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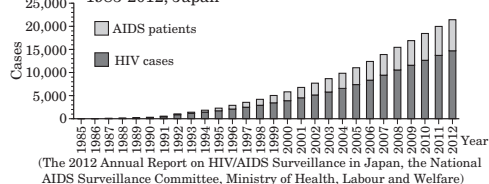
<THE TOPIC OF THIS MONTH> HIV/AIDS in Japan, 2012

HIV/AIDS surveillance in Japan started in 1984. From 1989 to March 1999, it was conducted in compliance with the AIDS Prevention Law. Since April 1999, it has been conducted in compliance with the Infectious Diseases Control Law, which obliges doctors to notify all the diagnosed HIV/AIDS cases (reporting criteria are found in <http://www.nih.go.jp/niid/images/iasr/34/403/de4031.pdf>). The numbers of HIV* and AIDS* cases presented below are derived from the annual report of the National AIDS Surveillance Committee for year 2012 released by the Specific Disease Control Division, the Ministry of Health, Labour and Welfare (MHLW) (http://api-net.jfap.or.jp/status/2012/12nenpo/nenpo_menu.htm).

In Japan, while the annually reported number of new HIV and AIDS cases has remained around 1,500 since 2007, the cumulative number has continued to increase and it exceeded 20,000 in 2012 (Fig.1). In the world, according to the 2012 UNAIDS announcement (<http://www.unaids.org/en/>), every year 2,500,000 people are infected by HIV and 1,700,000 patients die; the HIV-infected population in 2012 was estimated to be as many as 34,000,000.

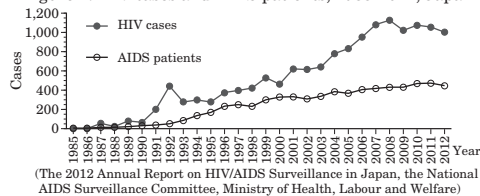
1. Trends of HIV/AIDS during 1985–2012: The number of reported HIV cases peaked in 2008 (1,126 per year). In 2012 it was 1,002 (954 males and 48 females), which level has been maintained since 2007 (Fig.2). The number of reported AIDS cases was 447 (418 males and 29 females), which was the third highest since the start of the surveillance. Cumulative number of HIV since 1985 to 2012 (excluding infections through administration of coagulants) amounted to 14,706 (12,518 males and 2,188 females) and that of AIDS to 6,719 (6,022 males and 697 females), which are equivalent to 11.507 and 5.258 per 100,000 population (as of October 1, 2012), respectively. The “Nationwide Survey of Blood Coagulation Anomalies” has additionally identified total 1,439 coagulation factor products-related HIV infections (no increase since 2008), which includes 682 cases deceased (as of May 31, 2012).

Figure 1. Cumulative number of HIV cases and AIDS patients, 1985–2012, Japan



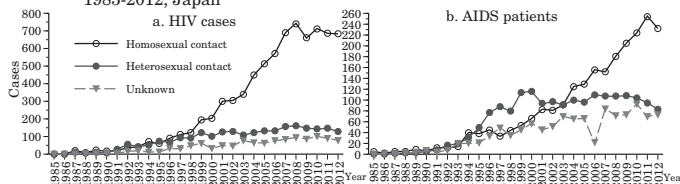
(The 2012 Annual Report on HIV/AIDS Surveillance in Japan, the National AIDS Surveillance Committee, Ministry of Health, Labour and Welfare)

Figure 2. HIV cases and AIDS patients, 1985–2012, Japan



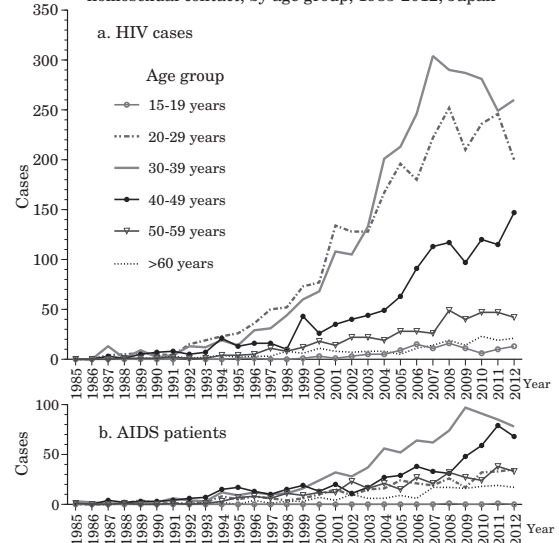
(The 2012 Annual Report on HIV/AIDS Surveillance in Japan, the National AIDS Surveillance Committee, Ministry of Health, Labour and Welfare)

Figure 3. Mode of infection of Japanese male HIV cases and AIDS patients, 1985–2012, Japan



(The 2012 Annual Report on HIV/AIDS Surveillance in Japan, the National AIDS Surveillance Committee, Ministry of Health, Labour and Welfare)

Figure 4. Japanese male HIV cases and AIDS patients due to homosexual contact, by age group, 1985–2012, Japan



(The 2012 Annual Report on HIV/AIDS Surveillance in Japan, the National AIDS Surveillance Committee, Ministry of Health, Labour and Welfare)

*It is important to note that the HIV surveillance in Japan counts as an “HIV case” an infected case that is detected by laboratory diagnosis before development of AIDS, and as an “AIDS case” an infected case detected by the manifestation of AIDS symptoms. An HIV infected case once registered as an HIV case is not registered as AIDS case even if he/she subsequently develops AIDS.

(THE TOPIC OF THIS MONTH-Continued)

Table 1. HIV cases and AIDS patients in Japan, the top 10 prefectures in 2012

a. HIV cases			
Prefecture	Number of reports *	Prefecture	per 100,000 population
1 Tokyo M.	372 (320)	1 Tokyo M.	2.819
2 Osaka P.	124 (169)	2 Osaka P.	1.399
3 Aichi P.	79 (76)	3 Aichi P.	1.065
4 Kanagawa P.	66 (58)	4 Fukui P.	0.872
5 Fukuoka P.	43 (40)	5 Okinawa P.	0.857
6 Chiba P.	29 (35)	6 Fukuoka P.	0.847
7 Hyogo P.	27 (29)	7 Kanagawa P.	0.729
8 Saitama P.	25 (28)	8 Wakayama P.	0.603
9 Hokkaido	20 (18)	9 Okayama P.	0.567
10 Shizuoka P.	17 (32)	10 Ibaraki P.	0.541

b. AIDS patients			
Prefecture	Number of reports *	Prefecture	per 100,000 population
1 Tokyo M.	92 (84)	1 Tokyo M.	0.697
2 Osaka P.	56 (65)	2 Osaka P.	0.632
3 Aichi P.	40 (50)	3 Tochigi P.	0.550
4 Kanagawa P.	34 (25)	4 Aichi P.	0.539
5 Chiba P.	24 (21)	5 Ishikawa P.	0.515
6 Hyogo P.	18 (17)	6 Okinawa P.	0.500
7 Saitama P.	17 (16)	7 Hiroshima P.	0.490
8 Fukuoka P.	17 (19)	8 Ehime P.	0.422
9 Hiroshima P.	14 (8)	9 Kagawa P.	0.403
10 Shizuoka P.	12 (12)	10 Chiba P.	0.386

M.: Metropolitan, P.: Prefecture *(): Number of reports in 2011

(The 2012 Annual Report on HIV/AIDS Surveillance in Japan, the National AIDS Surveillance Committee, Ministry of Health, Labour and Welfare)

Nationality and gender: In 2012, among total 1,002 cases, 954 were males, among which 889 (923 in 2011) were Japanese males, and among 447 AIDS cases, 418 were males, among which 387 (419 in 2011) were Japanese males, i.e., 89% of HIV cases and 87% of AIDS cases were Japanese males.

Infection route and age distribution: Among the 889 Japanese male HIV cases, 683 (77%) were infection through homosexual (including bisexual) contact (Fig. 3). Among them, 20-40 year olds were the majority (Fig. 4). Among Japanese female HIV cases, the majority was infection through heterosexual contact (26 in 31 cases, 84%). No mother-to-child infection was reported in 2012. There were 8 HIV/AIDS cases of infection through intravenous drug use (IDU) (7 Japanese and 1 non-Japanese) in 2012 (5 cases in 2011), and 17 HIV/AIDS cases infected through IDU in combination with other routes (classified as "others") in 2012 (there were 7 cases of "others" in 2011).

Suspected place of infection: Infection occurred mostly outside of Japan till 1994 but afterwards mostly in Japan. In 2012, 86% of all the infections (864/1,002) and 90% of infections of the Japanese (829/920) occurred in Japan.

Districts where doctors made notification: Kanto-Koshinetsu, Kinki and Tokai areas reported majority of HIV and AIDS cases (Table 1).

2. HIV-antibody-positive rates among blood donors: In 2012, there were 68 HIV-positives (62 from males, 6 from females) among total 5,271,103 donated blood specimens, which were equivalent to 1.290 positives (1.701 for males and 0.369 for females) per 100,000 blood donations and lower than the level of 2011 (1.695) (Fig. 5).

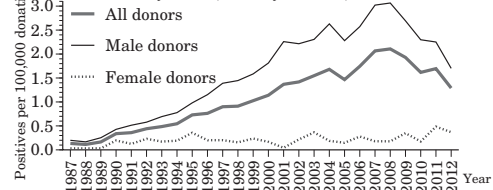
3. HIV antibody tests and consultation provided by the local governments: The number of people receiving the HIV tests at health centers and other facilities provided by the local governments was 131,235 maintaining the same level of 2011 (131,243) (Fig. 6). There were 469 HIV positives in 2012 (453 cases in 2011) corresponding to 0.36% of the tested samples (0.35% in 2011). While the HIV positive rate among samples tested in health centers was 0.29% (294/102,512), the positive rate among samples from facilities other than the health centers was 0.61% (175/28,723), significantly higher than in health centers. The number of counseling provided by the local governments has decreased in successive 4 years (153,583 in 2012 in contrast to 163,006 in 2011).

Conclusion: The number of HIV/AIDS cases reported annually has remained around 1,500 since 2007. The cumulative number of HIV/AIDS exceeded 20,000 in 2012. The fact that AIDS occupied 30% of all the reported cases indicates that significant fraction of the HIV infected people do not consult clinics before development of AIDS, and indicates that implementation of the early HIV diagnosis has been insufficient and many HIV-infected persons are not captured by the present surveillance system. The number of people using the HIV testing supported by local governments is declining since 2008 and there has been no sign of increase.

With knowledge of the current characteristics of HIV/AIDS epidemic, the central and local governments should establish an effective policy for early detection of HIV infections and effective public communications so as to prevent further spread of HIV and to facilitate the early start of therapy of the HIV-infected people. Effective preventive measures may include making HIV testing and medical consultations more accessible in time and place to the male homosexuals, young people, commercial sex workers and their clients, etc. It is important to note that implementing any measures require consideration of human rights and collaboration with appropriate partners, such as, companies, NGOs, and educational and/or medical staff.

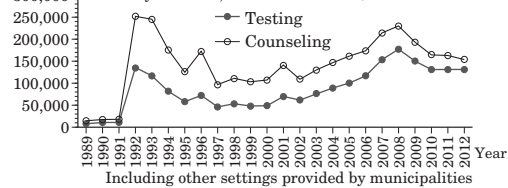
The national HIV/AIDS control policy should include further enhancement of monitoring of HIV/AIDS, public awareness, early diagnosis and early therapeutic intervention, and such a policy could contribute to the global HIV/AIDS control, too. While effective in preventing progression to AIDS, the anti-HIV chemotherapy necessitates the life-long treatment as it does not cure the patients of the virus. The life-long treatment is associated with occurrence of drug-resistant HIV variants and nonlethal but serious pathological conditions due to HIV persistence. These issues should be addressed in the future HIV/AIDS policy.

Figure 5. HIV-antibody positives (by the confirmatory test) among blood donors in Japan, 1987-2012 (Blood and Blood Products Division, Pharmaceutical and Food Safety Bureau, Ministry of Health, Labour and Welfare)



In 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011 and 2012, three of 67, one of 79, two of 82, two of 87, two of 92, two of 78, one of 87, six of 102, zero of 107, two of 102, one of 86, three of 89 and one of 68 donors, respectively, were positive only by the nucleic acid amplification test.

Figure 6. HIV testing and counseling at health centers, 1989-2012 (Specific Disease Control Division, Health Service Bureau, Ministry of Health, Labour and Welfare)



Including other settings provided by municipalities

The statistics in this report are based on 1) the data concerning patients and laboratory findings obtained by the National Epidemiological Surveillance of Infectious Diseases undertaken in compliance with the Law Concerning the Prevention of Infectious Diseases and Medical Care for Patients of Infections, and 2) other data covering various aspects of infectious diseases. The prefectural and municipal health centers and public health institutes (PHIs), the Department of Food Safety, the Ministry of Health, Labour and Welfare, and quarantine stations, have provided the above data.

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