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<THE TOPIC OF THIS MONTH> HIV/AIDS in Japan, 2019

HIV/AIDS surveillance in Japan started in September 1984. It was conducted under the AIDS Prevention Law between February 1989 and March 1999, and has operated under the Infectious Diseases Control Law since April 1999. Under the law, physicians must notify all diagnosed cases (see <http://www.niid.go.jp/niid/images/iasr/34/403/de4031.pdf>). The data presented in this article are from the annual report of the National AIDS Surveillance Committee for the year 2019 (published by the Tuberculosis and Infectious Diseases Control Division, the Ministry of Health, Labour and Welfare (MHLW), <https://api-net.jfap.or.jp/status/japan/nenpo.html>).

For surveillance purposes, HIV/AIDS cases are classified into two categories, "HIV" or "AIDS" (see footnote*). The cumulative number of notified cases (excluding coagulating agent-related cases) from 1985-2019 was 21,739 for "HIV" (19,216 males; 2,523 females) and 9,646 for "AIDS" (8,793 males; 853 females) (Fig. 1). According to the National Survey of Blood Coagulation Abnormality Cases (as at 31 May 2019), the cumulative number of coagulating agent-related HIV-infected cases was 1,440, including 720 deaths. An estimated 38.0 million people are currently infected with HIV worldwide. Each year, 1.7 million become infected and an estimated 690,000 die from the disease (UNAIDS FACT SHEET 2020; <https://www.unaids.org/en/resources/fact-sheet>).

HIV/AIDS cases notified in Japan in 2019: The number of new HIV/AIDS cases notified annually has exceeded 1,300 since 2006, and has remained at a flat to slightly decreasing trend after peaking at 1,590 in 2013. In 2019, 903 "HIV" (857 males; 46 females) and 333 "AIDS" (318 males; 15 females) cases were notified (Fig. 2). Among the total 903 "HIV" cases, 770 were Japanese (741 males; 29 females) and 133 were non-Japanese (116 males; 17 females), and Japanese males accounted for 82% of the total "HIV" cases (741/903). The number of newly notified foreign male HIV cases increased in 2015-2017, but has remained almost unchanged since 2017. Among all "HIV" cases, 72% (651/903) were MSM (men who have sex with men, including bisexual contacts), and among Japanese male "HIV" cases, 78% (575/741) were MSM (Fig. 3), with the majority in their 20's to 40's (Fig. 4). On the other hand, among the total 903 HIV cases, 99 males (11%) were infected through heterosexual contact, and among 741 Japanese male cases, 81 (11%) were infected through heterosexual contact. Among 29 Japanese HIV-infected females, 27 were infected heterosexually and 2 were infected through unknown routes. Among Japanese male cases, intravenous drug use has been notified annually since 2001 (except in 2013, 2017, and 2018) and two cases were notified in 2019.

Suspected place of infection: Until 1992, the majority

Figure 1. Cumulative notified number of HIV cases and AIDS patients, 1985-2019, Japan

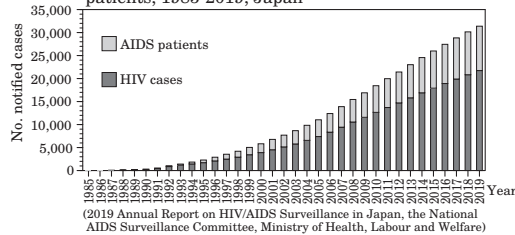


Figure 2. Annual notified number of new HIV cases and AIDS patients, 1985-2019, Japan

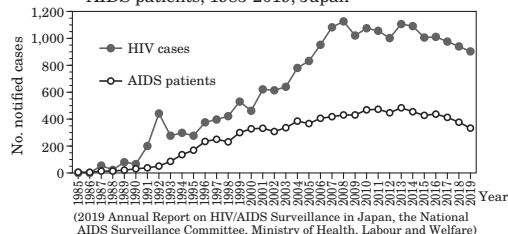


Figure 3. Notified number of new Japanese male HIV cases and AIDS patients by mode of transmission, 1985-2019, Japan

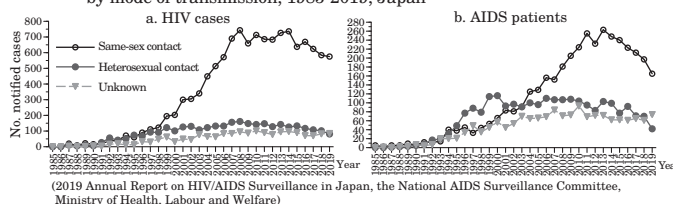
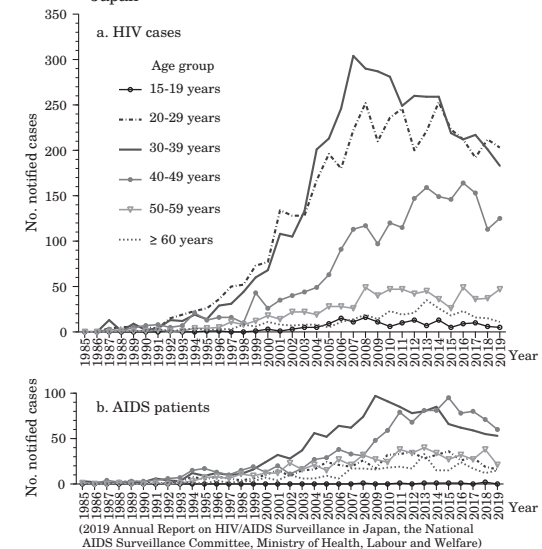


Figure 4. Notified number of new Japanese male HIV cases and AIDS patients due to same-sex contact by age group, 1985-2019, Japan



(THE TOPIC OF THIS MONTH-Continued)

Table. Notifications of HIV cases and AIDS patients in Japan, by top 10 prefectures in 2019

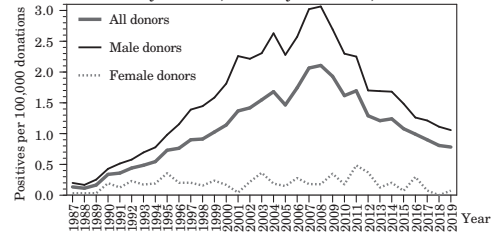
a. HIV cases			
Prefecture	Reported number*	Prefecture	per 100,000 population
1 Tokyo	335 (351)	1 Tokyo	2.406
2 Osaka	106 (116)	2 Osaka	1.203
3 Aichi	66 (76)	3 Aichi	0.874
4 Kanagawa	44 (53)	4 Fukuoka	0.862
4 Fukuoka	44 (39)	5 Okinawa	0.757
6 Saitama	31 (18)	6 Saga	0.736
7 Chiba	30 (36)	7 Gunma	0.721
8 Hokkaido	27 (21)	8 Kagawa	0.628
9 Hyogo	19 (21)	9 Tochigi	0.569
10 Gunma	14 (6)	10 Tokushima	0.549

b. AIDS patients			
Prefecture	Reported number*	Prefecture	per 100,000 population
1 Tokyo	71 (72)	1 Fukuoka	0.568
2 Osaka	34 (41)	2 Okinawa	0.551
3 Aichi	29 (26)	3 Tokyo	0.510
3 Fukuoka	29 (33)	4 Shiga	0.424
5 Kanagawa	27 (26)	5 Osaka	0.386
6 Saitama	15 (14)	6 Aichi	0.384
7 Hokkaido	12 (8)	7 Oita	0.352
8 Chiba	11 (15)	7 Gifu	0.352
9 Shizuoka	8 (13)	9 Kagoshima	0.312
9 Okinawa	8 (7)	10 Kanagawa	0.294

* (): Reported number in 2018

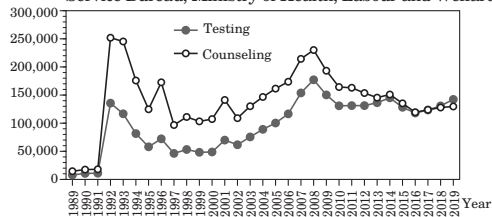
(2019 Annual Report on HIV/AIDS Surveillance in Japan, the National AIDS Surveillance Committee, Ministry of Health, Labour and Welfare)

Figure 5. HIV-antibody positive specimens (based on confirmatory test results) among blood donors in Japan, 1987-2019 (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, 2015, 2016, 2017, 2018 and 2019, 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, one of 53, one of 48, zero of 43, two of 38 and three of 38 positive donors, respectively, were positive only by the nucleic acid amplification test.

Figure 6. Number of HIV testing and counseling at health centers*, 1989-2019, Japan (Tuberculosis and Infectious Disease Control Division, Health Service Bureau, Ministry of Health, Labour and Welfare)



* includes other facilities managed by local government units

of infections were acquired abroad; thereafter, most infections were acquired in Japan. In 2019, 82% of all “HIV” cases (742/903) and 87% of “HIV” cases in Japanese nationals (667/770) were presumed to have acquired infection in Japan.

Place of notification (based on place of notifying physician): Areas that notified many HIV/AIDS cases in 2019 were the Kanto-Koshinetsu area (includes Tokyo), which notified 480 “HIV” and 143 “AIDS” cases, the Kinki area with 149 “HIV” and 52 “AIDS” cases, the Kyushu area with 84 “HIV” and 55 “AIDS” cases, and the Tokai area with 89 “HIV” and 49 “AIDS” cases. When prefectures were compared by notifications per 100,000 population, 5 of 8 prefectures in Kyushu were in the top 10 (Table).

Reference information 1. HIV antibody positivity among blood donors: In 2019, among 4,859,253 donated blood specimens, 38 were HIV-positive (37 males; 1 female), which corresponds to 0.782 HIV-positive specimens (male: 1.057; female: 0.074) per 100,000 blood donations (Fig. 5).

Reference information 2. HIV antibody tests and consultations provided by local governments: The number of HIV antibody tests conducted by local governments at public health centers and other facilities was 142,260 in 2019, which increased from that in 2018 (130,759) (Fig. 6). The number of HIV antibody-positive cases was 437 (385 antibody-positive cases in 2018) and the positivity rate was 0.31% (0.29% in 2018). The positivity rate was 0.24% (258/105,859) in the tests conducted at public health centers and 0.49% (179/36,401) in tests at other facilities, being higher at the latter. In addition, the number of persons who used consultation services in 2019 was 129,695, increasing from 2018 (127,830 consultations).

Conclusion: The number of HIV/AIDS cases notified in 2019 was 1,236 (1,317 in 2018). Approximately 27% of the HIV/AIDS cases in 2019 were detected after the development of AIDS, which suggests that there are HIV-infected persons who are unaware of their own infection. Based on the Guidelines for AIDS Prevention, it is important to raise awareness regarding the prevention and early detection of HIV infection, and plan and implement effective countermeasures based on the care cascade framework (see p.177 of this issue). Preventive measures include making HIV testing and medical consultations more accessible both time- and location-wise for those where prevention is important, such as MSM and commercial sex workers. It is important to be aware and mindful of human rights and coordination among key stakeholders (e.g., healthcare workers, non-governmental organizations, and those in the education sector).

To control HIV/AIDS in Japan, it is necessary that the national HIV/AIDS control efforts be connected to global HIV control efforts, in addition to efforts aimed at monitoring and understanding domestic infection trends, raising awareness for prevention, and early diagnosis and treatment. Although it effectively prevents progression to AIDS, anti-HIV chemotherapy does not eliminate HIV from the patient. Life-long treatment is necessary, and it is associated with the development 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.

*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-indicator diseases), and as an “AIDS case” if a case is laboratory diagnosed with HIV infection and manifests AIDS-indicator diseases 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. However, “AIDS cases” reported through 31 March 1999 include those who subsequently developed AIDS.

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 Act on the Prevention of Infectious Diseases and Medical Care for Patients with Infectious Diseases, and 2) other data covering various aspects of infectious diseases. The prefectural and municipal health centers and public health institutes (PHIs), the Department of Environmental Health and Food Safety, the Ministry of Health, Labour and Welfare, and quarantine stations, have provided the above data.

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