Community Assessment and Evaluation of HIV Prevention among Injecting Drug Users- Extract of Report of Working Group on HIV Prevention among Injecting Drug Users in Hong Kong  
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Section A. Situation Assessment

The injecting drug abusers population has been slowly declining in Hong Kong in the last decade. From various sources including the Central Registry of Drug Abuse (CRDA), attendance at the methadone clinics and other surveys, it is estimated that the heroin using population in Hong Kong is around 13000, with the vast majority capturing by methadone clinics. Among them, about 55-60% are current injectors and the needle sharing rate is about 20%. More than 99% of the injectors reported in CRDA in the past decade are heroin users, meaning that injecting drug abuse solely with drugs other than heroin has been rare. It was observed that the new addicts, usually start off abusing heroin through inhalation route, are switching to injection route within a shorter period of time than before due to poor purity of heroin, and injecting heroin with triazolam/midazolam is increasing also because the purity of heroin is getting low. According to CRDA, the proportion of injectors abusing heroin and triazolam/midazolam increased from 3% in 1995 to 22% in 2004 among all injectors.

HIV infection in injecting drug users (IDU) in Hong Kong has been maintained at a very low level until the turn of this century. Before the year 2000, HIV reports with primary risk for HIV infection reported as IDU only accounted for 1.67% of the total HIV reports. The corresponding percentage for year 2000 to 2005 has risen to 6.07%. Cumulatively, 4 percent of the 2825 HIV infections reported to the Department of Health between 1984 and 2005 were most likely to have infected through IDU. The absolute number of HIV infections known to have transmitted from injecting drug use remains low, though a rising trend is observed more notably after the implementation of the universal HIV urine testing programme in methadone clinics in 2004 which has doubled the number of tests performed in methadone clinics [Figures 1 & 2].

Figure 1. Risk distribution of HIV reports (1984 – 2005)
A small but rising prevalence of HIV infection was similarly observed in various seroprevalence studies for drug users. The percentage positive test was very close to zero before 1998 among the 4000 - 9000 tests performed in methadone clinics every year, but then stable at around 0.2% afterwards. Indeed, Hong Kong is still a low prevalence area with no subpopulations in the area with prevalence higher than 5% [Figure 3].

Injecting drug users also carry sexual risk for HIV transmission. In Hong Kong, practice of commercial sex among female heroin users in Hong Kong is uncommon. The cross sectional study in 2001 showed that there was only one female subject (4.6%) reported to have engaged in commercial sex work, though she has served no client in the past one year. All along only a few cases of the HIV reported cases with risk factor as IDU were female. Frequency of visit of female sex workers by male heroin abusers is slightly lower than that of general male population. The cross sectional study in 2001 showed that 12% of them visited commercial sex worker in Hong Kong in last year, and 7.5% did so in China. On the other hand, the street addict survey showed about 20% sought commercial sex across the border. Consistent condom use rate for commercial sex in Hong Kong was 72% and 62% in China from 2001 cross sectional survey.
It is noted that, for the cases reported in 2000 and 2005, only 53% were of Chinese ethnicity, 45% were of ethnicities from other Asian countries. In fact, if we refer to all the 32 HIV positive cases diagnosed in methadone clinics since the introduction of universal screening (excluding two with unknown place of origin/birth), only 20% of them were born and raised in Hong Kong. 70% of them originated from different parts of China, 57% from Pearl River Delta Region. The rest of 10% were of other non Chinese Asian ethnicity. As much as one third of the newly diagnosed did not carry local identity cards (all from Mainland China).

From the above observations, a large proportion of those reported HIV infections are from either people coming for short stay or new immigrants and had possibly taken place outside Hong Kong. This is actually in line with the HIV epidemic growing in the region driven mainly by injecting drug use. The HIV prevalence among injecting drug users in Thailand 54%, Nepal 50%, Vietnam 22%, Indonesia 20%. In 2004, more than 20% of HIV prevalence was reported in selected sites in Xinjiang, Sichuan, Guizhou, Guangxi and Hunan. Nearer to Hong Kong are the cities in the Pearl River Delta Region, most cities reported a prevalence rate 3-6% for injecting drug users, a figure that is 20 times than that in Hong Kong. In Taiwan, explosive increase in HIV infections was noted last year with annual number of reports increased from below 200 in 2003 to almost 3000 in 2005 in a single year. It has been reported that increased control from police causes the drug users refrained from buying needles at pharmacy and sharing of solvent for injections were some of the possible reasons for the outbreak.

Rising prevalence in nearby regions is a major threat to HIV situation in Hong Kong because of high volume of human mobility in the regions. The risk for rise in HIV through injecting drug use is genuine when non locals who are infected may come to Hong Kong or local people practicing risk behaviour elsewhere. For the former, it has been evident from the significant proportions of infected IDU being non Chinese as described above. For the latter, the Street Addict Survey has reported that about one quarter of the subjects reported drug use in Mainland China in the previous three months in 2000 to 2004. The group also reported the practice of assembly line drug use across the border in the 2004 report. At present moment, risk for local spread is expected to be minimal due to low prevalence of virus, and low level of at risk behaviour in general. However, attention would have to pay to selected populations where the infections are occurring, and the risk behaviour of those who are unclear for example the ethnic minority groups or the newly immigrants.

In summary, the present HIV situation in injecting drug users in Hong Kong is under control with stable/decreasing number of heroin abusers, low amount of virus present, low level of at risk behaviour in general. However, the main THREAT always with us is the rising HIV prevalence in regions surrounding Hong Kong. We have seen most of the injecting drug use related HIV infections occurred in new immigrants, visitors from Mainland on tourist visas and ethnic minority groups (e.g., Southeast Asian countries). The phenomenon of cross border injection is also a cause for concern because of much higher HIV prevalence in Mainland China. Finally, the increasing absolute amount of virus circulating among injecting drug users in Hong Kong actually increases the risk for further HIV spread locally. This is particularly significant should at risk behaviour (injection and sharing injecting equipments) become more frequent. The risk for rapid upsurge akin to other places worldwide is not eliminated completely.

Section B.
Current Response in HIV Prevention among Injecting Drug Users

Both the government and non-governmental organizations are playing active part in the current response on prevention of HIV infection through injecting drug use in Hong Kong. These are summarised in the box below.
Box 1. Summary of current activities for preventing HIV infection among IDU in HK

(1). Methadone treatment programme
(2). Prevention activities in methadone clinics:
   a. Universal HIV testing programme at methadone clinics;
   b. individual and group counselling services;
   c. condom distribution at methadone clinics;
   d. risk assessment and follow up of HIV infected drug users by social workers;
   e. DH Working Group on control of HIV infection among drug abusers for coordinating prevention activities
(3). Outreach programmes with collection of used needles, distribution of condoms) by various NGOs
(4). Educational talks at drug treatment and rehabilitation centres, halfway houses and prisons
(5). Other drug treatment and rehabilitation services
(6). Population based publicity event (harm reduction media campaign)
(7). Treatment of HIV infected drug users in public HIV clinics
(8). Surveillance activities:
   a. behavioural risk assessment at admission/readmission to methadone clinics
   b. annual street addict survey
   c. universal testing programme in methadone clinics
   d. unlinked anonymous testing in prisons and SKC drug treatment centre

The methadone treatment programme under the Department of Health remained the largest drug treatment service for HIV prevention among drug users. On average 7000 heroin users are getting a dose of methadone (98% on maintenance) every day in the past two decades, with about 9000 heroin users actively registered with the clinics (attended at least once in the previous 28 days). A local study has reported that consistent use of methadone and a daily dose of more than 60 mg are associated with lower frequency of injections thus lowering the risk of HIV infection.

Inside the network of 20 methadone clinics in Hong Kong, there are also other HIV activities taking place.

(a). A universal voluntary HIV urine testing programme has been fully implemented since 2004 in view of the increasing amount of HIV positive cases. In the past 2 years, a coverage rate of 90% was reached and more than 9000 HIV tests were done annually for the methadone users. A total of 31 new HIV infections have been diagnosed since its pilot in July 2003.

(b). Currently about 1800 cases are receiving care by social workers in methadone clinics. Group counseling sessions and individual counselling services are provided. It was noted particularly that the group counselling services improved staff patient relationship, and resulted in a higher number of successful detoxification. For example in Eastern Street methadone clinic, the group counseling has improved the staff patient relationship and also the acceptance of HIV urine testing.

(c). Condoms are given to all newly admitted patients to the methadone clinics and are freely distributed. In the ten-year period between 1995 and 2004, more than 760,000 condoms have been distributed in the network of methadone clinics. The annual number of condoms distributed increased from around 60,000 in early nineties to more than 100,000 in 2004.
(d). By default all HIV infected drug users at methadone clinics are regularly followed up and supported by doctors and social workers of the methadone clinics. Regular risk assessments are performed with risk reduction measures continuously reinforced so as to prevent HIV spread from the infected persons.

(e). A Department of Health Working Group on Control of HIV Infection among Drug Abusers has been set up to coordinate HIV prevention activities in methadone clinics since March 2005. The group, consisting of workers in methadone clinics and AIDS unit of the Department of Health, has been meeting every quarter to discuss common issues and improve on HIV prevention on working level.

At least four NGOs (SARDA, Pui Hong Self Help Association, Hong Kong AIDS Foundation and SRACP) have peer outreach teams for HIV prevention to heroin abusers. Altogether, these organizations have mobilized about 50 peer workers to conduct about 200 outreach sessions reaching about 14000 person times every year. During outreach, HIV prevention promotion items such as leaflets, tissue packs, condoms were given away. Some of the sessions also involved picking up used needles and syringes on the streets or parks.

There are other types of drug treatment and detoxification centres in Hong Kong providing compulsory, voluntary, residential or out-patient treatment for heroin abusers. According to data from the Narcotics Division, Security Bureau, there are 16 NGOs running 30 centres with the total capacity approximating 1400.4

A proportion of these residential drug treatment and rehabilitation centres have HIV workshops provided by NGOs or government. Since 2005, HIV workshop and counseling have been regularly conducted in selected prisons by SRACP.

A population based media campaign on harm reduction was initiated in 2002. Evaluation of which suggested that the campaign has moderately and highly positive impact in the general public and the drug users. High degree of awareness (67% of drug users and 29% for general public had certainly heard of the campaign) and acceptance (47% general population and 89% drug users agreed that the slogan 'Break the needle habit, methadone does it') of the using methadone as harm reduction measures for HIV prevention was received.

Specialist HIV management is provided by the two major public HIV clinics run by Department of Health (DH) and Hospital Authority (HA). Cases diagnosed at methadone clinics of the DH are by default referred to DH HIV clinic for management. The social workers in methadone clinics play important role in improving adherence to medical treatment among HIV infected drug users and maintain frequent communication with HIV workers through regular case conference and other communications.

Various activities are taking place to track HIV situation among drug users in Hong Kong for improving prevention and control of HIV infection in this population. In addition to the voluntary HIV reporting system, there are prevalence studies in methadone clinics (universal testing programme), the largest residential treatment centre (unlinked anonymous testing) and prisons (unlinked anonymous testing) where one third of the population are injecting drug users. Sources of information for tracking behavioral trend include Central Registry of Drug Abuse maintained by Security Bureau, admission/readmission survey at methadone clinics, admission survey at prisons and street addict survey. Moreover, all blood specimens diagnosed HIV positive at the public laboratories also undergo HIV-1 subtyping to identify cluster of HIV infection.
There is also informal communication with health professionals in the regions on HIV situation among injecting drug users. For the 12 cities in the Pearl River Delta Region, a working group on HIV epidemiology has been formed since 2002 on technical exchange in HIV situation in the regions in general.

The Working Group has identified the following as current service gaps in effective HIV prevention for injecting drug users in Hong Kong:

(a). Limited support to development of counselling services in methadone clinics: with current level of resource support, only 1800 cases were under the care of social workers from SARDA. Accessible individual services to drug users who may have higher HIV risk, including new immigrants, people on travel visas and ethnic minority groups are not adequately covered. Moreover, there is not enough space inside or beside some of the methadone clinics for conduction of group counseling services.

(b). Coverage of HIV prevention efforts in prison settings and post discharged persons: it was agreed that the prison setting conveniently provides a network of contact points for reaching injecting drug users. It was noted that there were some HIV prevention projects involving education talks and group counselling in prisons, the scale and intensity should be expanded and the programme become regularized.

(c). HIV prevention and harm reduction services appropriate for ethnic minority groups are inadequate. There are both language and cultural barriers for current effort to meet the special needs of the group.

(d). Lack of understanding of HIV risk pattern in new immigrants, the people on travel visas (NEP) and ethnic minority groups rendering prevention efforts not targeted to their needs. Biological markers showed these groups of people are most likely to be diagnosed HIV infected, however their behavioural risk pattern to further HIV spread locally is unknown.

(e). Effect in HIV risk from dual abuse of heroin and triazolam/midazolam remains unclear. It is observed that these drug abusers have increased craving for injections and poor memory (thus increased frequency of injections), and no specific intervention is available to tackle the issues relating to dual use of heroin and triazolam/midazolam.

Section C.
Proposed strategy on HIV prevention among injecting drug users in Hong Kong 2007-2011

The ultimate goal of the strategy of preventing HIV infection among injecting drug users is to maintain a low level of HIV prevalence in this particular population primarily through injecting drug use and secondarily through practice of unprotected sex. Based on (1) situation assessment, (2) intervention and service evaluation described in previous sections, (3) review of exiting recommendations by international authorities5, the following principles and strategies are set out. These are summarized in Box 2.
### Box 2. Proposed framework of HIV prevention strategies for injecting drug users in Hong Kong

<table>
<thead>
<tr>
<th>Goal:</th>
<th>Maintain low prevalence among injecting drug users in Hong Kong</th>
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</table>
| Objectives: | 1. Prevent local incident HIV infection through sharing of injecting equipments in Hong Kong  
2. Prevent 'local drug users' getting HIV infection elsewhere  
3. Prevent HIV infection from sexual transmission in injecting drug users |
| Guiding principles: | 1. Harm reduction with good coverage is the most effective approach to HIV prevention in drug users  
2. Supportive, enabling, non-discriminatory environment essential  
3. Response to HIV should be multisectoral with regional perspective |
| Proposed Strategies: | A. Coherent policy on drug prevention and harm reduction  
B. Essential Prevention Package with adequate coverage  
  • Information and education through outreach  
  • Access to needle, syringe and condoms  
  • Expanded range of drug dependence treatment  
C. Accessible voluntary counseling and testing service  
D. Risk reduction from infected drug users  
E. Regular general publicity and promotion on harm reduction  
F. Surveillance and research areas  
  • Assessment and monitoring of HIV risk among at risk subpopulations (ethnic minorities groups, new immigrants)  
  • Assessment and monitoring of HIV risk of cross border injecting drug use  
G. Support to and collaboration with agencies in nearby regions |

The goal of the strategy is to maintain Hong Kong HIV prevalence among IDU low. The specific objectives leading to this goal include preventing local infections and local IDU from getting infections from elsewhere. The primary concerned risk would be HIV risk through sharing of injecting equipments, while secondary concerned risk would be sexual risk from injecting drug users. It is understood that there is simply no control over the amount of HIV infected individuals coming to Hong Kong, hence the key prevention effort must rely on the dual efforts of keeping a behavioral risk minimal and, or thus prevent any other addition of cases of infection.

In line with the principles listed by the WHO Biregional Strategy for Harm Reduction 2005-2009, the Working Group reckoned that the guiding principles for the successful HIV prevention for IDU in Hong Kong to be (1) accessible essential prevention package, (2) non-discriminatory and supportive environment for HIV infection and (3) particularly important for Hong Kong, is the regional effort in control of HIV infection among IDU.

The Working Group is of the view that a coherent drug prevention and control policy which supports harm reduction as a measure for HIV prevention would be indispensable for effective HIV prevention among injecting drug users. The issue of HIV prevention should be addressed in the drug control policy thus to provide an enabling environment for, or more so to expand the response of, HIV prevention activities for injecting drug users.
The second proposed strategy is to provide essential prevention package on harm reduction, including (1) information and education through outreach, (2) access to needle, syringe and condoms and (3) expanded range of drug dependence treatment. The working group suggested that the current level of effort should be maintained while focus should be paid to providing relevant information and adequate coverage.

Relevant information include higher risk of getting HIV infection if injecting outside Hong Kong, misconceptions and HIV risks about triazolam/midazolam injections (Drug users who also inject triazolam/midazolam are forgetful and have higher frequency of injections which may increase HIV risk), no sharing of injecting equipments including solvent and foster a sense of social responsibility on reducing harm to the public, in addition to the standard harm reduction messages.

At present, it is reckoned that coverage is inadequate among people with increased HIV risk, including new immigrants and ethnic minority groups. HIV prevention education and counseling has to be strengthened among these subpopulations. Collaboration with relevant NGOs that are specialized in working with them would be beneficial. As the largest network of access points for drug users, there should be enhanced resource support to social workers in methadone clinics for individual or group counseling sessions which were reckoned to be related to improved acceptance of HIV tests or other treatment modalities.

The prison settings are also recognized as a good access points for injecting drug users. Indeed similar to overseas situation, about one third of the prison populations are injecting drug users. Experience overseas also documented that close settings like prisons are notorious for outbreak of HIV infection through sharing of injecting equipments. The Working Group reckoned that HIV prevention effort should be enhanced in prison settings. Currently, limited resource support has been given to scale up HIV prevention efforts in prisons. It is recommended that coverage of education on HIV prevention should be expanded with adequate resource support.

The network of methadone clinics should continue to provide accessible and low threshold methadone treatment programme for HIV prevention among injecting drug users. Its coverage should be expanded in view of its effective HIV prevention role. HIV prevention activities should also be continued in methadone clinics and should be modified according to needs of the population (for example, needs among new immigrants of ethnic minorities). HIV prevention activities should be strengthened in other drug treatment and rehabilitation settings, such as voluntary treatment and rehabilitation centres.

The third proposed strategy is to provide accessible voluntary counseling and testing service to injecting drug users. The working group is of the view that the universal voluntary HIV urine testing programme should be continued and maintained with good coverage in the years to come, so that infections should be detected as early as possible and thus minimizing the risk for further transmission.

The fourth proposed strategy is to provide regular and long term risk reduction measures to HIV infected injecting drug users. This would be instrumental to prevent HIV spread from infected persons through injecting locally. The team in methadone clinics and HIV clinics should cooperate and maintain dialogue to improve adherence on drug and HIV treatment and support the drug users in psychosocial aspect.

The harm reduction media campaign was well received by the public as well as the drug users population. The working group regarded population based publicity on HIV prevention among IDU essential to raise awareness among different sectors of the community and instill accepting attitude of
and supporting environment for methadone treatment in the society. Similar territory wide harm reduction publicity should be implemented at a regular interval (say 5 yearly).

Surveillance activities for HIV among injecting drug users should be continued while efforts should be enhanced in understanding and assessing risks for exponential spread. The information system to be introduced in the network of methadone clinics would be valuable in providing a source of information for assessment and evaluation of preventive initiatives in methadone clinics. Specific research areas include (1) assessment and monitoring of HIV risk and needs assessment among at risk subpopulations (ethnic minorities groups, new immigrants), (2) assessment and monitoring of HIV risk and needs assessment of cross border injecting drug use and (3) impact in HIV risk in injection of both heroin and triazolam/midazolam.

In view of more severe HIV epidemic driven by injecting drug use in region nearby, the working group recommended that local workers on HIV and drug should maintain network with key individuals/ agencies in nearby regions and if necessary provide technical support to such. Local experience in HIV prevention should also properly documented and shared with people who need them locally and in the region. As outbreak of HIV infections through injecting drug use continued to happen, local workers should also be familiar with HIV situation in IDU in the region and understand the factors leading to outbreaks thus contributing to better HIV prevention for injecting drug users in Hong Kong. Hong Kong is indeed surrounded by areas of rising HIV prevalence among IDU, the local situation by no means immune but is deemed to be heavily influenced by the regional situation.
## Abbreviations

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<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>CHOICE</td>
<td>Community Health Organization for Intervention, Care and Empowerment</td>
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<td>CRDA</td>
<td>Central Registry of Drug Abuse</td>
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<tr>
<td>CSD</td>
<td>Correctional Services Department, HKSAR Government</td>
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<tr>
<td>DH</td>
<td>Department of Health, HKSAR Government</td>
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<td>HA</td>
<td>Hospital Authority</td>
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<td>IDU</td>
<td>Injecting drug users</td>
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<td>NGO</td>
<td>Non-governmental organizations</td>
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<tr>
<td>SARDA</td>
<td>Society for the Aid and Rehabilitation of Drug Abusers</td>
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<tr>
<td>SPP</td>
<td>Special Preventive Programme, Centre for Health Protection, HKSAR Government</td>
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<td>SRACP</td>
<td>The Society of Rehabilitation and Crime Prevention</td>
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References

1. Source for all data presented in the report except quoted otherwise are from Special Preventive Programme, Department of Health and its communication with Central Registry for Drug Abuse.


1. Which of the following is not true about the current HIV situation among drug users in Hong Kong?
   (a) Low HIV prevalence <0.5%
   (b) Accounted for <5% of the cumulative reported cases
   (c) Female predominance
   (d) Both Chinese and non-Chinese cases are reported
   (e) None of the above

2. When is the universal HIV urine testing programme in methadone clinics implemented in Hong Kong?
   (a) 2002
   (b) 2003
   (c) 2004
   (d) 2005
   (e) 2006

3. Which of the following activities in methadone clinics can contribute to HIV prevention?
   (a) Individual and group counseling
   (b) Condom distribution
   (c) Risk assessment and follow up of HIV infected drug users
   (d) Provision of HIV testing
   (e) All of the above

4. What are the guiding principles for HIV prevention among drug users locally after taking reference of international recommendations?
   (a) Adopt harm reduction approach with good coverage
   (b) Foster a non-discriminatory and supportive environment
   (c) Have a multisectoral response with regional perspective
   (d) Ensure accessibility to essential prevention packages
   (e) All of the above

5. Which of the following is not relevant to surveillance of HIV infection among drug users?
   (a) Voluntary HIV/AIDS reporting system
   (b) Prevalence studies in methadone clinics and other drug treatment rehabilitation services
   (c) Central Registry of Drug Abuse
   (d) Behavioural surveys at institutions and outreach settings
   (e) None of the above
6. Which of the following is not essential prevention package for HIV in drug users?
   (a) Access to needle, syringe and condom
   (b) Information and education on HIV awareness
   (c) Drug dependence treatment
   (d) Police raid
   (e) Outreach for risk reduction

7. Which of the following does not pose concern for a rise in HIV infection among drug users despite a currently low level epidemic?
   (a) Higher HIV prevalence among drug users in nearby Mainland and other regions
   (b) Increased risk for more rapid spread should amount of local circulating virus rises
   (c) Change in risk behaviours
   (d) Increasing injection use of triazolam/midazolam in heroin abusers
   (e) Continuing improvement of successful interventions

8. Which of the following potentially increases the risk of contracting HIV for drug users?
   (a) Cross-border injection
   (b) Injection together with people from places with higher HIV rate among drug users
   (c) Increased craving for drug and injection
   (d) Loss of memory and autonomy during injection from e.g. concurrent use of triazolam/midazolam
   (e) All of the above

9. What are the emerging epidemiologic features of HIV in drug users in Hong Kong?
   (a) More Asian non-Chinese diagnosed to be HIV-infected
   (b) Contribution of non-local factors seems increasing
   (c) Many of the infected Chinese originated from different parts of Mainland
   (d) More cases were diagnosed due to implementation of universal testing at methadone clinics
   (e) All of the above

10. What is not true about the methadone treatment programme in Hong Kong?
    (a) High coverage of heroin abusers with about 7000 daily attendance
    (b) Vast majority of attendees on maintenance programme
    (c) Good contact point for HIV prevention and control
    (d) Does not contribute to the low HIV prevalence in drug users
        (e) More than 9000 HIV tests are done per year upon universal testing programme