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Asterisked (*) references are included in the Attachments.

HIV/AIDS Surveillance

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THAILAND REPORT

1. INTRODUCTION

Prevention and control of HIV infection is one of the most challenging area in health promotion. The difficulty of HIV infection control may be because it involves sexuality, addictive agents and discrimination which are the weak parts of human society. HIV disease is a frightening disease with no cure and high mortality and morbidity. Human Immunodeficiency Virus itself is a very interesting pathogen. Although scientists have taken major steps in advancing our knowledge of virology, immunology and pathology, we have not found a strategy to prevent HIV infection efficiently. One of the best strategy we have to help monitor the dynamic of the epidemic and evaluate the control measures is the surveillance.

2. HIV/AIDS –RELATED SURVEILLANCE

(1) AIDS case surveillance

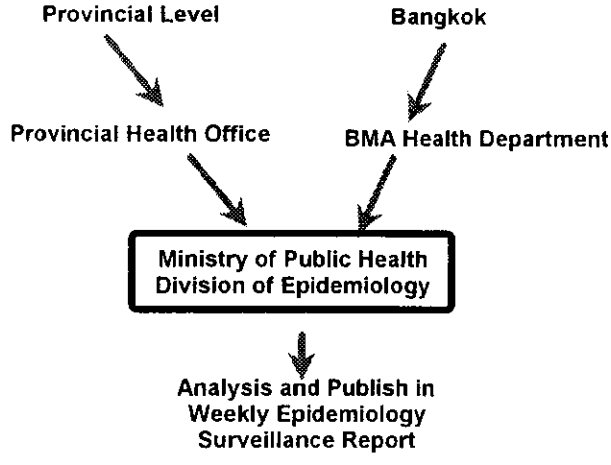
Organizational and legal structure for surveillance

The Division of Epidemiology under the Thai Ministry of Public Health (MOPH) is the main responsible and legal organization for the national HIV/AIDS surveillance system. At present, AIDS were declared as a severe communicable disease which all physicians need to report to the Division.

Reporting system

According to a special act, the physician who diagnosed AIDS need to report to the provincial health office in a confidential fashioned. The name of the patients were changed to a code (using standard soundex procedure). The provincial health office performed data entry and analysis of the result to show the local situation. The individual reporting form of AIDS cases were then sent to the Division either in a paper format or in computer diskette. The flows of reporting system are described in the following diagram.

The Flow of Reporting System



Hospital of all level or health care service has to assign at least one personnel responsible in data collecting, reporting and keeping confidentiality. Main variables collected by the AIDS/HIV notifiable form are as following:

1. Type of patients
2. Soundex code of patient's name
3. Gender
4. Age
5. Marital status
6. Race
7. Occupation
8. District and province of resident
9. Name of the service health care
10. Ever treated before (Y/N)
11. Date of onset
12. Date of treatment
13. Status of patient
14. Types of patient (in or out patient)
15. Laboratory results
16. Risk factor
17. Checklist of AIDS defining conditions
18. Name of physician who gave diagnosis

AIDS case definition and validation

After the first AIDS case in 1984, the definition were revised in 1987, 1989 and the recent one in 1993. The current definition of AIDS case was modified based on CDC 1993 definition and WHO case definition. Basically, every case must have a> confirmation of HIV infection plus one of the following three criteria:

1. Present of one or more of 25 opportunistic infection (include invasive cervical cancer, tuberculosis, recurrent (bacterial) pneumonia, penicillium maneffei and wasting syndrome)
2. CD 4 count of less than 200 per microlitres (at least 2 different times)
3. In the case of pediatric who was suspected of getting vertical transmission a modified WHO criteria of at least two major signs and two minor signs can be applied. Only one major and one minor signs are also enough to establish an AIDS diagnosis for children who died before the age of 15 months and born from infected mother.

Results of case surveillance

Since 1984 to December 31st, 1998, there were 104,199 reported AIDS cases, among them 28,693 cases were death. In 1998 only, there were 14,220 report AIDS case, about which 3221 died, counting by the onset of illness.

The ratio of male to female was 4 to 1. Age group which has highest proportion of AIDS cases was 25 to 29 years old (28.7%). The most frequent occupation was laborer (43%), then agriculture (21%), merchant (4%), government officials (2%) and house-wife (2%).

The distribution by mode of transmission were heterosexual (83%), injecting drug user (5%), vertical transmission (5), and blood transfusion (0.05%). The homosexual practice were reported in 0.8% of AIDS cases.

Region that has highest proportion was Northern Region (41%). The distribution in other region were 21% in Central Region, 17% in Southern Region and 10% in North-eastern Region.

The five most frequent reported opportunistic infection were Mycobacterium tuberculosis (26%), Pneumocystis carinii (18%), Cryptococcosis (17%), Candidiasis of

esophagus, trachea or lung (6%), and Recurrent bacterial pneumonia (4%), respectively.

Dissemination and actions which result

The surveillance data were analyzed and present to the health authorities of all level through the Weekly Epidemiology Surveillance Report on a monthly basis. Summary or fact sheet were published monthly by the AIDS Division and disseminated to special interested group. The data was also posted in the Ministry Home Page. With all these mechanism, the public and media can easily access to AIDS figures. Beside showing the increasing trend of AIDS cases which help raising the awareness, the result has been used primarily for the allocation of budget and resource for hospital and community care including of funding support for NGO who work in different area.

Problems and future perspectives

With special study it was shown that the current figure is approximately 1/3 of the actual aliving AIDS cases. The under report for AIDS death is even higher, perhaps, only 1 in 9 were reported. These might result from the fatigue of the government personnel, inadequate coordination with private hospital, inadequate supervision from the central level. or afraid of stigmatization affected for the patient or family member.

(2) HIV case surveillance

In the early phase of HIV epidemic, HIV asymtomatic infection was also put in the severe communicable disease act as same as AIDS and required the same reporting system. Encounter of problem from lack of usefulness to monitor the trend of HIV spreading and problem of confidentiality the reporting of HIV infection was removed from the reporting system since 1991.

Currently, there is no HIV case surveillance. Only symptomatic HIV infection will be reported through the same system of AIDS case surveillance. Symptomatic HIV patients is defined as HIV infected people who have immune deficiency related symptoms but was not fit well to the AIDS definition.

Results of case surveillance

Until December 31st, 1998, there were 42,309 reported symptomatic HIV infection, among them 4,320 cases were died. Only in 1998, there were 5,927 reported symptomatic HIV infection, among them 411 cases were death.

(3) Sentinel sero-surveillance

HIV surveillance in Thailand started in 1989 using sentinel approach by selecting sentinel population and sites. The sentinel population is divided broadly into 2 main groups;

1. General population
   - 1.1 Pregnant women in ante-natal clinics: unlinked anonymous
   - 1.2 Blood donations: routine screening
   - 1.3 Conscripts in the Royal Thai Army: routine screening
2. High risk groups
   - 2.1 Intravenous drug users attending drug rehabilitation clinic: voluntary confidential
   - 2.2 Male commercial sex workers: voluntary confidential
   - 2.3 Female commercial sex workers (direct and indirect): voluntary confidential
   - 2.4 Male clients of STD clinics: unlinked anonymous

Sample are collected from 100-200 persons in each group and use two different types of ELISA tests. The provinces have to perform systematic and regular surveys in June and December of each year. The first round was started in June 1989 in 14 sentinel provinces and expanded to 31 and finally cover all 76 provinces in the following year. These cross-sectional

sero-surveys were done twice a year until 1995 at which time the prevalence showed a stable or declining trend when compared to the beginning phase. At present the frequency of surveys was decreased to once a year and is done in June. In addition to the sentinel surveillance system responsible by the MOPH, there is another sentinel population under the respnsibility of the Royal Thai Army. New conscripts recruited in May and November of each year were routinely testd for HIV. The main purpose is to assigned appropriate duty for HIV positive conscripts and provide special education. With the HIV testing results the prevalence of HIV infection in this group is very useful to track the trend of HIV spreading male population.

HIV infection test: sample is recorded as HIV infection if it is reactive by two different ELISA antibody tests.

Syphilis infection test: using VDRL reactivity according to the guideline of Division of Sexually Transmitted Disease.

After receiving results of the survey each time representatives of each province join a meeting conducted by the DOE to discuss any problem in the field and to learn how to interpret the data. In each meeting, the personnel from some selected provinces have to present their results and this is followed by discussion from experts in epidemiology and social science. This provides an opportunity to learn about the situation in other provinces and across the country.

Organizational and legal structure for surveillance

Division of Epidemiology is the main co-ordinating center for HIV serosurveillance. The provincial health office through AIDS/STD section will responsible for the annual HIV surveillance starting from data collection, analysis and dissemination of the result in their own province. Most of the provinces has computer facilities to manage the data. Summary sheet of main analysis tables with the diskette were sent to Division of Epidemiology within September. The national figure and detail of prevalence in each group and each provinces were showing in the Division analysis. With good cooperation the Ministry of Health and the Royal Thai Army establish information exchage and networking which enable all party getting the whole information of HIV serosurveillance.

Sampled populations and sampling procedures

The 16th National HIV Sentinel Sero-survey was performed in June of 1998. The methods were the same as the earlier year however all samples were tested for syphilis infection in addition of HIV infection test. Survey procedures for each specific population are as the followings:

1. Donated blood
   - 1.1. Sampling method
     - 1.1.1. Geographic coverage: blood banks in Thai Red Cross, Regional Hospitals and General Hospitals
     - 1.1.2. Sampling method and number of samples: all donate blood in June.
     - 1.1.3. Items to be reported:
       - 1.1.3.1. Number of donated blood
       - 1.1.3.2. Number of survey
       - 1.1.3.3. Province of blood donor
       - 1.1.3.4. Name of blood bank
       - 1.1.3.5. Gender
       - 1.1.3.6. Age

1.1.3.7. New or old donors
1.1.3.8. Result of HIV infection test.
1.1.3.9. Result of syphilis infection test.

2. Injecting drug users
   2.1. Sampling method
      2.1.1. Geographic coverage: Drug rehabilitation Clinics in Regional Hospitals, General Hospitals or special Drug Detoxification Centers. Not all province shas the mentioned drug rehabilitation or detoxification centers. Samples will be gathered from one clinic. In case of not enough sample, additional sentinel clinics were added.
      2.1.2. Sampling method and number of samples: all attending drug users in June. If there are less than 100 samples by June 31st, interval of data collection will be extended until July 15th. For patient with known confirmed HIV positive, the result was used withour repeating test.
      2.1.3. Items to be reported:
         2.1.3.1. Number of sample
         2.1.3.2. Number of survey sites
         2.1.3.3. Province
         2.1.3.4. Name of the clinic
         2.1.3.5. Gender
         2.1.3.6. Age
         2.1.3.7. New case or old case.
         2.1.3.8. Method of drug use (intravenous or other method)
         2.1.3.9. Result of HIV infection test.
         2.1.3.10. Result of syphilis infection test.

3. Pregnant women
   3.1. Sampling method
      3.1.1. In each province, data will be collected from ante-natal clinics of
         3.1.1.1. 1at least one hospital either Regional Hospital, General Hospital or Mother and Child Hospital of the province was selected to be sentinel sites.
         3.1.1.2. 1-3 community hospitals, which has routine HIV testing and counseling for pregnant women was also select to be sentinel site.
      3.1.2. Sampling method and number of samples: 1) for hospitals that routinely test for HIV in all pregnant women, data will be collected from new pregnant women during April 1st to June 30th. If numbers of sample are more than 300 per month, only patients who come in June will be reported; 2) for hospitals with no routinely HIV testing, the sampling technique is unlinked anonymous approach adding to routine syphilis infection tests.
      3.1.3. Items to be reported:
         3.1.3.1. Number of pregnant women during the survey period
         3.1.3.2. Number of pregnant women enrolled
         3.1.3.3. Province
         3.1.3.4. Name of the service clinic
         3.1.3.5. Age
         3.1.3.7. Nationality
         3.1.3.8. Gravida

3.1.3.9. Result of HIV infection test.
3.1.3.10. Result of syphilis infection test.

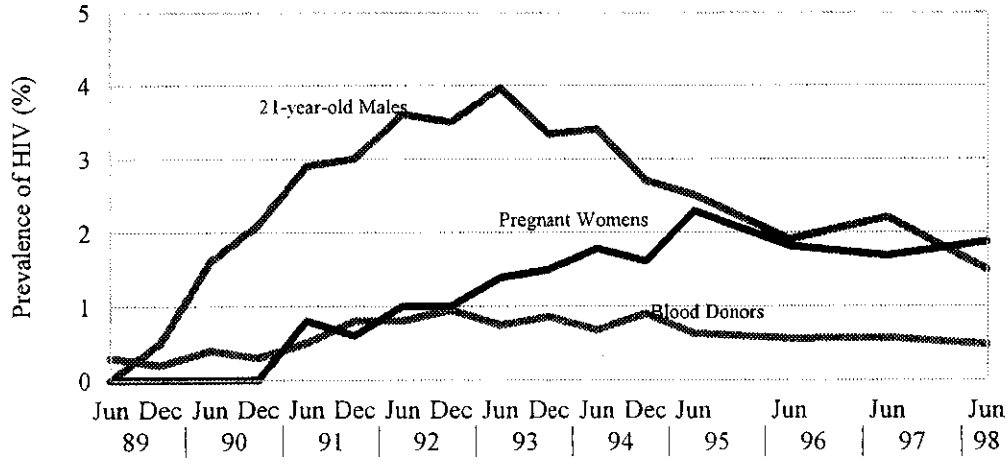
4. Male attendees at government sexually transmitted diseases clinics (STDs)
   4.1. Sampling method
      4.1.1. Sentinel sites
         4.1.1.1. STD clinic of each Provincial Health Office.
         4.1.1.2. STD clinic of Regional Communicable Control Disease Center, Department of Communicable Disease Control, MOPH.
      4.1.2. Sampling method and number of samples: blood for syphilis infection test will be divided and sent to HIV tests. Samples will be collected from male attendees who come during June 1st and June 30th. The method of testing is unlinked anonymous. If there are less than 100 samples by June 30th, interval of data collection will be extended until July 15th.
      4.1.3. Items to be reported:
         4.1.3.1. Number of blood sample
         4.1.3.2. Number of survey
         4.1.3.3. Province
         4.1.3.4. Name of the service
         4.1.3.5. Age
         4.1.3.6. Suspected STD (Y/N)
         4.1.3.7. Result of HIV infection test.
         4.1.3.8. Result of syphilis infection test.
5. Commercial sex workers (CSWs)
   5.1. Sampling method
      5.1.1. Sentinel sites
         5.1.1.1. City district.
         5.1.1.2. In case that there are not enough CSWs in the city district, one to three other districts will be chosen as sample areas. These same set of districts will be used as sample areas in every year in order to compare the results.
      5.1.2. Number of samples:
         5.1.2.1. 100-200 Direct CSWs. Direct CSWs are CSWs who work in brothels.
         5.1.2.2. 100-200 indirect CSWs. Indirect CSWs are Women who work in other entainment settings but also providing sex for customer on negotiation, for example waitress.
      5.1.3. Sampling method
         5.1.3.1. Sampling frame: list of brothels and list of other entertainment places with estimate number of female workers. For each group, name of service will be randomly selected one to another until the total number of workers reach 100-200.
         5.1.3.2. If number of CSWs in city district are less than 100, sample will be collected from outside districts.
      5.1.4. Items to be reported:
         5.1.4.1. Number of blood sample
         5.1.4.2. Number of survey
         5.1.4.3. Province
         5.1.4.4. Name of the service

5.1.4.5. Age
5.1.4.6. Number of customer in last working night
5.1.4.7. Number of unprotected sex in last working night
5.1.4.8. Result of HIV infection test.
5.1.4.9. Result of syphilis infection test.
5.1.4.10. Number of sex-related services by district and type of CSWs
5.1.4.11. Number of sample service by type of CSWs
5.1.4.12. Number of CSWs who give blood samples

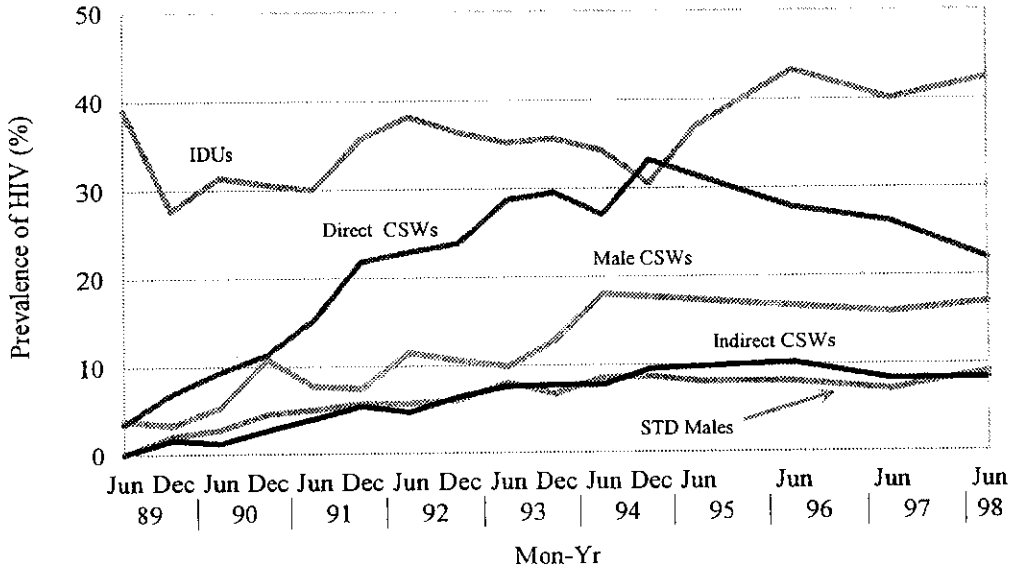
6. Male CSWs
   6.1. Sampling method
      6.1.1. Sentinel sites: 5 provinces; Chiang Mai, Bangkok, Chonburi, Songkla, and Phuket
         6.1.1.1. Number of samples: 100-200 samples.
      6.1.2. Sampling method
         6.1.2.1. Sampling of services
         6.1.2.2. All male CSWs in the sampled service will be asked for blood sample until the total number reach 100-200, or until July 15th
      6.1.3. Items to be reported:
         6.1.3.1. Number of blood sample
         6.1.3.2. Number of survey
         6.1.3.3. Province
         6.1.3.4. Name of the service
         6.1.3.5. Age
         6.1.3.6. Result of HIV infection test.
         6.1.3.7. Result of syphilis infection test.

Results of sentinel sero-surveillance

HIV Prevalence among 21-year-old Males, Pregnant Women, and Blood Donors, Thailand 1989-1998



HIV Prevalence among High Risk Groups, Thailand 1989-1998



(4) Behavioral surveillance

The most recent surveillance system is Behavior Sentinel Surveillance (BSS). Because the main route of transmission of HIV infection in Thailand is sexual (85% of AIDS patient), this behavior surveillance is focused only on the sexually transmission data [DOE, 1996]. The objectives are to monitor trends in risk behavior and to help AIDS prevention planning at both provincial and national level. The pilot project was launched in March 1995. The first round was started in 19 provinces all over the country that fitted 4 inclusion criteria: large, high prevalence, good infra-structure with high feasibility for working, and representative of each region. There were 3 sampling groups in the first round survey; factory workers of both genders, military conscripts and pregnant women in ANC clinics. The second round survey included male and female secondary school students in the sampling groups [Family Health International, 1997].

Organizational and legal structure for surveillance

The division of Epidemiology is the main co-ordinating body. The survey was conducted by staff of AIDS/STD section of the sentinel province with co-operation from authorities of Ministry of Education, Ministry of Labor and welfare and the Royal Thai Army.

Sampled populations and sampling procedures

The fourth round BSS was performed in 19 provinces. Each province will select the survey site from the list of school, factory, ante-natal care clinic and military camp from the available list. In each province, the sample size for each sentinel population was set around 350 persons. After the survey sites has been selected, the whole samples in that particulr site were enrolle. If the sample was not enough the second site will be selected and enrolled the samples in the same manner until the number is close to the expected sample. Among pregnant women and factory workers the sampling population was confined to the age group of 15-29 year only. The survey was perform during the month of July and August of every year. Age of newly recruited male conscripts is 21 years old, while students is between 15-19

years of age.

Measurements

The instrument is a self-administered anonymous questionnaire with approximately 18 questions. There are four group of information in the questionnaire. First component is the demographic data. Second component was the history of first sexual experiance. The third part asking about sexual experiance in the past 12 month and the fourth component was STD related symptom furing the past year.

Reporting system

Data will be first analyzed in the provincial level using EPI-Info software. Data of each province in diskette form was sent to DOE. A median statistics of major risk behavior was calculated to show national trend.

Results of behavioral surveillance (appendix)

Dissemination and actions which result

The data were shared primarily for the 19 province participate in the survey and also distribute trrough the Weekly Epidemiology Surveillance Report to all provinces and the public.

Problems and future perspectives

We are facing the shortage of skill in data management both at the provincial can national level. Validity and interpretation of the information is a big question. A supplement of small scale qualitative study in all site would provide a better understanding of the changing figure.

3. HIV/AIDS PROGRAM EFFECTIVENESS MONITORED AND EVALUATED BY SURVEILLANCES OR SURVEYS

Data from different surveillance sources are used to validate each other. While data from other reporting systems and surveys are used to validate the program. Example of program evaluations are; Incidence of STD found in male and female patients at all government clinic was used to measure the declining of STD, condom use among sex workers was used to monitor the progress of 100% condom program, prevalence of HIV among donated blood to monitor the effective of self-deferal process at the blood bank, and prevalence of HIV among pregnant women and conscripts was used to monitor the overall impact of control program for general population.

4. CONCLUSION

HIV/AIDS surveillance in Thailand has started since the finding of the first AIDS cases in 1984. The system try to include all major component which will monitor the changing trend of behavior, HIV infection, STD ad AIDS. The Division of Epidemiology is the legal body to co-ordinate the surveillance which actually carry out by provincial field staff. The system has adapted itself to fit each phase of the epidemic and has served the country to alarm the public, identify area of high priority, a rational resource allocation and evaluate the control program. the whole surveillance is facing growing problem of good data management, meaningful interpretation, and timely distribution of the information.

TABLE 5. RESULT OF BEHAVIOR SENTINEL SURVEILLANCE AMONG STUDENTS FROM 19 PROVINCES, THAILAND, 1995-1998

MALE INFORMATION	15-19 YR	
	1996 N=6114	1997 N=5876
Never have a lover	79.6	79.0
Ever had sex	9.9	10.0
Age at 1st sex (mean, SD)	15, 1.4	15, 1.5
1st sex with lover or friend	63.2	59.0
Last Year Sexual Experiance		
With CSWs	1.8	2.5
Always use condoms with CSWs	75.0	44.4
With casual partners	3.1	7.1
Always use condoms with casual partners	45.5	20.0
With men	1.4	1.1
Last Year STD		
Had symptom of STD	0.5	0.8
Received treatment for STD	0.0	14.3

FEMALE INFORMATION	15-19 YR	
	1996 N=6845	1997 N=6454
Never have lover	82.6	81.1
Ever had sex	3.1	2.6
Age at 1st sex (mean, SD)	15.4, 1.4	15.2, 1.0
1st sex with lover or friend	83.3	77.8
1st sex with willingness	2.1	1.8
Last Year Sexual Experiance		
Had multiple sex partners	0.3	0.3
Had sex with lover	2.1	1.9
Alway use condoms with lover	5.9	10.0
Had sex with casual partner	0.3	0.3
Always use condoms with casural partners	0.0	0.0
Had symptom of STD	0.0	0.0
Received treatment for STD	0.0	0.0
Other information		
Ever had sex for money	0.0	0.0
Ever got pregnant	0.3	0.30
Ever had abortion	0	0.20

HIV/AIDS Surveillance in Japan-Country report

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1.INTRODUCTION

Though the number of HIV and AIDS cases reported through HIV/AIDS surveillance is still low in Japan from an international perspective, an increase in sexually transmitted HIV continues and appears to have been accelerating in the past 5 years. This highlights the importance of better monitoring of the prevalence and incidence of HIV infection and the associated risk thereof. Despite this desperate need the future of HIV/AIDS case surveillance in Japan appears to be in jeopardy on account of the so-called New Infectious Disease Control Laws which will take effect from April 1999. The "new" surveillance system to be enacted under this law appears not to be very effective or at best as effective as the current laws. By limiting the ability of HIV/AIDS case surveillance it will be essential to compensate for this through other means of surveillance such as through serological or behavioral surveillance, in order to monitor trends to assess the effectiveness of preventive measures and to plan medical and social services for those affected by HIV.

2.HIV/AIDS-RELATED SURVEILLANCE AND SURVEYS

(1) HIV/AIDS CASE SURVEILLANCE

Historical background

AIDS surveillance was started by the Ministry of Health and Welfare (MHW) in 1984, one year prior to the identification of the first AIDS case (infected through homosexual contact). Surveillance began with voluntary participation of about 600 medical care institutions across the country and expanded to more than 2,000 institutions by 1986. In addition to AIDS cases, asymptomatic HIV positive cases were included in the surveillance in 1987. Note that in Japan HIV infection surveillance was integrated with AIDS surveillance almost from the outset.

Organizational and legal structures for surveillance

Enacted in February 1989, the so-called AIDS Prevention Law set forth the

responsibilities of the government, local public bodies, citizens and medical doctors in the prevention of AIDS and promoting AIDS control measures. HIV positive and AIDS are notifiable conditions according to the law. The National AIDS Surveillance Committee and the AIDS and Specific Diseases Control Division, Health Service Bureau, Ministry of Health and Welfare is responsible for the surveillance including data entry and analysis at a central level and health authorities of prefectures or Municipal Cities share a similar responsibility at a local level.

Reporting system and the quality of reporting

The law requires that all physicians report HIV/AIDS cases within 7 days of diagnosis to the governor of the prefecture or Municipal City in which the patient resides. Two types of reporting form are prepared; *Form 1* for the case first identified to be HIV positive or AIDS and *Form 2* for the cases identified to have changed pathological status from asymptomatic carrier to AIDS or from AIDS to death. Form 1 contains age, gender, nationality, clinical status (e.g., asymptomatic AIDS, or other), date of diagnosis, symptoms, possible transmission category, and suspected place of infection (in Japan/abroad). Form 2 contains clinical status before the change, age, gender, nationality, and the date of diagnosis. Note that no information such as name, address, date of birth or occupation that may help to identify the case are excluded and that Form 2 is thus only applicable to the cases followed up by the physicians. All reports are collected at respective local public health department, which then forward the information to the AIDS and Specific Diseases Control Division, Ministry of Health and Welfare after checking for completeness. *Reporting delay* is not serious, as more than 95% of cases are reported within the same year of diagnosis. *Reporting rates* have been monitored by the **Japanese Epidemiological and Preventive Studies on AIDS (JEPA)** of MHW through a questionnaire of all hospitals in Tokyo. This study indicated that about 90% of cases have been reported. This data should be however interpreted with caution since it may only reflect the situation in Tokyo. Cases infected through contaminated blood products are excluded from the notifiable condition, instead such cases have been monitored by another research group of MHW and updated statistics are reported to the AIDS Surveillance Committee once a year.

AIDS case definition and validation

The AIDS case definition for adult/pediatric cases was revised in 1988 in accordance with the WHO case definition and also in 1994 to expand symptomatic criteria for adult cases to include pulmonary tuberculosis, recurrent bacterial pneumonia and invasive cervical cancer. CD4 count is not a part of the AIDS case definition. The AIDS Surveillance Committee reviews each report every 2 months in view of the AIDS case

definition criteria. Because of the absence of any case identification it is not possible to detect duplicates nor make any link between HIV and AIDS.

Outline of the case surveillance results *(See Dr.Kamakura's report for more details)*

Cumulative totals of the reported HIV and AIDS cases are 2,913 and 1,286 respectively as of the end of 1998. Japanese HIV positive cases continue to increase in both genders with cumulative total of 1,377 for men and 260 for women. Increase in the incidence has become more than tripled since 1993. Japanese AIDS cases continued to increase until 1996 and leveled off or started to decline thereafter, probably due to the effect of antiretroviral combination therapy, drug prophylaxis and decreased reporting by physicians. Cumulative totals of Japanese AIDS cases are 852 and 73 for men and women, respectively. Foreigner cases comprise approximately 30% of HIV and 45% of AIDS cases in total. A transient but large increase was observed in the number of HIV positive foreign women of Southeast Asian origin in 1992 and 93, which was later confirmed by one survey of JEPIA that it did not reflect the changes in prevalence or incidence of HIV infection in this population but reflected the transient phenomenon where such women working as prostitutes rushed to local clinics to obtain negative HIV certification.

By transmission category injecting drug use or perinatal infection represents only less than 1% of all HIV or AIDS cases reported. In both genders sexual infection accounts for 90-95% of all HIV and AIDS cases of known mode of acquisition. In contrast to most of the developed countries people infected through heterosexual or homosexual contact are roughly equal in number in Japanese men. Cases of unknown/unstated mode of acquisition represent as high as 35-40% of female HIV/AIDS cases reflecting the high proportion of such cases in foreigners. Significant increase in the cases of unknown/unstated mode of transmission has been observed in Japanese men during the last 3 years. Most of Japanese cases were infected in Japan and foreign cases abroad. Reported cases are fairly clustered in Tokyo and surrounding areas both in number and per population. People infected through homosexual contact has been particularly concentrated in Tokyo.

Dissemination and actions which result

National surveillance data is compiled, reported to the National AIDS Surveillance Committee and released in a regular tabulation along with comment from the chairperson on a 2 monthly basis. The Surveillance report is then sent to the related ministries of central government, major medical associations, and local public health authorities. The annual report is released in January with a comprehensive set of tables for dissemination. The mechanism for translation of surveillance information or any

epidemiological findings into control actions is not functioning well at central or local levels. In spite of all the available information indicating a continuing spread of HIV, most local governments have cut the HIV/AIDS program budgets over the last several years. At a central level, though the National Commission on AIDS was established under the purview of the Infectious Disease Control Committee of the Public Health Council and met once in 1992, it ceased activity thereafter. Only a few people are actually allocated to the national AIDS control program thus considerably reducing the ability of central government to respond to the impact of or the changing situation of the epidemic appropriately.

Problems and future perspectives

Though useful for estimating and projecting the number of HIV or AIDS cases, the quality of HIV/AIDS surveillance has been limited because of the inability of detecting duplicates and also because of the potentially low ratio of HIV positive persons who actually take an HIV test. The latter problem seems to be worsening because the test-activity represented by the number of people who visit public health center for free anonymous testing has decreased significantly since 1992. In order to improve the accuracy of HIV case surveillance, "easier to access" HIV test sites should be established nationwide. An administrative mechanism to disseminate the surveillance information more effectively and a means to translate epidemiological findings into action should also be developed.

The future perspective of HIV/AIDS surveillance is currently unclear since so-called New Infectious Disease Prevention Law is going to be enforced from this April (1999) but the resulting system for HIV/AIDS surveillance under this law has not yet been fully worked out. Under this law HIV/AIDS reporting is still mandatory and to be reported within 7 days of diagnosis, this time with non-compliance with this time frame resulting in a fine. A list of indicator diseases has been added in the new reporting form, however again any information useful for case identification such as name code or birth date is unlikely to be included. More importantly, though under the previous law reporting by Form 1 and Form 2 were both mandatory, only Form 1 will become mandatory under the new law. Making the reporting AIDS (form2) non-mandatory could only increase the probability of such going unreported. The potential impact of this "new" system on surveillance must be considered/monitored with extreme care.

(3) SENTINEL SEROSURVEILLANCE

Sampled populations and sampling procedures

In Japan the only ongoing nationwide serosurveillance is that of HIV screening for

blood donors. Started in 1986 around 6 million blood samples are routinely screened per year. Seroprevalence data of various population subgroups other than blood donors have been collected on a research only basis by JEPA since 1988. Expanded gradually in the number of population as well as in sample size, study populations now include pregnant women, voluntary HIV testers at public health centers, STD patients, foreign immigrants, Japanese CSW, and injecting drug users. No random sampling has ever been possible for any of these populations. For ***pregnant women*** HIV prevalence data for about 160,000 tests was collected from collaborating institutes across the country in 1997. However, these samples were geographically biased with more than 80% limited to Tokyo and surrounding prefectures. Seroprevalence data from ***voluntary HIV testers*** at public health centers has been collected since 1986 in a less geographically biased fashion through the collaboration of 15 public laboratories across the country and the results of about 40,000 tests were collected in 1997. Seroprevalence data of ***STD patients*** was also collected nationwide through the collaboration of a nationwide STD clinic network. This study collected a total of about 3,000 blood specimens at a central laboratory from several participating STD clinics in each region in an unlinked anonymous fashion to examine HIV antibodies, hepatitis B and C, syphilis and chlamydia. The sampling frame was reduced to Tokyo and surrounding areas in 1998 to enhance the efficiency of the study. Only fragmental data is now available on the HIV seroprevalence of ***foreign immigrants.*** This is partly because access of foreigners to HIV testing services is quite limited due to the virtual lack of language services at testing sites and because many of at-risk foreigners, such as women working as sex workers, are staying illegally. Seroprevalence of Thai women coming to at several STD clinics located in the Tokyo vicinity has been monitored since 1993. The sample size was about 900 in 1993 and gradually decreased to 200 in 1997. No seroprevalence data on foreigners other than Thai females has been available. Seroprevalence data from ***Japanese commercial sex workers*** (***JCSW***) is also limited. Only one type of JCSW working at establishments called "soapland" has been monitored through the same STD clinics network for STD patients survey where they come for regular check-ups for HIV and other STDs. Around 3,000 JCSW have been screened every year since 1987. In view of the recent shift of the sex industry from soapland to massage parlors or phone clubs involving increasingly more amateur workers this study only represents a fraction of JCSW. Efforts to obtain sustainable sampling from other type of JCSW have been unsuccessful. ***Injecting drug users*** have been sampled nationwide on a voluntary basis from arrestees as well as from consecutive inpatients at drug treatment hospitals. The former study started in 1988 sampling more than 2,500 every year. The latter study started in 1993 and now covers 20% of all IDU inpatients in Japan. Note that we have no study on the seroprevalence of ***men who have a sex with men (MSM)*** in spite of the