

(J Tokyo Wom Med Univ)
 (68 (11·12) 889~898 (1998))

The Trial of HIV/AIDS Surveillance Program at the Louisiana Office of Public Health in New Orleans

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(Received August 12, 1998)

In the United States, 581,429 cases of AIDS had been reported to the Center for Disease Control and Prevention (CDC) as of December 30, 1996. A recent study estimated that 223,000 people in the United States were living with AIDS. HIV/AIDS surveillance is a multifaceted, complex process that involves many parts, people, and advancing computers systems. The HIV/AIDS Surveillance Program in the state of Louisiana is headquartered at the Louisiana Office of Public Health in New Orleans. All information is recorded on a form provided by the CDC and data are entered into the HIV/AIDS Reporting System (HARS) database and observing data analysis from the Adult Spectrum of Disease (ASD) study.

HARS database: It is a multipurpose surveillance system designed to monitor the total number of reported cases from public, private, and government reporting facilities. Case reports are received from providers who voluntarily complete the CDC form and who report to the local surveillance program by phone with a surveillance representative completing the case report form.

ASD study: ASD project are to enumerate and characterize persons with HIV infection at various stages of immunologic function who received medical care at selected inpatient and outpatient facilities. This information is forwarded to the CDC and is used in data analysis with information from other states to form conclusion about the epidemic in the United States as a whole. The Louisiana data is also analyzed for the state's funding and disease strategies.

Surveillance program should be carried out in order to monitor the extent of HIV infection and disease in given region and community. Effective surveillance programs require careful monitoring and evaluation to understand changing social circumstances. With many epidemiologists taking experience and institutional strengthening, surveillance program at the Louisiana Office of Public Health in New Orleans is more accurate and very modern program. HIV/AIDS surveillance need careful adaptation of existing methods and the development of new approaches and of new ways of analyzing and making sense of the information.

Introduction

Through 1996, an estimated 29.4 million people worldwide had been infected with HIV (human immunodeficiency virus), of whom

approximately 8.4 million have developed AIDS (acquired immune deficiency syndrome)¹⁾. In the United States, 581,429 cases of AIDS had been reported to the Centers for Disease Control and Prevention (CDC) as of December 30,

1996²⁾. A recent study estimated that 223,000 people in the United States were living with AIDS³⁾. HIV/AIDS surveillance is a multifaceted, complex process that involves many parts, people, and advancing computers systems.

The HIV/AIDS Surveillance Program in the state of Louisiana is headquartered at the Louisiana Office of Public Health in New Orleans and divides the state into nine public health regions to be examined. HIV/AIDS field epidemiologists investigate all possible cases of HIV or AIDS entering the Medical Center of Louisiana at New Orleans, formerly known and still referred to as Charity Hospital, the Tulane-LSU (Louisiana State University) AIDS Clinical Trials Unit (ACTU). ACTU is a joint program of Tulane University School of Medicine and LSU School of Medicine. Sponsored by the National Institute of Allergy & Infectious Disease/Division of AIDS, the Tulane-LSU is one of 30 sites nationwide known collectively as the AIDS Clinical Trials Group (ACTG). Located in downtown New Orleans, the ACTU offers access to research studies which test new drugs and treatment strategies for adults infected with HIV. The ACTU consists of physicians, nurses and laboratory scientists in virology, immunology, and pharmacology. The staff also includes a pharmacist, social worker/outreach coordinator and an administrative/data man-

agement team. Studies are performed at the Medical Center of Louisiana at New Orleans and the HIV Outpatient Clinic (HOP). Surveillance of this hospital includes all of its associated laboratories, clinics, and morgues. Surveillance in this area also covers reported jail and prison cases.

All information is recorded on a form provided by the CDC (Table), and data are entered into the HIV/AIDS Reporting System (HARS) database. This information is forwarded to the CDC and is used in data analysis with information from other states to form conclusion about the epidemic in the United States as a whole. But CDC does not receive patient names or information that could identify the individual patient. Local data displays with five cases or fewer are not included in the tabular distributions. National data releases aggregate key variables to preclude indirect identification of individuals reported with HIV/AIDS. Additionally, recipients of HIV/AIDS surveillance cooperative agreements are required to maintain secure and confidential case registries. The results are disseminated and used in future surveillance, prevention, and control projects. Because of the special nature of the topic, surveillance of this subject encounters many problems⁴⁾, which can lead to missing information in surveillance data. Consequently, there is

Table Centers for disease control and prevention data resources

Adult spectrum of disease (ASD)
Congenital syphilis (CS) cases investigation and report (from CDC-73.126)
Gonococcal isolate surveillance project (GISP) : demographic/clinical data and antimicrobial susceptibility testing (from CDC-73.60A, B)
HIV/AIDS reporting system (HARS)
Supplement to HIV/AIDS surveillance (SHAS)
HIV epidemiology research (HER) study
HIV seroprevalence survey of childbearing women (SCBW)
HIV seroprevalence among intravenous drug users entering treatment programs, United States
HIV seroprevalence in sexually transmitted disease clinics
Pediatric spectrum of HIV disease (PSD)
Report of civilian cases of primary and secondary syphilis and gonorrhea by reporting source, sex, race/ethnicity and age group (from CDC-9.2638)

For a more complete understanding of the current surveillance trends, calling the CDC National Prevention Information Network 1-800-458-5231.

a lack of information on the true nature of the HIV/AIDS epidemic, which can give way to inadequate modes of treatment and prevention.

Method

In the process of better understanding the Louisiana HIV/AIDS surveillance process, I visited and got information from the different units and wards of Charity Hospital in New Orleans, Charity's Infectious Control unit, the laboratories, the morgue, the HIV/AIDS Clinic, and the STD Clinic in Louisiana. I also visited the OPH, the HARS and Tickler system offices, and spoke to the many officials and staff. I was fortunate to attend a meeting between the health educators at C-100 (HIV/AIDS Clinic) and concerning the importance of the RISK Assessment Forms and how to better the reporting of risk factors by health educators.

Involvement in the surveillance project included 1) talking to several people in various positions; 2) abstracting information from medical records at Charity Hospital, C-100, and Delgado STD Clinic, both for new active cases and for the yearly validation study; 3) comparing hospital morgue records with those already in HARS; and 4) observing data analysis from the Adult Spectrum of Disease (ASD) study. Indeed, the whole surveillance project could not be explained in a paper such as this, as many parts of the process are omitted here. Some examples are the traveling between the different units, the internal thinking involved, the smaller periodically conducted evaluation studies examining which units receive more cases, and so on.

HIV/AIDS Reporting System (HARS)

HIV/AIDS surveillance system is conducted in all 50 states, 6 major cities, and the territories and possessions of the United States. It is a multipurpose surveillance system designed to monitor the total number of reported cases from public, private, and government reporting facilities. This ongoing surveillance system monitors the total number of AIDS cases repor-

ted from the areas noted above, adult/adolescent HIV cases in 25 states that require named HIV reporting, and in 2 states that require reporting of pediatric HIV cases only. Data are used to assess trends by reporting areas, race/ethnicity, risk, age, and sex. The universe to which the data apply are all reported AIDS cases in the 50 states, territories, and possessions and HIV cases in states that require reporting of persons with HIV (not AIDS). The database is cumulative, containing all case reports since 1981.

All AIDS and HIV cases, where authorized by state law, are reported under legal mandates and not sampled. The source of data collection is the CDC form 50.42A for adults and form 50.42B for pediatric cases. Case reports are received from providers who voluntarily complete the CDC form and who report to the local surveillance program by phone with a surveillance representative completing the case report form. Also received from surveillance representatives who abstract medical records in hospitals and private physicians' offices to complete the case report form. The record unit in the database is the individual HIV/AIDS case report form.

Adult Spectrum of Disease (ASD) study

The objectives of the Adult Spectrum of Disease (ASD) project are to enumerate and characterize persons with HIV infection at various stages of immunologic function who received medical care at selected inpatient and outpatient facilities. The universe study is all persons with HIV infection who access selected hospitals, outpatient facilities, and HIV treatment facilities in the 10 selected project areas. Data are collected continuously at 6-month intervals through abstraction of patient medical records. All HIV-infected woman accessing the target facilities, as well as persons of racial and ethnic minority groups are included in survey. However, some sites are over-represented by white males. These sites do sample white males at one to fourth ratio. The source of ASD data is the individual patient

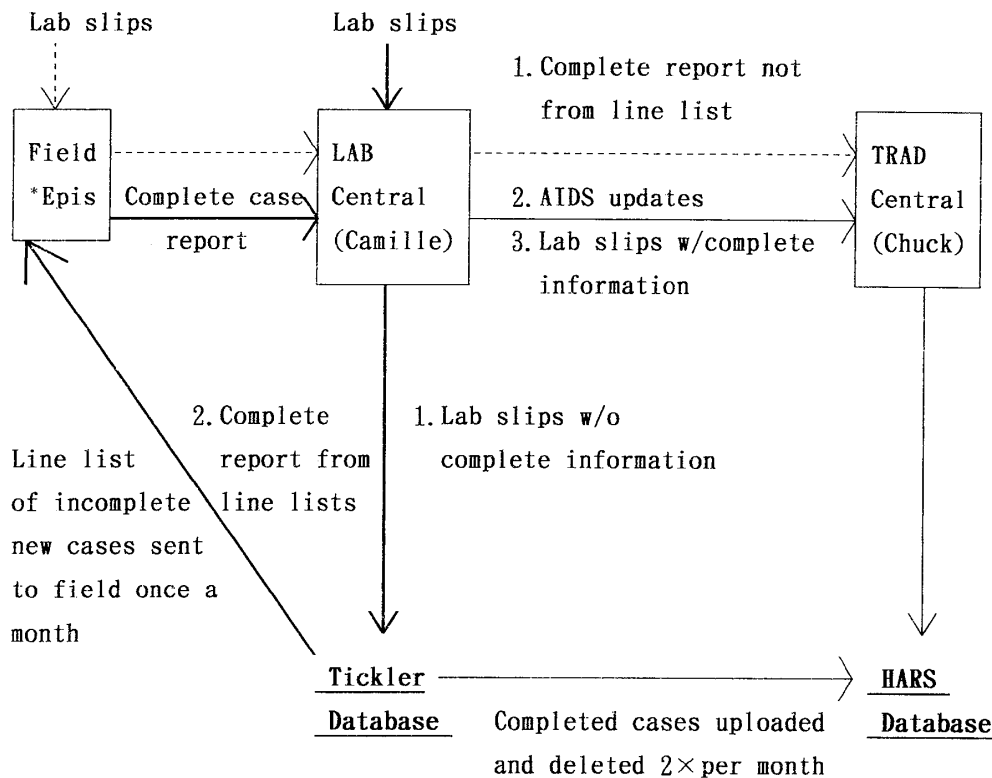
medical record, which is abstracted onto the CDC form 50.99A. The database record unit is the CDC form 50.99A, which is updated every 6-month over a 42-month period. Missing cases can sometimes be found through the ASD. A retrospective study, the ASD study is part of the Louisiana HIV/AIDS Program and is also a CDC project, only a few designated areas in the nation have such a project. Areas such as Colorado, New York, California, Texas, and Louisiana represents geographic regions of the nation for study. As a separate study from the HIV/AIDS surveillance, it also conducts chart abstractions on forms provided by the CDC to examine the progression of the disease. Files on a case are updated every 6-month until the patient does not come back for follow-up visits. This data is sent to the CDC for analysis for the nation as a whole. The Louisiana data is also analyzed for the state's funding and disease

strategies. Frequent meetings between the field epidemiologist and the ASD study coordinator Anne Morse function to compare cases, and update case from HIV+ to AIDS status.

Lab Surveillance Protocol (Figure)

1. Lab slips received by central lab surveillance

- 1) Lab slips are checked in HARS. Names in HARS are updated directly by Chuck.
- 2) Lab slips are checked in the Tickler. High CD4 counts are checked against the database of negative cases.
- 3) Slips with complete information are given directly to Chuck for entry into HARS.
- 4) Lab slips without complete information is entered into the Tickler.
- 5) Once a month a line list of new incomplete cases for each epidemiologist will be sent to the field. Line list will have only new names



* Epidemiologists

Figure Lab surveillance protocol

for that month. It is possible for Camille to print cumulative line lists showing all outstanding cases, upon request. Please keep in mind that a line list contains all of the information given on a lab slip, and that the comment field will indicate what information is needed to complete the case. Line lists may be sorted and organized in almost any way. In case of your list to be reformatted, contact to Camille.

6) Epidemiologists send completed case reports to Camille, who completes them in the Tickler.

7) Every two weeks completed cases are uploaded from the Tickler into HARS and deleted from the Tickler.

2. Lab reports received by epidemiologists in the field

1) Epidemiologists complete the case and send it to Camille so lab surveillance can keep track of numbers of cases from each lab.

2) Camille gives cases to Chuck for entry into HARS.

3. Cases without a name or date of birth

When lab surveillance receives a lab slip that has only a medical record number, or if the case has only a name or date of birth but not both, there is no way to determine whether or not that case is in HARS. These cases must therefore be sent into the field to get more information. It is recommended that the epidemiologists keep their line lists so they can check their new cases against the ones they have already completed. This should help to avoid unnecessary duplicate investigation. If a duplicate case does appear on a line list, the epidemiologist should contact lab surveillance, not traditional surveillance, so that the duplicate case can be removed from the Tickler.

4. Other duplication issues

When lab surveillance sends completed new cases to traditional surveillance and deletes them from the Tickler, it may take a few days before these new cases are actually entered in HARS and the database is updated on the lab surveillance computers. If lab surveillance receives a new lab slip on one of these cases, it

may not yet show up in HARS and may get sent back into the field. If this happens, the epidemiologist should contact lab surveillance to have the case removed from the Tickler. Lab and traditional surveillance are working together to reduce the time delay between Tickler deletion and HARS entry, but there will always be a couple that slip through the cracks. Other potential causes of duplicate cases include; 1) Lab slip with an alias not in HARS. 2) Lab slips with misspelled names or incorrect dates of birth. 3) Line lists and completed case reports crossing in the mail. Lab surveillance would be most appreciative of any suggestions on how to reduce the number of duplicate cases sent to the field.

Case Reporting

1. Traditional case reporting

New Orleans Area are reported by a number of sources, and although the HIV/AIDS surveillance program in Louisiana has mainly switched to laboratory-based reporting, cases, missed by laboratories, are still investigated and reported by a traditional active surveillance process. This mechanism encompasses periodic telephone calls and visits to hospital units and related specialty clinics to which HIV/AIDS patients might be referred for treatment or further examination. AIDS patients with dementia may be referred to the neurology or psychiatric unit, and regular stops at the eye clinic may find patients with CMV (Cytomegalovirus) retinitis, a major opportunistic infection of HIV+ patients. Other hospital units and clinics periodically checked are oncology, dermatology, pediatrics, proctology, urology, ENT (ears, nose, throat), gastrointestinal and dental clinics, these, however, are only a few clinics which must be systematically checked on for a complete surveillance system.

Examination of hospital morgue records of new deaths also catches cases of patients who were tested for HIV or AIDS, but have still been missed by the system and are not reported in the HARS database. Sometimes these cases

are of patients who are very elderly or sometimes newborn. If a person appears on the morgue record book as having AIDS or HIV, but he or she is not found in the HARS system, that person is counted as a new case. Comparison of morgue records with names in HARS also functions to update the HARS database on previously those with HIV who have died, and those who were previously known to have HIV but died with AIDS status. Updating the database aids in estimating incidence and prevalence rates of the epidemic. The HIV/AIDS Clinic, otherwise known as C-100, is a center housing the HIV Outpatient Program (HOP) and acts as a primary case clinic for adults, adolescents, and children. The center provides evaluation and treatment for AIDS, as well as health education, counseling, social services, an outreach program, and several other services. C-100 helps in following patients who may change in status from HIV+ to AIDS. The center also functions to give follow-up information such as anti-retroviral therapy or AIDS opportunistic infection diseases.

The Rampart Public Health Center, also called the STD Clinic or Delgado, also attracts people from the local neighborhoods and acts as an early prevention site in the area. The STD Clinic treats patients as long as they are not AIDS status, at which point they are referred to C-100. Here, too, surveillance data is available on risk factors and demographic information. Both C-100 and the STD Clinic help in reaching out into the neighborhoods and findings cases that would otherwise be lost. Cases are reported in jails and prisons when prisoners ask to be tested for HIV and are seen by health officials visiting the jail or prison. Certainly, persons in jail or prison for a long period of time are at risk for HIV transmission. Although some persons are reported to be HIV+, jails and prisons persist consistently as sources of cases yet to be accessed, due to logistic reasons which will be discussed later.

2. Laboratory case reporting

During the past few years, several states have

been participating in a CDC project to update surveillance methods for the future. Each state submitted a proposal for future surveillance, some states test surveillance through SSI (Supplemental Security Income) or disability forms recording HIV states, others through tumor registry, and others through the pharmacy.

Louisiana proposed a project to test the efficacy and efficiency of laboratory reporting in HIV/AIDS surveillance for the future. Indeed, a recent study has shown that 85% of all cases in the states were initially reported from laboratories. However, the results of laboratory reports never leak out, because the privacy is strictly protected in the United States. The Louisiana OPH developed the Tickler system to work in conjunction with the CDC HARS system.

The Tickler system was specifically designed to hold reports on cases from laboratories without the complete information needed enter into HARS. Information from laboratories include only some demographic information and usually only a positive HIV test, unusually low CD4 counts or percentages, and viral loads, although sometimes, even the viral load is not recorded. From month to month, new HIV cases and cases with low CD4 counts or percentages are reported to the OPH Tickler system.

These cases are not complete and given to the area field epidemiologist who investigates these cases and finds the missing information by going to the different places the patients went to for testing, treatment, and follow-up visits. The Tickler form is quite similar to the CDC HIV/AIDS case report form. A case reported through lab might be missing such basic information such as name, address, date of birth, and even gender or ethnicity which is needed to prevent duplicate case reporting as well as analyze demographic data. Aside from this basic information, risk factors and date of confirmed HIV testing might be missing. This information can be found by combing medical charts at one or more of the listed facilities; medical charts include demographic data, data

of HIV testing and type of HIV test conducted, risk factors, and clinicians' notes.

In addition, medical charts usually include financial aid information which commonly also records this same information; this can sometimes be very helpful since medical charts are not always complete with the needed information. Low CD4 counts and percentages are noted because of the AIDS definition change by CDC in 1993. When these low CD4 cases are sent out for further investigation, epidemiologists must first establish linkage between low CD4 counts or percentages and HIV+ status. Low CD4 counts in a patient does not necessarily constitute AIDS status since immunosuppression can occur in people for reasons other than HIV, such as cancer or treatment for cancer⁵⁾.

When a case is complete, it is entered into the HARS system to be sent to the CDC for data analysis for the nation (Figure). The Louisiana OPH also conducts data analysis for trends specifically pertaining to Louisiana, since HIV/AIDS cases may have different needs than those in other states in terms of prevention and control strategies. Dissemination of this information is required for adequate federal funding in state projects as well as in designing strategies for prevention, control, and surveillance of the disease in the future.

Discussion

Problems in surveillance

1. No identified risk (NIR)

One of the biggest problems in HIV/AIDS surveillance is reporting risk factors, or rather the lack of reporting risk factors. Risk factors for HIV/AIDS is not only important for complete information of knowing who is at most risk for this disease, but also to prioritize where time, energy, personnel and financial resource should be spent the most according to need⁴⁾. Furthermore, reporting of risk factors can determine if and when unusual modes of transmission occur or when an unusual number of transmissions occur. When abstracting infor-

mation from medical charts for cases to be entered into HARS, many charts from various facilities do not list a single risk factor. Because of the sensitive nature of the subject, many clinicians and staff are hesitant to ask about possible risk factors, saying it is the responsibility of the health educators, even though not all cases receive health education services. Health educators, on the other hand, do not always ask about risk factors on the first visit, feeling that patients are overwhelmed by testing, talking to doctors, nurses. Some of health educators wait until phase II, the second visit. Unfortunately, not everyone comes back to the clinic for further services such as treatment, counseling and education, and follow-up check-ups.

The major problem, however, occurs when medical charts show risk factors not being recorded on as many visits as ten. These are situations in which improper handling of the case has occurred since the patient has, by that point, seen numerous clinicians, health educators, and staff members at various facilities, all of whom have not asked about any risk factors or modes of transmission. It is not surprising that, as of November 13, 1997, 47% of all reported HIV cases did not have a risk factor. In circumstances such as these, field epidemiologists must go back to counselors and clinicians to see if they might remember the patient and a risk factor.

As a last resort, the investigator must interview the patient with a 30-45 minute survey. If the case is unavailable for questioning due to death or conditions such as coma, the epidemiologist conducts a proxy interview with the family, friend, or lover. Unfortunately, the interviewer may not have known the case patient was HIV and so the questionnaire must reflect that knowledge in accordance with the confidentiality requirements of HIV/AIDS surveillance; this problem makes it all the more difficult to assess a risk for the patient. Although it is not mandatory for counselors, clinicians, and health educators to list factors,

it is, however, important that they do so because a large number of NIR cases can cause many problems to arise. First and most importantly, the implications point to risk reduction not being a primary concern of the health system. When counselors are not counseling on risk factors for HIV transmission, they are not attempting to prevent future transmission from that person to many others, even transmission from someone else to the patient. Second, the recorded and reported trends in HIV/AIDS risk factors are not truly representative of the cases in Louisiana. Third, as a result, adequate attention will not be put on the appropriate target groups and methods. Fourth, unsupported fears of the public will arise due to such large proportions of HIV and AIDS cases not linked to known risk factors. A high percentage of cases unattached to known risk factors and groundless fears like possible transmission through mosquito casual contact.

2. Cooperation with others

Although AIDS reporting is mandatory, currently no penalties exist for those clinicians, counselors, laboratories, or private physicians who do not report cases⁴⁾; thus those patients who turn to private physicians will be lost. HIV reporting is not mandatory by Louisiana, thus cooperation between health professionals is very important in HIV/AIDS surveillance. For example, meetings between health educators and the field epidemiologist could facilitate improved relations as well as a better understanding of reasons why listing risk factors is such an important procedure in the public health realm, not only in reducing future risks, but also in reducing public fears. Understanding what questions on the Risk Assessment Form are important and what types of answers are inadequate and unhelpful can enable health educators to fill out the forms in such a way as to meet the needs of HIV/AIDS surveillance.

On the other hand, current cooperation between the jail and prison system and the HIV/AIDS surveillance program is lacking. Physical abuse is commonly suspected in jails

and prison systems, and because this abuse may be reported in inmate files, files are kept closely under lock and key. Access to these files is strict and, for this reason, field epidemiologists have a hard time completing HIV/AIDS files on jail and prison inmates.

3. Missing cases

Similar to files in jails and prisons, fear of the law keeps some cases from coming into the system for testing treatment. For example, women may not come in for prenatal care and HIV testing because they are afraid of being tested for drugs. Thus, patients such as these are lost to the system, unless these women come in for the delivery, in which case, it is too late to prevent vertical HIV transmission. These cases and other non-reported cases in jails and prisons, or others not willing to come in for HIV testing or counseling for a variety of reasons. It comprises of missing cases not reported by the system. But it depends on the patients' decision to know the results of laboratory reports. Hopefully, cooperative meetings, joint efforts, and public targetting of these groups can bring these people out for proper treatment and counseling.

Conclusions

Surveillance program should be carried out in order to monitor the extent of HIV infection and disease in given region and community. Effective surveillance programs require careful monitoring and evaluation to understand changing circumstances. In New Orleans, many resources are now available for epidemiological monitoring. At the start of HIV epidemic in US⁶⁾⁷⁾, Louisiana surveillance was only able to show gross changes and monitor relatively crudely the arrival and subsequent spread of infection. However, Louisiana surveillance epidemiologists need improvement. Efforts of collecting official data, demographic information focusing on Knowledge Attitudes and Behaviors (KAB) in respect to HIV/AIDS success to provide an adequate surveillance program in New Orleans. With many epidemiologists tak-

ing experience and institutional strengthening, surveillance program at the Louisiana Office of Public Health in New Orleans is more accurate and very modern program computer system. Also, HARS, ASD, and Lab Surveillance Protocol in New Orleans have already established under the guidance of CDC.

HIV/AIDS surveillance is a complex process, involving many different facilities, information, relationships and understandings. The surveillance system serves many functions, the most important of which is prevention of the disease in the future. Both quantitative data and qualitative data are important to research HIV/AIDS surveillance. Studying these data require using a variety of surveillance programs and computer system to obtain a complete situation. The volatility of the situation and the mobility of the study HIV/AIDS surveillance need careful adaptation of existing methods and the development of new approaches and of new ways of analyzing and making sense of the information. Targeting those people highest at risk for HIV/AIDS transmission, as well as those transmitting the virus, whether knowingly or unknowingly, is wholly dependent on a clear understanding of the epidemic where it is, and who involves. From the statistical information obtained during study from surveillance program, I have gained a great understanding of the HIV/AIDS surveillance objectives, process, and difficulties. What is more I studied to analyze and identified potential risk factors for HIV/AIDS and impact on populations, health

care surveillance program and infrastructure.

In conclusion, it is very important to develop and strengthen surveillance program including health promotion and information approaches. The emphasis epidemiologists at Louisiana Office of Public Health Office in New Orleans personally placed on catching every HIV/AIDS case demonstrated to me how important every single case really is in preventing, controlling, and treating the disease.

References

- 1) **World Health Organization:** HIV/AIDS: The global epidemic. *Wkly Epidemiol Rec* **72**: 17-24, 1997
- 2) **Centers for Disease Control and Prevention (CDC):** Update. Trends in AIDS incidence, deaths, and prevalence —United States. *MMWR Morb Mortal Wkly Rep* **46**(8): 165-192, 1997
- 3) **Centers for Disease Control and Prevention:** HIV/AIDS Surveill Rep **8**(2): 1-40, 1996
- 4) **Catania J, Gibson DR, Chitwood DD et al:** Methodological problems in AIDS behavioral research. Influences on measurement error and participation bias in studies of sexual behavior. *Psychol Bull* **108**: 339-362, 1990
- 5) **Yarchoan R, Venzon DJ, Pluda JM et al:** CD4 count and the risk for death in patients infected with HIV receiving antiretroviral therapy. *Ann Intern Med* **111**: 184-189, 1991
- 6) **Centers for Disease Control and Prevention:** Human immunodeficiency virus in the United States. A review of current knowledge. *MMWR CDC Surveill Summ* **36** (Suppl. 5-6): 1-48, 1987
- 7) **Curran JW, Jaffe HW, Hardy AM et al:** Epidemiology of HIV infection and AIDS in the United States. *Science* **239**: 610-616, 1988

米国ルイジアナ州ニューオリンズ市における公衆衛生局による

HIV/AIDS サーベイランスプログラムの試み

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WHO (世界保健機構) は1996年度の全世界における HIV 感染症の累計総数を2,940万人, AIDS 患者840万人と報告している。また, CDC (疾病管理予防センター) の報告 (1996年12月30日) によると, 米国内では HIV 感染者58万人, AIDS 患者22万人が報告されており, このような現状の中で CDC を中心とした米国州単位の HIV/AIDS サーベイランスシステムが確立されている。しかしながら, HIV/AIDS サーベイランスは複雑な過程と多面性が交錯し, 対象についても病院の臨床検査室, 外来診療, 死体安置所, さらには囚人までを含む先進的コンピューターシステムが要求される。その典型例として, ルイジアナ州ニューオリンズ市では公衆衛生局の疫学者を中心にチューレーン大学医療センターとルイジアナ州立大学医学部の ACTU (AIDS 臨床研究グループ) の指導の下, 基幹病院であるチャリティ病院内で CDC の HARS データベース, ASD スタディによる AIDS サーベイランスが展開されており, 医療先進国である米国のコンピューターシステムによる HIV/AIDS サーベイランスを公衆衛生的見地から報告する。CDC の HARS システムは米国50州および6大主要都市において多目的サーベイランスとして公的, 私的, 政府機関を問わず, HIV/AIDS 患者の総数をモニターすることを目的としており, その内容は地域, 人種, 感染危険度, 年齢, 性別等, 多岐に渡り報告される。ASD スタディは指定機関で治療を受けた外来・入院 HIV 患者の多種多様の免疫状態を反映している。これらより, サーベイランスプログラムはその地域における HIV 感染進展度をモニターするものでなければならない, 効果的なサーベイランスプログラムとはモニタリングとともに時代の変化を認識するものであり, ルイジアナ州ニューオリンズ市の公衆衛生局の HIV/AIDS サーベイランスは, 社会環境変化に対応した情報伝達の意義と分析能力を求められ確立されたといえる。