

Status of AIDS in the Americas

In 1983 PAHO initiated regionwide surveillance for acquired immunodeficiency syndrome (AIDS). Because AIDS was confined almost exclusively to the United States and certain high risk population groups, a very simple reporting system was installed based on the Centers for Disease Control's case definition. Member countries were requested to report the total number of cases of AIDS and deaths due to AIDS every six months. Since the objective was to follow the spread of AIDS within the Region, no attempts were made to distinguish AIDS-related complex from advanced AIDS cases, nor to include AIDS infection once antibody testing became available.

This report summarizes the available data based on the PAHO surveillance system, as well as data from several special studies carried out in some of the countries. The data are sufficient to define the overall picture

of AIDS in the Americas, although the exact magnitude of the AIDS problem is not known precisely.

Table 1 presents the total number of AIDS cases and deaths through 31 December 1986, by subregion and country. Mexico and Brazil are considered to be separate subregions. Since the initiation of surveillance, a total of 32,560 cases and 17,910 deaths have been reported. The overall case fatality rate (number of deaths as a proportion of the number of cases) is 56%. However, this rate varies from a low of 24% in the Latin Caribbean Region to a high of 61% in Central America and Panama. In countries where there is a sufficient number of cases and deaths to stabilize the rate, it ranges between 40 and 55%.

Four countries, Brazil, Canada, Haiti and the United States have the most cases and contributed a total of 31,357 cases or 96% of the total. Neither incidence

Table 1. Number of AIDS cases and deaths reported in the Americas through 31 December, 1986.

Subregion and country	No. of confirmed cases	No. of deaths	Subregion and country	No. of confirmed cases	No. of deaths
Latin America	2,119	919	Caribbean	464	225
<i>Andean Group</i>	116	80	Antigua and Barbuda	2	2
Bolivia	1 ^a	1 ^a	Bahamas	85	29
Colombia	30	15	Barbados	15	9
Ecuador	7 ^a	4 ^a	Belize	1	0
Peru	9 ^a	6 ^a	Cayman Island	1	1
Venezuela	69	54	French Guiana	58	41
<i>Southern Cone</i>	100	57	Grenada	3	3
Argentina	69	37	Guadeloupe	40	23
Chile	22	14	French Antilles	92 ^c	... ^e
Paraguay	1	1	Jamaica	6	6
Uruguay	8	5	Martinique	16	10
Brazil	921	497 ^b	St. Christopher and Nevis	1 ^a	0 ^a
<i>Central American Isthmus</i>	62	38	Saint Lucia	3 ^a	2 ^a
Costa Rica	16	11	Saint Vincent and the Grenadines	3 ^a	2 ^a
El Salvador	6	3	Suriname	2 ^a	2 ^a
Guatemala	15	8	Trinidad and Tobago	134	93
Honduras	13	7	Turks and Caicos Islands	2	2
Panama	12	9 ^c	North America	29,977	16,766
Mexico	316	100 ^d	Bermuda	48	29
<i>Latin Caribbean</i>	604	147	Canada	926	436
Cuba	1 ^a	1 ^a	United States of America	29,003 ^f	16,301 ^f
Dominican Republic	96	35			
Haiti	507 ^a	111 ^a	Total	32,560	17,910

^aDid not report for second semester of 1986 (1 July through 31 December).

^bThrough 20 November 1986.

^cThrough 30 September 1986.

^dThrough 15 January 1987.

^eThrough 15 September 1986.

^fIncludes 76 cases diagnosed prior to 1981; of these 63 are known to have died.

strengthening of research (defining of policies and priority areas, articulation with services, improving methodologies, identification of sources of financing, and assimilation of findings into services).

Establishment of an Epidemiological Analysis and Information Unit in Ecuador

In response to one of the recommendations of the Seminar on the Uses and Prospects of Epidemiology in Ecuador, held in Ibarra from 28 to 30 August 1985, and to the proposal of the National Directorate for Epidemiological Control and Surveillance, the Ministry of Public Health has established an Epidemiological Analysis and Information Unit. This unit will be part of the Ministry's regular statutory organization and its purpose will be to maximize the use of epidemiological information and the epidemiological method in disease control. Among its functions are the following:

- Improve the information system, particularly for notifiable diseases, so as to reduce underrecording and improve the promptness of reports in order to provide information that may be of use in establishing effective surveillance and control measures.

- Streamline the processing of routine information generated in provincial units and establish mechanisms for its rapid analysis.

- Make complete analyses and adopt new indicators so that the information generated may be of use in evaluating and monitoring programs.

- Feed processed information back to operational units. It is hoped to double the number of copies of the *Boletín Epidemiológico* produced in the first year and to increase its distribution.

This action has given legal standing to some of the operations promoted in recent years as part of the modernization of epidemiological practice in the Ministry of Public Health. However, for this effort to produce the desired results, the activities for strengthening training and research in epidemiology will have to be undertaken soon.

Journal of the Peruvian Epidemiological Society

To contribute to the understanding of leading national problems and their causes and at the same time to circulate local and foreign information on public health, the Peruvian Epidemiological Society is publishing a quarterly *Revista de la Sociedad Peruana de Epidemiología*. This journal contains the following sections: Trabajos originales (Original Papers), offering unpublished papers on epidemiological and public health aspects of national interest; Recordando epi-

miología (Epidemiological Reminders), which presents concepts of epidemiology and epidemiological methodology not in frequent use; Revistas (Journals), which contains articles of unusual interest originally published in other journals; Contribución (Contributions), presenting notes conveying information on some specific subject and commentary on epidemiological problems; and finally, Editorial (The Editorial), in which the management of the journal states the views of the editorial board. In addition to this publication, there is the *Boletín de Enfermedades Transmisibles* (Communicable Diseases Bulletin), prepared by the Ministry of Health.

Persons interested in receiving this publication should write to: *Revista de la Sociedad Peruana de Epidemiología*, Av. Lima 701, Lima 32, Peru.

***Epidemiología*: New Mexican Bulletin**

The bulletin *Epidemiología* is the product of a series of coordinating actions being carried out in Mexico by the Inter-Institutional Epidemiological Surveillance Committee, and has been appearing monthly since January 1986. It is based on information generated by the leading institutions of the National Health System and its primary purposes are to advise on the frequency and distribution of diseases subject to epidemiological surveillance, publish epidemiological studies of good technical and scientific quality, and disseminate current knowledge on the epidemiology, prevention, and control of diseases whose nature and frequency make them major health problems.

This bulletin does not replace other epidemiological notification and surveillance arrangements needed for immediate decision-making and maintained by each institution. The information presented is of a more general nature, useful for medium-and long-term planning. The publication also serves as a vehicle for conveying information on academic events in the area of epidemiology. It is aimed chiefly at the physicians and personnel who generate the epidemiological information in health institutions, in hopes that the material published will encourage and in some manner reward their efforts. It also supplies data and disseminates knowledge useful to all health workers, and especially to those responsible for the planning and implementation of programs for the study, prevention, and correction of the country's health problems.

Persons interested in receiving this publication should write to: *Epidemiología*, Boletín Mensual, Aniceto Ortega 1321, 7º piso, México 03100, D.F., Mexico.

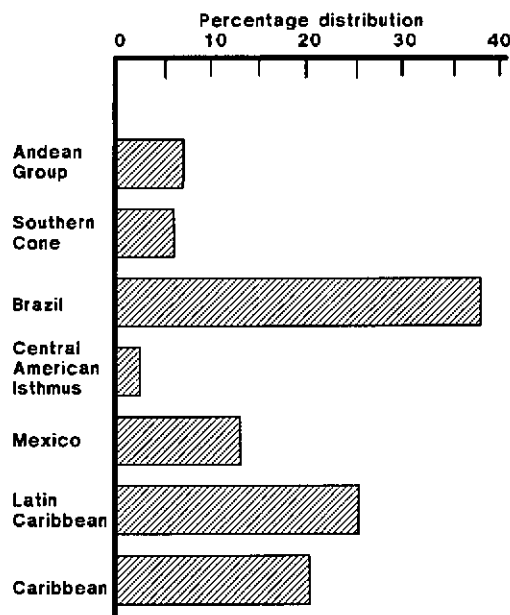
nor prevalence rates are calculated since it is difficult to determine which cases are new and which cases are prevalent during a given time period. Cumulative evidence rates have not been calculated outside of the USA and Canada due to uncertainties regarding the validity of both the numerator and denominator. Excluding North America, there have been 2,583 cases in all the remaining 40 countries in the Americas.

Figure 1 presents the proportional distribution of AIDS cases in the Americas, by geographical subregion excluding North America. The Latin Caribbean subregion contributed 23% of the cases (604) due to the large contribution by Haiti, 507 cases. It is worrisome that the Caribbean (excluding the Latin Region) contributed 464 cases or 18% of the total from a population of approximately 6 million people, while Brazil contributed 921 cases or 36% from a population of approximately 130 million, that is, 20 times the population but only 2 times the number of cases.

The occurrence of opportunistic infections as markers for AIDS is variable throughout the Region. The specific frequencies of certain infections are essentially the same as in the United States, with some exceptions which still need further clarification. Diarrheal illness is more common in Haiti and generalized *Mycobacterium tuberculosis* infection is more common in Brazil and the Dominican Republic.

Table 2 is a composite of data obtained from multiple studies with varying methodologies. It presents the

Figure 1. Percentage distribution of AIDS cases in the Americas by geographic subregion, through 31 December 1986 (excludes North America).



percent distribution of AIDS cases by patient categories. Not all countries use the different patient groups used by the United States as listed in column one. Numbers in parentheses represent the total number of cases on which the percentages are based. These studies

Table 2. Percent distribution of AIDS cases by patient characteristics.

Categories	USA (25,814)	Canada (743)	Brazil ^a (825)	Argentina ^a (40)	Costa Rica ^a (9)	Puerto Rico (32)
1. Adults	100	100	100	100	100	100
Homosexual/bisexual	66	80	70	96	35	55
Intravenous drug users	17	<1	2	2	—	36
Homosexual male/drug users	8	3	—	—	—	—
Hemophilia/coagulation disorder	1	—	5	—	65	<1
Heterosexual cases	4	2	2	—	—	—
Transfusion	2	3	2	—	—	—
None/unknown	3	10	15	2	—	8.5
2. Children	100	100	—	—	—	—
Hemophilia/coagulation disorder	4	—	—	—	—	—
Parents with/at risk for AIDS	81	82	—	—	—	—
Transfusion	13	18	—	—	—	—
None/unknown	2	—	—	—	—	—

^aNo data on 16 children <10 years old.

were done between 1984 and 1986. Although many blanks appear in this table, some conclusions can still be drawn:

1. The patient profile in the United States is clear and well known. There has been little deviation from this pattern since the beginning of the epidemic. Sixty-six% of cases are homosexual or bisexual men, while 17% are intravenous drug users. Eight% are both. Only 4% are men or women who acquired their disease through heterosexual means. Most of these 1,033 cases are women who were contacts of bisexual men or intravenous drug users. In most children acquiring the disease one parent has AIDS or belongs to a group at high risk of acquiring AIDS.

2. In Canada and Brazil, the pattern is slightly different; there is a greater proportion of homosexual and bisexual men and a much smaller proportion of intravenous drug users. In Brazil, 15% of the cases are not classified. Nevertheless, this proportion is decreasing as Brazil increases its case investigations.

3. In Costa Rica, almost all the initial cases were in hemophiliacs who received blood products from the United States. More recently, this proportion is falling as seroprevalence studies and case-finding efforts document the spread of the disease to other population groups at risk. In contrast, in Argentina nearly all cases have been homosexual men.

In the Americas AIDS is predominantly a sexually transmitted disease which has remained concentrated in the homosexual/bisexual male population. Haiti is an exception. The best available data indicates a male to female ratio of 2-3:1 compared to 12-14:1 in the United States.

With the advent of ELISA technology for AIDS, many countries began limited and sometimes sporadic antibody testing for blood donors, symptomatic persons and people in certain risk groups. The data in Table 3 were obtained from PAHO's Caribbean Epidemiology Center (CAREC) whose viral laboratories serve as reference laboratories for 19 English speaking Caribbean countries. During the period January 1 through December 31, 1985, CAREC tested a total of 967 adults and 103 children less than 15 years old, all from Trinidad and Tobago. These blood samples were not obtained in any systematic way and are not representative of particular risk groups. Nevertheless, it was possible to group the patients into various categories. Thus among the 390 symptomatic adults tested, 50 or 12.8% were positive by ELISA and Western Blot techniques. Of these, 99 were women who had a positivity rate of 5.1% compared to 15.5% in men. Asymptomatic homosexual men had a positivity rate of 28.4%. In a limited sample, none of 17 prostitutes were positive.

**Table 3. Antibody testing in Trinidad and Tobago, by reason for testing
1 January to 31 December, 1985.**

Categories	Male			Female			Total		
	No. tested	No. positive	%	No. tested	No. positive	%	No. tested	No. positive	%
1. Symptomatic adults	291	45	15.5	99	5	5.1	390	50	12.8
Homosexual	47	20	42.6	—	—	—	47	20	42.6
2. Asymptomatic adults	213	49	23.0	58	11	19	271	60	22.1
Homosexual	162	46	28.4	—	—	—	162	46	28.4
Contact	42	5	11.9	34	10	29.4	76	15	19.7
Prostitute	—	—	—	17	0	0	17	0	0
Transfused	—	—	—	4	1	25	4	1	25.0
Subtotal	755	165	21.8	212	27	12.7	967	192	19.9
3. Symptomatic children	—	—	—	—	—	—	78	6	7.7
4. Asymptomatic children	—	—	—	—	—	—	—	—	—
Parent with/at risk AIDS	—	—	—	—	—	—	11	1	9.0
Transfused	—	—	—	—	—	—	14	1	7.1
Subtotal	—	—	—	—	—	—	103	8	7.8

Source: CAREC.

Blood donor screening is variable in the Region, ranging from screening of all blood donors in the United States to very limited screening in other countries. A special study was undertaken in the Dominican Republic early in 1986 (Table 4). A total of 968 donors were screened during a 3-month period, yielding 14 confirmed positive or 1.5% overall. Recent data from the Bahamas revealed that three persons of 2,600 screened were positive, that is 0.1%. In the Dominican Republic none of the 35 women were positive. Paid donors had a slightly higher positivity rate, 1.8%, and a history of travel was significantly correlated with seropositivity (3.5% vs 1.3%). In this limited survey, a history of sexually transmitted diseases was not correlated with seropositivity.

In conclusion, AIDS is a growing problem in the Americas. It is clearly a sexually transmitted disease, whose overall pattern, with the exception of Haiti, appears to be following the one established in the United States. The occurrence of disease in the intravenous drug user, however, is less prominent. The homosexual, and perhaps the bisexual, male accounts for most of the cases, but in some countries, e. g., Brazil, heterosexual cases are one of the fastest growing groups. Since it is firmly established in Africa that

Table 4. Blood donor screening results in the Dominican Republic, March 1986.

Donor characteristic	No. positive	%
Men	14	1.5
Women	0	0
Volunteer donor	6	1.4
Paid donor	8	1.8
No external travel	10	1.3
External travel	4	3.5
No homosexual contact	13	1.5
History previous STD	1	<1
No history previous STD	13	1.6

STD = Sexually transmitted diseases.

AIDS can be transmitted predominantly among heterosexual persons, it is possible that AIDS may spread into the general population in Latin America and the Caribbean. AIDS is a growing concern in Brazil, Mexico, and the Caribbean area and public health measures to prevent further transmission must be established urgently.

(Source: Health Situation and Trend Assessment Program, PAHO.)

Recommendations for Individuals Likely to Have HIV Infection

An individual judged most likely to have the human immunodeficiency virus (HIV) infection should be provided the following information and advice:

1. The prognosis for an individual infected with HIV over the long term is not known. However, data available from prospective studies indicate that most persons will remain infected.

2. Although asymptomatic, these individuals may transmit HIV to others. Regular medical evaluation and follow-up is advised, especially for individuals who develop signs or symptoms suggestive of AIDS.

3. Infected persons should refrain from donating blood, plasma, body organs, other tissue, or sperm.

4. There is a risk of infecting others by sexual intercourse, sharing of needles, and possibly exposure of others to saliva through oral-genital contact or intimate kissing. The consistent and adequate use of condoms may reduce the transmission of HIV.

5. Toothbrushes, razors, or other implements that could become contaminated with blood should not be shared.

6. Women with a seropositive test, or women whose sexual partner is seropositive, are themselves at increased risk of acquiring AIDS. If they become pregnant, their offspring are also at increased risk of acquiring AIDS.