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### <THE TOPIC OF THIS MONTH> HIV/AIDS in Japan, 2014

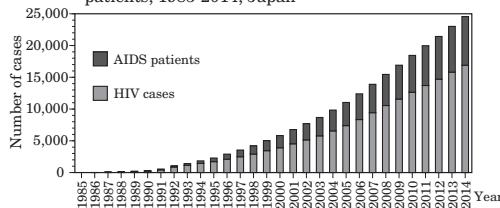
HIV/AIDS surveillance in Japan started in 1984. From 1989, it has been conducted in compliance with the AIDS Prevention Law and since April 1999, it has been conducted in compliance with the Infectious Diseases Control Law, which obliges clinicians to notify all diagnosed HIV/AIDS cases (reporting criteria found in <http://www.nih.go.jp/niid/images/iasr/34/403/de4031.pdf>). The data on HIV and AIDS cases (\*see footnote below for definitions) are derived from the annual report of the National AIDS Surveillance Committee for year 2014 [released by the Specific Disease Control Division, the Ministry of Health, Labour and Welfare (MHLW), [http://api-net.jfap.or.jp/status/2014/14nenpo/14nenpo\\_menu.html](http://api-net.jfap.or.jp/status/2014/14nenpo/14nenpo_menu.html)].

In Japan, around 1,500 new HIV/AIDS cases have been reported annually since 2007. The cumulative number of reported HIV/AIDS cases reached a total of 24,000 HIV/AIDS from 1985 to 2014 (Fig. 1). Globally, there are an estimated 35 million HIV/AIDS cases, and every year, an estimated 2.1 million new HIV infections and 1.5 million deaths (according to the UNAIDS 2014, <http://www.unaids.org/en/>).

**1. Trends of HIV/AIDS during 1985-2014:** In 2014, 1,091 HIV cases (1,041 males and 50 females) and 455 AIDS cases (435 males and 20 females) were reported, which were respectively the third and the fourth highest numbers in the past (the number was 1,002-1,126 for HIV and 418-484 for AIDS in 2007-2014) (Fig. 2). Since 1985 to 2014, total 16,903 HIV (14,619 males; 2,284 females) and 7,658 AIDS (6,923 males; 735 females) (excluding infections that occurred through administration of coagulation factor products) were reported. The "Nationwide Survey of Blood Coagulation Anomalies" has additionally identified total 1,439 HIV infections caused by HIV-contaminated coagulation factor products including 700 deceased cases (as of May 31, 2014).

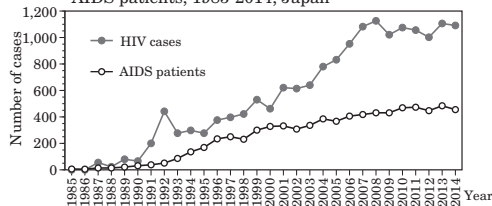
**Nationality and gender:** In 2014, among a total of 1,091 HIV cases, 994 were of Japanese nationality (959 males, 35 females) and 97 were of non-Japanese nationality (82 males and 15 females). Japanese males occupied 88% (959/1,091) of HIV cases and 90% (409/455) of AIDS cases.

Figure 1. Cumulative reported number of HIV cases and AIDS patients, 1985-2014, Japan



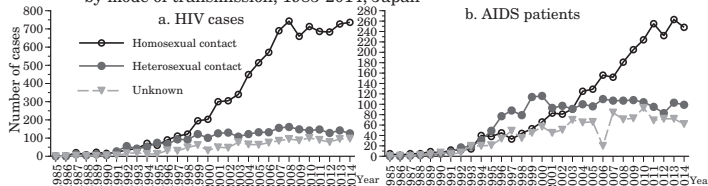
(2014 Annual Report on HIV/AIDS Surveillance in Japan, the National AIDS Surveillance Committee, Ministry of Health, Labour and Welfare)

Figure 2. Annual reported number of new HIV cases and AIDS patients, 1985-2014, Japan



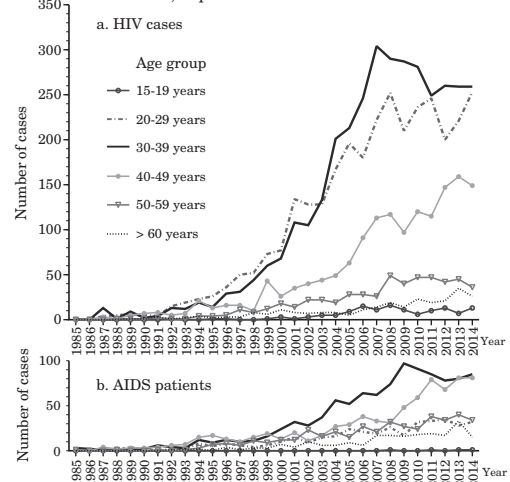
(2014 Annual Report on HIV/AIDS Surveillance in Japan, the National AIDS Surveillance Committee, Ministry of Health, Labour and Welfare)

Figure 3. Reported number of new Japanese male HIV cases and AIDS patients, by mode of transmission, 1985-2014, Japan



(2014 Annual Report on HIV/AIDS Surveillance in Japan, the National AIDS Surveillance Committee, Ministry of Health, Labour and Welfare)

Figure 4. Reported number of new Japanese male HIV cases and AIDS patients due to homosexual contact, by age group, 1985-2014, Japan



(2014 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.

\*\*Bisexual contact is counted as homosexual contact.

(THE TOPIC OF THIS MONTH-Continued)

Table 1. HIV cases and AIDS patients in Japan, the top 10 prefectures in 2014

a. HIV cases			
Prefecture	Reported*	Prefecture	per
1 Tokyo M.	410 (363)	1 Tokyo M.	3.083
2 Osaka P.	156 (172)	2 Osaka P.	1.763
3 Kanagawa P.	68 ( 89)	3 Okinawa P.	1.625
4 Aichi P.	67 ( 65)	4 Fukuoka P.	0.904
5 Fukuoka P.	46 ( 46)	5 Aichi P.	0.900
6 Chiba P.	36 ( 42)	6 Ishikawa P.	0.777
7 Saitama P.	24 ( 30)	7 Oita P.	0.764
8 Hyogo P.	23 ( 32)	8 Kanagawa P.	0.749
8 Okinawa P.	23 ( 15)	9 Miyazaki P.	0.714
10 Hokkaido P.	19 ( 23)	10 Gunma P.	0.706

b. AIDS patients			
Prefecture	Reported*	Prefecture	per
1 Tokyo M.	96 (110)	1 Okinawa P.	0.848
2 Osaka P.	53 ( 54)	2 Fukui P.	0.755
3 Aichi P.	32 ( 33)	3 Tokyo M.	0.722
4 Kanagawa P.	29 ( 30)	4 Osaka P.	0.599
5 Fukuoka P.	24 ( 16)	5 Gifu P.	0.536
6 Saitama P.	23 ( 11)	6 Tottori P.	0.519
7 Chiba P.	21 ( 30)	7 Tochigi P.	0.504
8 Okinawa P.	12 ( 8)	8 Fukuoka P.	0.472
9 Ibaraki P.	11 ( 5)	9 Miyazaki P.	0.446
9 Gifu P.	11 ( 9)	10 Nara P.	0.434
9 Hyogo P.	11 ( 21)		

M.: Metropolitan, P.: Prefecture; \*( ): Reported number in 2013  
(2014 Annual Report on HIV/AIDS Surveillance in Japan, the National AIDS Surveillance Committee, Ministry of Health, Labour and Welfare)

### Transmission route and age distribution among HIV cases:

Infection through male homosexual contacts (men who have sex with men: MSM)\*\* occupied 72% of total HIV cases (789/1,091) and 77% of Japanese male HIV cases (736/959) (Fig. 3) and the majority were in their 20's to 40's (Fig. 4). Among Japanese female HIV cases, the majority was infection through heterosexual contact (32 in 35 cases, 91%). One case of mother-to-child infection was reported in 2014.

There were 7 HIV/AIDS cases infected through intravenous drug use (IDU), which were all Japanese nationality, and 35 "other cases" that include blood transfusion-related cases and cases with multiple infection routes, such as, homosexual contacts and IDU. Incidence of reported HIV infections per 100,000 population increased in almost all age groups, and particularly in the 25-29 year old age group.

**Suspected place of infection:** Infection occurred mostly abroad until 1992 but the majority have been domestic since then. In 2014, 87% of all HIV cases (951/1,091) and 91% of HIV cases among those of Japanese nationality (901/994) occurred in Japan.

**Place of notification based on physician report:** Majority of HIV and AIDS cases were reported from the Kanto-Koshinetsu area including Tokyo (HIV: 581; AIDS: 203) and Kinki area (HIV: 206; AIDS: 82) have been the top two in reporting the large numbers HIV/AIDS, followed by Tokai area. In 2014, however, Tokai area was superseded by Kyushu area (HIV: 109; AIDS: 82), which has been reporting increasingly in recent years. In Okinawa Prefecture in the Kyushu area, number of HIV per 100,000 population was the third highest among the 47 prefectures and that of AIDS was the top of all the prefectures (Table 1).

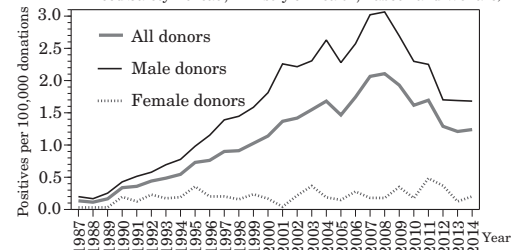
**2. HIV-antibody-positive rates among blood donors:** In 2014, among a total of 4,999,127 donated blood specimens, 62 were HIV positives (59 males, 3 females), or 1.240 HIV positive specimens (1.681 for males and 0.202 for females) per 100,000 blood donations (Fig. 5).

**3. HIV antibody tests and consultation provided by local governments:** The number of people receiving the HIV tests at health centers and other facilities managed by local government units was 145,048, which was slightly higher than that in 2013 (136,400) (Fig. 6). Among those tested, 490 were HIV positive in 2014 (453 cases in 2013), corresponding to 0.34% positivity (0.33% in 2013). While the HIV positivity rate among specimens tested in health centers was 0.27% (298/111,743), the positivity rate in facilities other than health centers was 0.58% (192/33,305), considerably higher than in health centers. The number of counseling cases provided by local governments was 150,993 in 2014, which was slightly higher than that in the previous year (145,401 in 2013).

**Conclusion:** The number of HIV/AIDS cases reported in 2014 was 1,546 cases (1,590 in 2013), the third highest in the past. The number of AIDS cases has not been reduced, and about 30% of the HIV/AIDS cases in 2014 were detected after development of AIDS, suggesting that many HIV-infected persons were unaware of their own HIV infection for a long time. With knowledge of the current characteristics of HIV/AIDS epidemic (high HIV incidence among people in their 20's and increase of AIDS among those over 60 years of age), the central and local governments should establish an effective policy for early detection of HIV infections and effective public communications in order to prevent further spread of HIV/AIDS and facilitate early HIV treatment. Effective preventive measures include making HIV testing and medical consultations more accessible in time and place for those such as MSM, adolescents and young adults, and commercial sex workers and their clients. It is important to note that implementing any measure requires consideration of human rights and coordination with appropriate partners, such as, medical, educational, corporations and non-governmental organization (NGO)s.

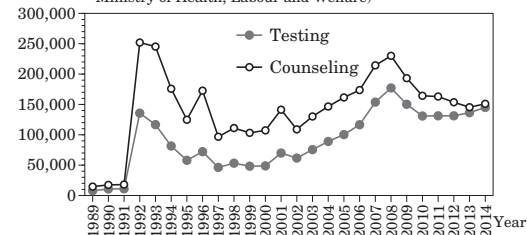
The national HIV/AIDS control policy should include enhancing understanding of the HIV/AIDS trends and continuing activities regarding, public awareness, early diagnosis and early therapeutic intervention. The national policy should be such that it also contributes to global HIV/AIDS control. While effective 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 serious pathological conditions due to latent infection under antiretroviral therapy, such as neurocognitive dysfunction, osteoporosis, cardiovascular disorder, and non-AIDS-defining cancers, which are new challenges for HIV/AIDS management.

Figure 5. HIV-antibody positive specimens (based on confirmatory test results) among blood donors in Japan, 1987-2014 (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, 2013 and 2014, 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, zero of 62 donors, respectively, were positive only by the nucleic acid amplification test.

Figure 6. Number of HIV testing and counseling at health centers\* 1989-2014, Japan (Specific Disease Control Division, Health Service Bureau, Ministry of Health, Labour and Welfare)



\*includes other facilities managed by local government units

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.

Infectious Disease Surveillance Center, National Institute of Infectious Diseases

Toyama 1-23-1, Shinjuku-ku, Tokyo 162-8640, JAPAN Tel (+81-3)5285-1111