## **AIDS** in Japan

By Toru Chosa

ananese reactions to AIDS vary between apathy and panic. To most Japanese, AIDS is "a homosexual disease" and one that only happens in far-off lands. It is not something that concerns them or warrants much thought. But when someone showing AIDS symptoms or infected with the virus is discovered, especially in an entertainment district, the popular reaction borders on hysteria. There are special reports in the media every day, people stay away from the night spots, and the number of blood donors increases dramatically as people rush to take advantage of the free screening for AIDS. There have even been instances where the medical institutions themselves went into panic mode and refused to treat patients.

But this hysteria is usually short-lived and does not have any lasting educational impact that would leave people better informed as to what AIDS is all about. For Japanese hemophiliacs, however, who constitute the majority of those infected with AIDS in Japan, the fear of AIDS remains a daily reality. For them, the AIDS issue is past the point of being simply a medical problem and has evolved into a serious psycho-social problem.

Japanese government policy currently calls for priority economic and social assistance to these hemophiliacs. At the same time, the government has launched a massive education campaign to teach the facts of AIDS to the general public. It is now, before the virus spreads too widely, that a prevention program can be most effective. Significantly, this education campaign is directed not only at the public but also at medical personnel.

Table 1 shows the number of AIDS cases reported to the World Health Organization (WHO) worldwide as of March 31, 1989. As seen, AIDS is especially prevalent in the United States, Africa and Europe. Although the infection rate is still relatively low in Asia, it is gradually on the increase. In some countries in Southeast Asia, for example, there are re-

ports that AIDS is running rampant due to widespread prostitution and intravenous drug use.

Drawing on figures released by the Ministry of Health and Welfare AIDS Surveillance Committee on May 11, 1989, Tables 2 and 3 show the situation in Japan. By now, researchers have established that AIDS is caused by the human immunodeficiency virus (HIV) and goes through a number of stages from the asymptomatic phase to full-grown AIDS. Infected persons include everyone who tested positive for HIV as reported by the medical facilities nationwide. Of these, patients showing symptoms are identified and registered with the AIDS Surveillance Committee.

## **Prevention law**

The Law Concerning the Prevention of Acquired Immune Deficiency Syndrome, known as the AIDS Prevention Law, went into effect on February 17, 1989. This law includes a stipulation that AIDS cases originating from contaminated blood products will no longer be reported, so such cases after this date are not included in these statistics. Since the first AIDS patient was identified in 1985, the number of AIDS cases in Japan has grown to 103, with 61 having died.

In Japan 52% of all AIDS patients, and 89% of all those who are HIV-infected, are hemophiliacs. These patients' infections were caused through the use of clotting factor concentrates (for factors VIII and IX) that were produced from blood

Table 1 AIDS Cases Reported to WHO
(as of March 31, 1989)

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Africa		23,201	
America	as	101,831	
(U.S.A.)		(86,656)	
Asia		360	
Europe		19,817	
Oceania		1,360	
		146,569	NOTE OF



supplies imported from the United States and other countries where donors are often paid for their blood. As a result, the regulations have been revised to make heat treatment a required part of the production process for these concentrates in an effort to stop the spread of the virus, and infection from this source should no longer be a factor. There are an estimated 5,000 hemophiliacs in Japan, 30% of whom are thought to have already been exposed to the virus. Since the AIDS incubation period can be as long as 15 years, there will probably be more cases showing up from this group well into the future.

Male homosexuals account for 31 AIDS patients and 59 HIV-infected persons in Japan. This is the second-largest group, and so far almost all infections have been directly or indirectly from foreign homosexuals from Europe and the United States.

Heterosexual contact is responsible for 12 AIDS patients and 47 HIV-infected people—including the tragic infection of some wives of hemophiliacs. For males, the vast majority of these are due to sexual contacts overseas, chiefly in Africa and Southeast Asia. Because a person risks infection from even a single sexual contact, the rapidly increasing numbers of overseas travelers has sparked anxiety that this will become the major source of AIDS in Japan. Within Japan, there is the

Table 2 HIV-Infected Persons in Japan (as of April 1989)

Cause of infection	
Male homosexuals	59
Heterosexuals	47
Clotting factor concentrates	979
Others	19
Total	1,104

possibility that the virus will begin to spread via hostess bars, cabarets and other fringe establishments—especially with the rapid increase recently in the number of girls from Southeast Asia working at such places. Although it is hard to find out the actual number of infections, one Japanese woman employed in a massage parlor has already died of AIDS and there was a near-panic when it was discovered that a female dancer from Southeast Asia carried the virus.

The category in which the cause is unknown includes some cases of people receiving blood transfusions overseas.

In contrast with America and Europe, Japan has only a small number of AIDS-infected intravenous drug users. The number of stimulant addicts is increasing yearly, however, and there is considerable risk that infection might spread through their supply networks.

Blood transfusions now involve only minimal risks, since Japan has established a system of screening potential donors. According to the Japanese Red Cross Central Blood Center, only 0.0002% of 1987's approximately 8 million donors tested positive.

## Control program

The Japanese government's program for the control of AIDS, set out in Fig. 1, is largely the responsibility of the Ministry of Health and Welfare, and involves such duties as (i) mounting educational campaigns, (ii) monitoring epidemiological statistics, (iii) improving the guidance and counseling arrangements and strengthening the program to prevent secondary infection, and (iv) promoting international cooperation and research. For example, the ministry makes use of the Japanese Foundation of AIDS Prevention to get the word out to the general public on

AIDS. This education campaign covers a wide range of activities, including printing posters, pamphlets and guidebooks, producing advertisements for television and the other media, and sponsoring an ambitious program of conferences and seminars. The foundation also dispatches researchers overseas and donates money for research.

Education for youth is conducted under the Ministry of Education's auspices as part of the school curriculum, but the Health and Welfare Ministry also provides personnel for this task. Although it is extremely important that young people receive AIDS-prevention education, there is some question as to how thoroughly it will be carried out in light of Japanese teachers' traditional reluctance to get involved in anything smacking of sex education.

AIDS education does not mean only information on the disease itself, but information on how it is spread, high-risk behavior, how to avoid being exposed to it and other facts to eliminate unfounded anxiety and prejudice against patients. Since the recent trend has been an increase in infections occurring overseas, the government is considering making the necessary information more widely available by asking for help from the travel industry, promoting in-house training sessions before overseas trips, distributing pamphlets at airports and other means.

The dissemination of AIDS information in massage parlors and other fringe establishments is almost nonexistent. Given that these establishments are such a high-risk hotbed for AIDS infection, a good prevention program is sorely needed here.

Education for medical personnel is also very important, and the Department of Medical Information on AIDS established within the National Medical Center is active in publishing educational periodicals and sponsoring seminars on AIDS.

The Japanese network for tracking information on AIDS infection is shown on the left side of Fig. 1. A medical institution discovering an AIDS patient or someone who is HIV-infected is required to report the discovery to the prefectural government within seven days. The information is then relayed to the Health and Welfare Ministry's Office for Infectious Diseases Control, where it is processed by the Department of Statistics and Information.

The AIDS Prevention Law also requires that doctors notify the patient or the patient's guardian and provide the necessary guidance. Since the main purpose is to prevent secondary infection, the doctor has to report the patient's name and address to the prefectural government if the patient refuses to follow instructions and poses a danger to others. Normally, however, notification is done anonymously in keeping with the law's basic principle of protecting the patient's privacy.

The law also stipulates that foreigners infected with AIDS may be barred entry into Japan if there is reason to believe that the person would spread the disease.

Furthermore, an addendum to the law requires that counseling and consultation be made available to people infected with AIDS. The AIDS prevention program budget for fiscal 1989 is over \(\frac{4}{2}\),134 million, of which \(\frac{4}{6}\)66 million is being used to set up counseling centers in health centers and medical institutions nationwide. A new training program for counselors has also been instituted.

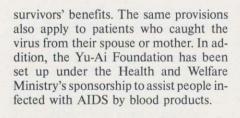
Together with continuing to screen blood donors, Japan must do more to end its dependence on imported blood products. Since infection from tainted blood products is still the most serious problem in Japan, the AIDS Prevention Law includes a number of relief measures for these people. The main one is the use of public funds to cover the medical costs of hemophiliacs. For AIDS sufferers infected from contaminated blood products, there are also provisions for medical allowances, special allowances and even

Table 3 AIDS Cases in Japan (as of April 1989)

Cause of infection	Male	Female	Total
Male homosexuals	31 (10)		31 (10)
Heterosexuals	5 (2)	7 (2)	12 (4)
Clotting factor concentrates	53	1	54
Others	5	1	6
Total	94 (12)	9 (2)	103 (14)

Note: Figures in parentheses represent the number of non-Japanese.

Fig. 1 System of AIDS Control Program Conducted by Ministry of Health and Welfare



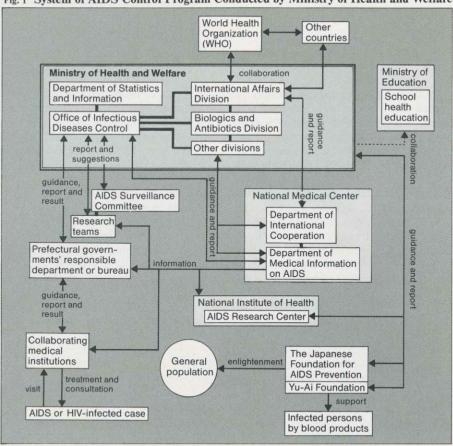
## Research and cooperation

The fiscal 1989 budget allocates ¥1,294 million for AIDS research. The government agencies sharing in this are the Health and Welfare Ministry, Education Ministry and the Science and Technology Agency. The Health and Welfare Ministry will be mainly concerned with clinical research, the Education Ministry with basic research, and the Science and Technology Agency with developing diagnostic agents.

The Health and Welfare Ministry research team is involved in research on disease arrest and therapy for HIV-infected patients, epidemiological research on HIV, detection of clinical markers indicating disease progression, animal research on vaccine development, development of anti-HIV agents, and research on therapeutic and prophylactic agents that are effective against AIDS and associated diseases. The AIDS Research Center has been established as an independent research facility within the National Institute of Health.

The Education Ministry research team is involved in HIV virological research including gene-structure research, the development of vaccines based on this research, biological activity research on the infection mechanism and cytopathic effects, research on the body's immunological interaction to the virus and the development of anti-HIV drugs.

The teams include researchers from a number of research labs, universities and medical institutions, and research takes place at each of these levels. Because no cure is yet anywhere on the horizon, one type of research receiving considerable attention in Japan now is that on prophylactic agents to prevent the disease's progression. Several preventive agents developed in Japan based on Chinese



herbal medicines have succeeded in neutralizing viral infectivity in vitro. They have shown promise in human subjects, and are now undergoing clinical trial.

Although Japan lags behind America and Europe in research on vaccines, more and more animal research facilities are being built and brought onstream throughout Japan for such research.

Among the internationally known research by Japanese scientists actively involved in AIDS research are an HIV infectivity titration method and drug evaluation method, research on the newly discovered virus HIV-2 and on an SIV AIDS virus that affects monkeys, and the development of monoclonal antibodies that attack envelope proteins and research on treatment using them.

There is a rush of international exchange activity occurring at the research level, not just among individual researchers but among organizations as well. The AIDS Division of the U.S.A.-Japan Cooperative Medical Science Program is already in place, and similar organizations are being planned for Japan to interface with France and West Germany. Additionally, France's Pasteur Laboratory—

famous as the discoverer of the HIV-has established a laboratory in Kyoto.

Unlike the United States and European countries, Japan does not at present provide any direct aid for the medical treatment of AIDS in Africa, where the disease proliferates. The economic assistance that Japan does offer is funneled through the WHO. In fiscal 1989, Japan donated \$2.5 million to the WHO Global Program on AIDS.

The Health and Welfare Ministry has also cooperated with the WHO in sponsoring a number of international conferences. The International AIDS Counseling Conference held in August 1988, for example, provided an excellent forum for the transfer of AIDS technology to Japan. Japan is still very inexperienced in dealing with AIDS prevention, and should continue to encourage international exchanges and information gathering of this sort.

Toru Chosa is a staff with the Department of International Cooperation and the Department of Medical Information on AIDS at the National Medical Center.