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<THE TOPIC OF THIS MONTH> HIV/AIDS in Japan, 2015

HIV/AIDS surveillance in Japan started in 1984. It was conducted under the AIDS Prevention Law from 1989 to March 1999 and since April 1999, has been operating under the Infectious Diseases Control Law. Physicians who have made a diagnosis of HIV/AIDS are required to notify all such cases (see <http://www.nih.go.jp/niid/images/iasr/34/403/de4031.pdf> for the reporting criteria). The data used in this article were derived from the annual report of the National AIDS Surveillance Committee for the year 2015 (released by the Tuberculosis and Infectious Diseases Control Division, the Ministry of Health, Labour and Welfare (MHLW), http://api-net.jfap.or.jp/status/2015/15nenpo/15nenpo_menu.html). HIV/AIDS cases are classified into two categories: as an "HIV case" if HIV infection was detected before clinical manifestation of AIDS, and as an "AIDS case" if the infection was detected after manifestation of AIDS symptoms*.

The cumulative number of reported HIV/AIDS cases (excluding coagulating agent-related cases) from 1985-2015 was 17,909 for HIV (15,567 males; 2,342 females) and 8,086 for AIDS (7,332 males; 754 females) (Fig. 1). According to the National Survey of Blood Coagulation Abnormality Cases (as of 31 May 2015), the cumulative number of the coagulating agent-related HIV infected cases was 1,439, including 706 deceased cases.

Globally, an estimated 36.7 million people are currently HIV-infected. Every year, an estimated 2.1 million acquire HIV infection and 1.2 million infected people are estimated to die from the infection (according to the UNAIDS Fact Sheet 2016, <http://www.unaids.org/en/resources/fact-sheet>).

Figure 1. Cumulative reported number of HIV cases and AIDS patients, 1985-2015, Japan

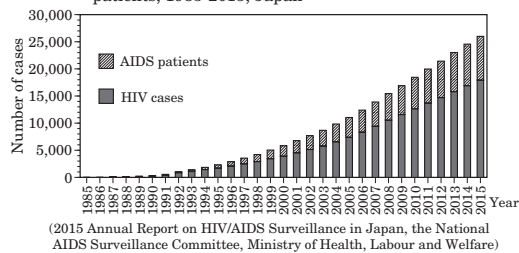


Figure 2. Annual reported number of new HIV cases and AIDS patients, 1985-2015, Japan

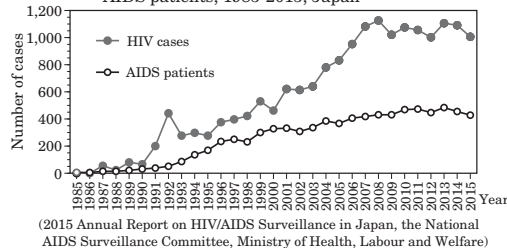


Figure 3. Reported number of new Japanese male HIV cases and AIDS patients, by mode of transmission, 1985-2015, Japan

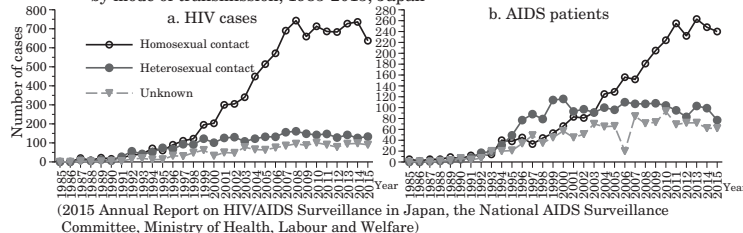
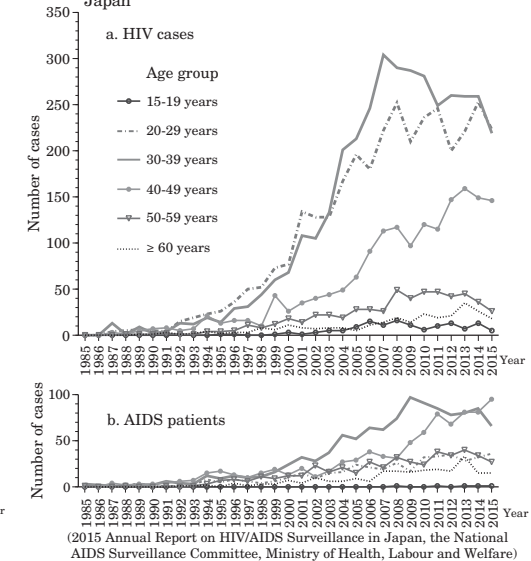


Figure 4. Reported number of new Japanese male HIV cases and AIDS patients due to homosexual contact, by age group, 1985-2015, Japan



*HIV surveillance in Japan counts a case as an "HIV case" if a 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.

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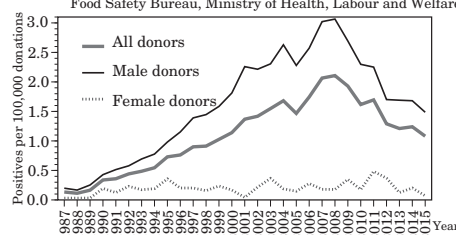
Table 1. HIV cases and AIDS patients in Japan, by top 10 prefectures in 2015

a. HIV cases			
Prefecture	Reported number*	Prefecture	per 100,000 population
1 Tokyo	364 (410)	1 Tokyo	2.718
2 Osaka	168 (156)	2 Osaka	1.901
3 Aichi	62 (67)	3 Okinawa	1.196
4 Kanagawa	54 (68)	4 Okayama	0.884
5 Hokkaido	35 (19)	5 Aichi	0.832
6 Chiba	32 (36)	6 Tokushima	0.785
7 Fukuoka	30 (46)	7 Nara	0.727
8 Saitama	22 (24)	8 Miyazaki	0.718
9 Shizuoka	21 (16)	9 Kagawa	0.714
9 Hyogo	21 (23)	10 Gifu	0.686

b. AIDS patients			
Prefecture	Reported number*	Prefecture	per 100,000 population
1 Tokyo	71 (96)	1 Kagawa	0.917
2 Osaka	53 (53)	2 Okinawa	0.704
3 Aichi	43 (32)	3 Kochi	0.678
4 Kanagawa	33 (29)	4 Miyazaki	0.628
5 Fukuoka	27 (24)	5 Osaka	0.600
6 Chiba	22 (21)	6 Aichi	0.577
7 Saitama	13 (23)	7 Fukuoka	0.530
8 Hokkaido	12 (9)	8 Tokyo	0.530
9 Gifu	10 (11)	9 Gifu	0.490
9 Hiroshima	10 (10)	10 Shiga	0.424
9 Okinawa	10 (12)		

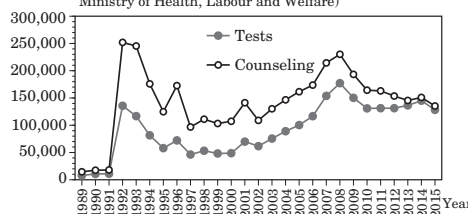
*(): Reported number in 2014
(2015 Annual Report on HIV/AIDS Surveillance in Japan, the National AIDS Surveillance Committee, Ministry of Health, Labour and Welfare)

Figure 5. HIV-antibody positive specimens (based on confirmatory test results) among blood donors in Japan, 1987-2015 (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, 2014 and 2015, 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, one of 63, zero of 62 and one of 53 donors, respectively, were positive only by the nucleic acid amplification test.

Figure 6. Number of HIV tests and counseling sessions at health centers*, 1989-2015, Japan (Specific Disease Control Division, Health Service Bureau, Ministry of Health, Labour and Welfare)



*includes other facilities managed by local government units

(MSM), including bisexual contacts, occupied 69% (691/1,006); among Japanese male HIV cases, MSM occupied 74% (637/860) (Fig. 3). Most of them were in their 20's to 40's (Fig. 4). Male HIV cases infected through heterosexual contacts occupied 15%, both for the total HIV cases (153/1,006) and for the Japanese HIV cases (133/860). Among Japanese female HIV cases, 92% (35/38) were infected through heterosexual contact. There was one maternal infection case each in 2013 and 2014. As for infection through intravenous drug injection, 1-5 cases have been reported every year since 2001 (one case in 2015), except in 2013 when there was none. Notification rate of HIV infections per 100,000 population have remained high in most age groups in recent years.

Suspected place of infection: Infections occurred mostly abroad until 1992 but more recently, the majority of infections have been in Japan. In 2015, 84% of all HIV cases (845/1,006) and 89% among those among Japanese nationality (797/898) acquired infection in Japan.

Place of notification based on physicians' report: Majority of HIV and AIDS cases were reported from the Kanto-Koshinetsu area, which includes Tokyo (HIV: 510 cases; AIDS: 158 cases), and the Kinki area (HIV: 218 cases; AIDS: 81 cases). Based on notifications of HIV or AIDS per 100,000 population by prefecture, some prefectures in the Chugoku-Shikoku area ranked in the top ten prefectures. (Table 1).

2. HIV-antibody-positivity rates among blood donors: In 2015, among 4,909,156 donated blood specimens, 53 were HIV positive (52 males; 1 female), which corresponds to 1.080 HIV positive specimens (male: 1.486; female: 0.071) per 100,000 blood donations (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 governments was 128,241 in 2015, which was slightly lower than that in 2014 (145,048) (Fig. 6). Among those tested, 463 were HIV positive in 2015 (490 cases in 2014), corresponding to 0.36% positivity (0.34% in 2014). While the HIV positivity rate among specimens tested in health centers was 0.28% (273/96,740), the positivity rate in facilities other than health centers was 0.60% (190/31,501), considerably higher than that in the health centers. The number of counselling sessions provided by the local governments was 135,282 in 2015, which was slightly lower than that in 2014 (150,993).

Conclusion: The number of HIV/AIDS cases reported in 2015 was 1,434 (1,546 in 2014), ranking as the 9th highest to date. About 30% of the HIV/AIDS cases in 2015 were detected after development of AIDS, suggesting that many HIV-infected persons were unaware of their own HIV infection. Recognizing the relatively high HIV incidence among people in their 20's and increasing number of AIDS cases among those aged 60 years or older, the central and local governments should establish a policy for early detection of HIV infection and develop effective methods for preventing further spread of HIV/AIDS while facilitating 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, non-governmental, and educational sectors.

The national HIV/AIDS control policy should include enhancement of the understanding of the HIV/AIDS trends in Japan, raising public awareness, and development of early diagnosis and early therapeutic interventions. 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 patient. 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, and cardiovascular disorder, which are new challenges for HIV/AIDS management.

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.