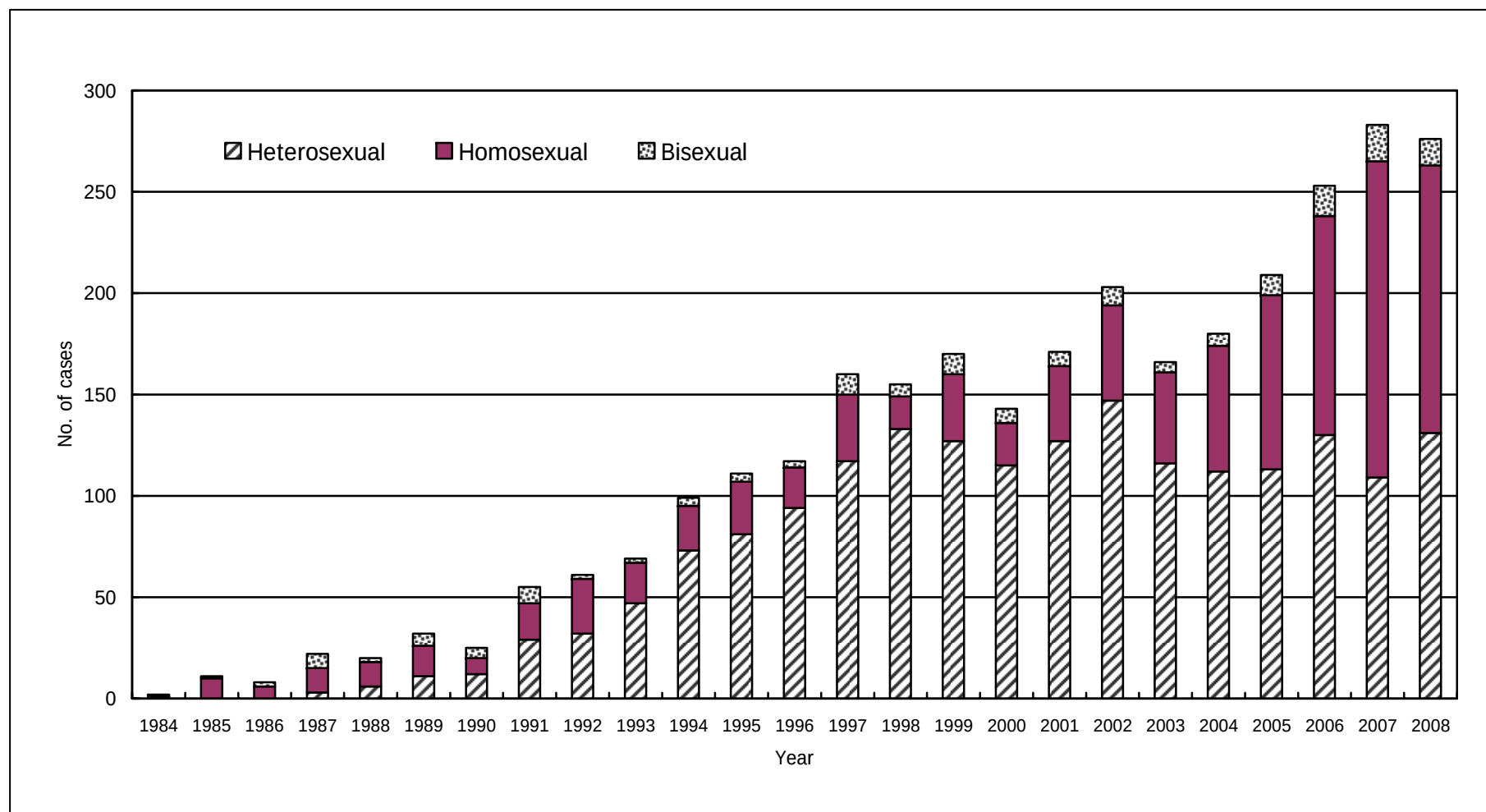


(b) Reported AIDS case in injecting drug users - by gender

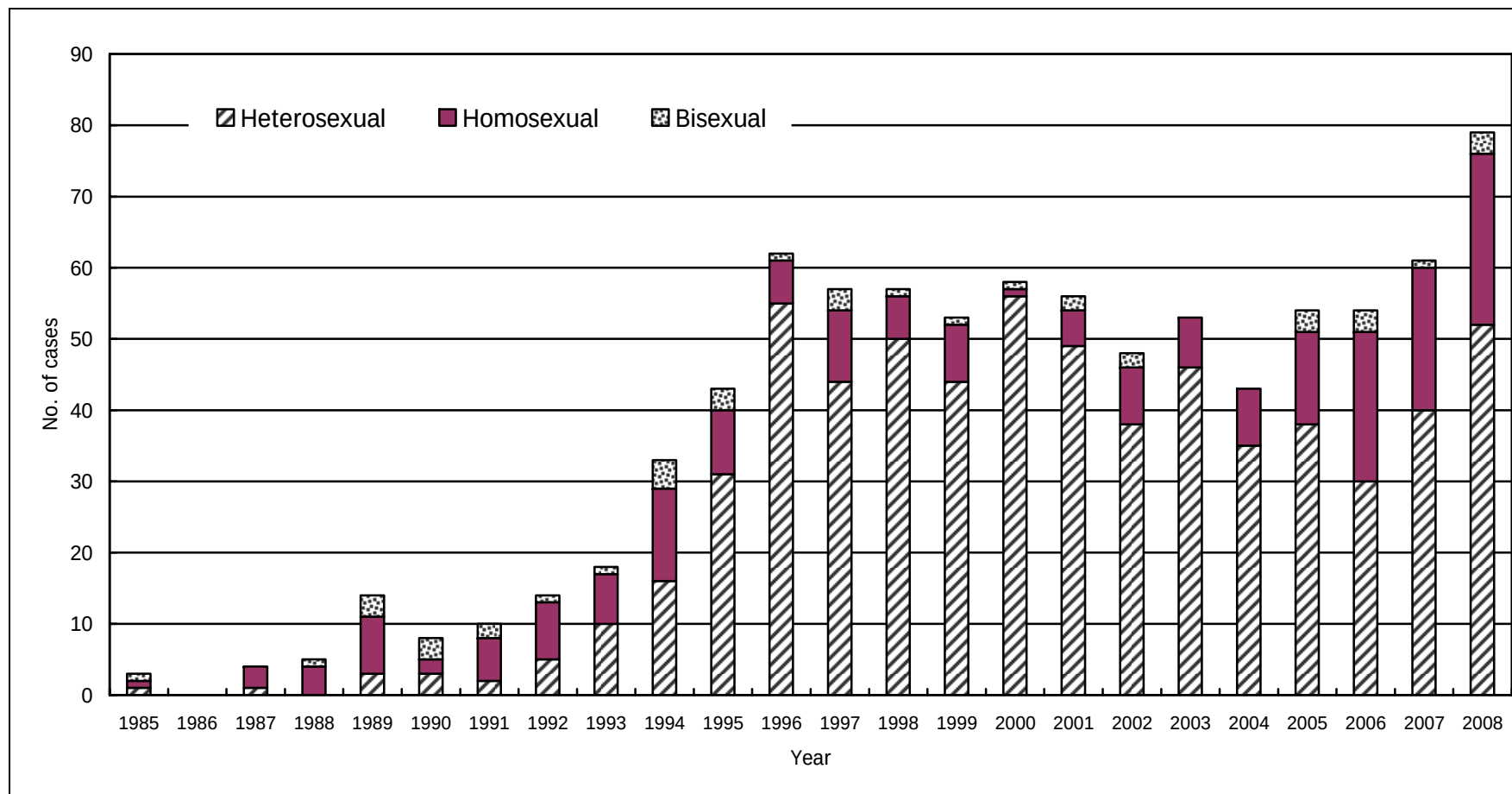


## Box 2.7 Reported sexually acquired HIV/AIDS cases

### (a) Yearly reports of sexually acquired HIV cases



**(b) Yearly reports of sexually acquired AIDS cases**



**(c) Ratio of heterosexual vs. homosexual/bisexual men reported with HIV/AIDS**

| Year  | HIV     | AIDS     |
|-------|---------|----------|
| 1984  | 1.0 : 1 | ---      |
| 1985  | 0.0 : 1 | 0.5 : 1  |
| 1986  | 0.0 : 1 | ---      |
| 1987  | 0.1 : 1 | 0.0 : 1  |
| 1988  | 0.4 : 1 | 0.0 : 1  |
| 1989  | 0.4 : 1 | 0.3 : 1  |
| 1990  | 0.8 : 1 | 0.6 : 1  |
| 1991  | 1.0 : 1 | 0.3 : 1  |
| 1992  | 0.9 : 1 | 0.6 : 1  |
| 1993  | 1.7 : 1 | 0.9 : 1  |
| 1994  | 2.3 : 1 | 0.8 : 1  |
| 1995  | 1.9 : 1 | 2.0 : 1  |
| 1996  | 3.0 : 1 | 7.1 : 1  |
| 1997  | 2.0 : 1 | 2.5 : 1  |
| 1998  | 4.2 : 1 | 5.9 : 1  |
| 1999  | 2.0 : 1 | 4.2 : 1  |
| 2000  | 2.8 : 1 | 23.5 : 1 |
| 2001  | 1.9 : 1 | 5.3 : 1  |
| 2002  | 1.8 : 1 | 2.7 : 1  |
| 2003  | 1.7 : 1 | 4.9 : 1  |
| 2004  | 1.1 : 1 | 3.8 : 1  |
| 2005  | 0.8 : 1 | 1.8 : 1  |
| 2006  | 0.7 : 1 | 0.8 : 1  |
| 2007  | 0.4 : 1 | 1.5 : 1  |
| 2008  | 0.6 : 1 | 1.4 : 1  |
| Total | 1.1 : 1 | 2.0 : 1  |

**Box 2.8 Profile of primary AIDS defining illnesses (ADI) (1985 - 2008)**

| Year<br>ADI (%)                         | 1985        | 1986 | 1987        | 1988        | 1989        | 1990        | 1991        | 1992        | 1993         | 1994         | 1995         | 1996         | 1997         | 1998         | 1999         | 2000         | 2001         | 2002         | 2003         | 2004         | 2005         | 2006         | 2007         | 2008         | Total         |
|-----------------------------------------|-------------|------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|
| <i>Pneumocystic<br/>Pneumonia (PCP)</i> | 1<br>(33.3) | ---  | 2<br>(33.3) | 4<br>(57.1) | 8<br>(47.1) | 5<br>(38.5) | 4<br>(28.6) | 7<br>(50.0) | 10<br>(52.6) | 12<br>(32.4) | 17<br>(37.8) | 21<br>(30.0) | 20<br>(31.3) | 26<br>(41.3) | 23<br>(37.7) | 30<br>(44.8) | 26<br>(43.3) | 25<br>(47.2) | 22<br>(39.3) | 22<br>(44.9) | 20<br>(31.3) | 27<br>(37.0) | 28<br>(35.4) | 37<br>(38.5) | 397<br>(38.5) |
| <i>Mycobacterium<br/>Tuberculosis</i>   | 0<br>(0.0)  | ---  | 0<br>(0.0)  | 0<br>(0.0)  | 1<br>(5.9)  | 2<br>(15.4) | 3<br>(21.4) | 1<br>(7.1)  | 2<br>(10.5)  | 4<br>(10.8)  | 8<br>(17.8)  | 21<br>(30.0) | 17<br>(26.6) | 18<br>(28.6) | 13<br>(21.3) | 19<br>(28.4) | 17<br>(28.3) | 9<br>(17.0)  | 15<br>(26.8) | 13<br>(26.5) | 25<br>(39.1) | 26<br>(35.6) | 32<br>(40.5) | 32<br>(33.3) | 278<br>(27.0) |
| Other fungal<br>infections              | 0<br>(0.0)  | ---  | 3<br>(50.0) | 0<br>(0.0)  | 3<br>(17.6) | 0<br>(0.0)  | 2<br>(14.3) | 2<br>(14.3) | 1<br>(5.3)   | 4<br>(10.8)  | 7<br>(15.6)  | 6<br>(8.6)   | 10<br>(15.6) | 8<br>(12.7)  | 5<br>(8.2)   | 4<br>(6.0)   | 5<br>(8.3)   | 8<br>(15.1)  | 4<br>(7.1)   | 6<br>(12.2)  | 5<br>(7.8)   | 4<br>(5.5)   | 3<br>(3.8)   | 3<br>(3.1)   | 93<br>(9.0)   |
| Penicilliosis                           | 0<br>(0.0)  | ---  | 0<br>(0.0)  | 0<br>(0.0)  | 0<br>(0.0)  | 1<br>(7.7)  | 1<br>(7.1)  | 0<br>(0.0)  | 1<br>(5.3)   | 6<br>(16.2)  | 7<br>(15.6)  | 7<br>(10.0)  | 5<br>(7.8)   | 2<br>(3.2)   | 7<br>(11.5)  | 5<br>(7.5)   | 1<br>(1.7)   | 7<br>(13.2)  | 5<br>(8.9)   | 4<br>(8.2)   | 7<br>(10.9)  | 11<br>(15.1) | 4<br>(5.1)   | 6<br>(6.3)   | 87<br>(8.4)   |
| Cytomegalovirus<br>diseases             | 1<br>(33.3) | ---  | 0<br>(0.0)  | 0<br>(0.0)  | 0<br>(0.0)  | 1<br>(7.7)  | 1<br>(7.1)  | 1<br>(7.1)  | 2<br>(10.5)  | 1<br>(2.7)   | 3<br>(6.7)   | 4<br>(5.7)   | 4<br>(6.3)   | 3<br>(4.8)   | 2<br>(3.3)   | 3<br>(4.5)   | 2<br>(3.3)   | 0<br>(0.0)   | 3<br>(5.4)   | 1<br>(2.0)   | 2<br>(3.1)   | 3<br>(4.1)   | 4<br>(5.1)   | 6<br>(6.3)   | 47<br>(4.6)   |
| Non-TB<br>mycobacterial<br>infections   | 0<br>(0.0)  | ---  | 0<br>(0.0)  | 0<br>(0.0)  | 1<br>(5.9)  | 0<br>(0.0)  | 3<br>(21.4) | 0<br>(0.0)  | 1<br>(5.3)   | 0<br>(0.0)   | 0<br>(0.0)   | 2<br>(2.9)   | 1<br>(1.6)   | 0<br>(0.0)   | 5<br>(8.2)   | 1<br>(1.5)   | 5<br>(8.3)   | 2<br>(3.8)   | 1<br>(1.8)   | 2<br>(4.1)   | 0<br>(0.0)   | 1<br>(1.4)   | 0<br>(0.0)   | 1<br>(1.0)   | 26<br>(2.5)   |
| Kaposi's<br>sarcoma                     | 1<br>(33.3) | ---  | 0<br>(0.0)  | 1<br>(14.3) | 2<br>(11.8) | 1<br>(7.7)  | 0<br>(0.0)  | 2<br>(14.3) | 0<br>(0.0)   | 4<br>(10.8)  | 1<br>(2.2)   | 2<br>(2.9)   | 3<br>(4.7)   | 0<br>(0.0)   | 0<br>(0.0)   | 0<br>(0.0)   | 0<br>(0.0)   | 0<br>(0.0)   | 1<br>(1.8)   | 0<br>(0.0)   | 1<br>(1.6)   | 0<br>(0.0)   | 1<br>(1.3)   | 4<br>(4.2)   | 24<br>(2.3)   |
| Others                                  | 0<br>(0.0)  | ---  | 1<br>(16.7) | 2<br>(28.6) | 2<br>(11.8) | 3<br>(23.1) | 0<br>(0.0)  | 1<br>(7.1)  | 2<br>(10.5)  | 6<br>(16.2)  | 2<br>(4.4)   | 7<br>(10.0)  | 4<br>(6.3)   | 6<br>(9.5)   | 6<br>(9.8)   | 5<br>(7.5)   | 4<br>(6.7)   | 2<br>(3.8)   | 5<br>(8.9)   | 1<br>(2.0)   | 4<br>(6.3)   | 1<br>(1.4)   | 7<br>(8.9)   | 7<br>(7.3)   | 78<br>(7.6)   |
| Total                                   | 3<br>(100)  | ---  | 6<br>(100)  | 7<br>(100)  | 17<br>(100) | 13<br>(100) | 14<br>(100) | 14<br>(100) | 19<br>(100)  | 37<br>(100)  | 45<br>(100)  | 70<br>(100)  | 64<br>(100)  | 63<br>(100)  | 61<br>(100)  | 67<br>(100)  | 60<br>(100)  | 53<br>(100)  | 56<br>(100)  | 49<br>(100)  | 64<br>(100)  | 73<br>(100)  | 79<br>(100)  | 96<br>(100)  | 1030<br>(100) |

### **3. TABULATED RESULTS OF SEROSURVEILLANCE STUDIES**

#### **System description**

- This is a collection of data from seroprevalence studies and public service records that contribute to the understanding of the HIV situation in selected community groups or settings.

## System layout

|                                                     | Setting                                                    | System                                                | Since           | Sample size            | Data available in 2008 |
|-----------------------------------------------------|------------------------------------------------------------|-------------------------------------------------------|-----------------|------------------------|------------------------|
| <b>(a) Community with predisposing risk factors</b> |                                                            |                                                       |                 |                        |                        |
| STD patients                                        | Social Hygiene Clinics                                     | Voluntary testing offered to clients                  | 1985            | 30000 – 40000 / year   | Yes                    |
| *Drug users (1)                                     | Methadone Clinics                                          | Unlinked anonymous screening using urine samples      | 1992 (to 2003)  | 2000 – 4000 / year     | No                     |
| Drug users (2)                                      | Different treatment and rehabilitation services            | Voluntary testing                                     | 1985            | 300 – 1000 / year      | Yes                    |
| Drug users (3)                                      | Street addicts approached by outreach workers              | Voluntary testing on unlinked saliva samples          | 1993 ( to 1997) | 200 – 500 / year       | No                     |
| MSM                                                 | AIDS Concern                                               | Voluntary testing offered to MSM                      | 2000            | 200 - 700 / year       | Yes                    |
| <b>(b) Community without risk factors</b>           |                                                            |                                                       |                 |                        |                        |
| Blood donors                                        | Hong Kong Red Cross Blood Transfusion Service              | A requirement for all potential donors                | 1985            | 150000 – 200000 / year | Yes                    |
| Antenatal women                                     | All maternal and child health centres and public hospitals | Universal voluntary testing                           | Sept 2001       | Around 40000 / year    | Yes                    |
| *Neonates                                           | Testing of Cord blood from delivering women                | Unlinked anonymous screening on blood samples         | 1990 (to 2000)  | 4000 / year            | No                     |
| Civil servants                                      | Pre-employment health check                                | Unlinked anonymous screening on blood samples         | 1991 (once)     | 1553                   | No                     |
| <b>(c) Community with undefined risk</b>            |                                                            |                                                       |                 |                        |                        |
| TB patients (1)                                     | TB and Chest Clinics of the Department of Health           | Unlinked anonymous screening                          | 1990            | 1000 / year            | Yes                    |
| TB patients (2)                                     | TB and Chest Clinics of the Department of Health           | Voluntary testing                                     | 1993            | 2000 – 3500 / year     | Yes                    |
| Prisoners                                           | Penal institutions                                         | Unlinked anonymous screening on blood / urine samples | 1992            | 1000 – 2000 / year     | Yes                    |

\*replaced by methadone clinics universal HIV testing programme and universal voluntary testing of antenatal women respectively

## Tables & Figures

| Box     | Content                                                                                                                                     | Page |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------|------|
| Box 3.1 | HIV seroprevalence in blood donors at Hong Kong Red Cross Blood Transfusion Service                                                         |      |
|         | (a) HIV detection rate by number of donated blood units (1985 – 2008)                                                                       | 41   |
|         | (b) HIV seroprevalence in new and repeat blood donors (1991 – 2008)                                                                         | 42   |
| Box 3.2 | HIV seroprevalence in clients attending Social Hygiene Services, from voluntary blood testing (1985 – 2008)                                 | 43   |
| Box 3.3 | HIV seroprevalence in drug users attending methadone clinics                                                                                |      |
|         | (a) HIV seroprevalence in drug users attending methadone clinics from unlinked anonymous screening (1992 – 2003)                            | 44   |
|         | (b) HIV seroprevalence in drug users attending methadone clinics from voluntary testing (1991 – 2003)                                       | 45   |
|         | (c) HIV seroprevalence in drug users attending methadone clinics from Universal HIV Antibody (Urine) Testing Programme (2003 - 2008)        | 46   |
| Box 3.4 | HIV seroprevalence in drug users attending inpatient drug treatment centres / institutions, from unlinked anonymous screening (1998 – 2008) | 47   |
| Box 3.5 | HIV seroprevalence in newly admitted prisoners from unlinked anonymous screening (1995 – 2008)                                              | 48   |
| Box 3.6 | HIV seroprevalence in patients with tuberculosis                                                                                            |      |
|         | (a) HIV seroprevalence in patients attending government TB & Chest Clinic, from unlinked anonymous screening (1990 – 2008)                  | 49   |
|         | (b) HIV seroprevalence in patients attending government TB & Chest Clinic, from voluntary blood testing (1993 – 2008)                       | 50   |
| Box 3.7 | HIV prevalence among antenatal women                                                                                                        |      |
|         | (a) HIV prevalence among antenatal women from unlinked anonymous screening (1990 - 2000)                                                    | 51   |
|         | (b) HIV prevalence among antenatal women from Universal Antenatal HIV Antibody Testing Programme (2001 – 2008)                              | 52   |
| Box 3.8 | HIV prevalence among MSM tested by AIDS Concern (2000-2008)                                                                                 | 53   |



**Box 3.1 HIV seroprevalence in blood donors at Hong Kong Red Cross Blood Transfusion Service**

**(a) HIV detection rate by number of donated blood units (1985 - 2008)**

| Year  | Units of blood donated | No. of units anti-HIV+ | Positive detection rate of donated units (%) | 95% C.I. for prevalence (%) |
|-------|------------------------|------------------------|----------------------------------------------|-----------------------------|
| 1985  | 58,563                 | 2                      | 0.003                                        | ( 0.0004 - 0.0123 )         |
| 1986  | 146,639                | 1                      | 0.001                                        | ( 0.0000 - 0.0038 )         |
| 1987  | 155,079                | 2                      | 0.001                                        | ( 0.0002 - 0.0047 )         |
| 1988  | 152,319                | 2                      | 0.001                                        | ( 0.0002 - 0.0047 )         |
| 1989  | 156,587                | 3                      | 0.002                                        | ( 0.0004 - 0.0056 )         |
| 1990  | 168,082                | 4                      | 0.002                                        | ( 0.0006 - 0.0061 )         |
| 1991  | 181,756                | 3                      | 0.002                                        | ( 0.0003 - 0.0048 )         |
| 1992  | 176,492                | 9                      | 0.005                                        | ( 0.0023 - 0.0097 )         |
| 1993  | 165,053                | 3                      | 0.002                                        | ( 0.0004 - 0.0053 )         |
| 1994  | 172,151                | 7                      | 0.004                                        | ( 0.0016 - 0.0084 )         |
| 1995* | 133,058                | 4                      | 0.002                                        | ( 0.0008 - 0.0077 )         |
| 1996* | 140,169                | 5                      | 0.003                                        | ( 0.0012 - 0.0083 )         |
| 1997* | 122,325                | 7                      | 0.004                                        | ( 0.0023 - 0.0118 )         |
| 1998* | 136,267                | 7                      | 0.003                                        | ( 0.0021 - 0.0106 )         |
| 1999* | 117,058                | 7                      | 0.004                                        | ( 0.0024 - 0.0123 )         |
| 2000* | 189,482                | 9                      | 0.005                                        | ( 0.0022 - 0.0090 )         |
| 2001  | 193,835                | 3                      | 0.002                                        | ( 0.0003 - 0.0045 )         |
| 2002  | 193,702                | 3                      | 0.002                                        | ( 0.0003 - 0.0045 )         |
| 2003* | 179,962                | 5                      | 0.003                                        | ( 0.0009 - 0.0065 )         |
| 2004  | 198,420                | 1                      | 0.001                                        | ( 0.0000 - 0.0028 )         |
| 2005  | 197,974                | 3                      | 0.002                                        | ( 0.0003 - 0.0044 )         |
| 2006  | 196,332                | 6                      | 0.003                                        | ( 0.0011 - 0.0067 )         |
| 2007  | 205,645                | 9                      | 0.004                                        | ( 0.0020 - 0.0083 )         |
| 2008  | 212,739                | 10                     | 0.005                                        | ( 0.0023 - 0.0086 )         |

\* Figures revised

**(b) HIV seroprevalence in new and repeat blood donors (1991 - 2008)**

| Year | New donors    |                         |                                           | Repeat donors |                         |                                           |
|------|---------------|-------------------------|-------------------------------------------|---------------|-------------------------|-------------------------------------------|
|      | No. of donors | No. of donors anti-HIV+ | HIV positivity rate (%)<br>(95% C.I. (%)) | No. of donors | No. of donors anti-HIV+ | HIV positivity rate (%)<br>(95% C.I. (%)) |
| 1991 | 48,769        | 0                       | 0<br>(---)                                | 132,987       | 3                       | 0.002<br>( 0.0005 - 0.0066 )              |
| 1992 | 43,674        | 1                       | 0.002<br>( 0.0001 - 0.0128 )              | 132,818       | 8                       | 0.006<br>( 0.0026 - 0.0119 )              |
| 1993 | 36,146        | 1                       | 0.003<br>( 0.0001 - 0.0154 )              | 128,907       | 2                       | 0.002<br>( 0.0002 - 0.0056 )              |
| 1994 | 38,077        | 2                       | 0.005<br>( 0.0006 - 0.0190 )              | 134,074       | 5                       | 0.004<br>( 0.0012 - 0.0087 )              |
| 1995 | 39,778        | 2                       | 0.005<br>( 0.0006 - 0.0182 )              | 93,280        | 2                       | 0.002<br>( 0.0003 - 0.0077 )              |
| 1996 | 40,875        | 1                       | 0.002<br>( 0.0001 - 0.0136 )              | 99,294        | 4                       | 0.004<br>( 0.0011 - 0.0103 )              |
| 1997 | 40,419        | 1                       | 0.002<br>( 0.0001 - 0.0138 )              | 81,906        | 6                       | 0.007<br>( 0.0027 - 0.0159 )              |
| 1998 | 43,756        | 3                       | 0.007<br>( 0.0014 - 0.0200 )              | 92,511        | 4                       | 0.004<br>( 0.0012 - 0.0111 )              |
| 1999 | 40,960        | 1                       | 0.002<br>( 0.0001 - 0.0136 )              | 76,098        | 6                       | 0.008<br>( 0.0029 - 0.0172 )              |
| 2000 | 41,116        | 5                       | 0.012<br>( 0.0039 - 0.0284 )              | 148,366       | 4                       | 0.003<br>( 0.0007 - 0.0069 )              |
| 2001 | 43,415        | 0                       | 0<br>(---)                                | 150,420       | 3                       | 0.002<br>( 0.0004 - 0.0058 )              |
| 2002 | 42,292        | 1                       | 0.002<br>( 0.0001 - 0.0132 )              | 151,410       | 2                       | 0.001<br>( 0.0002 - 0.0048 )              |
| 2003 | 36,732        | 3                       | 0.008<br>( 0.0017 - 0.0239 )              | 143,230       | 2                       | 0.001<br>( 0.0002 - 0.0050 )              |
| 2004 | 41,679        | 0                       | 0<br>(---)                                | 156,741       | 1                       | 0.001<br>( 0.0000 - 0.0036 )              |
| 2005 | 42,643        | 1                       | 0.002<br>( 0.0001 - 0.0131 )              | 155,331       | 2                       | 0.001<br>( 0.0002 - 0.0047 )              |
| 2006 | 40,029        | 2                       | 0.005<br>( 0.0006 - 0.0180 )              | 156,303       | 4                       | 0.003<br>( 0.0007 - 0.0066 )              |
| 2007 | 40,287        | 3                       | 0.007<br>( 0.0015 - 0.0218 )              | 165,358       | 6                       | 0.004<br>( 0.0013 - 0.0079 )              |
| 2008 | 40,909        | 5                       | 0.012<br>( 0.0040 - 0.0285 )              | 171,830       | 5                       | 0.003<br>( 0.0009 - 0.0068 )              |

**Box 3.2 HIV seroprevalence in clients attending Social Hygiene Services, from voluntary blood testing (1985 - 2008)**

| Year | No. of blood samples | No. of samples tested anti-HIV+ | Prevalence (%) | 95% C.I. for prevalence (%) |
|------|----------------------|---------------------------------|----------------|-----------------------------|
| 1985 | 7,911                | 5                               | 0.063          | ( 0.021 - 0.147 )           |
| 1986 | 27,179               | 2                               | 0.007          | ( 0.001 - 0.027 )           |
| 1987 | 33,553               | 2                               | 0.006          | ( 0.001 - 0.022 )           |
| 1988 | 33,039               | 3                               | 0.009          | ( 0.002 - 0.027 )           |
| 1989 | 29,663               | 6                               | 0.020          | ( 0.007 - 0.044 )           |
| 1990 | 27,045               | 9                               | 0.033          | ( 0.015 - 0.063 )           |
| 1991 | 27,013               | 19                              | 0.070          | ( 0.042 - 0.110 )           |
| 1992 | 27,334               | 12                              | 0.044          | ( 0.023 - 0.077 )           |
| 1993 | 28,736               | 16                              | 0.056          | ( 0.032 - 0.090 )           |
| 1994 | 30,162               | 29                              | 0.096          | ( 0.064 - 0.138 )           |
| 1995 | 33,896               | 14                              | 0.041          | ( 0.023 - 0.069 )           |
| 1996 | 37,126               | 25                              | 0.067          | ( 0.044 - 0.099 )           |
| 1997 | 38,779               | 27                              | 0.070          | ( 0.046 - 0.101 )           |
| 1998 | 46,127               | 27                              | 0.059          | ( 0.039 - 0.085 )           |
| 1999 | 51,639               | 31                              | 0.060          | ( 0.041 - 0.085 )           |
| 2000 | 51,197               | 20                              | 0.039          | ( 0.024 - 0.060 )           |
| 2001 | 51,209               | 31                              | 0.061          | ( 0.041 - 0.086 )           |
| 2002 | 53,363               | 41                              | 0.077          | ( 0.055 - 0.104 )           |
| 2003 | 42,764               | 34                              | 0.080          | ( 0.055 - 0.111 )           |
| 2004 | 43,980               | 46                              | 0.105          | ( 0.077 - 0.140 )           |
| 2005 | 38,978               | 28                              | 0.072          | ( 0.048 - 0.104 )           |
| 2006 | 37,120               | 47                              | 0.127          | ( 0.093 - 0.168 )           |
| 2007 | 33,841               | 50                              | 0.148          | ( 0.110 - 0.195 )           |
| 2008 | 31,040               | 72                              | 0.232          | ( 0.181 - 0.292 )           |

### Box 3.3 HIV seroprevalence in drug users attending methadone clinics

#### (a) HIV seroprevalence in drug users attending methadone clinics from unlinked anonymous screening (1992 - 2003)\*

| Year | No. of urine samples | No. of samples tested anti-HIV+ | Prevalence (%) | 95% C.I. for prevalence (%) |
|------|----------------------|---------------------------------|----------------|-----------------------------|
| 1992 | 2,189                | 0                               | 0              | ( --- - --- )               |
| 1993 | 3,219                | 0                               | 0              | ( --- - --- )               |
| 1994 | 4,113                | 2                               | 0.049          | ( 0.006 - 0.176 )           |
| 1995 | 2,240                | 1                               | 0.045          | ( 0.001 - 0.249 )           |
| 1996 | 3,714                | 1                               | 0.027          | ( 0.001 - 0.150 )           |
| 1997 | 1,816                | 0                               | 0              | ( --- - --- )               |
| 1998 | 2,838                | 6                               | 0.211          | ( 0.078 - 0.460 )           |
| 1999 | 2,674                | 3                               | 0.112          | ( 0.023 - 0.328 )           |
| 2000 | 3,644                | 10                              | 0.274          | ( 0.132 - 0.505 )           |
| 2001 | 3,811                | 4                               | 0.105          | ( 0.029 - 0.269 )           |
| 2002 | 4,037                | 10                              | 0.248          | ( 0.119 - 0.456 )           |
| 2003 | 1,949                | 5                               | 0.257          | ( 0.083 - 0.599 )           |

\* Replaced by MUT programme since 2004

**(b) HIV seroprevalence in drug users attending methadone clinics from voluntary testing (1991 - 2003)\*\***

| Year | *No. of blood samples | No. of samples tested anti-HIV+ | Prevalence (%) | 95% C.I. for prevalence (%) |
|------|-----------------------|---------------------------------|----------------|-----------------------------|
| 1991 | 379                   | 0                               | 0              | ( --- - --- )               |
| 1992 | 212                   | 0                               | 0              | ( --- - --- )               |
| 1993 | 198                   | 0                               | 0              | ( --- - --- )               |
| 1994 | 296                   | 1                               | 0.338          | ( 0.009 - 1.882 )           |
| 1995 | 102                   | 0                               | 0              | ( --- - --- )               |
| 1996 | 302                   | 0                               | 0              | ( --- - --- )               |
| 1997 | 254                   | 0                               | 0              | ( --- - --- )               |
| 1998 | 250                   | 1                               | 0.400          | ( 0.010 - 2.229 )           |
| 1999 | 599                   | 3                               | 0.501          | ( 0.103 - 1.464 )           |
| 2000 | 602                   | 1                               | 0.166          | ( 0.004 - 0.926 )           |
| 2001 | 363                   | 0                               | 0              | ( --- - --- )               |
| 2002 | 318                   | 0                               | 0              | ( --- - --- )               |
| 2003 | 148                   | 0                               | 0              | ( --- - --- )               |

\* all were blood samples, with a small proportion being urine samples since late 1999

\*\* Replaced by MUT programme since 2004

**(c) HIV seroprevalence in drug users attending methadone clinics from Universal HIV Antibody (Urine) Testing Programme (2003 - 2008)**

| Year             | No. of Urine samples | No. of samples tested anti-HIV+ | Prevalence (%) | 95% C.I. for prevalence (%) |
|------------------|----------------------|---------------------------------|----------------|-----------------------------|
| 2003 (Jul – Sep) | 1,834                | 9                               | 0.491          | ( 0.224 - 0.932 )           |
| 2004             | 8,812                | 18                              | 0.204          | ( 0.121 - 0.323 )           |
| 2005             | 8,696                | 28                              | 0.322          | ( 0.214 - 0.465 )           |
| 2006             | 7,730                | 28                              | 0.362          | ( 0.241 - 0.524 )           |
| 2007             | 7,314                | 26                              | 0.355          | ( 0.232 - 0.521 )           |
| 2008             | 7,955                | 37                              | 0.465          | ( 0.327 - 0.641 )           |

**Box 3.4 HIV seroprevalence in drug users attending inpatient drug treatment centres / institutions, from unlinked anonymous screening (1998 - 2008)**

| Year  | No. of urine samples | No. of samples tested anti-HIV+ | Prevalence (%) | 95% C.I. for prevalence (%) |
|-------|----------------------|---------------------------------|----------------|-----------------------------|
| 1998  | 2,286                | 3                               | 0.131          | ( 0.027 - 0.384 )           |
| 1999  | 1,675                | 3                               | 0.179          | ( 0.037 - 0.523 )           |
| 2000  | 1,165                | 7                               | 0.601          | ( 0.242 - 1.238 )           |
| 2001  | 1,137                | 2                               | 0.176          | ( 0.021 - 0.635 )           |
| 2002  | 761                  | 0                               | 0              | ( --- - --- )               |
| 2003  | 361                  | 1                               | 0.277          | ( 0.007 - 1.543 )           |
| 2004* | ---                  | ---                             | ---            | ( --- - --- )               |
| 2005  | 630                  | 0                               | 0              | ( --- - --- )               |
| 2006  | 786                  | 4                               | 0.509          | ( 0.139 - 1.303 )           |
| 2007  | 387                  | 0                               | 0              | ( --- - --- )               |
| 2008  | 369                  | 0                               | 0              | ( --- - --- )               |

\* Unlinked anonymous screening was not performed in 2004

**Box 3.5 HIV seroprevalence in newly admitted prisoners from unlinked anonymous screening (1995 - 2008)**

| Year | No. of Samples* | No. of samples tested anti-HIV+ | Prevalence (%) | 95% C.I. for prevalence (%) |
|------|-----------------|---------------------------------|----------------|-----------------------------|
| 1995 | 653             | 3                               | 0.459          | ( 0.095 - 1.343 )           |
| 1996 | 1,503           | 6                               | 0.399          | ( 0.147 - 0.869 )           |
| 1997 | 1,474           | 3                               | 0.204          | ( 0.042 - 0.595 )           |
| 1998 | 1,571           | 4                               | 0.255          | ( 0.069 - 0.652 )           |
| 1999 | 1,580           | 10                              | 0.633          | ( 0.303 - 1.164 )**         |
| 2000 | 1,516           | 4                               | 0.264          | ( 0.072 - 0.676 )           |
| 2001 | 1,502           | 5                               | 0.333          | ( 0.108 - 0.777 )           |
| 2002 | 1,500           | 6                               | 0.400          | ( 0.147 - 0.871 )           |
| 2003 | 1,502           | 5                               | 0.333          | ( 0.108 - 0.777 )           |
| 2004 | 1,980           | 7                               | 0.354          | ( 0.142 - 0.728 )           |
| 2005 | 2,007           | 6                               | 0.299          | ( 0.110 - 0.651 )           |
| 2006 | 2,796           | 13                              | 0.465          | ( 0.248 - 0.795 )           |
| 2007 | 2,718           | 7                               | 0.258          | ( 0.104 - 0.531 )           |
| 2008 | 2,231           | 21                              | 0.941          | ( 0.583 - 1.439 )           |

\* Only samples of 1995 were blood samples. All others were urine samples.



### Box 3.6 HIV seroprevalence in patients with tuberculosis

#### (a) HIV seroprevalence in patients attending government TB & Chest Clinics, from unlinked anonymous screening (1990 - 2008)

| Year   | No. of urine samples | No. of samples tested anti-HIV+ | Prevalence (%) | 95% C.I. for prevalence(%) |
|--------|----------------------|---------------------------------|----------------|----------------------------|
| 1990   | 1,548                | 0                               | 0              | ( --- - --- )              |
| 1991   | 485                  | 0                               | 0              | ( --- - --- )              |
| 1992   | 1,469                | 2                               | 0.136          | ( 0.016 - 0.492 )          |
| 1993   | 1,173                | 0                               | 0              | ( --- - --- )              |
| 1994*  | -                    | -                               | -              | ( --- - --- )              |
| 1995   | 895                  | 2                               | 0.223          | ( 0.027 - 0.807 )          |
| 1996   | 998                  | 4                               | 0.401          | ( 0.109 - 1.026 )          |
| 1997   | 1,003                | 2                               | 0.199          | ( 0.024 - 0.720 )          |
| 1998   | 833                  | 4                               | 0.480          | ( 0.131 - 1.229 )          |
| 1999   | 1,166                | 8                               | 0.686          | ( 0.296 - 1.352 )          |
| 2000   | 1,018                | 5                               | 0.491          | ( 0.159 - 1.146 )          |
| 2001   | 1,071                | 4                               | 0.373          | ( 0.102 - 0.956 )          |
| 2002   | 1,000                | 8                               | 0.800          | ( 0.345 - 1.576 )          |
| 2003   | 920                  | 6                               | 0.652          | ( 0.239 - 1.420 )          |
| 2004** | 1,056                | 9                               | 0.852          | ( 0.390 - 1.618 )          |
| 2005   | 840                  | 7                               | 0.833          | ( 0.335 - 1.717 )          |
| 2006** | 841                  | 5**                             | 0.595          | ( 0.193 - 1.387 )          |
| 2007   | 887                  | 11                              | 1.240          | ( 0.619 - 2.219 )          |
| 2008   | 783                  | 4                               | 0.511          | ( 0.139 - 1.308 )          |

\* Unlinked anonymous screening was not performed in 1994

\*\* figure revised

**(b) HIV seroprevalence in patients attending government TB & Chest Clinics, from voluntary blood testing  
(1993 - 2008)**

| Year              | No. of blood samples | Coverage* |                     | No. of anti-HIV+ | Prevalence (%) | 95% C.I. for prevalence (%) |
|-------------------|----------------------|-----------|---------------------|------------------|----------------|-----------------------------|
|                   |                      | A         | B                   |                  |                |                             |
| 1993              | 2,116                | ---       | ---                 | 0                | 0              | ( --- - --- )               |
| 1994              | 2,534                | ---       | ---                 | 2                | 0.079          | ( 0.010 - 0.285 )           |
| 1995              | 2,548                | ---       | ---                 | 2                | 0.078          | ( 0.010 - 0.284 )           |
| 1996              | 3,157                | ---       | ---                 | 2                | 0.063          | ( 0.008 - 0.229 )           |
| 1997              | 3,524                | ---       | ---                 | 2                | 0.057          | ( 0.007 - 0.205 )           |
| 1998              | 3,726                | ---       | ---                 | 6                | 0.161          | ( 0.059 - 0.350 )           |
| 1999              | 3,633                | ---       | ---                 | 11               | 0.303          | ( 0.151 - 0.542 )           |
| 2000              | 3,426                | 92.8%     | 44.8% <sup>#</sup>  | 3                | 0.088          | ( 0.018 - 0.256 )           |
| 2001              | 3,404                | 94.2%     | 45.3% <sup>#</sup>  | 9                | 0.264          | ( 0.121 - 0.502 )           |
| 2002              | 3,186                | 94.2%     | 47.4% <sup>#</sup>  | 7                | 0.220          | ( 0.088 - 0.453 )           |
| 2003              | 3,122                | 92.3%     | 50.4% <sup>#</sup>  | 2                | 0.064          | ( 0.008 - 0.231 )           |
| 2004              | 3,202                | 93.1%     | 44.4% <sup>#</sup>  | 10               | 0.312          | ( 0.150 - 0.574 )           |
| 2005 <sup>#</sup> | 4,209                | 81.2%     | 68.3%               | 35               | 0.832          | ( 0.579 - 1.157 )           |
| 2006 <sup>#</sup> | 4,511                | 91.0%     | 78.2%               | 33               | 0.732          | ( 0.504 - 1.027 )           |
| 2007 <sup>#</sup> | 4,075                | 88.7%     | 74.6%               | 41               | 1.006          | ( 0.722 - 1.365 )           |
| 2008              | 4,121                | 89.9%     | 71.9% <sup>**</sup> | 48               | 1.165          | ( 0.859 - 1.544 )           |

\* coverage      A is the proportion of patients attended government TB & Chest Clinics who have been tested for HIV in TB Clinic. (For year 2000-2004, it used to be the proportion of patients who started on TB tx at government TB & Chest Clinics who have been tested for HIV in TB Clinic)  
B is the proportion of total TB notifications who have been tested for HIV at government TB & Chest Clinics.

<sup>#</sup> figures revised

<sup>\*\*</sup> Notification of tuberculosis in 2008 is a provisional figure

### Box 3.7 HIV prevalence among antenatal women

#### (a) HIV prevalence among antenatal women from unlinked anonymous screening (1990 - 2000)

| Year | No. of blood samples | No. of anti-HIV+ | Prevalence (%) | 95% C.I. for prevalence (%) |
|------|----------------------|------------------|----------------|-----------------------------|
| 1990 | 993                  | 0                | 0              | ( --- - --- )               |
| 1991 | 5,253                | 0                | 0              | ( --- - --- )               |
| 1992 | 5,796                | 0                | 0              | ( --- - --- )               |
| 1993 | 4,532                | 0                | 0              | ( --- - --- )               |
| 1994 | 4,762                | 0                | 0              | ( --- - --- )               |
| 1995 | 4,648                | 1                | 0.02           | ( 0.0005 - 0.1199 )         |
| 1996 | 3,968                | 1                | 0.03           | ( 0.0006 - 0.1404 )         |
| 1997 | 3,331                | 0                | 0              | ( --- - --- )               |
| 1998 | 3,031                | 1                | 0.03           | ( 0.0008 - 0.1838 )         |
| 1999 | 3,125                | 1                | 0.03           | ( 0.0008 - 0.1783 )         |
| 2000 | 3,478                | 1                | 0.03           | ( 0.0007 - 0.1602 )         |

**(b) HIV prevalence among antenatal women from Universal Antenatal HIV Antibody Testing Programme (2001 - 2008)**

|                   | Number of tests | Coverage* | Number of positive tests | Prevalence (%) | 95% C.I. for prevalence (%) |
|-------------------|-----------------|-----------|--------------------------|----------------|-----------------------------|
| 2001 (Sep-Dec)    | 12,965          | 96.6%     | 7                        | 0.05           | ( 0.0217 - 0.1112 )         |
| 2002              | 41,932          | 97.2%     | 8                        | 0.02           | ( 0.0082 - 0.0376 )         |
| 2003              | 36,366          | 96.9%     | 6                        | 0.02           | ( 0.0061 - 0.0359 )         |
| 2004              | 41,070          | 97.9%     | 6                        | 0.01           | ( 0.0054 - 0.0318 )         |
| 2005              | 42,750          | 98.1%     | 5                        | 0.01           | ( 0.0038 - 0.0273 )         |
| 2006 <sup>#</sup> | 43,297          | 98.0%     | 9                        | 0.02           | ( 0.0095 - 0.0395 )         |
| 2007              | 47,472          | 97.4%     | 10                       | 0.02           | ( 0.0101 - 0.0387 )         |
| 2008              | 51,737          | 98.2%     | 2                        | 0.004          | ( 0.0005 - 0.0140 )         |

\* coverage is the proportion of women attending public antenatal services who have been tested for HIV

<sup>#</sup> figures revised

**Box 3.8 HIV prevalence among MSM tested by AIDS Concern (2000 - 2008)**

|       | Number of tests | Number of positive tests | Prevalence (%) | 95% C.I. for prevalence (%) |
|-------|-----------------|--------------------------|----------------|-----------------------------|
| 2000  | 38              | 0                        | 0              | ( --- - --- )               |
| 2001  | 107             | 1                        | 0.93           | ( 0.024 - 5.207 )           |
| 2002  | 130             | 1                        | 0.77           | ( 0.019 - 4.286 )           |
| 2003  | 223             | 2                        | 0.90           | ( 0.109 - 3.240 )           |
| 2004  | 332             | 6                        | 1.81           | ( 0.663 - 3.934 )           |
| 2005  | 483             | 12                       | 2.48           | ( 1.284 - 4.340 )           |
| 2006  | 610             | 10                       | 1.64           | ( 0.786 - 3.015 )           |
| 2007* | 723             | 17                       | 2.35           | ( 1.370 - 3.765 )           |
| 2008  | 905             | 15                       | 1.66           | ( 0.928 - 2.734 )           |

\* figures in 2007 revised

#### **4. TABULATED RESULTS OF STATISTICS ON SEXUALLY TRANSMITTED INFECTIONS (STI)**

##### **System description:**

- This is a clinic based disease reporting system contributed by Social Hygiene Service, Department of Health. Summary tables are submitted quarterly by Social Hygiene Service. The clinics included in this surveillance system are: Chai Wan, Lek Yuen<sup>1</sup>, Wan Chai, Western<sup>2</sup>, Yau Ma Tei, South Kwai Chung<sup>3</sup>, Yung Fung Shee, Tuen Mun, Fanling ITC<sup>4</sup>, Tai Po<sup>5</sup>, and Shek Wu Hui<sup>5</sup>.

-----  
Remark:

<sup>1</sup> Leck Yuen Clinic was closed since April 2005

<sup>2</sup> Western Social Hygiene Clinic was merged with Wan Chai Social Hygiene Clinic and Sai Ying Pun Dermatology Clinic wef 2.7.2003.

<sup>3</sup> South Kwai Chung Clinic was closed on 27.3.2004

<sup>4</sup> Venereal Diseases Clinics in Fanling ITC was commenced operation in part-time basis on 1.9.2003 by appointment only.

<sup>5</sup> Tai Po and Shek Wu Hui clinics were closed since 2001

## Tables & Figures

| <b>Box</b> | <b>Content</b>                                                                   | <b>Page</b> |
|------------|----------------------------------------------------------------------------------|-------------|
| Box 4.1    | Total number of STI reported by individual Social Hygiene Clinic                 |             |
|            | (a) Year 2008                                                                    | 56          |
|            | (b) 2004 - 2008                                                                  | 57          |
| Box 4.2    | Annual reported STIs in Social Hygiene Clinics                                   | 58          |
| Box 4.3    | Syphilis reported by Social Hygiene Clinics (2004 - 2008)                        | 59          |
| Box 4.4    | Sexually acquired HIV infection in Hong Kong                                     | 60          |
| Box 4.5    | Syndromic presentations of STI from Behavioural Survey of Social Hygiene Service | 61          |

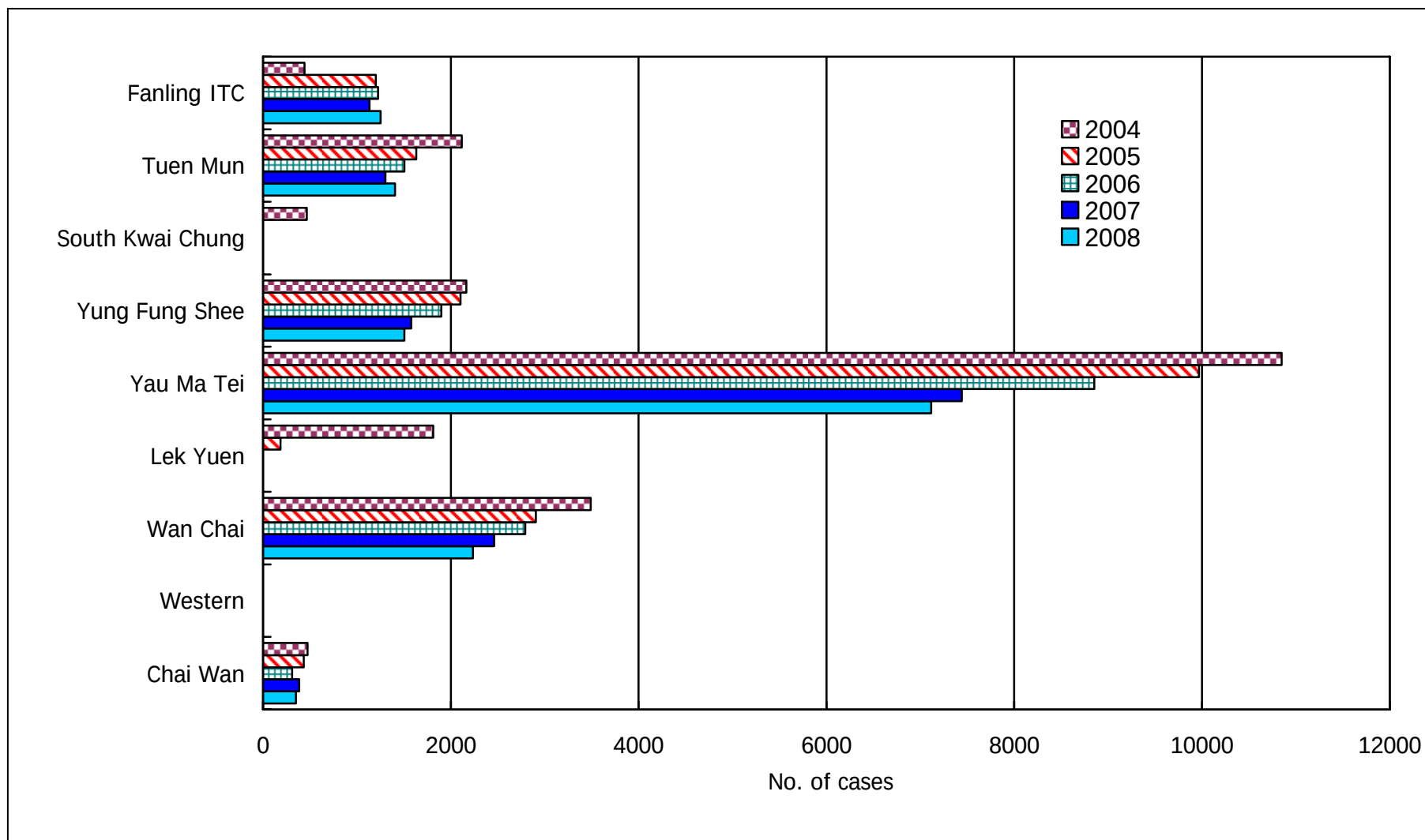
**Box 4.1 Total number of STI reported by individual Social Hygiene Clinic****(a) Year 2008**

|        | Chai Wan | Wan Chai | Yau Ma Tei | Yung Fung Shee | Tuen Mun | Fanling ITC <sup>#</sup> |
|--------|----------|----------|------------|----------------|----------|--------------------------|
| Male   | 222      | 1,491    | 4,211      | 1,020          | 744      | 736                      |
| Female | 129      | 744      | 2,906      | 485            | 662      | 517                      |
| Total  | 351      | 2,235    | 7,117      | 1,505          | 1,406    | 1,253                    |

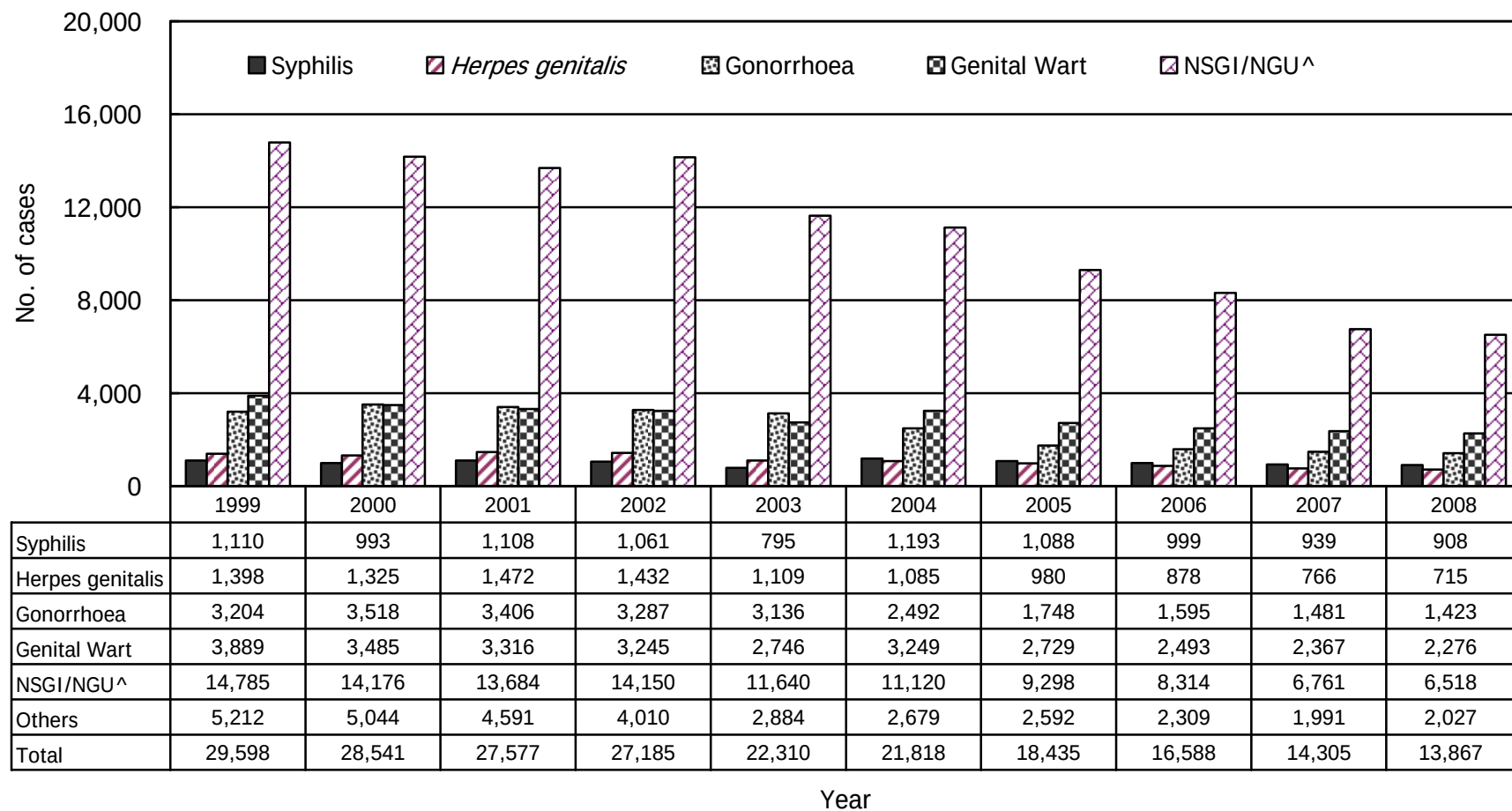
# Venereal Diseases Clinics in Fanling ITC commenced operation in part-time basis on 1.9.2003 by appointment only.



**(b) 2004 - 2008**



**Box 4.2 Annual reported STIs in Social Hygiene Clinics**

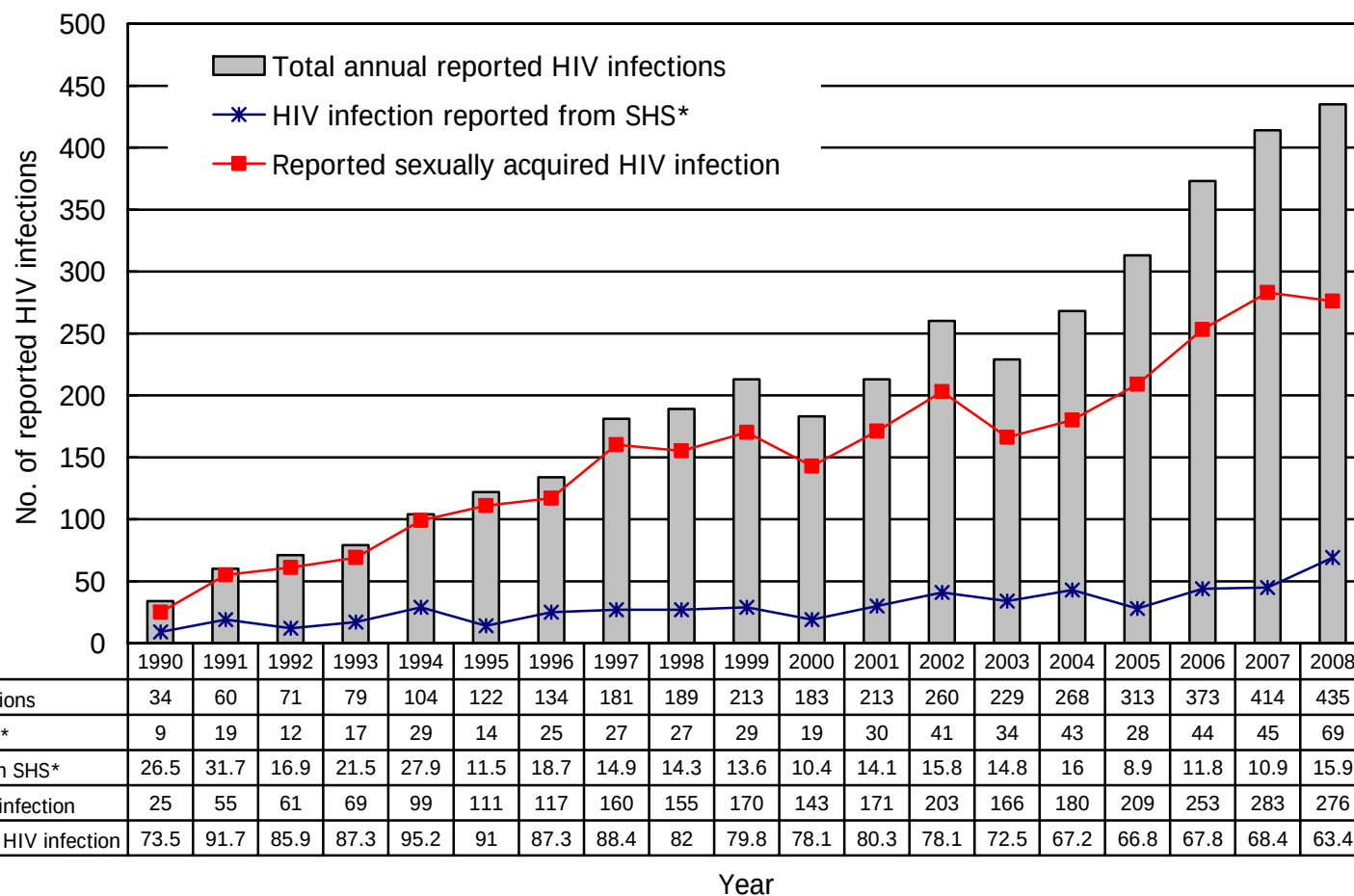


^ NSGI / NGU : Non-specific Genital Infection / Non-gonococcal Urethritis

**Box 4.3 Syphilis reported by Social Hygiene Clinics (2004 - 2008)**

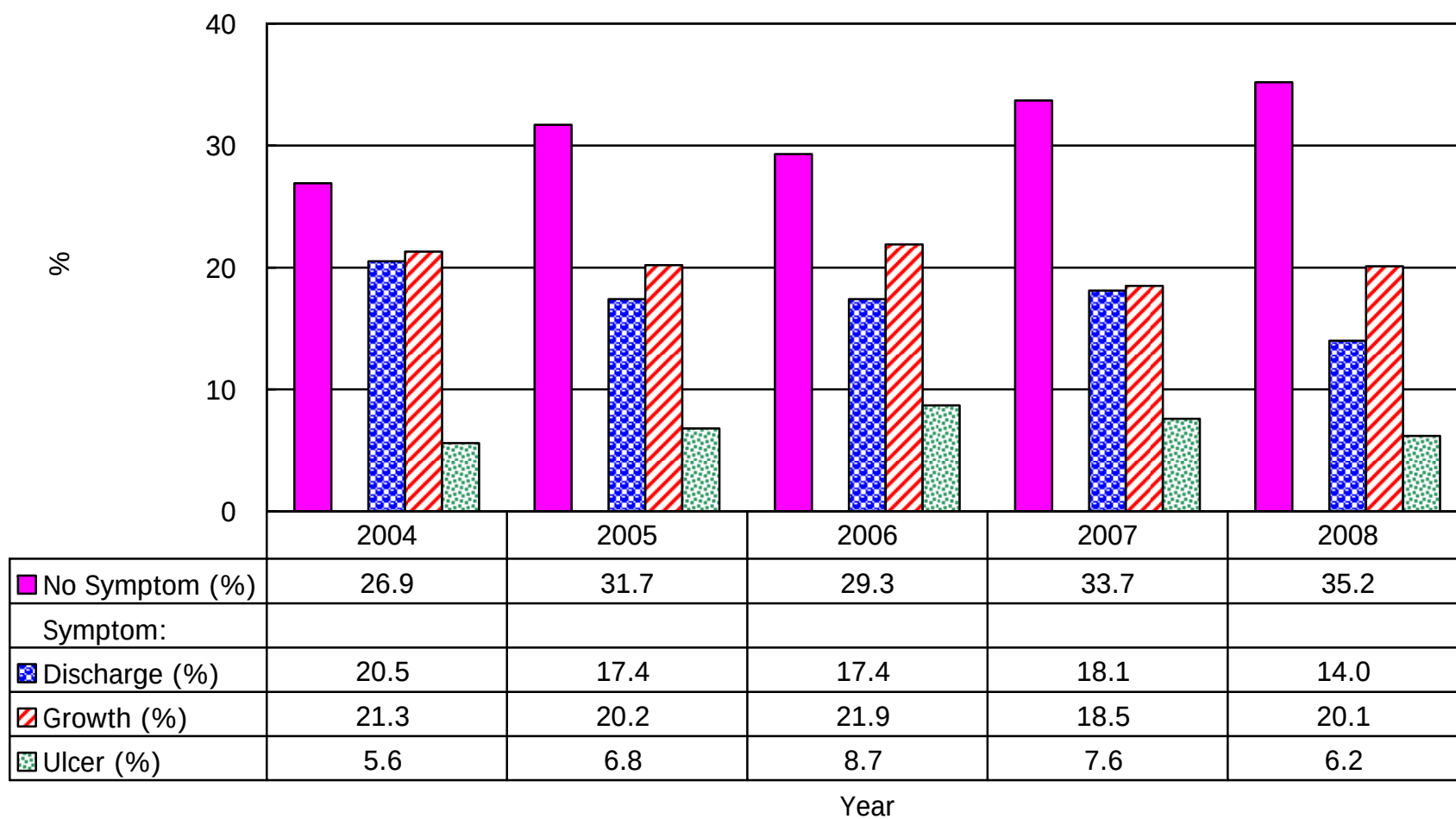
| Syphilis \ Year               | 2004  | 2005  | 2006 | 2007 | 2008 |
|-------------------------------|-------|-------|------|------|------|
| Primary                       | 124   | 72    | 48   | 50   | 45   |
| Secondary                     | 49    | 36    | 42   | 58   | 56   |
| Early latent                  | 132   | 130   | 69   | 63   | 82   |
| Late latent                   | 877   | 845   | 835  | 764  | 720  |
| Late (cardiovascular / neuro) | 10    | 5     | 4    | 3    | 5    |
| Congenital (early)            | 0     | 0     | 0    | 0    | 0    |
| Congenital (late)             | 1     | 0     | 1    | 1    | 0    |
| Total                         | 1,193 | 1,088 | 999  | 939  | 908  |

# Box 4.4 Sexually acquired HIV infection in Hong Kong



\* SHS: Social Hygiene Service

**Box 4.5 Syndromic presentations of STI from Behavioural Survey of Social Hygiene Service**



## **5. TABULATED RESULTS ON BEHAVIOURAL MONITORING**

### **System description**

- This is a tabulation of behavioural data relating to HIV risk collected from different sources in Hong Kong

## System layout

| Source                                                                                                                                  | Sexual behaviour                                                                                                                                                                                                             | Drug-taking behaviour                                                                                                                              | Data available in 2008 |
|-----------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| AIDS Counselling and Testing Service (ACTS)                                                                                             | <ul style="list-style-type: none"> <li>- Median no. of sexual partners among men</li> <li>- Recent history of commercial sex</li> <li>- Condom use in men</li> <li>- No. of sexual partners and Condom use in MSM</li> </ul> |                                                                                                                                                    | Yes                    |
| Social Hygiene Service (SHS)                                                                                                            | <ul style="list-style-type: none"> <li>- Recent history of commercial sex</li> <li>- Condom use in heterosexual men</li> </ul>                                                                                               |                                                                                                                                                    | Yes                    |
| Methadone clinics (DRS-M)                                                                                                               |                                                                                                                                                                                                                              | <ul style="list-style-type: none"> <li>- Proportion of injectors</li> <li>- Practice of needle-sharing</li> </ul>                                  | Yes                    |
| Shek Kwu Chau (SKC) Treatment and Rehabilitation Centre (DRS-S)                                                                         |                                                                                                                                                                                                                              | <ul style="list-style-type: none"> <li>- Proportion of injectors</li> <li>- Practice of needle-sharing</li> </ul>                                  | Yes                    |
| Central Registry of Drug Abuse (CRDA)                                                                                                   |                                                                                                                                                                                                                              | <ul style="list-style-type: none"> <li>- Proportion of injectors in all drug users</li> <li>- Proportion of injectors in new drug users</li> </ul> | Yes                    |
| Street Addict Survey (SAS) (From the society for the Aid and Rehabilitation of Drug Abusers)                                            |                                                                                                                                                                                                                              | <ul style="list-style-type: none"> <li>- Proportion of injectors</li> <li>- Practice of needle-sharing</li> </ul>                                  | Yes                    |
| AIDS Concern testing service for MSM (AC)                                                                                               | <ul style="list-style-type: none"> <li>- Condom use in MSM</li> </ul>                                                                                                                                                        |                                                                                                                                                    | Yes                    |
| Community Research Programme on AIDS (CRPA-H and –T<br>H: Household; T: Travellers)<br>(From Centre for Epidemiology and Biostatistics) | <ul style="list-style-type: none"> <li>- Condom use in heterosexual men</li> </ul>                                                                                                                                           |                                                                                                                                                    | No                     |

## Tables & Figures

| <b>Box</b> | <b>Content</b>                                                                                                                 | <b>Page</b> |
|------------|--------------------------------------------------------------------------------------------------------------------------------|-------------|
| Box 5.1    | Median number of sex partners in the previous year among heterosexual men / MSM attending AIDS Counselling and Testing Service | 65          |
| Box 5.2    | Recent history of commercial sex among adult men                                                                               | 66          |
| Box 5.3    | Condom use with regular partners among adult heterosexual men                                                                  |             |
|            | (a) Regular condom use with regular partners among adult heterosexual men                                                      | 67          |
|            | (b) Condom use for last sex with regular partners among adult heterosexual men                                                 | 68          |
| Box 5.4    | Condom use with commercial partners among adult heterosexual men                                                               |             |
|            | (a) Regular condom use with commercial partners among adult heterosexual men                                                   | 69          |
|            | (b) Condom use for last sex with commercial partners among adult heterosexual men                                              | 70          |
| Box 5.5    | Condom use among adult Men have Sex with Men (MSM)                                                                             |             |
|            | (a) Regular condom use* among MSM                                                                                              | 71          |
|            | (b) Condom use for last anal sex among MSM                                                                                     | 72          |
| Box 5.6    | Proportion of injectors                                                                                                        | 73          |
| Box 5.7    | Proportion of needle-sharers                                                                                                   | 74          |



**Box 5.1 Median number of sex partners in the previous year among adult heterosexual men / MSM attending AIDS Counselling and Testing Service (ACTS)**

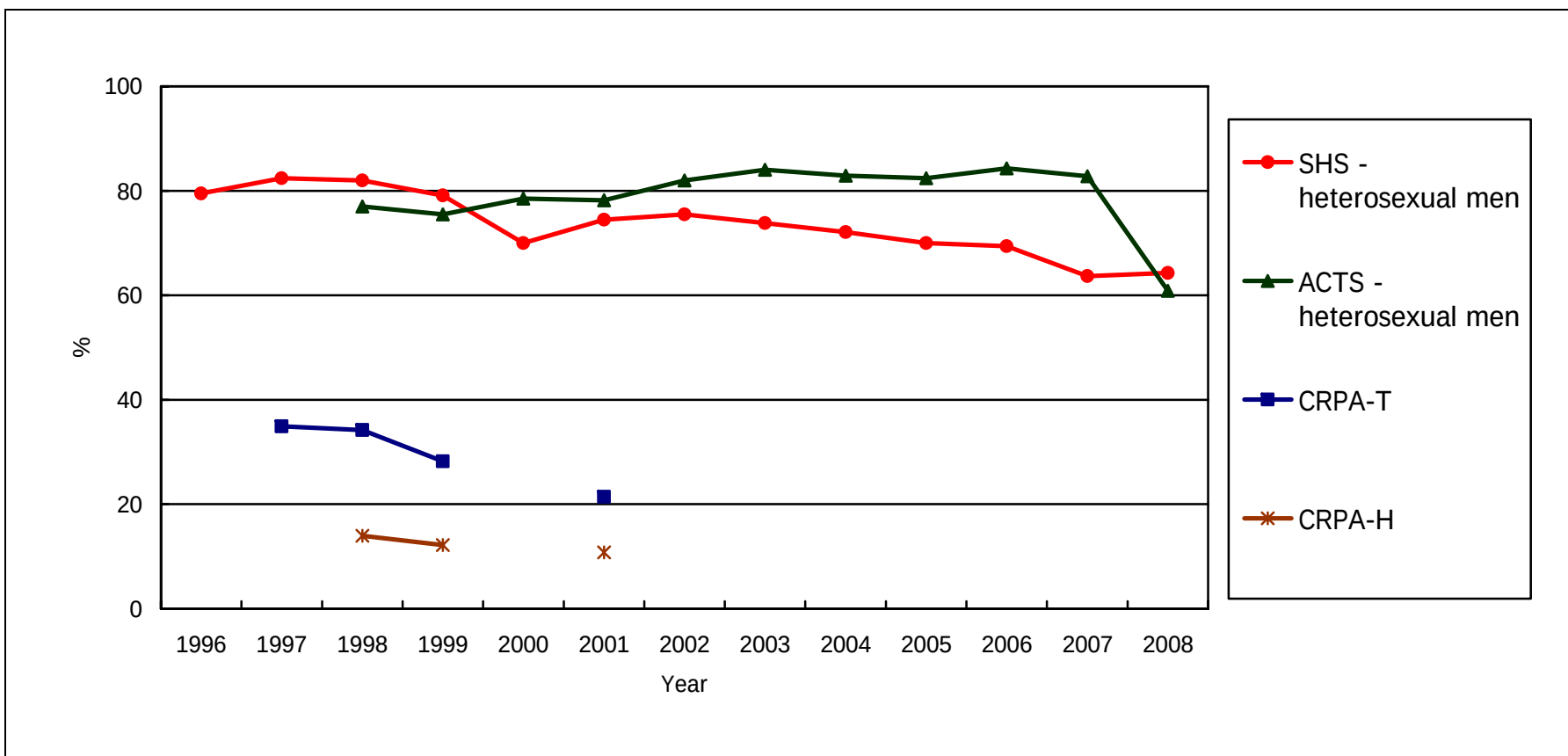
|                                              | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|----------------------------------------------|------|------|------|------|------|------|------|------|
| Heterosexual men - Regular sex partners*     | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    |
| Heterosexual men - Commercial sex partners** | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Heterosexual men - Casual sex partners***    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    |
| MSM - Regular sex partners*                  | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    |
| MSM - Commercial sex partners**              | 1    | 2    | 2.5  | 2    | 1    | 1.5  | 1    | 2    |
| MSM - Casual sex partners***                 | 3    | 3    | 3    | 4    | 3    | 3    | 3.5  | 3    |

\* Regular sex partners used to refer to long-term sex partners including spouse, mistress, and steady boy/girl friends for at least one year, or if less than one year, one with whom is expected to continue sexual relationship. This definition of regular sex partners in 2008 has been further refined to include (other than the long-term sex partners) sex buddy that refers to regular sex only partner for at least 6 months, or if less than 6 months, one with whom is expected to continue sexual relationship

\*\* Commercial sex partners are defined as those who have sexual intercourse in exchange for money, goods or services. Examples are prostitutes and customers of prostitutes.

\*\*\* Casual sex partners, the two do not have steady relationship.

### Box 5.2 Recent history\* of commercial sex among adult men



\* Time period: SHS & ACTS : past one year / CRPA : past 6 months

Remarks : Data of CRPA of 2000 is not available, and suspended since 2002

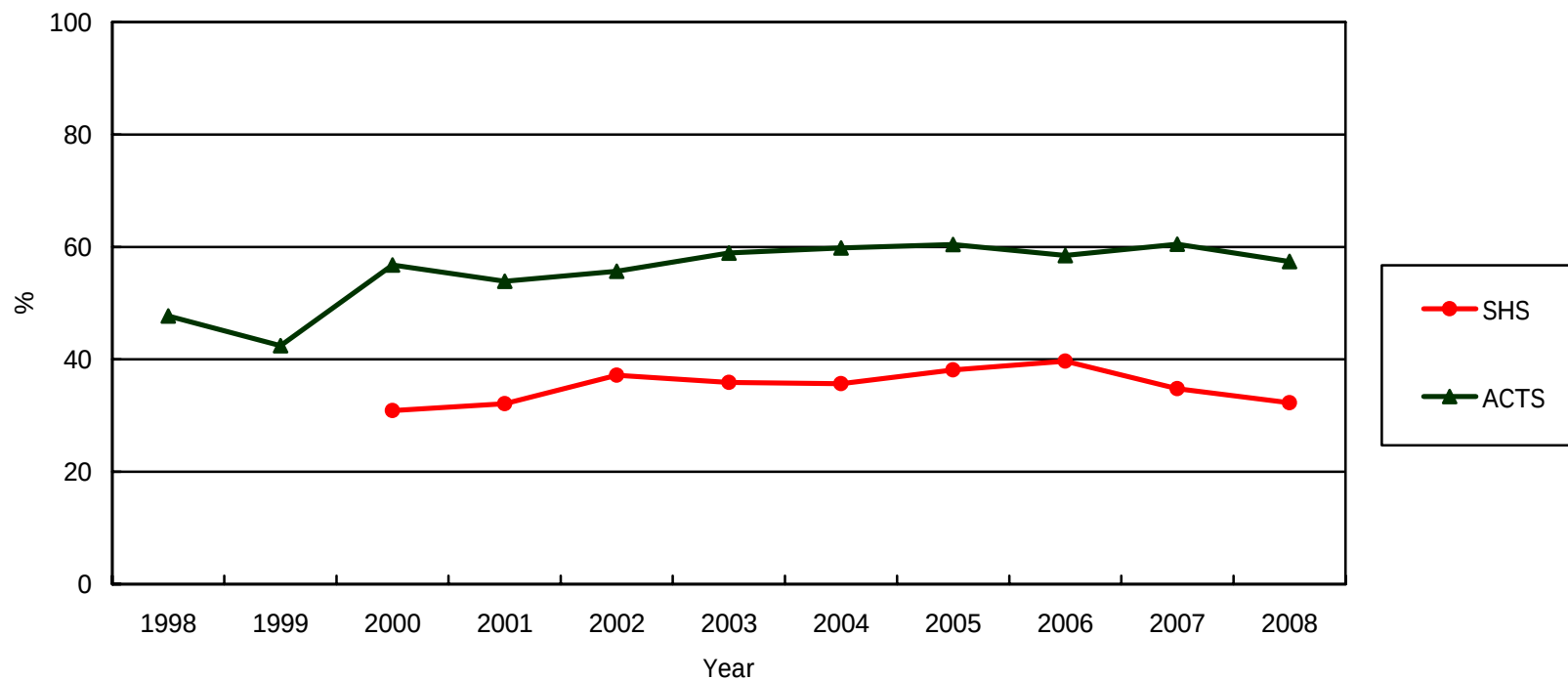
SHS – Social Hygiene Services

ACTS - AIDS Counselling and Testing Service

CRPA - Community Research Programme on AIDS from Centre for Epidemiology and Biostatistics (H: Household; T: Travellers)

### Box 5.3 Condom use with regular partners among adult heterosexual men

#### (a) Regular condom use\* with regular partners\*\* among adult heterosexual men



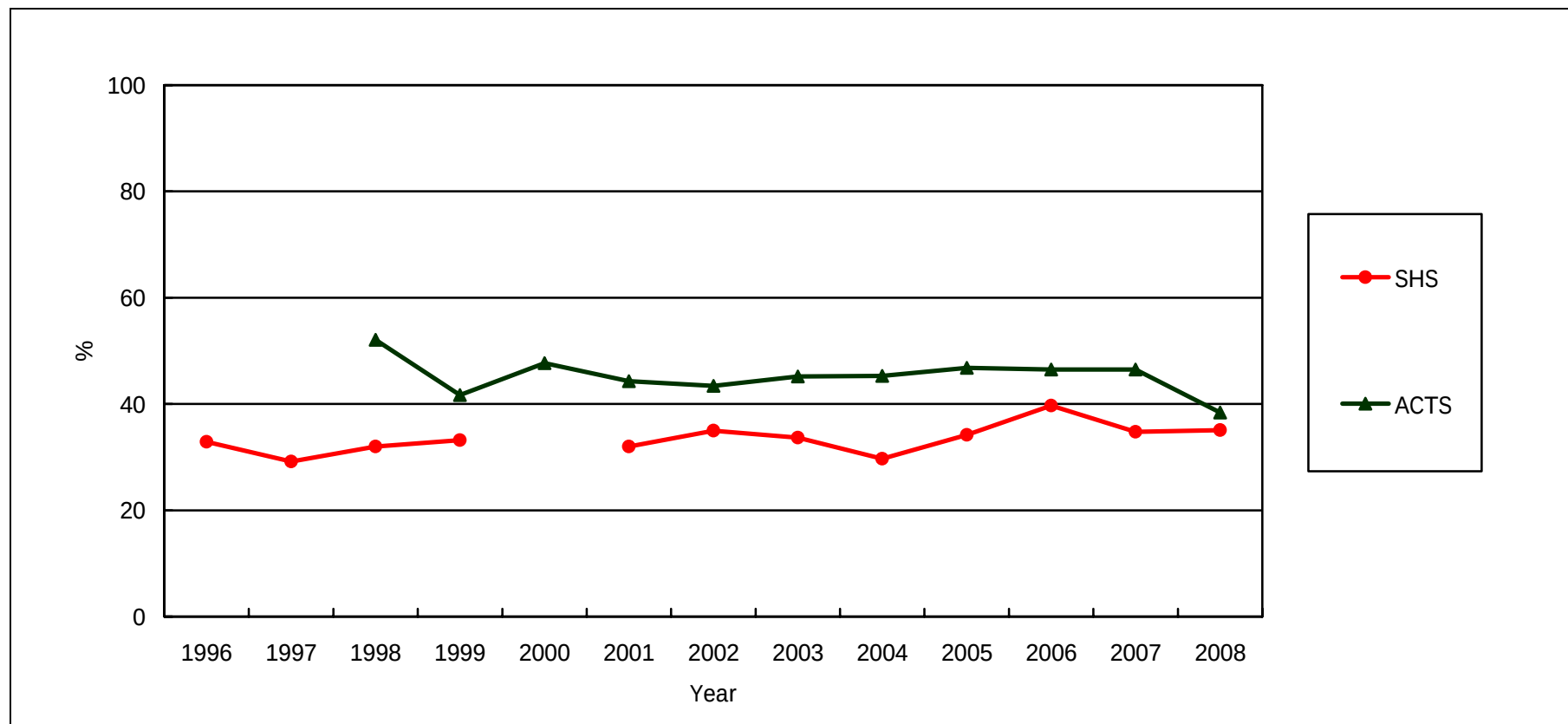
\* Regular condom use is defined as always or usually using a condom on a 4-level scale

\*\* Regular sex partners used to refer to long-term sex partners including spouse, mistress, and steady boy/girl friends for at least one year, or if less than one year, one with whom is expected to continue sexual relationship. This definition of regular sex partners in 2008 has been further refined to include (other than the long-term sex partners) sex buddy that refers to regular sex only partner for at least 6 months, or if less than 6 months, one with whom is expected to continue sexual relationship

Remarks : SHS – Social Hygiene Services (figures in 2006 and 2007 are revised)

ACTS - AIDS Counselling and Testing Service

**(b) Condom use for last sex with regular partners\* among adult heterosexual men**

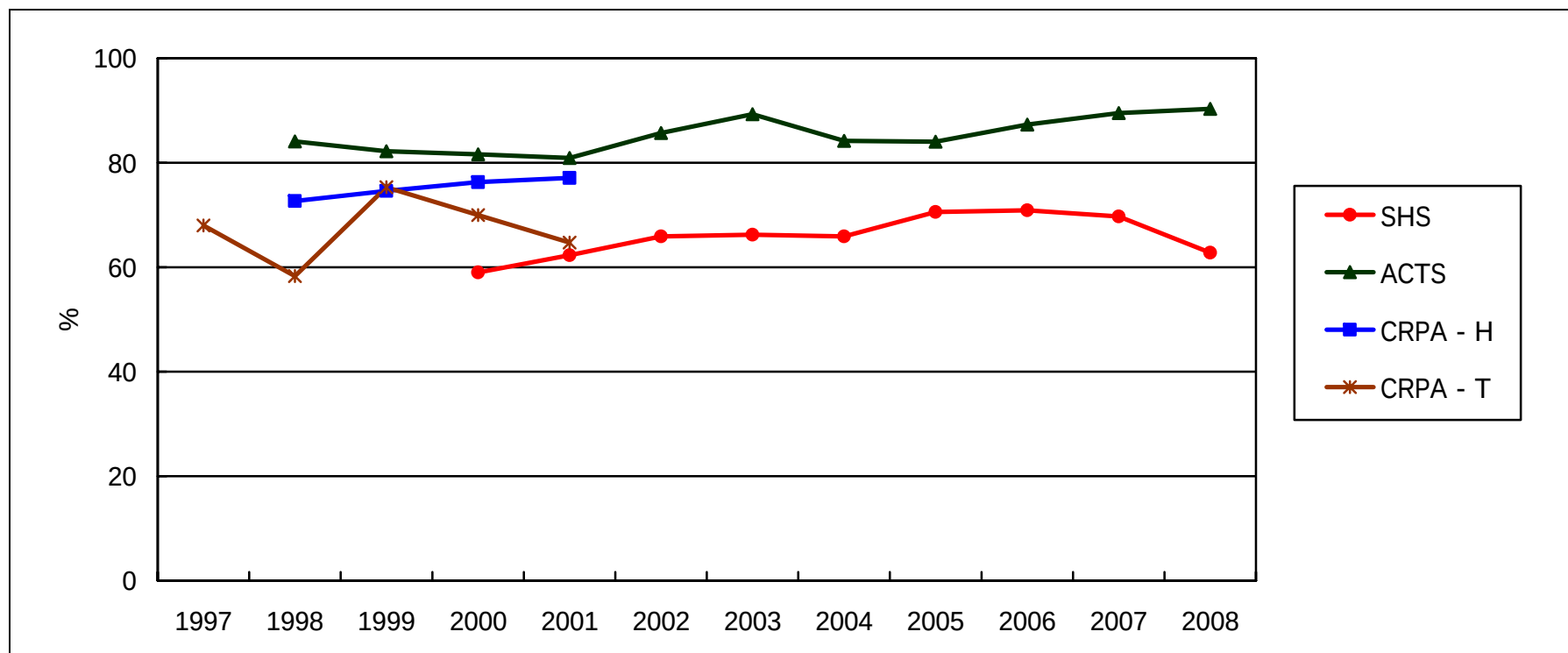


\* Regular sex partners used to refer to long-term sex partners including spouse, mistress, and steady boy/girl friends for at least one year, or if less than one year, one with whom is expected to continue sexual relationship. This definition of regular sex partners in 2008 has been further refined to include (other than the long-term sex partners) sex buddy that refers to regular sex only partner for at least 6 months, or if less than 6 months, one with whom is expected to continue sexual relationship. Regular sex partners refer to the spouse or other long-term sex partners for at least one year, or if less than one year,

Remarks : Data from SHS of 2000 is not available  
SHS – Social Hygiene Services; ACTS - AIDS Counselling and Testing Service

## Box 5.4 Condom use with commercial partners among adult heterosexual men

### (a) Regular condom use\* with commercial partners\*\* among adult heterosexual men



\* Regular condom use is defined as always or usually using a condom on a 4-level scale

\*\* Commercial sex partners are defined as those who have sexual intercourse in exchange for money, goods or services. Examples are prostitutes and customers of prostitutes.

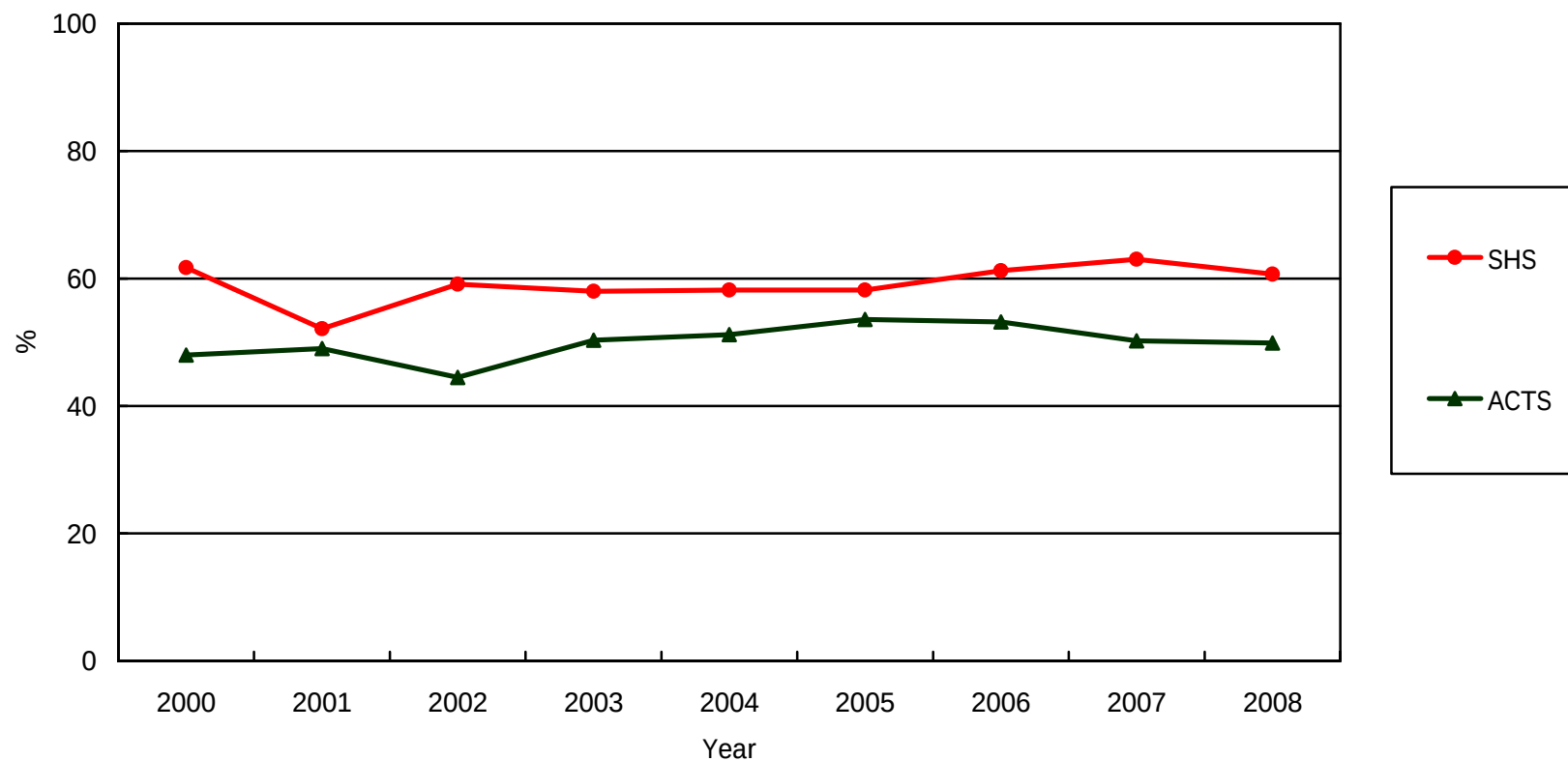
Remarks : Data of CRPA suspended since 2002

SHS – Social Hygiene Services

ACTS - AIDS Counselling and Testing Service

CRPA - Community Research Programme on AIDS from Centre for Epidemiology and Biostatistics (H: Household; T: Travellers)

**(b) Condom use for last sex with commercial partners\* among adult heterosexual men**

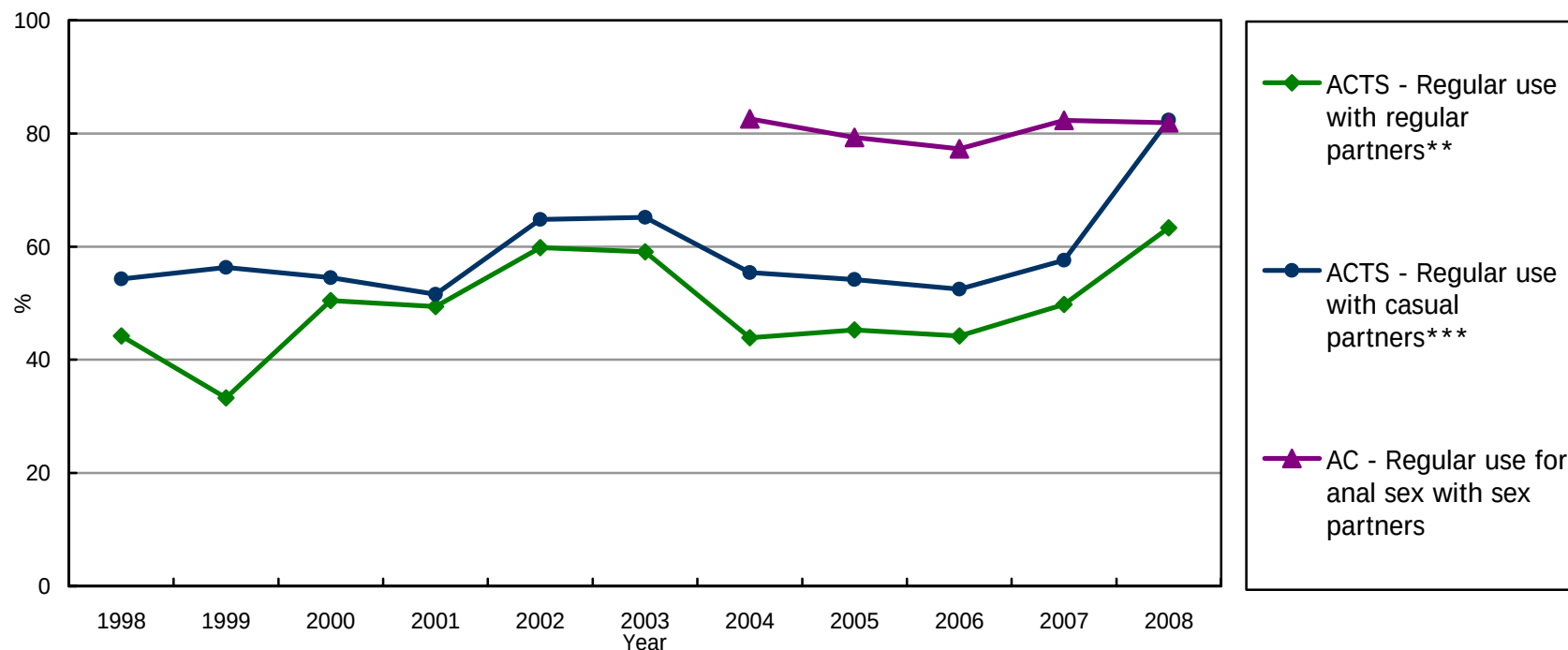


\* Commercial sex partners are defined as those who have sexual intercourse in exchange for money, goods or services. Examples are prostitutes and customers of prostitutes.

Remarks : SHS – Social Hygiene Services  
ACTS - AIDS Counselling and Testing Service

## Box 5.5 Condom use among adult Men have Sex with Men (MSM)

### (a) Regular condom use\* among MSM



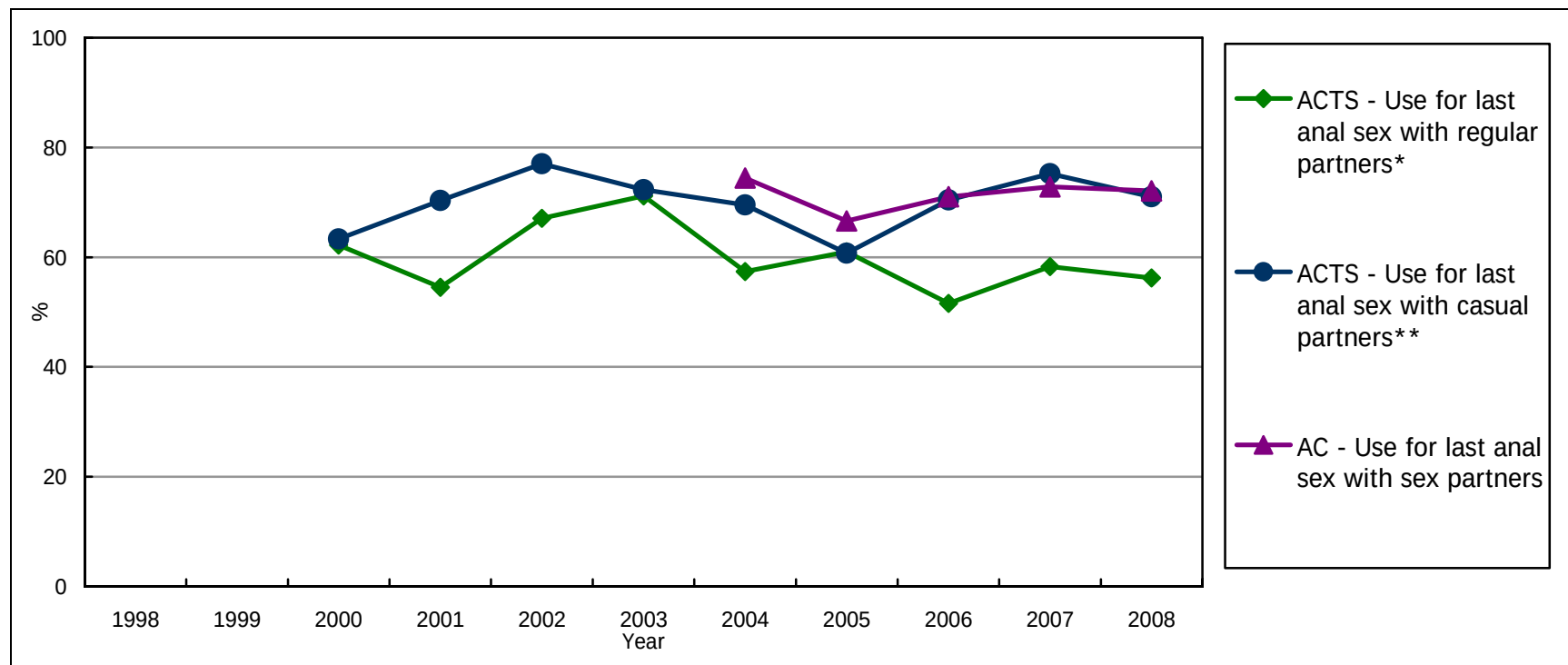
\* Regular condom use is defined as always or usually using a condom on a 4-level scale  
time period: ACTS: past one year / AC: past 3 months

\*\* Regular sex partners used to refer to long-term sex partners including spouse, mistress, and steady boy/girl friends for at least one year, or if less than one year, one with whom is expected to continue sexual relationship. This definition of regular sex partners in 2008 has been further refined to include (other than the long-term sex partners) sex buddy that refers to regular sex only partner for at least 6 months, or if less than 6 months, one with whom is expected to continue sexual relationship

\*\*\* Casual sex partners, the two do not have steady relationship.

Remarks : ACTS - AIDS Counselling and Testing Service; AC - AIDS Concern

**(b) Condom use for last anal sex among MSM**



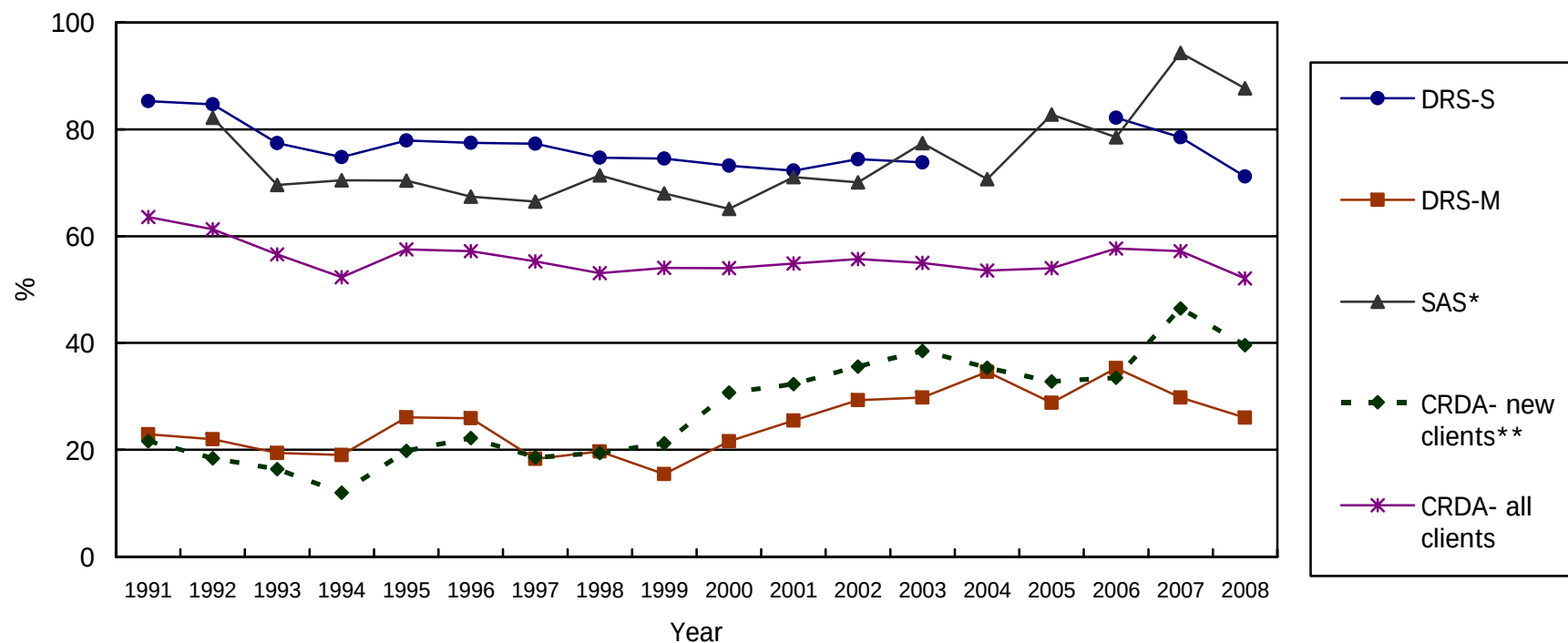
\* Regular sex partners used to refer to long-term sex partners including spouse, mistress, and steady boy/girl friends for at least one year, or if less than one year, one with whom is expected to continue sexual relationship. This definition of regular sex partners in 2008 has been further refined to include (other than the long-term sex partners) sex buddy that refers to regular sex only partner for at least 6 months, or if less than 6 months, one with whom is expected to continue sexual relationship

\*\* Casual sex partners, the two do not have steady relationship.

Remarks : ACTS - AIDS Counselling and Testing Service  
AC - AIDS Concern



## Box 5.6 Proportion of injectors

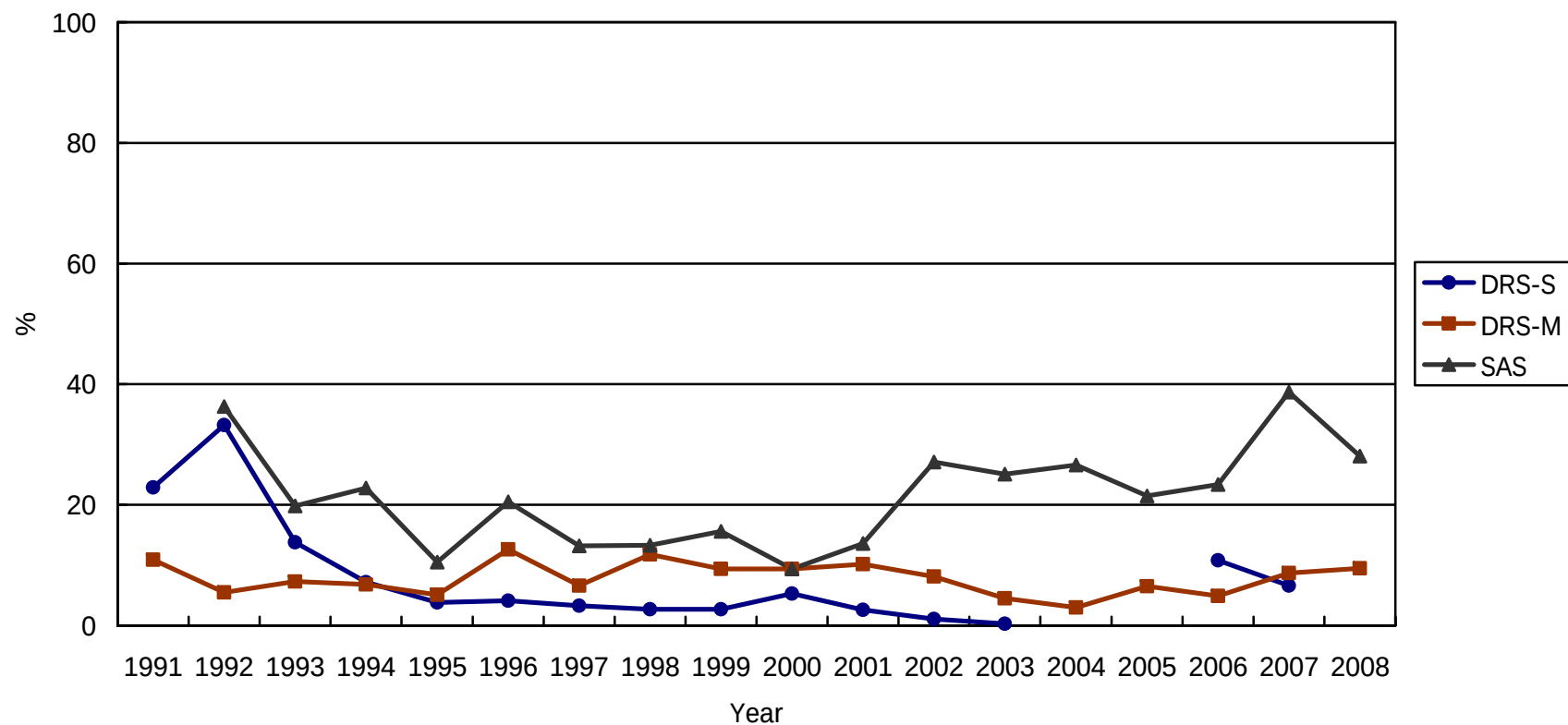


\* The figure of SAS referred to proportion of ever injectors before 2003. It referred to proportion of current injectors since 2003.

\*\* New clients refer to people who are known to the CRDA for the first time in a period. For a particular period, a person will be regarded as a newly reported person if and only if the person does not have any report before the specified period.

Remarks: DRS-S - Shek Kwu Chau Treatment and Rehabilitation Centre (New admission case only)  
 DRS-M - Methadone clinics  
 SAS - Street Addict Survey (From the society for the Aid and Rehabilitation of Drug Abusers)  
 CRDA - Central Registry of Drug Abuse

### Box 5.7 Proportion of needle-sharers



Remarks: DRS-S - Shek Kwu Chau Treatment and Rehabilitation Centre (New admission case only)  
 DRS-M - Methadone clinics  
 SAS - Street Addict Survey (From the society for the Aid and Rehabilitation of Drug Abusers)  
 Data of DRS-S suspended since 2004, and resumed in 2006 and 2007. Data in 2008 omitted due to methologic flaw

## Appendix I: HIV/AIDS report form (DH2293)

### DEPARTMENT OF HEALTH

#### HIV/AIDS Report Form

The HIV/AIDS voluntary reporting system has been in place since 1984. All doctors are encouraged to report patients with HIV/AIDS and to update status of the previously reported cases where appropriate. This is an anonymous and confidential system. Data collected is crucial for understanding the HIV epidemiology in Hong Kong and is used in global analysis only. Aggregated statistics are released quarterly and can be obtained at [www.aids.gov.hk](http://www.aids.gov.hk). For any query please call 2780 8622 or email us at [aids@dh.gov.hk](mailto:aids@dh.gov.hk).

Please complete ALL sections and '✓' in the appropriate box.

#### Section (A) – Report of HIV

- [1] THIS is a ☐ NEW report or ☐ UPDATE of previous reported case
- [2] Your reference code number<sup>1</sup>: \_\_\_\_\_ [3] Does the patient have a HK identity card? ☐ Yes ☐ No
- [4] Sex : ☐ M ☐ F For female, is she pregnant? ☐ No ☐ Yes If yes, go to Box I
- [5] Date of birth: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ (ddmm/yyyy) OR Age at last birthday: \_\_\_\_\_
- [6] Ethnicity: ☐ Chinese ☐ Non-Chinese (Specify for Non-Chinese: ☐ Asian ☐ Caucasian ☐ Black ☐ Others: ( \_\_\_\_\_ )
- [7] Suspected risk(s) for HIV infection<sup>2</sup>
- ☐ Sex (☐ Heterosexual ☐ Homosexual ☐ Bisexual)
- ☐ Injecting drug use
- ☐ Transfusion of blood/blood products (Haemophilia: ☐ Yes ☐ No )
- ☐ Perinatal
- ☐ Others, please specify: \_\_\_\_\_
- ☐ Asked, but risk undetermined
- ☐ Not asked
- Box 1**

Gravida \_\_\_\_ Para \_\_\_\_ LMP \_\_\_\_ / \_\_\_\_ / \_\_\_\_ (dd/mm/yyyy)

Obstetric follow up clinic/ hospital : \_\_\_\_\_

Plan: ☐ TOP ☐ Continue pregnancy

Expected hospital/place of delivery: \_\_\_\_\_
- [8] Suspected place of infection: ☐ Hong Kong ☐ Others, specify: \_\_\_\_\_ ☐ Asked, but undetermined ☐ Not asked
- [9] Date of laboratory diagnosis in HK: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ (dd/mm/yyyy) [10] Western blot confirmation: ☐ Yes ☐ No
- [11] Name of Laboratory: \_\_\_\_\_ [12] Laboratory Number, if a/v: \_\_\_\_\_
- [13] Previous HIV diagnosis outside HK: ☐ No ☐ Yes If yes, date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ (dd.mm.yyyy) place: \_\_\_\_\_
- [14] CD4 (cells/μl): \_\_\_\_\_ Date \_\_\_\_ / \_\_\_\_ / \_\_\_\_ (dd/mm/yyyy)
- [15] HIV status of spouse/regular partner: ☐ HIV positive ☐ HIV negative ☐ Unknown

#### Section (B) – Report of AIDS

- [16] Has the patient developed AIDS<sup>3</sup>: ☐ Yes ☐ No (Go to Section C)
- [17] If yes, the AIDS defining illness(es) is (are):
- (i) \_\_\_\_\_ Date of diagnosis: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ (dd.mm.yyyy)
- (ii) \_\_\_\_\_ Date of diagnosis: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ (dd.mm.yyyy)
- (iii) \_\_\_\_\_ Date of diagnosis: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ (dd.mm.yyyy)
- [18] CD4 (cells/μl) at AIDS: \_\_\_\_\_ Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ (dd/mm/yyyy)

#### Section (C) – Report of deaths and defaults

- [19] Has the patient died? ☐ Yes ☐ No If yes, date of death: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ (dd/mm/yyyy) Cause: \_\_\_\_\_
- [20] Has the patient left HK/defaulted follow up? ☐ Yes ☐ No If yes, last seen on: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ (dd/mm/yyyy)

#### Section (D) – Correspondence

Name of medical practitioner: \_\_\_\_\_ ☐ in private practice ☐ in public service

Correspondence Address: \_\_\_\_\_

Tel: \_\_\_\_\_ Fax: \_\_\_\_\_

Email: \_\_\_\_\_ Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ (dd/mm/yyyy)

<sup>1</sup> Please put down any code of your choice (e.g., case number) for matching purpose only.

<sup>2</sup> Please tick the most likely risk for contracting HIV infection. If there is more than 1 suspected risks, please put down 1 & 2 in descending order of the two most likely risks.

<sup>3</sup> Surveillance definition of AIDS: a definitive laboratory diagnosis of HIV infection AND one or more of the AIDS indicator conditions (July 1995, Scientific Committee on AIDS. Available at [www.aids.gov.hk/report.htm](http://www.aids.gov.hk/report.htm)).

Appendix II: Classification system for HIV infection and surveillance case definition for AIDS in adolescents and adults in Hong Kong.

| <b>A definitive laboratory diagnosis of HIV infection<br/>normally by a positive screening test for HIV antibody (e.g. ELISA)<br/>supplemented by a confirmatory test (e.g. western blot)<br/>+<br/>one or more of the AIDS indicator conditions</b>                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
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| <b>AIDS indicator conditions</b>                                                                                                                                                                                                                                                                                                                                  | Candidiasis of bronchi, trachea, or lungs<br>Candidiasis, oesophageal<br>Cervical cancer, invasive<br>Coccidioidomycosis, disseminated or extrapulmonary<br>Cryptococcosis, extrapulmonary<br>Cryptosporidiosis, chronic intestinal (>1 month's duration)<br>Cytomegalovirus disease (other than liver, spleen or nodes)<br>Cytomegalovirus retinitis (with loss of vision)<br>Encephalopathy, HIV-related<br><i>Herpes simplex</i> : chronic ulcer(s) (>1 month's duration); or bronchitis, pneumonitis, or oesophagitis<br>Histoplasmosis, disseminated or extrapulmonary<br>Isosporiasis, chronic intestinal (>1 month's duration)<br>Kaposi's sarcoma<br>Lymphoma, Burkitt's (or equivalent term)<br>Lymphoma, primary, of brain<br><i>Mycobacterium tuberculosis</i> , extrapulmonary or pulmonary/cervical lymph node (only if CD4<200/ul)<br>Pneumonia, recurrent<br>Penicilliosis, disseminated<br>Mycobacterium, other species or unidentified species, disseminated or extrapulmonary<br><i>Pneumocystis carinii</i> pneumonia<br>Progressive multifocal leukoencephalopathy<br>Salmonella septicaemia, recurrent<br>Toxoplasmosis of brain<br>Wasting syndrome due to HIV |
| Hong Kong has adopted the 1993 Centers for Disease Control and Prevention (CDC) AIDS classification with 3 modifications: (1) disseminated penicilliosis is added as one AIDS-defining condition, (2) pulmonary or cervical lymph node tuberculosis included only if CD4 < 200 µl, (3) a CD4 < 200 µl without any AIDS-defining condition is not counted as AIDS. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

### Appendix III: Condom distribution for the prevention of HIV and STI by Department of Health

