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National Institute of Infectious Diseases and Tuberculosis and Infectious Diseases Control Division, Ministry of Health, Labour and Welfare

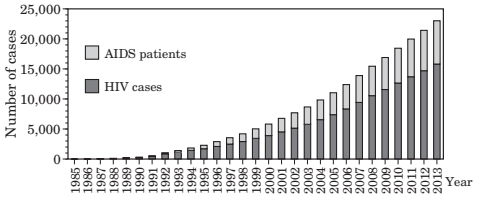
<THE TOPIC OF THIS MONTH>
HIV/AIDS in Japan, 2013

Japan started HIV/AIDS surveillance in 1984. From 1989, it was conducted in compliance with the AIDS Prevention Law and since April 1999, it has been conducted in compliance with the Infectious Diseases Control Law. Physicians must notify all diagnosed HIV/AIDS cases (reporting criteria found in http://www.nih.go.jp/niid/images/iasr/34/403/de4031.pdf). Under the scheme, the patients are notified either as "HIV" or as "AIDS" (*see footnote below for definitions). The data in this article are derived from the National AIDS Surveillance Committee 2013 Annual Report [released by the Specific Disease Control Division, the Ministry of Health, Labour and Welfare (MHLW), http://api-net.jfap.or.jp/status/2013/13nenpo/nenpo_menu.htm].

Around 1,500 new HIV/AIDS cases have been reported annually since 2007. Since then, through 2013, the cumulative number of reported HIV/AIDS cases reached a total of 23,000 (Fig. 1). Globally, there are an estimated 35 million HIV/AIDS cases, and every year, an estimated 2.3 million new HIV infections and 1.6 million deaths (2013 UNAIDS announcement, http://www.unaids.org/en/).

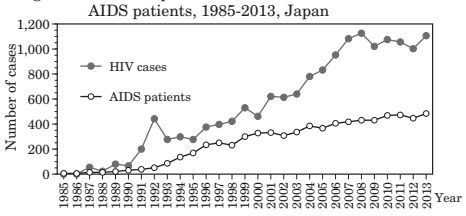
Recent information on HIV/AIDS testing and diagnosis, HIV-associated neurocognitive dysfunctions and other ailments under long-term antiretroviral therapy, and other articles on HIV/AIDS in Japan are found in pp. 205-217.

Figure 1. Cumulative reported number of HIV cases and AIDS patients, 1985-2013, Japan



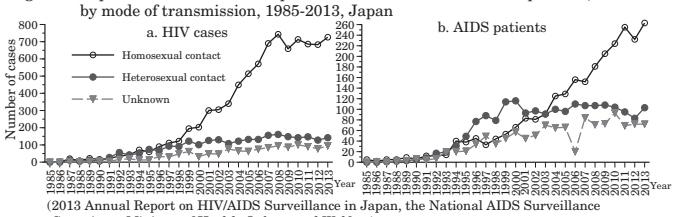
(2013 Annual Report on HIV/AIDS Surveillance in Japan, the National AIDS Surveillance Committee, Ministry of Health, Labour and Welfare)

Figure 2. Annual reported number of new HIV cases and AIDS patients, 1985-2013, Japan



(2013 Annual Report on HIV/AIDS Surveillance in Japan, the National AIDS Surveillance Committee, Ministry of Health, Labour and Welfare)

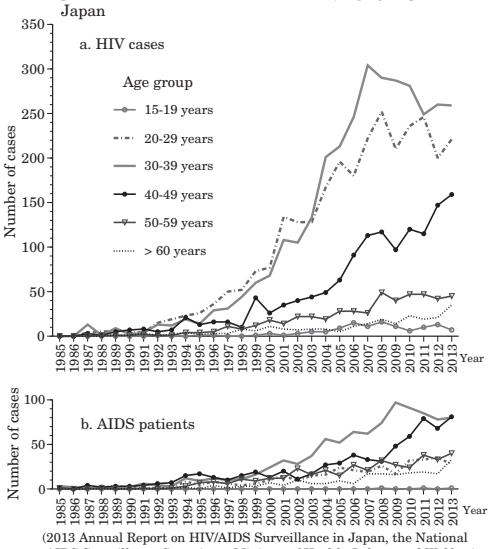
Figure 3. Reported number of new Japanese male HIV cases and AIDS patients, by mode of transmission, 1985-2013, Japan



(2013 Annual Report on HIV/AIDS Surveillance in Japan, the National AIDS Surveillance Committee, Ministry of Health, Labour and Welfare)

1. Trends in HIV/AIDS during 1985-2013: In 2013, 1,106 HIV cases (1,060 males and 46 females) and 484 AIDS cases (466 males and 18 females) were reported. The year 2013 recorded the second highest number of HIV cases (since 2007, annually reported number of HIV cases ranged from 1,002-1,126) and the highest number of AIDS cases since HIV/AIDS surveillance started (Fig. 2). Since 1985 to 2013, excluding infections that occurred through administration

Figure 4. Reported number of new Japanese male HIV cases and AIDS patients due to homosexual contact, by age group, 1985-2013, Japan



(2013 Annual Report on HIV/AIDS Surveillance in Japan, the National AIDS Surveillance Committee, Ministry of Health, Labour and Welfare)

*HIV surveillance in Japan counts a case as an "HIV case" if the case is laboratory diagnosed with HIV infection (but without manifestation of AIDS symptoms), and as an "AIDS case" if a case is laboratory diagnosed with HIV infection and manifests AIDS symptoms at the time of initial diagnosis and report. An HIV infected case once registered as an "HIV case" is not registered as an "AIDS case" even if he/she subsequently develops AIDS.

(Continued on page 204′)

(THE TOPIC OF THIS MONTH-Continued)

Table 1. HIV cases and AIDS patients in Japan, the top 10 prefectures in 2013

a. HIV cases

	Prefecture	Reported number *		Prefecture	per 100,000 population
1	Tokyo M.	363 (372)	1	Tokyo M.	2.729
2	Osaka P.	172 (124)	2	Osaka P.	1.944
3	Kanagawa P.	89 (66)	3	Okinawa P.	1.060
4	Aichi P.	65 (79)	4	Kanagawa P.	0.980
5	Fukuoka P.	46 (43)	5	Kagawa P.	0.914
6	Chiba P.	42 (29)	6	Fukuoka P.	0.904
7	Hyogo P.	32 (27)	7	Aichi P.	0.873
8	Saitama P.	30 (25)	8	Saga P.	0.833
9	Hokkaido P.	23 (20)	9	Okayama P.	0.829
10	Hiroshima P.	21 (10)	10	Hiroshima P.	0.739

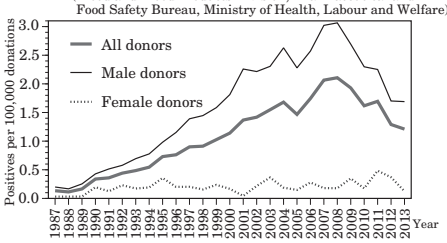
b. AIDS patients

	Prefecture	Reported number*		Prefecture	per 100,000 population
1	Tokyo M.	110 (92)	1	Tokyo M.	0.827
2	Osaka P.	54 (56)	2	Osaka P.	0.610
3	Aichi P.	33 (40)	3	Okinawa P.	0.565
4	Chiba P.	30 (24)	4	Hiroshima P.	0.528
5	Kanagawa P.	30 (34)	5	Shiga P.	0.494
6	Hyogo P.	21 (18)	6	Chiba P.	0.484
7	Shizuoka P.	16 (12)	7	Tochigi P.	0.453
8	Fukuoka P.	16 (17)	8	Aichi P.	0.443
9	Hiroshima P.	15 (14)	9	Gifu P.	0.439
10	Hokkaido P.	14 (7)	10	Ishikawa P.	0.431

M.: Metropolitan, P.: Prefecture *( ): Reported number in 2012

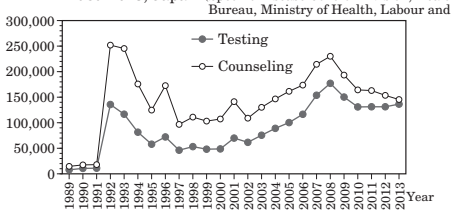
(2013 Annual Report on HIV/AIDS Surveillance in Japan, the National AIDS Surveillance Committee, Ministry of Health, Labour and Welfare)

Figure 5. HIV-antibody positive specimens (based on confirmatory test results) among blood donors in Japan, 1987-2013
(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, 2012 and 2013, 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, one of 68 and one of 63 donors, respectively, were positive only by the nucleic acid amplification test.

Figure 6. Number of HIV testing and counseling at health centers,* 1989-2013, Japan (Specific Disease Control Division, Health Service Bureau, Ministry of Health, Labour and Welfare)



*includes other facilities managed by local government units

of coagulants, the cumulative number of reported HIV and AIDS cases were, respectively, 15,812 (13,578 males and 2,234 females) and 7,203 (6,488 males and 715 females). Based on population size estimates as of October 1, 2013, this corresponds to 12.4 HIV and 5.7 AIDS cases per 100,000 population. The above data do not include 1,439 HIV infections caused by HIV-contaminated coagulation factor products (none since 2008), among whom 691 have died (as of May 31, 2013) ("Nationwide Survey of Blood Coagulation Anomalies").

Nationality and gender: In 2013, among a total of 1,106 HIV cases, 996 (963 males and 33 females) were of Japanese nationality and 110 (97 males and 13 females) were of non-Japanese nationality. Eighty-seven percent (963/1,106) of HIV cases and 91% (438/484) of AIDS cases were Japanese males.

Transmission route and age distribution among HIV cases: Among 1,106 HIV cases, 780 (71%) acquired infection through male homosexual contact (men who have sex with men: MSM); among Japanese males 75% (726/963) acquired infection through MSM (Fig. 3) and the majority were in their 20's to 40's (Fig. 4). Among 46 female HIV cases, 33 were of Japanese nationality, and 79% (26/33) acquired infection through heterosexual contact. One case of mother-to-child infection was reported in 2013. Incidence of reported HIV infections per 100,000 population increased in all age groups, and particularly in the 25-29 year old age group.

Suspected place of infection among HIV cases: Infection occurred mostly outside of Japan until 1994 but the majority have been domestic since then. In 2013, 85% (939/1,106) of all HIV cases and 90% of HIV cases among those of Japanese nationality (893/996) occurred in Japan.

Place of notification based on physician report: Majority of HIV and AIDS cases were reported from the Kanto-Koshinetsu, Kinki and Tokai areas (Table 1).

2. HIV-antibody-positive rates among blood donors: In 2013, among a total of 5,205,819 donated blood specimens, 63 were HIV positive (61 males, 2 females), or 1.210 HIV positive specimens (1.690 for males and 0.125 for females) per 100,000 blood donations, which was lower than that reported in 2012 (1.290) (Fig. 5).

3. HIV antibody tests and consultation provided by local governments: The number of people receiving HIV tests at health centers and other facilities managed by local government units was 136,400 (131,235 tests in 2012), and has been relatively stable over the years (peaked in 2008) (Fig. 6). Among those tested, 453 were HIV positive in 2013 (469 positives in 2012), corresponding to 0.33% positivity (0.36% in 2012). While the HIV positivity rate among specimens tested in health centers was 0.26% (273/105,531), the positivity rate in facilities other than health centers was 0.58% (180/30,869), considerably higher than in health centers. The number of counseling cases provided by local governments continued to decrease, following the same trend as in the preceding 5 years (145,401 in 2013 and153,583 in 2012).

Conclusion: The number of HIV/AIDS cases reported in 2013, 1, 590 cases, was the highest in the history of Japanese HIV/AIDS surveillance (1,449 cases in 2012). Increase in AIDS cases, which occupied 30% of the total, was remarkable; it may indicate that many HIV-infected persons were unaware of their own HIV infection for a long time. For early detection and diagnosis of HIV, information on the characteristics of the current HIV/AIDS epidemic, such as high HIV incidence among young male adults and increasing AIDS cases among those over 60 years of age, should be shared not only at the national level but also at local levels. A policy should be established and appropriate measures should be taken in order to prevent further spread of HIV/AIDS and facilitate early HIV treatment. Making HIV testing and medical consultations more accessible in time and place for those such as male homosexuals (MSM), adolescents and young adults, and commercial sex workers and their clients, are examples of such measures. It is important to note that implementing any measure requires consideration of human rights and coordination with appropriate partners, such as, corporations, NGOs, and educational and/or medical staff.

The national HIV/AIDS control policy should include enhancing understanding of the HIV/AIDS trends and continuing activities regarding public awareness, early diagnosis and early therapeutic intervention. The national policy should be such that it also contributes to global HIV/AIDS control. While effective in preventing progression to AIDS, anti-HIV chemotherapy necessitates life-long treatment as it does not cure the patients of the virus. In addition, life-long treatment is associated with occurrence of drug-resistant HIV variants and appearance of neurological, bone-related (e.g. osteoporosis), cardiovascular and other ailments due to proviral latency of HIV.

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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