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# **TRENDS AND PATTERNS OF HIV/AIDS INFECTION IN SELECTED DEVELOPING COUNTRIES**

**Country Profiles  
December 1993**



**Health Studies Branch  
Center for International Research  
U.S. Bureau of the Census  
Washington, DC 20233**

**Research Note  
No. 12  
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## **Preface**

The Center for International Research conducts specialized studies of population, economics, labor force, health, and aging issues. However, the use of data not generated by the U.S. Bureau of the Census precludes performing the same statistical reviews normally conducted on Census Bureau data.

This research note is a compilation of briefing materials by country resulting from analysis conducted in the Health Studies Branch. This research note is intended for a rapid dissemination of results to a specialized audience, highlighting recent developments and emerging trends. Reports containing a more thorough presentation and discussion of research findings will continue to be issued in the Center for International Research Staff Paper series.

The preparation of this report was supported by funding from the U.S. Agency for International Development.

This Briefing was compiled by Jinkie Corbin, Anne Ryan, Peggy Seybolt, and David Rudolph, the Health Studies Branch staff. Comments and questions regarding this report should be addressed to: Karen Stanecki or Peter Way, Health Studies Branch, Center for International Research, U.S. Bureau of the Census, Washington, DC 20233-3700; telephone: (301)763-4086.

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# TRENDS AND PATTERNS OF HIV INFECTION IN SELECTED DEVELOPING COUNTRIES

## Introduction

A critical issue for policy makers and program planners in the development assistance community is current status and trends over time in the spread of HIV infection and the AIDS epidemic in developing countries. The identification of "hot spots" in the spread of infection is important in decision-making regarding the allocation of scarce program funds.

Until recently, data on levels of HIV infection for developing countries were not sufficiently voluminous to allow any but a one-time snapshot of the situation in a particular region or country. However, this picture is rapidly changing as repeated surveys and sentinel surveillance projects established over the past several years begin to use consistent methods of HIV serologic data collection over a period of years. These data are being compiled by the Center for International Research and are the focus of this report.

The data presented in each country profile were drawn from the **HIV/AIDS Surveillance Database**, a compilation of HIV seroprevalence information contained in journals, articles, and public presentations. The database was developed and has been maintained at the U.S. Bureau of the Census since 1987 with funding support from the Africa Bureau and the Office of Health, HIV-AIDS Division, U.S. Agency for International Development. Currently, the database contains over 18,000 individual data records drawn from nearly 2,500 publications and presentations. Although every attempt has been made to present the most reliable data, given the quality of the original data, the trends and patterns described should be considered tentative indications, rather than precise estimates of the problem. Therefore, caution should be used in drawing conclusions.

These country profiles examine the patterns and trends of the epidemic using the best of the imperfect data available. In order to minimize the biases and confusion in using current seroprevalence estimates, we have developed several criteria to select the most representative sample estimate: larger samples are generally favored over smaller samples, more recent estimates are selected over older estimates, and better documented data are usually selected over poorly documented data. Each briefing highlights patterns of infection within population subgroups, patterns of infection by age, by sex, by race, and recent time trends in infection levels.

This research note is an update of and a supplement to Research Notes Nos. 5, 8, and 10 - **Trends and Patterns of HIV/AIDS Infection in Selected Developing Countries -- Country Profiles**. This update highlights the most recent information for countries reported earlier, as well as additional profiles. We make no attempt to duplicate any country profiles that are available in Research Notes Nos. 5, 8, and 10. A copy of these research notes can be obtained upon request. As before, these profiles have been 3-hole punched for use in a loose leaf binder for ease of insertion or substitution of new profile.

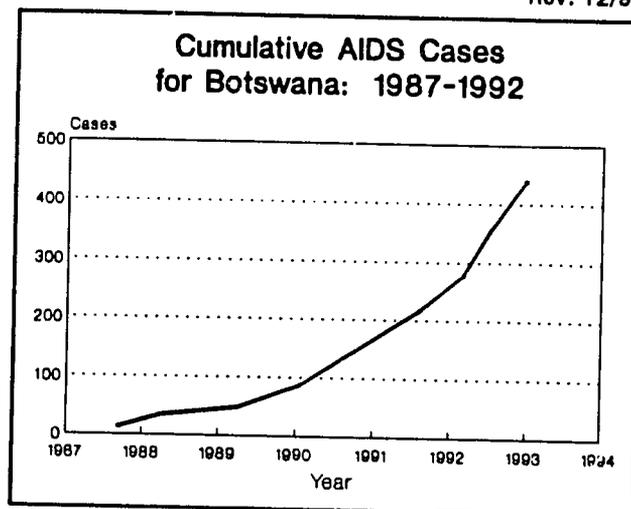
We welcome copies of articles or reference to information which may have been overlooked.

# **AFRICA**

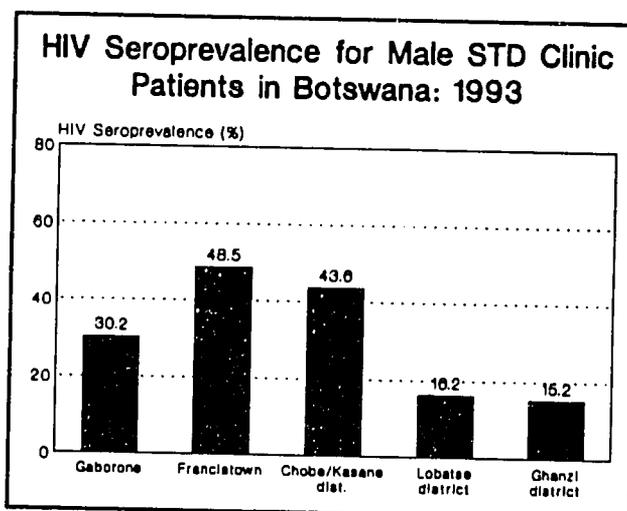
## Botswana

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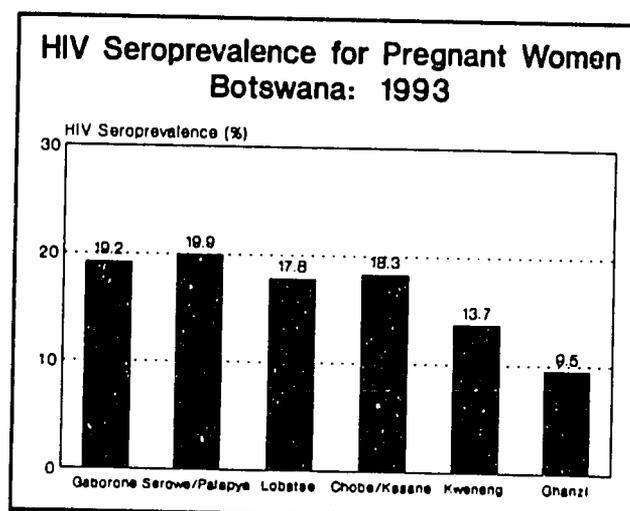
- Botswana has reported a total of 439 AIDS cases to the World Health Organization as of December 1992. The reported data show a steady increase in AIDS cases.



- In 1993, the second HIV sentinel surveillance survey was carried out in Botswana. In this study, males attending sexually transmitted disease (STD) clinics in Gaborone, Francistown and Chobe/Kasane district have much higher HIV seroprevalence levels compared to male STD clinic patients in Lobatse district and Ghanzi district.

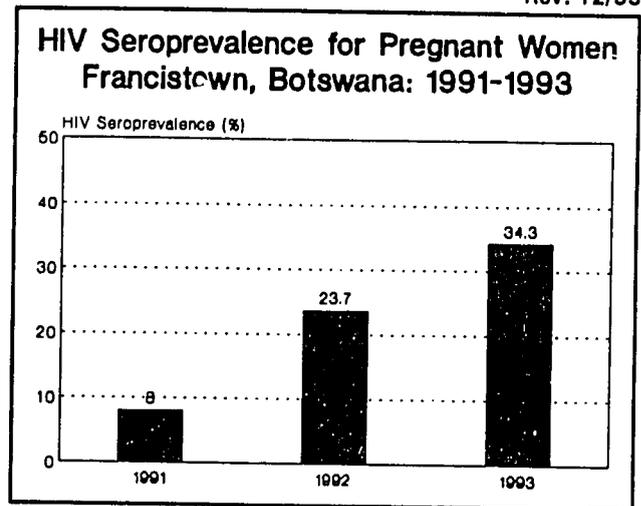


- Data from the second HIV sentinel surveillance among pregnant women show HIV seroprevalence levels ranging from 9.5 percent to 20.0 percent in various districts. In the capital city, Gaborone, the HIV seroprevalence level among pregnant women attending antenatal clinics is 19.2 percent.

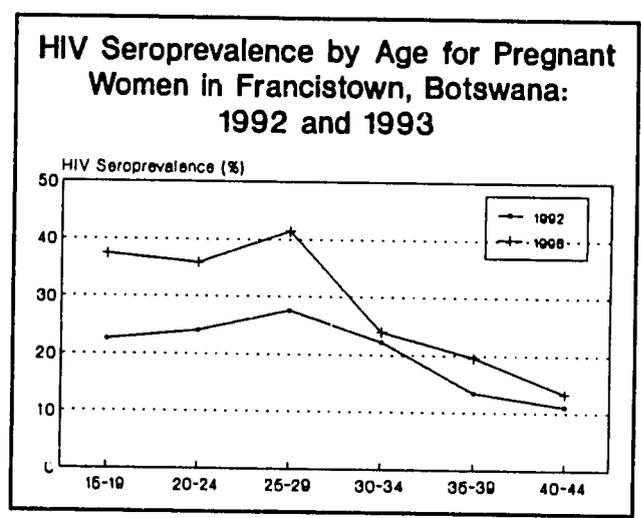


Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

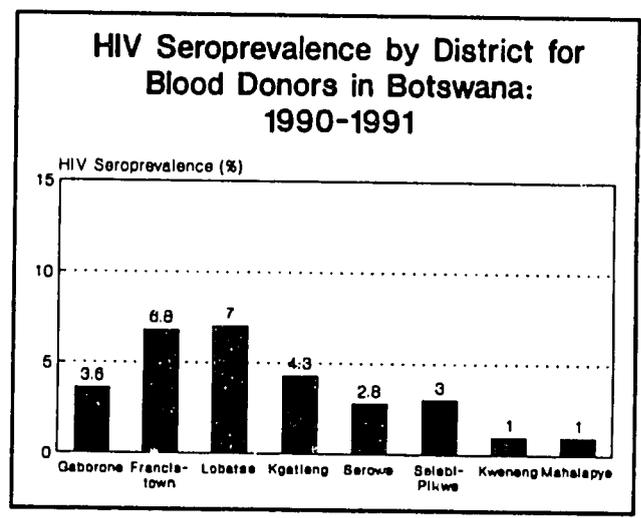
- The highest HIV prevalence level among pregnant women in Botswana is found in Francistown. The national HIV sentinel surveillance surveys show a steady increase in HIV infection levels, reaching 34.3 percent in 1993.



- From the same studies, the pattern of HIV infection level by age among pregnant women in Francistown is similar to that found in other countries, whereby the peak infection level for women is in their twenties.



- In another study, data for blood donors show HIV infection ranging from 1 percent to 7 percent in various districts. Clearly, the HIV infection has made its presence known and preventive measures must be adapted to reduce the spread of the virus.



Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

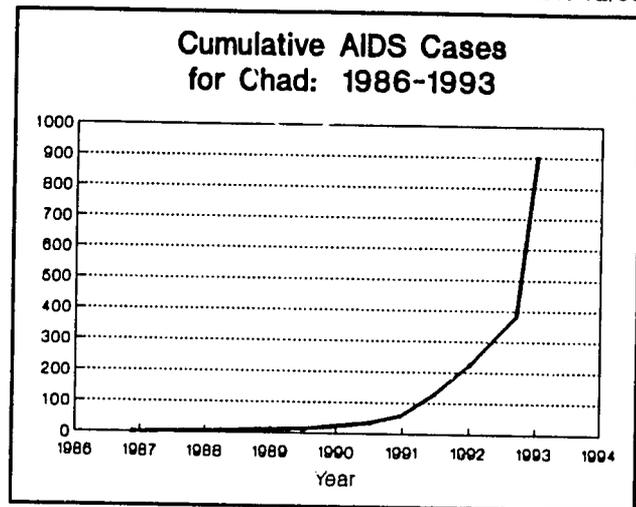
## Sources for Botswana

- L0091 Letamo, G., R. V. Rao, 1992, Knowledge and Perception of AIDS among Botswana Women: Analysis of DHS Data, Population Association of America Annual Meeting, Denver, Colorado, 4/30 - 5/2.
- N0087 NACP, 1992, Report on the First HIV Sentinel Surveillance in Botswana, July, Unpublished Report.
- N0097 Namboze, J. M., 1993, AIDS/HIV Update - Botswana, WHO/Botswana, unpublished memo.
- S0020 Star, The (Johannesburg), 1987, AIDS Deaths Reported, Joint Publications Research Service: Epidemiology, Dec. 2, no. 023, p. 3.
- W0013 World Health Organization, 1988, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 2, no. 6, pp. 487-490.
- W0032 World Health Organization, 1989, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 3, no. 6, pp. 405-406.
- W0042 World Health Organization, 1990, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 4, no. 6, pp. 605-606.
- W0054 World Health Organization, 1991, World Health Organization Global AIDS Statistics, AIDS Care, vol. 3, no. 4, pp. 481-484.
- W0058 World Health Organization, 1992, World Health Organization Global AIDS Statistics, AIDS Care, vol. 4, no. 2, pp. 231-234.
- W0072 World Health Organization, 1993, World Health Organization Global AIDS Statistics, AIDS, vol. 5, no. 1, pp. 125-128.
- W0079 World Health Organization, 1993, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 7, no. 9, pp. 1287-1291.

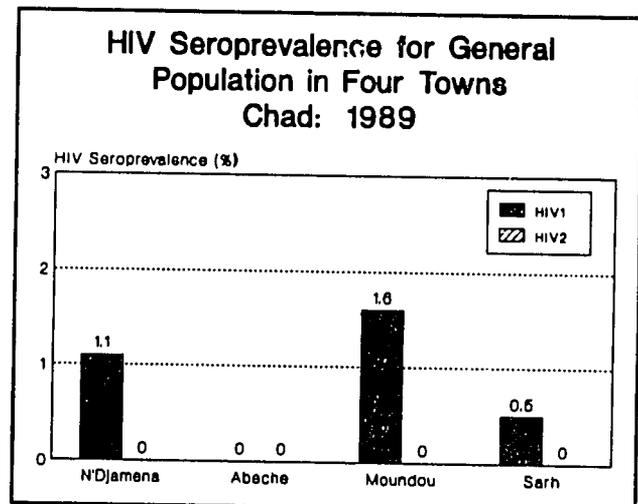
## Chad

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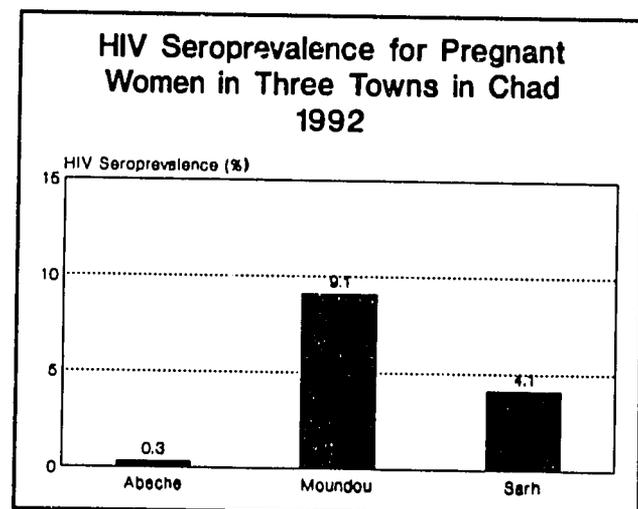
- In 1991, Chad reported 224 cumulative AIDS cases to the World Health Organization. In December 1992, they reported a fourfold increase in cumulative AIDS cases to 899 cases.



- A sero-epidemiological survey conducted in four towns in Chad in 1989 among adults from the general population found levels of HIV-1 infection varying from 0 to 1.1 percent. HIV-2 infection was not detected.

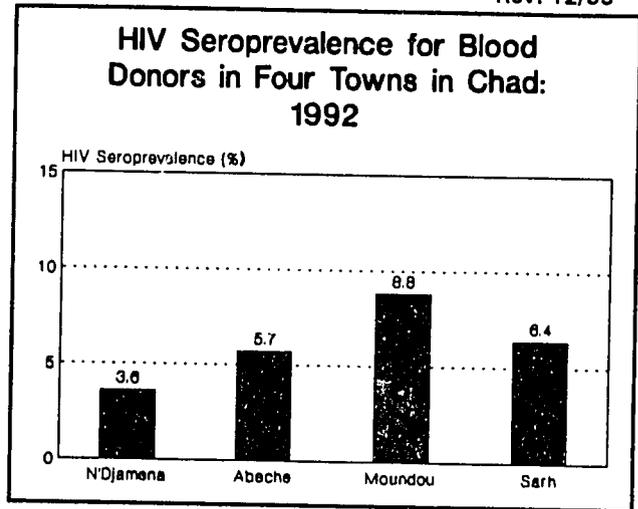


- Results from the 1992 WHO report on AIDS surveillance in three towns in Chad show the percent of pregnant women positive for HIV varies by town. In the northern area, Abeche has a low prevalence rate of 0.3 percent while the southern areas, Moundou and Sarh, have higher prevalence rates of 9.1 percent and 4.1 percent, respectively.



Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

- In the same report, the HIV seroprevalence levels among the blood donors also vary by city. HIV levels range from 8.8 percent in Moundou city to 3.6 in the capital city, N'Djamena.



Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

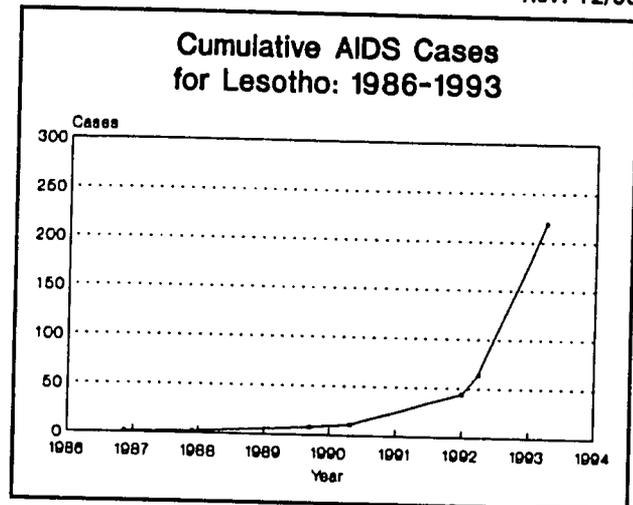
## Sources for Chad

- L0080 Louis, J. P., A. Trebucq, C. Hengy, et al, 1990, Epidemiologie des Infections a Retrovirus VIH1 - VIN2 et HTLV1 en Republique du Tchad, Bulletin de la Societe de Pathologie, Exotique, vol. 83, no. 5, pp. 603-610.
- M0266 Ministry of Public Health & Social Affairs, 1992, WHO Report on AIDS Surveillance, SFI/GPA/WHO/11.8, Official Report.
- W0002 Wellcome Foundation, 1987, AIDS and Its Management, The Wellcome Foundation Limited Berkhamsted Herts England, B.5676/09.87/5.0/R, pp. 4-5.
- W0003 World Health Organization, 1989, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 3, no. 3, pp. 187-188.
- W0013 World Health Organization, 1988, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 2, no. 6, pp. 487-490.
- W0033 World Health Organization, 1989, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 3, no. 9, pp. 619-620.
- W0041 World Health Organization, 1990, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 4, no. 3, pp. 277-278.
- W0045 World Health Organization, 1989, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 4, no. 12, pp. 1305-1306.
- W0046 World Health Organization, 1991, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 5, no. 3, pp. 349-350.
- W0054 World Health Organization, 1991, World Health Organization Global AIDS Statistics, AIDS Care, vol. 3, no. 4, pp. 481-484.
- W0067 World Health Organization, 1992, World Health Organization Global AIDS Statistics, AIDS Care, vol. 4, no. 3, pp. 365-368.
- W0072 World Health Organization, 1993, World Health Organization Global AIDS Statistics, AIDS, vol. 5, no. 1, pp. 125-128.
- W0079 World Health Organization, 1993, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 7, no. 9, pp. 1287-1291.

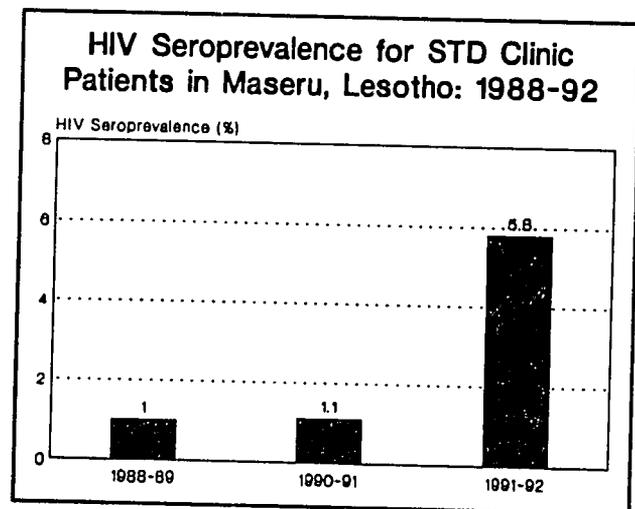
## Lesotho

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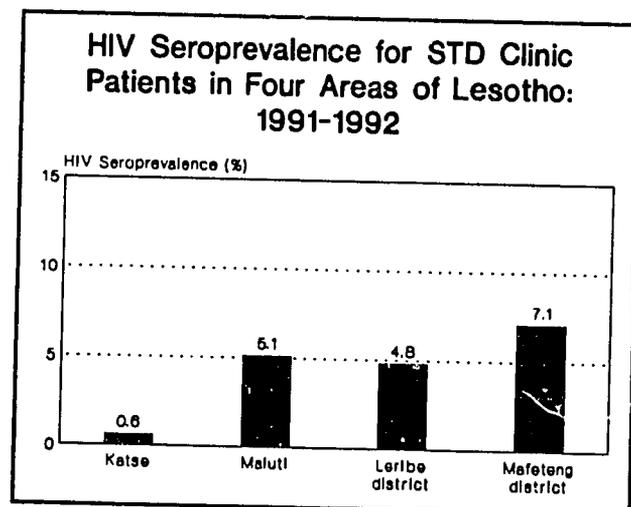
- There was a sharp increase in AIDS cases from March 1992 to March 1993. Lesotho had reported 219 AIDS cases to the World Health Organization as of March 1993. This corresponds to a cumulative rate of .12 cases per 1,000 population.



- The HIV seroprevalence in Lesotho among sexually transmitted disease (STD) clinic patients increased from 1 percent in 1988-89 to 5.8 percent by 1991-92. Various studies have shown that Lesotho has high levels of other STDs, increasing the risk of HIV transmission.

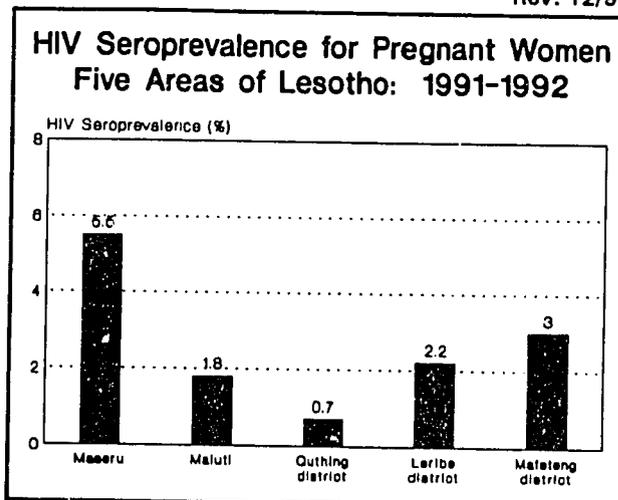


- The results of the sentinel surveillance survey conducted in Lesotho show the HIV seroprevalence of STD patients to vary from 0.6 percent in Katse to 7.1 percent in Mafeteng district.

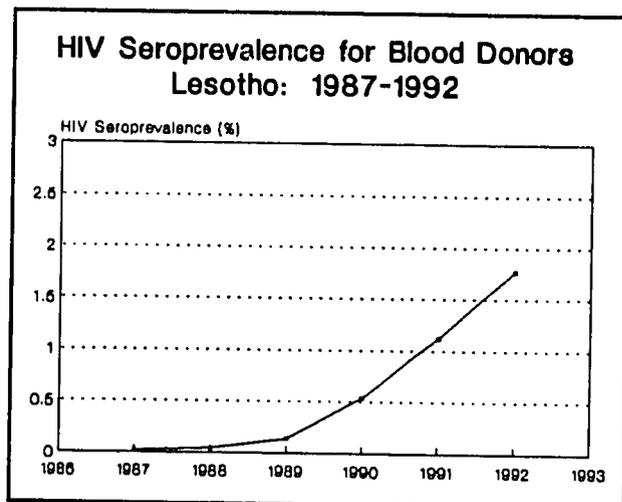


Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

- Sentinel surveillance among pregnant women show a wide range of HIV infection levels. The capital city, Maseru, has the highest level of 5.5 percent and Quithing district has the lowest, 0.7 percent.



- According to a national survey, levels of HIV seroprevalence among healthy blood donors has increased dramatically from 0.02 percent in 1987 to 1.77 percent in 1992.



Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

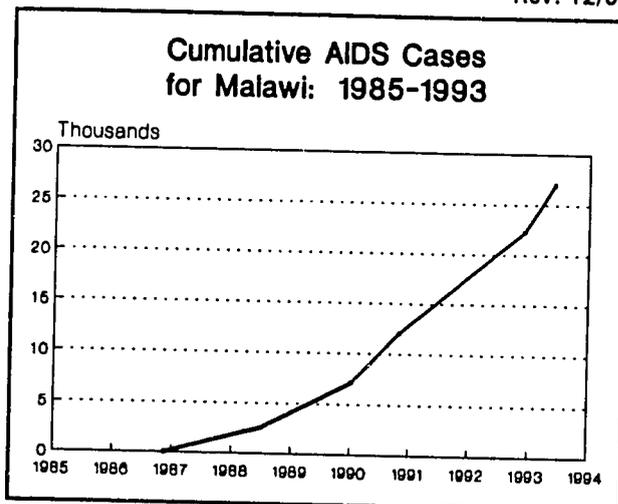
## Sources for Lesotho

- W0267 Ministry of Health Kingdom of Lesotho, 1993, HIV Prevalence data, In: Update on HIV/AIDS in Lesotho, Disease Control and Environmental Health Division, WHO, March 1993, pp. 8-10.
- W0075 Mtsekhe, P., 1991, STDs and HIV Infection in a STD Clinic in Lesotho, VI International Conference on AIDS in Africa, Dakar, Senegal, 12/16-19, Poster M.A.278.
- W0002 Wellcome Foundation, 1987, AIDS and Its Management, The Wellcome Foundation Limited Berkhamsted Herts England, B.5676/09.87/5.0/R, pp. 4-5.
- W0013 World Health Organization, 1988, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 2, no. 6, pp. 487-490.
- W0034 World Health Organization, 1989, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 3, no. 12, pp. 863-864.
- W0040 World Health Organization, 1990, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 4, no. 9, pp. 937-941.
- W0058 World Health Organization, 1992, World Health Organization Global AIDS Statistics, AIDS Care, vol. 4, no. 2, pp. 231-234.
- W0072 World Health Organization, 1993, World Health Organization Global AIDS Statistics, AIDS, vol. 5, no. 1, pp. 125-128.
- W0079 World Health Organization, 1993, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 7, no. 9, pp. 1287-1291.

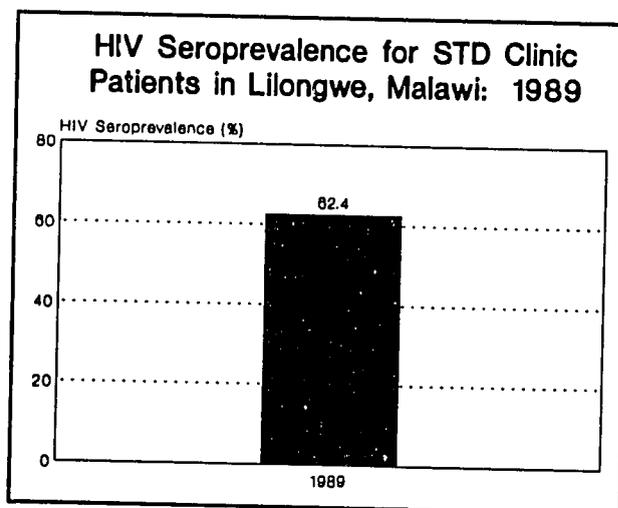
## Malawi

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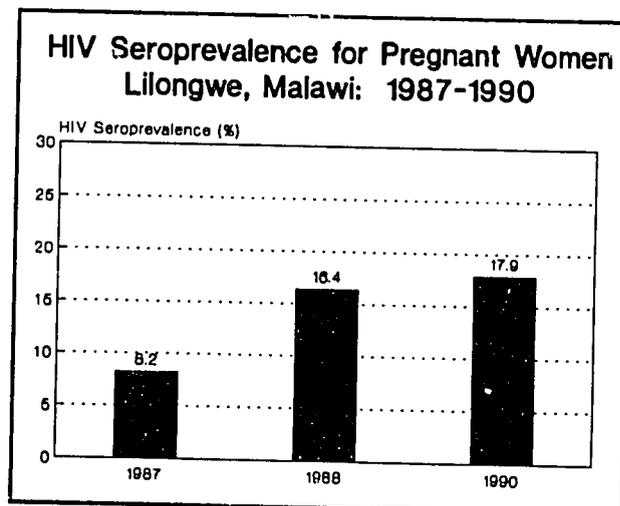
- Through May 1993, Malawi has reported 26,955 AIDS cases to the World Health Organization. This corresponds to a cumulative incidence of 2.7 per 1,000 population. Malawi continues to have the highest cumulative incidence rate among African countries.



- According to this study, levels of HIV infection among STD patients is very high in the capital, Lilongwe.

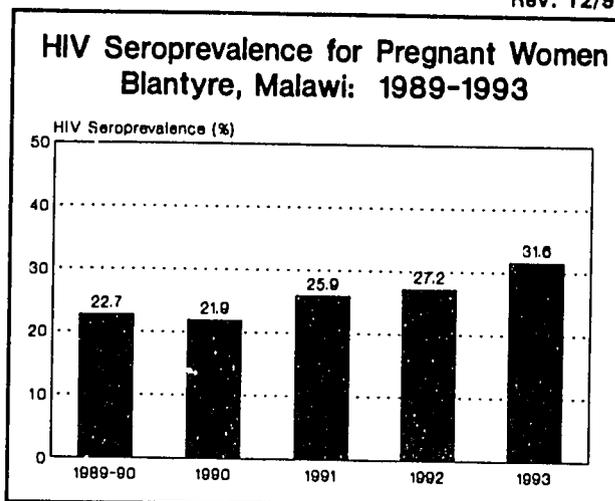


- The HIV infection level among pregnant women in the capital city, Lilongwe, has increased from 8.2 percent in 1987 to 17.9 percent in 1990.

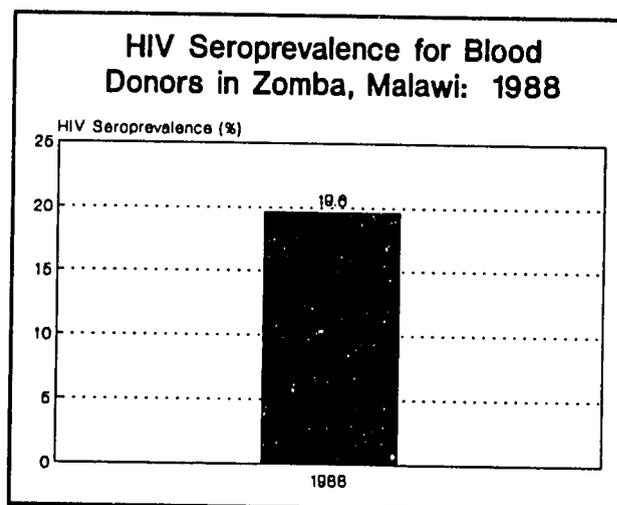


Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

- Available data for pregnant women in the urban city, Blantyre, show a higher HIV infection level than in the capital city, Lilongwe. HIV infection levels continue to rise, reaching 31.6 percent in 1993.



- In Zomba General Hospital, all nonpaid blood donors were tested for HIV seropositivity. Among these blood donors, the HIV seroprevalence level was 19.6 percent in 1988.



Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

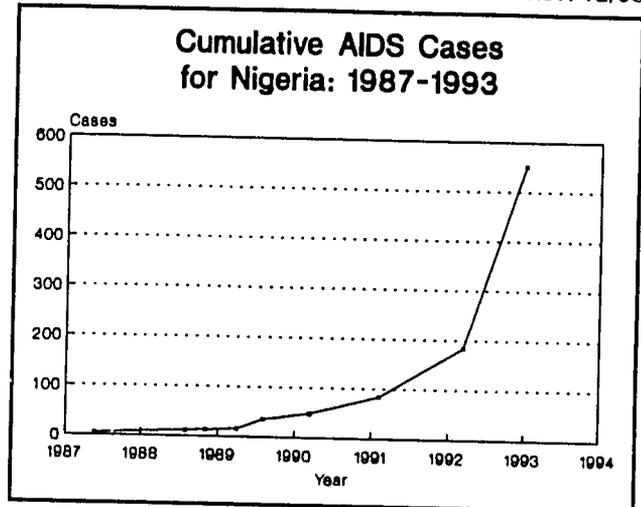
## Sources for Malawi

- 03703 U.S. Department of State, 1993, AIDS/HIV in Malawi - A Status Report, Unclassified cable, 8/93, Lilongwe 03703.
- K0088 Kool, H. E. J., D. Bloemkolk, P. A. Reeve, et al., 1990, HIV Seropositivity and Tuberculosis in a Large General Hospital in Malawi, *Tropical and Geographical Medicine*, vol. 42, no. 2, pp. 128-132.
- K0103 Kristensen, J. K., 1990, The Prevalence of Symptomatic Sexually Transmitted Diseases and Human Immunodeficiency Virus Infection in Outpatients in ..., *Gonitourinary Medicine*, vol. 66, no. 4, pp. 244-246.
- M0264 Miotti, P. G., G. A. Dallabetta, J. D. Chipangwi, et al., 1992, A Retrospective Study of Childhood Mortality and Spontaneous Abortion in HIV-1 Infected Women in Urban Malawi, *International Journal of Epidemiology*, vol. 21, no. 4, pp. 792-799.
- W0002 Wellcome Foundation, 1987, AIDS and Its Management, The Wellcome Foundation Limited Berkhamsted Herts England, B.5676/09.87/5.0/R, pp. 4-5.
- W0013 World Health Organization, 1988, Statistics from the WHO and the Centers for Disease Control, *AIDS*, vol. 2, no. 6, pp. 487-490.
- W0042 World Health Organization, 1990, Statistics from the WHO and the Centers for Disease Control, *AIDS*, vol. 4, no. 6, pp. 605-606.
- W0054 World Health Organization, 1991, World Health Organization Global AIDS Statistics, *AIDS Care*, vol. 3, no. 4, pp. 481-484.
- W0072 World Health Organization, 1993, World Health Organization Global AIDS Statistics, *AIDS*, vol. 5, no. 1, pp. 125-128.
- W0079 World Health Organization, 1993, Statistics from the WHO and the Centers for Disease Control, *AIDS*, vol. 7, no. 9, pp. 1287-1291.

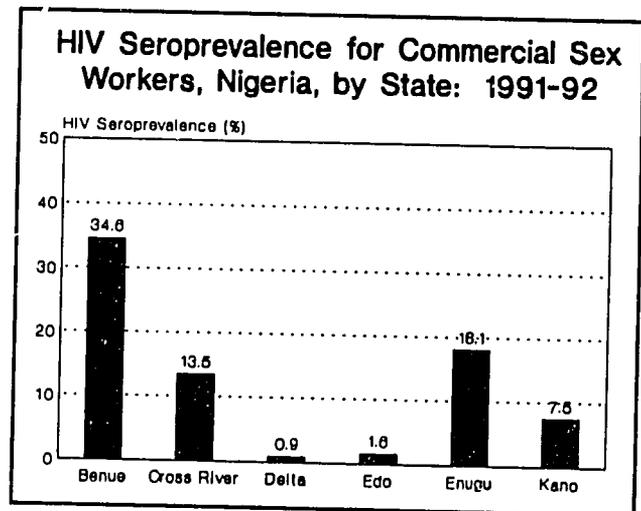
## Nigeria

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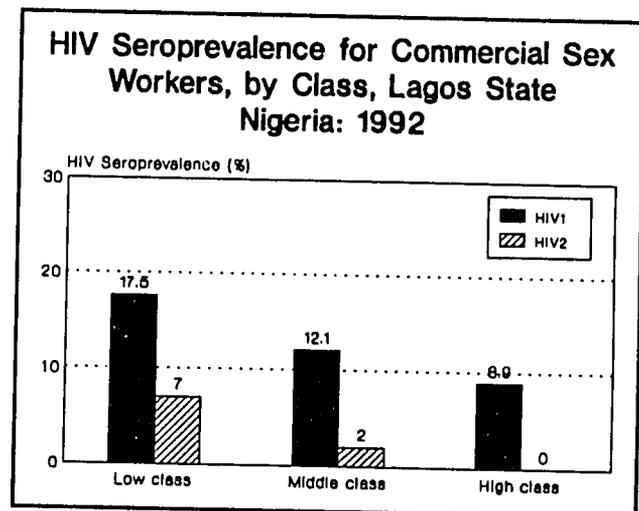
- In March 1992, Nigeria reported 184 cumulative AIDS cases to the World Health Organization. By the end of 1992, they reported an increase in cumulative AIDS cases to 552 cases.



- The Federal Ministry of Health and Human Services with the World Health Organization conducted a serosurvey of HIV infection at selected sentinel sites in various states of Nigeria. The results of all the sites in each state show the range of HIV infection among commercial sex workers from 0.9 percent in Delta state to 34.6 in Benue state.

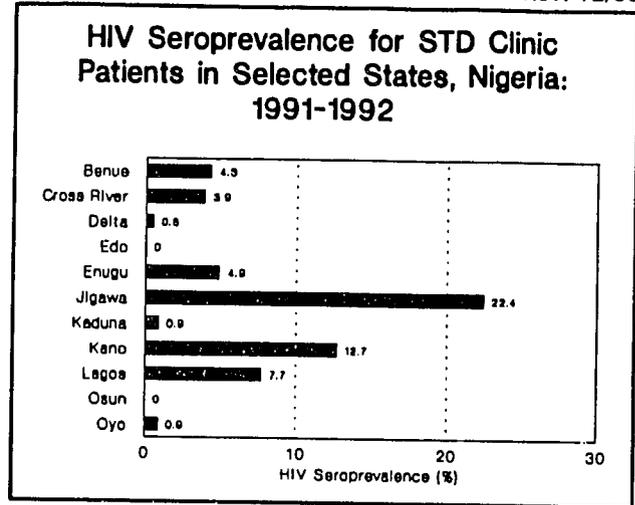


- Another study of commercial sex workers in Lagos State measured the seroprevalence of HIV-1 and HIV-2. Women in the lower class were not as likely to use condoms as the high class women. The overall prevalence rate varied by class: low class women had the highest HIV prevalence levels.

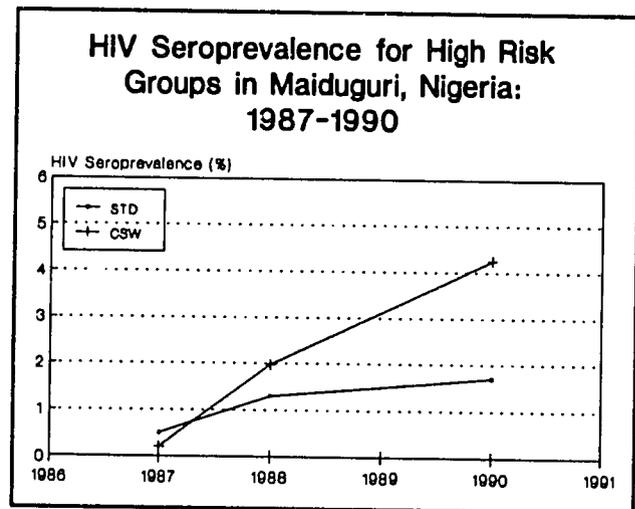


Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

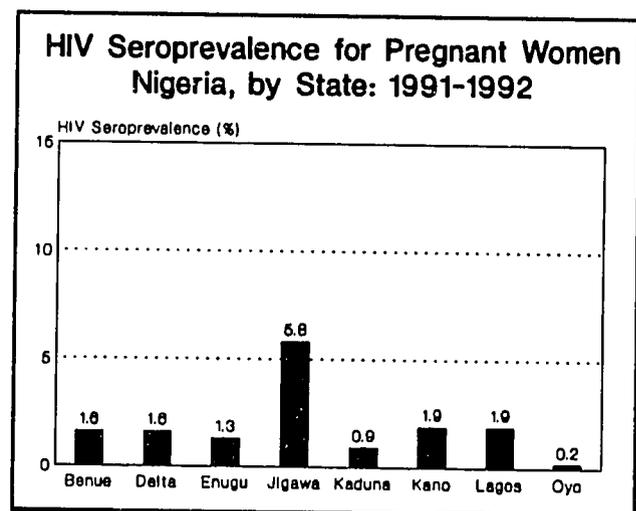
- The results from selected sentinel sites show the range of HIV infection among STD clinic patients from 0.0 percent to 22.4 percent.



- Data collected on high risk populations in Maiduguri, Nigeria, show a steady increase in HIV infection between 1987 and 1990. In 1990, HIV seroprevalence reached 1.7 percent among STD patients and 4.3 percent among commercial sex workers (CSW).

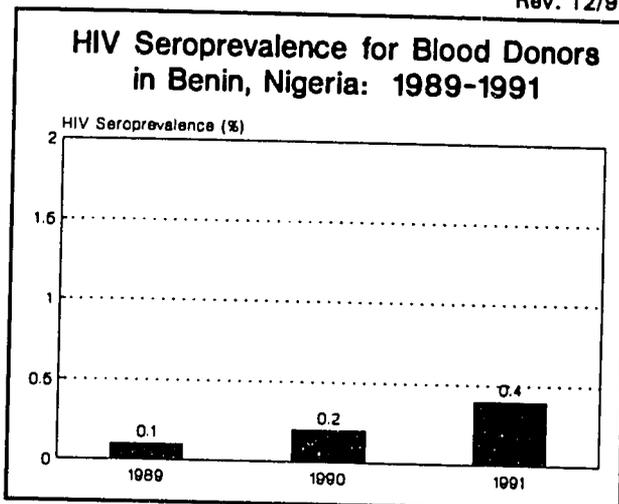


- Reports from sentinel sites within the states of Nigeria show the overall HIV seroprevalence level among pregnant women to range from 0.2 percent in Oyo state to 5.8 percent in Jigawa state.

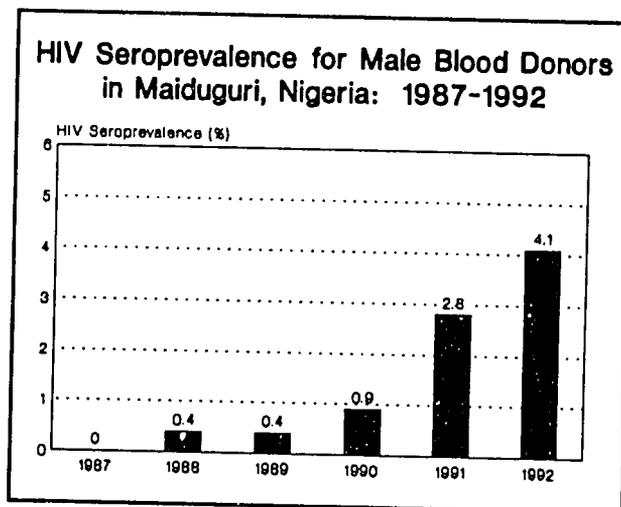


Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

- In Benin city, the HIV infection levels among the blood donors show a slow but steady increase to 0.4 percent in 1991.



- Studies conducted in Maiduguri City between 1987 and 1992 showed an increase in the HIV infection levels among blood donors. HIV seroprevalence levels increased from 0 percent in 1987 to 4.1 percent in 1992.



Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

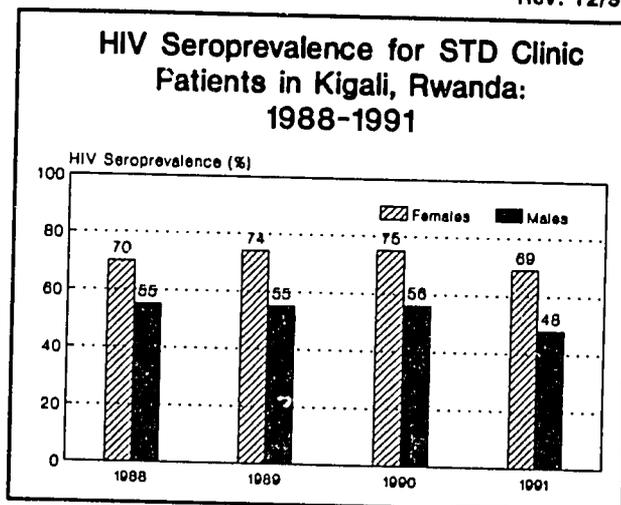
## Sources for Nigeria

- A0101 Asagba, A. O., J. J. Andy, T. Ayele, et al., 1992, HIV Sentinel Surveillance in Nigeria, Nigeria Bulletin of Epidemiology, vol. 2, no. 2, pp. 10-13.
- C0109 Chikwem, J. O., I. Mohammed, H. G. Bwala, et al., 1990, Human Immunodeficiency Virus (HIV) Infection in Patients Attending a Sexually Transmitted Diseases Clinic in Borno State of ..., Tropical and Geographical Medicine, vol. 42, pp. 17-22.
- D0120 Dada, A. J., F. Oyewole, R. Onofowokan, et al., 1993, Lagos, Nigeria-New Delhi, India HIV-1 Connection among High Class Prostitutes, IX International Conference on AIDS, Berlin, 6/6-11, Poster PO-C07-2744.
- H0055 Harry, T. O., W. Gashau, O. Ekenna, et al., 1990, Growing Threat of HIV Infection in a Low Prevalence Area, V International Conference: AIDS in Africa, Kinshasa, Zaire, Oct. 10-12, Poster T.P.E.21.
- H0087 Harry, T. O., A. E. Moses, T. O. Ola, et al., 1992, Increasing Risk of Transfusion-Associated AIDS as the Pandemic Spreads: Experience in Maiduguri, Nigeria, VII International Conference on AIDS in Africa, Yaounde, Cameroon, 12/8-11, Poster T.P.154.
- H0094 Harry, T. O., D. N. Bukbuk, A. Idrisa, et al., 1993, HIV Infection among Pregnant Women: A Worsening Situation in Maiduguri, Nigeria, IX International Conference on AIDS, Berlin, 6/6-11, Poster PO-C11-2862.
- O0039 Ofor, E., I. Okafor, I. Osunde, 1992, Changes in Prevalence Rate of HIV Transmission among Blood Donors in Benin City, Nigeria, VIII International Conference on AIDS, Amsterdam, 7/19-24, Poster PoC 4213.
- W0002 Wellcome Foundation, 1987, AIDS and Its Management, The Wellcome Foundation Limited Berkhamsted Herts England, B.5676/09.87/5.0/R, pp. 4-5.
- W0003 World Health Organization, 1989, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 3, no. 3, pp. 187-188.
- W0013 World Health Organization, 1988, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 2, pp. 487-490.
- W0032 World Health Organization, 1989, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 3, pp. 405-406.
- W0034 World Health Organization, 1989, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 3, no. 12, pp. 863-864.
- W0040 World Health Organization, 1990, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 4, no. 9, pp. 937-941.
- W0054 World Health Organization, 1991, World Health Organization Global AIDS Statistics, AIDS Care, vol. 3, no. 4, pp. 481-484.
- W0067 World Health Organization, 1992, World Health Organization Global AIDS Statistics, AIDS Care, vol. 4, no. 3, pp. 365-368.
- W0079 World Health Organization, 1993, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 7, no. 9, pp. 1287-1291.

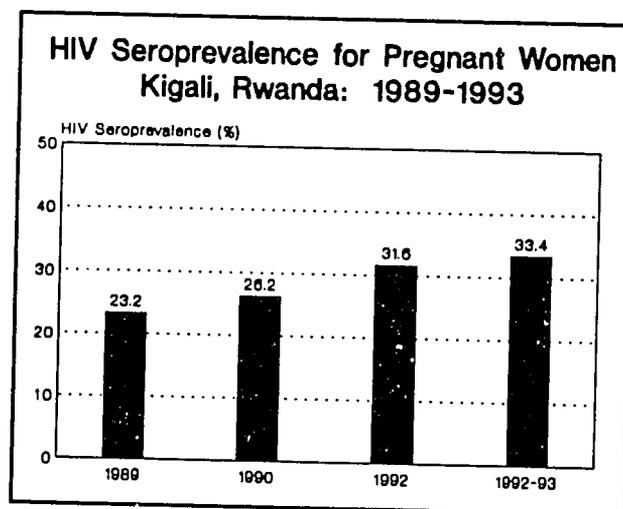
## Rwanda

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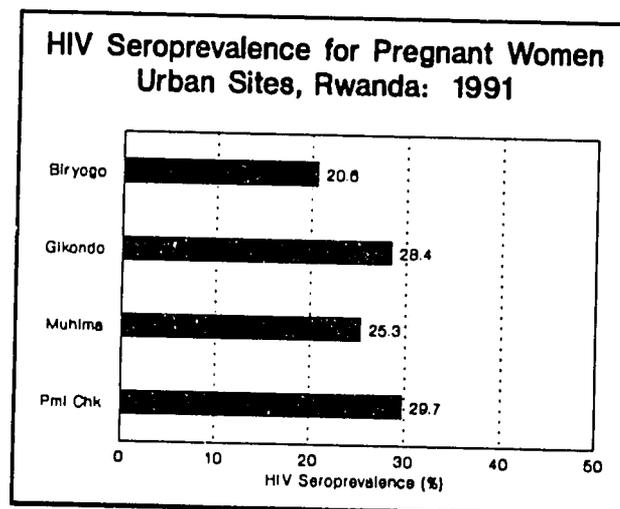
- A survey conducted at the Health Center of Biryogo, located in the heart of Kigali, showed high levels of HIV infection among STD clinic patients. Women visiting this STD clinic had higher levels of HIV infection than men.



- HIV infection levels among pregnant women in Kigali show an increase from 23.2 percent in 1989 to 33.4 percent in 1992-93.

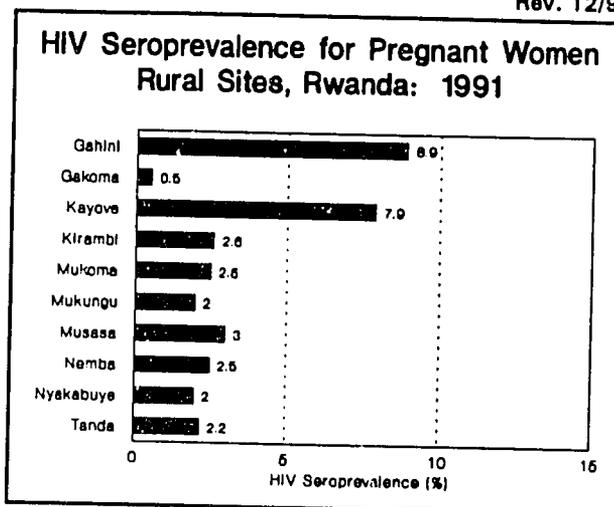


- During the second half of 1991 a sentinel surveillance study was conducted among pregnant women. The HIV infection levels showed only moderate variation between the different urban sites and were moderately high ranging from 20 percent to 30 percent.

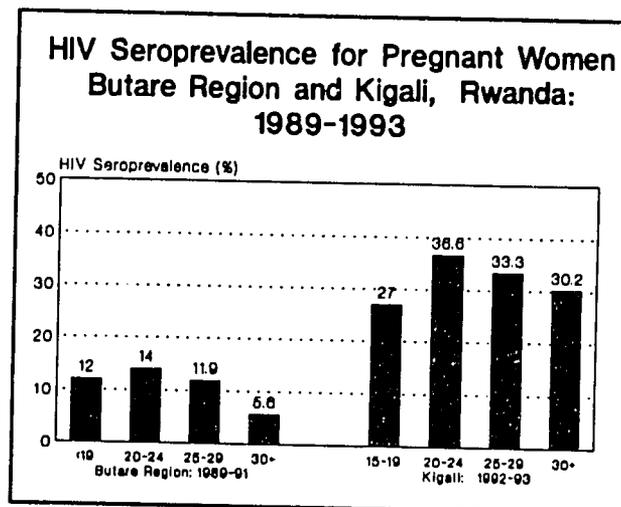


Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

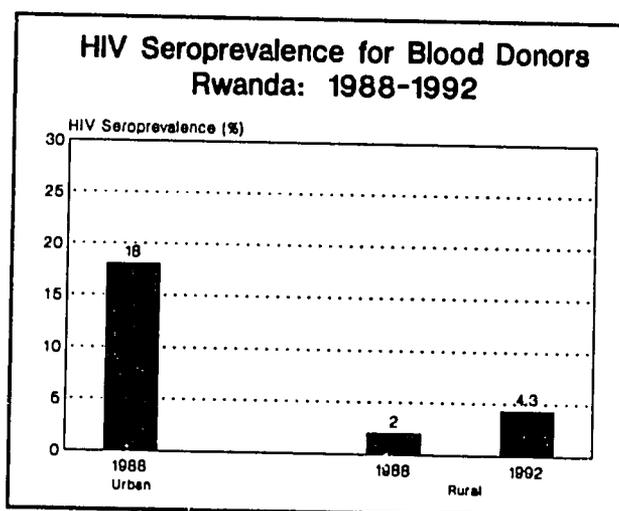
- According to the same sentinel surveillance study, pregnant women from the rural areas had much lower levels of HIV infection than urban women. In most rural areas, HIV infection levels among pregnant women were moderately low ranging from 0.5 percent to 3.0 percent, except for in Gahini and Kayove, with 8.9 percent and 7.9 percent, respectively.



- In a sample of pregnant women from mostly rural areas in the Butare region, HIV infection levels reached a maximum of 14 percent for ages 20-24 years. A similar age pattern is seen in a study of pregnant women in Kigali. HIV seroprevalence levels peaked in ages 20-24 at 36.6 percent.

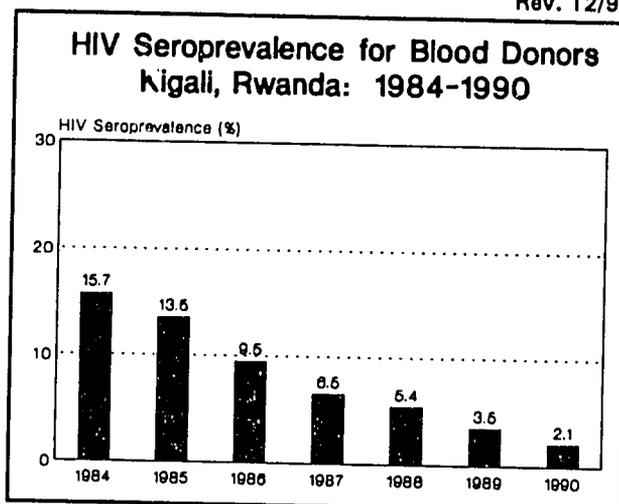


- In 1988, the HIV seroprevalence for blood donors in the urban areas of Rwanda was much higher than in rural areas (18 percent compared to 2 percent). However, by 1992, the HIV infection level in blood donors in the rural areas had doubled to 4.3 percent.



Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

- As epidemics mature, blood donors become less representative of the general population. A study done in Kigali, the capital city, over the past 7 years shows a decrease in the HIV seroprevalence among blood donors even though rates among pregnant women continue to increase.



Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

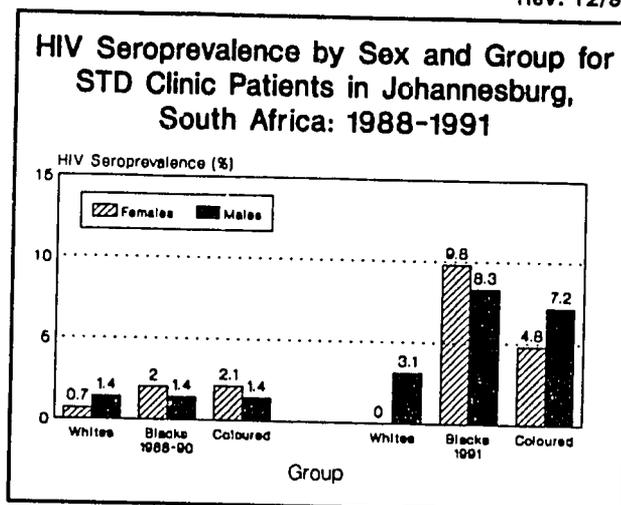
## Sources for Rwanda

- 80128 Bucyendore, A., E. Karita, P. Van de Perre, et al., 1991, Evolution de la Seroprevalence VIH-1 dans la Population Urbaine de la Ville de Kigali (Rwanda) Pendant les Annees ..., VI International Conference on AIDS in Africa, Dakar, Senegal, 12/16-19, Poster T.A.150.
- C0003 Clumeck, N., M. Robert-Guroff, P. Van De Perre, et al., 1985, Seroepidemiological Studies of HTLV-III Antibody Prevalence among Selected Groups of Heterosexual Africans, JAMA, vol. 254, no. 18, pp. 2559-2602.
- C0132 Chao, A., P. Habimana, M. Bulterys, et al., 1992, Oral Contraceptive Use, Cigarette Smoking, Age at First Sexual Intercourse, and HIV Infection among Rwandan Women, VIII International Conference on AIDS, Amsterdam, 7/19-24, Poster PoC 4338.
- F0046 Francois-Gerard, C., J. Nkurunziza, C. De Clercq, et al., 1992, Seroprevalence of HIV, HBV and HCV in Rwanda, VIII International Conference on AIDS, Amsterdam, 7/19-24, Poster PoC 4027.
- K0127 Karita, E., P. Van de Perre, A. Nziyumvira, et al., 1992, HIV Seroprevalence among STD Patients in Kigali, Rwanda, during the Four-Year Period 1988-1991, VIII International Conference on AIDS, Amsterdam, 7/19-24, Poster PoC 4468.
- L0020 Le Page, P., P. Van de Perre, 1988, Nosocomial Aspects of HIV Infection in Central Africa, In: AIDS in Children, Adolescents and Heterosexual Adults, Elsevier Science Publishing Company, Inc., pp. 188-189.
- L0104 Ladner, J., A. De Clercq, C. Ukulikiyimfura, et al., 1992, Seroprevalence de l'Infection par le VIH-1 et Counselling chez les Femmes Enceintes: Une Etude de Cohorte a Kigali, Rwanda ..., VII International Conference on AIDS in Africa, Yaounde, Cameroon, 12/8-11, Poster W.P.179.
- L0119 Ladner, J., A. De Clercq, M. Nyiraziraje, et al., 1993, HIV Seroprevalence and Counselling in Pregnant Women a Cohort Study in Kigali (Rwanda), 1992, IX International Conference on AIDS, Berlin, 6/6-11, Poster PO-D15-3884.
- M0268 Mugabo, P., J. Nkurunziza, 1993, Seroprevalence of HIV-1 in Rwanda Blood Banks from 1985 to 1990, IX International Conference on AIDS, Berlin, 6/6-11, Abstract PO-C21-3113.
- T0076 Twagirakristu, J. B., E. Fox, A. Nziyumvira, et al., 1992, Etat de l'Infection VIH au Rwanda en 1991, VII International Conference on AIDS in Africa, Yaounde, Cameroon, 12/8-11, Poster T.P.014.

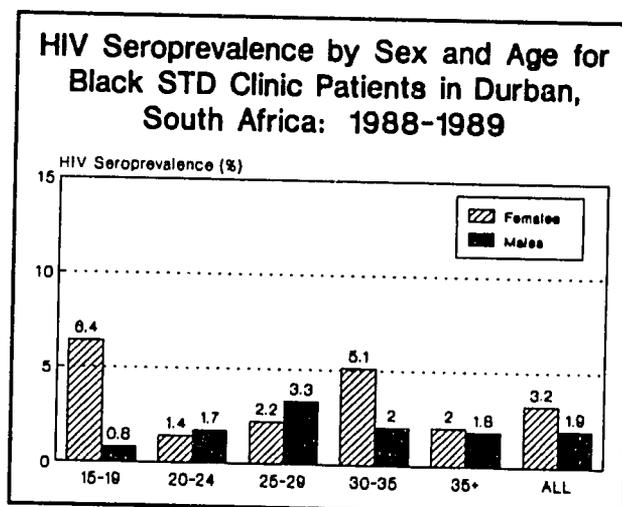
## South Africa

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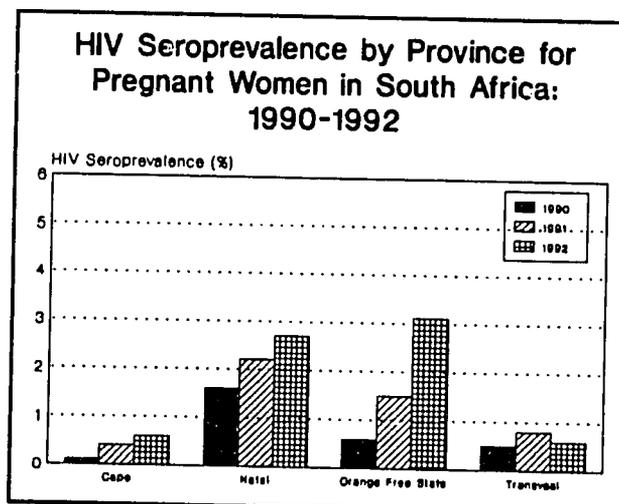
- All population groups should be considered to be at risk if they are engaging in high-risk behavior. Studies of STD clinic patients in Johannesburg showed the level of infection among all groups to have increased from 1988-90 to 1991.



- According to this study conducted among Black STD clinic patients in Durban at King Edward VIII Hospital, women, age 15-19 years, were at greater risk of HIV-1 infection than women of any other age group. Among men, the highest rate was in the age range 20-29 years.

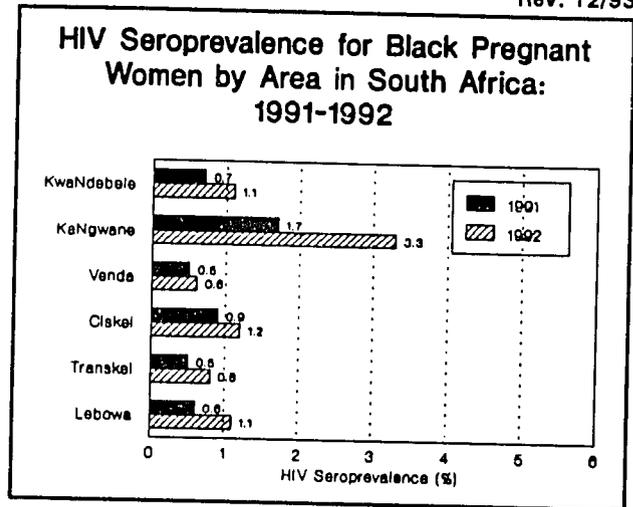


- In 1992, the third national HIV seroprevalence survey was done in South Africa among pregnant women. Based on all three surveys, HIV infection continues to increase in Cape, Natal and Orange Free State Provinces. However, Transvaal Province has not changed.

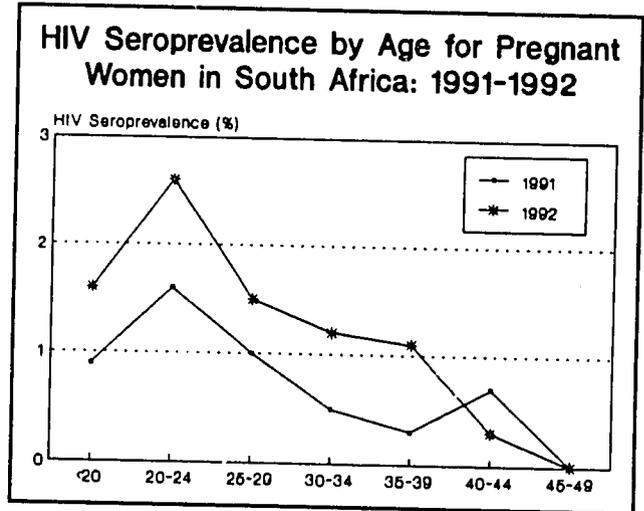


Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

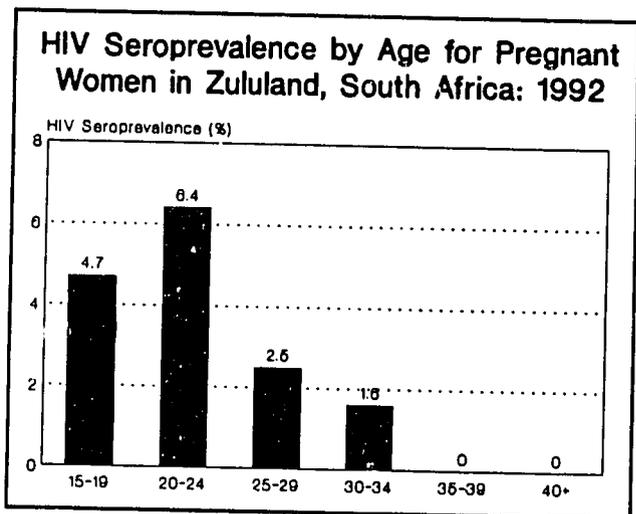
- Based on the 1991 and 1992 national HIV seroprevalence survey, black pregnant women had the highest level of infection in comparison to other groups. The 1992 data show an increase in HIV levels for all areas. KaNgwane continues to have the highest level, while Venda has the lowest level for both surveys.



- The national HIV seroprevalence survey documented the pattern of infection by age for 1991 and 1992. Data from 1991 and 1992 show a similarity in age patterns whereby the highest peak of HIV infection is in the 20-24 age group.

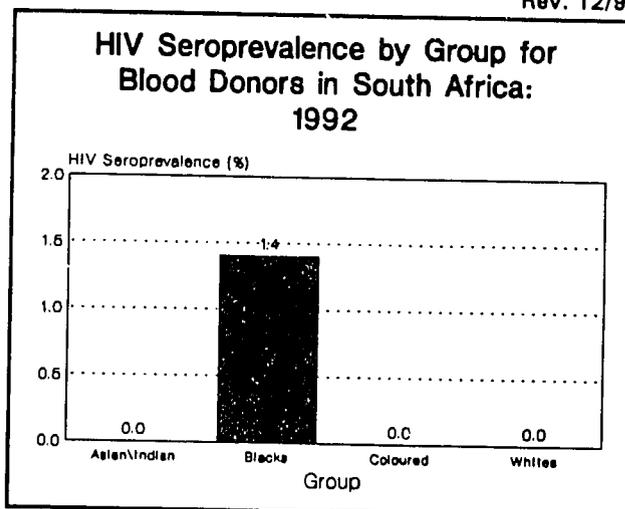


- A study conducted in Hlabisa Health Ward, located in the northern part of Zululand, South Africa, resulted in a similar age pattern of HIV infection among pregnant women.



Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

- National data from the South African blood transfusion services in 1992 show 1.4 percent HIV infection levels from black donors and lower levels for other groups. Potential blood donors, however, may choose not to donate if they consider themselves to be at risk of infection.



Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

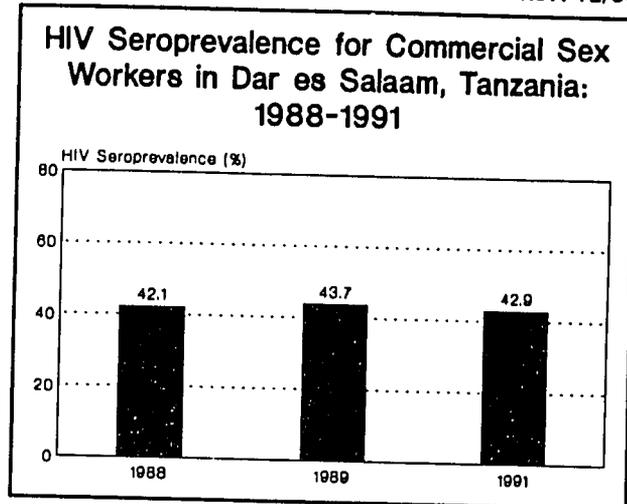
## Sources for South Africa

- 00037 O'Farrell, M., I. Windsor, P. Becker, 1991, HIV-1 Infection among Heterosexual Attenders at a Sexually Transmitted Diseases Clinic in Durban, South African Medical Journal, vol. 80, no. 1, pp. 17-20.
- R0065 RSA Department of National Health and Population Development, 1991, AIDS in South Africa: Status on World AIDS Day 1991, Epidemiological Comments, vol. 18, no. 11, pp. 229-249.
- R0066 RSA Department of National Health and Population Development, 1991, First National HIV Survey of Women Attending Antenatal Clinics, South Africa, Oct/Nov 1990, Epidemiological Comments, vol. 18, no. 2, pp. 35-44.
- R0074 RSA Department of National Health and Population Development, 1992, Second National Survey of Women Attending Antenatal Clinics, South Africa, October/November 1991, Epidemiological Comments, vol. 19 no. 5, pp. 80-92.
- R0089 RSA Dept. of National Health and Population Development, 1993, Third National HIV Survey of Women Attending Antenatal Clinics, South Africa, October/November 1992, Epidemiological Comments, vol. 20, no. 3, pp. 35-50.
- S0111 Schoub, B. D., A. N. Smith, S. Johnson, et al., 1990, Consideration on the Further Expansion of the AIDS Epidemic in South Africa - 1990, South African Medical Journal, vol. 77, pp. 613-618.
- W0077 Wilkinson, D., 1992, HIV Survey of Women Attending Antenatal Clinics, Hlabisa Health Ward, Zululand, 1992, Epidemiological Comments, vol. 19, no. 9, pp. 154-155.

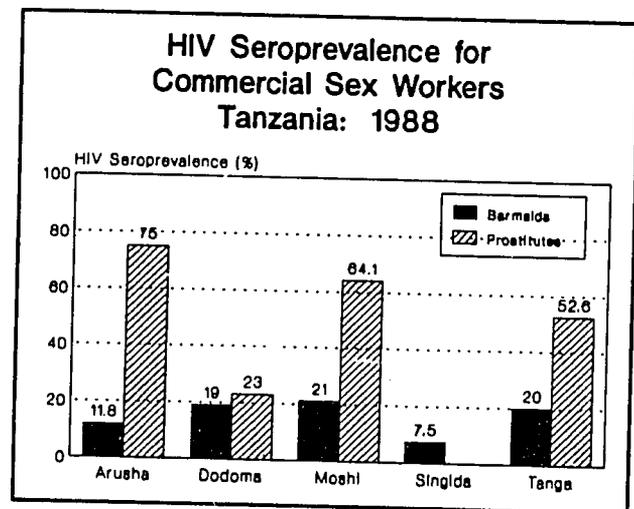
## Tanzania

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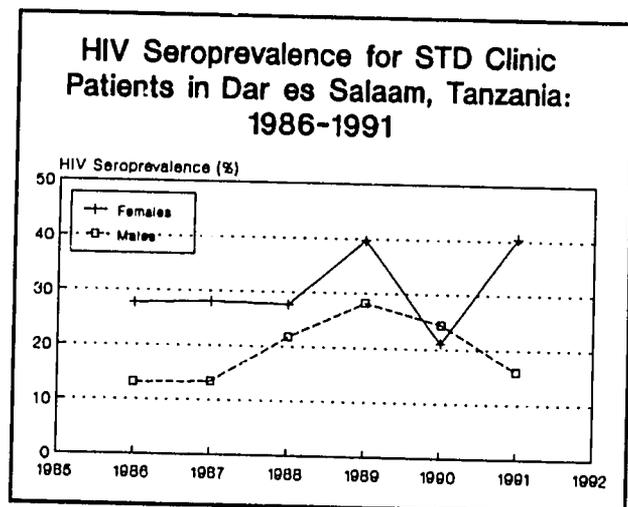
- In the capital city, Dar es Salaam, reported HIV infection levels among commercial sex workers have been extremely high since 1988.



- The level of HIV infection varies by region and by type of commercial sex worker. Prostitutes generally have higher seroprevalence than barmaids, probably due to differences in the number of sexual partners.

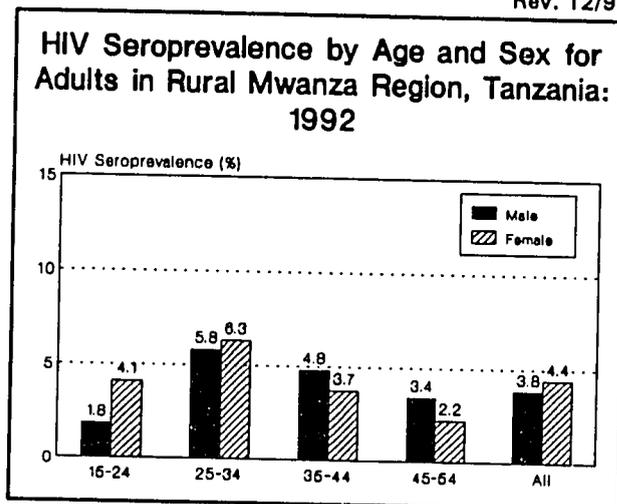


- Female STD clinic patients in Dar es Salaam generally have higher HIV seroprevalence levels than male STD clinic patients. From 1986 to 1991, seroprevalence levels for females increased by nearly 50 percent from 27.8 percent to 40.4 percent.

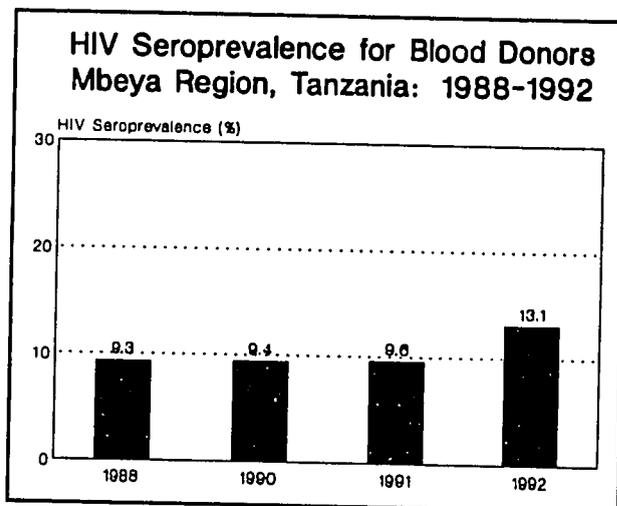


Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

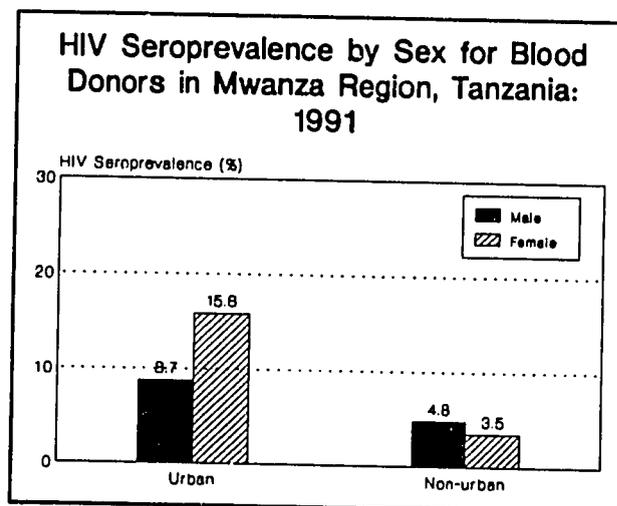
- According to this study conducted among adults from rural villages in Mwanza region for 1992, the highest rate of HIV infection falls in the age range of 25-34 years for both sexes. The overall HIV infection levels show females with slightly higher infection levels than males.



- In the Mbeya region in the southwest of Tanzania, HIV seroprevalence among blood donors remained the same from 1988 to 1990. However, in 1992 HIV levels increased to 13.1 percent.

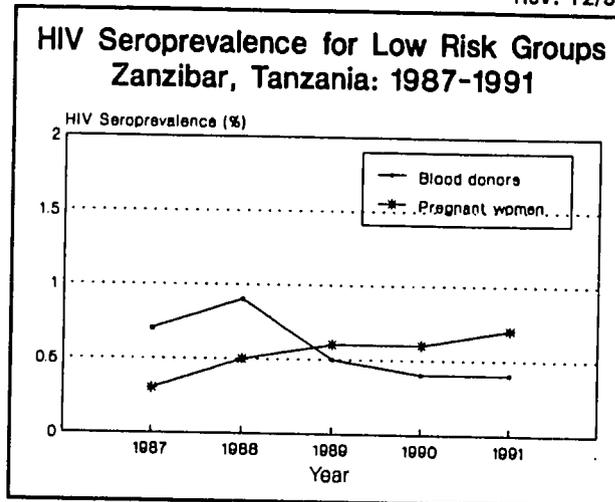


- In 1991, HIV seroprevalence for blood donors in the urban areas of Mwanza region was more than double than the HIV seroprevalence in non-urban areas.



Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

● Sentinel surveillance data collected in four centers from towns and rural areas of Unguja and Pemba Islands indicates the spread of HIV infection to Zanzibar. The HIV infection levels are under 1 percent for both pregnant women and male blood donors. However, among pregnant women HIV levels are increasing while among male blood donors there is a decrease in HIV levels.



Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

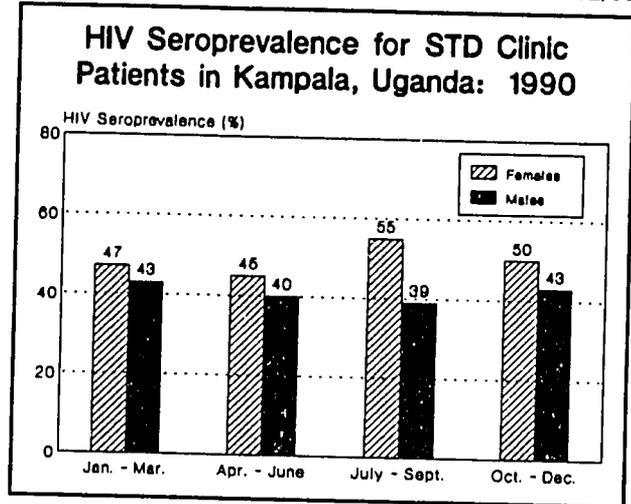
## Sources for Tanzania

- A0095 Ali, A. K., O. J. Khatib, W. Osei, et al., 1992, Sentinel Surveillance for HIV Infection: Five Years Period, VII International Conference on AIDS in Africa, Yaounde, Cameroon, 12/8-12, Poster T.P.036.
- B0165 Borgdorff, M., L. Barongo, E. Van Jaarsveld, et al., 1993, Sentinel Surveillance for HIV-1 Infection: How Representative are Blood Donors, Outpatients with Fever, Anaemia, or Sexually ..., AIDS, vol. 7, no. 4, pp. 567-572.
- C0088 Christiansen, C. B., P. Wantzin, J. F. Shao, et al., 1989, Prevalence of HIV-1 and HIV-2 among Low-Risk Groups in Tanzania, IV Internat. Conf.: AIDS and Assoc. Cancers in Africa, Marseille, Oct. 18-20, Abstract 086.
- K0144 Kwesigabo, G., J. Killewo, A. Sandstrom, 1992, The Accuracy of Sentinel Surveillance Systems in Monitoring the Prevalence of HIV-1 Infection, VII International Conference on AIDS in Africa, Yaounde, Cameroon, 12/8-11, Poster T.P.031.
- M0249 Mwakagile, D. S. M., A. B. M. Swai, K. J. Pallangyo, et al., 1992, Trend of Anogenital Warts among Patients Seen at a Referral Clinic for Sexually Transmitted Diseases in Dar es Salaam, Tanzania, VII International Conference on AIDS in Africa, Yaounde, Cameroon, 12/8-11, Poster W.P.190.
- M0256 Mhalu, F., A. Swai, D. Mwakagile, et al., 1992, Surveillance and Control of HIV-1 Transmission among Female Bar workers in Dar es Salaam 1986-1991, VII International Conference on AIDS in Africa, Yaounde, Cameroon, 12/8-11, Poster T.P.108.
- M0271 Moshia, F., H. Grosskurth, K. Senkoro, et al., 1993, The Impact of STD Intervention on HIV Infection: A Cohort Study on 12,000 People: Intermediate Results, IX International Conference on AIDS, Berlin, 6/6-11, Poster PO-C35-3383, p. 781.
- N0029 Nkya, W. M. M. M., W. P. Howlett, C. Assenga, et al., 1988, AIDS Situation in Northern Tanzania, III International Conference: AIDS and Associated Cancers in Africa, Sept. 14-16, Poster TP 9.
- P0060 Petry, U., H. Kingu, K. Sally, et al., 1990, Remarkable Low Prevalence of HIV Antibodies among Pregnant Women in South-Eastern Tanzania, V International Conference: AIDS in Africa, Kinshasa, Zaire, Oct. 10-12, Poster T.P.E.19.
- R0090 Riedner, G., Y. Hemed, F. Minja, et al., 1993, The Use of Serologic Trends of HIV and Syphilis for the Evaluation of the Mbeya Regional ACP Tanzania 1986-1992, IX International Conference on AIDS, Berlin, 6/6-11, Poster PO-C29-3263.
- U0006 Urassa, E., F. S. Mhalu, E. Mbena, et al., 1990, Prevalence of HIV-1 Infection among Pregnant Women in Dar es Salaam, Tanzania, V International Conference: AIDS in Africa, Kinshasa, Zaire, Oct. 10-12, Poster T.P.E.22.
- V0054 Van Cleeff, M. R. A., H. J. Chum, 1992, The Influence of HIV on the Epidemiology of Tuberculosis: An Analysis Made on Basis of a Pilot Study in Tanzania, VIII International Conference on AIDS, Amsterdam, 7/19-24, Poster PoC 4033.

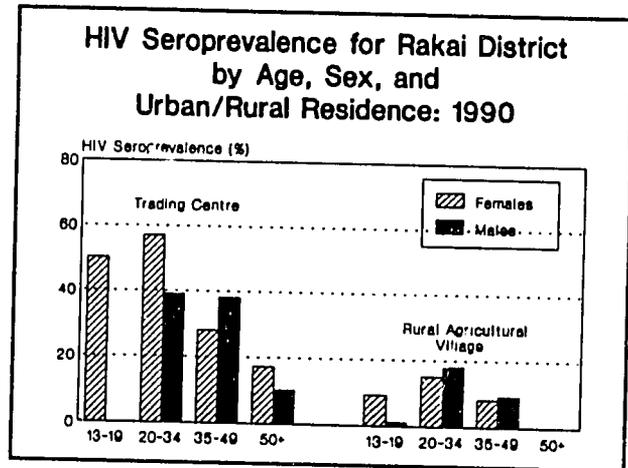
# Uganda

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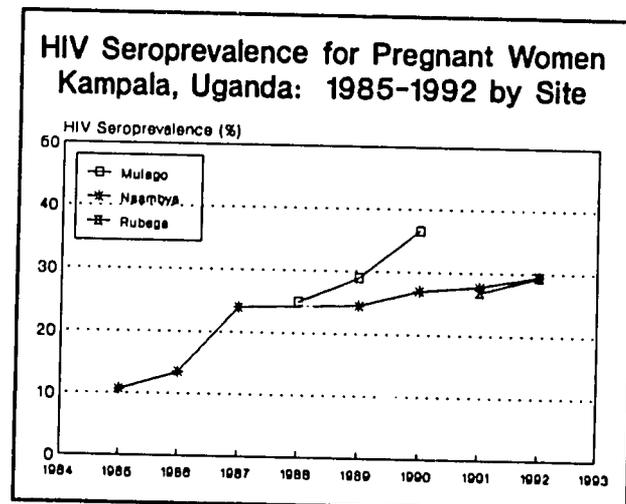
- The AIDS epidemic in Uganda is probably as severe as anywhere in the world. Those with sexually-transmitted diseases continue to be at high risk for infection. The combination of high-risk behavior and increased susceptibility are considered to contribute to their high levels of infection. In this study in Kampala, females visiting STD clinics had levels of HIV infection higher than the males.



- Available studies have tended to show a large differential in HIV infection levels between urban and rural areas. Data from the Rakai District in Uganda demonstrate both the typical age pattern of infection and the urban/rural differentiation in infection levels.

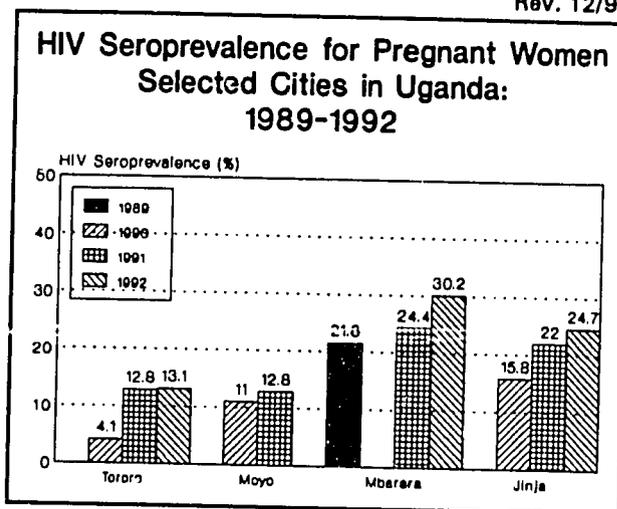


- HIV infection levels for pregnant women in Kampala were already high in the mid-1980s and have increased to about one-quarter of the population. Studies from different hospital sites show this increase in HIV infection levels. In Nsambya and Rubaga HIV levels have increased slowly but steadily while in Mulago, the increase has been more rapid.

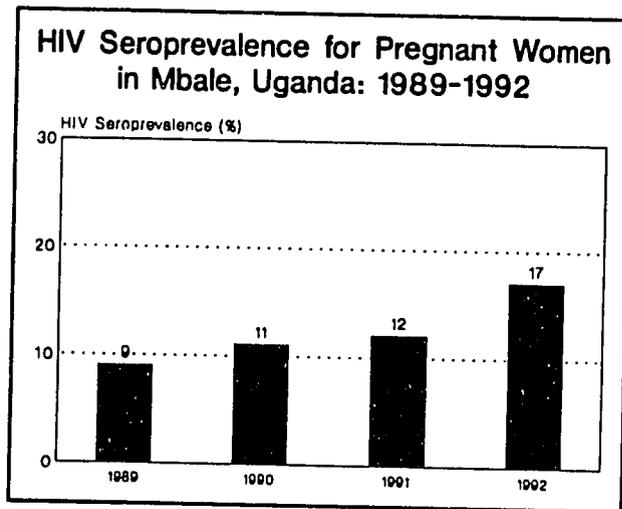


Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

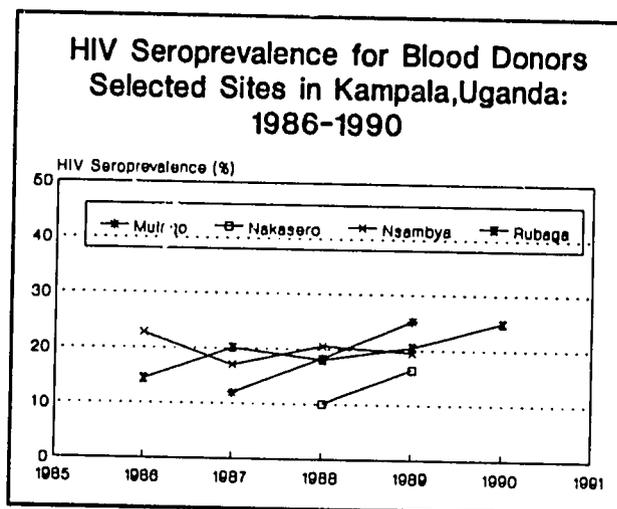
- HIV infection levels among pregnant women in cities throughout Uganda have increased over the 1989-92 time period. During 1992, Mbarara, capital of Western Region, had the highest HIV level among these sites, 30.2 percent.



- Mbale, capital of Eastern Region, a semi-rural area, shows trends similar to the urban cities. HIV infection levels have increased slowly but steadily.

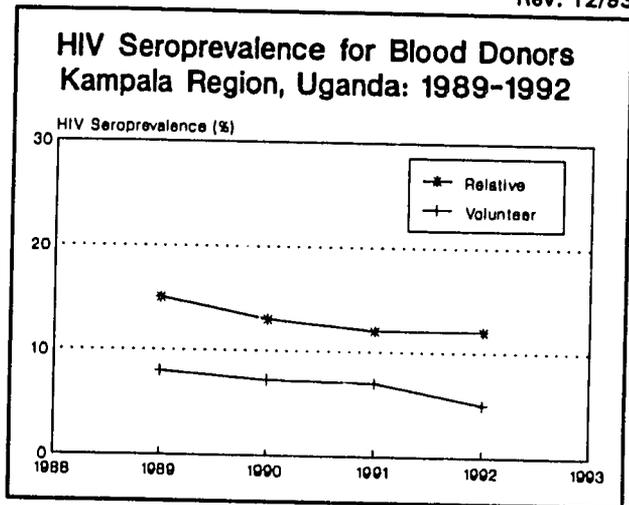


- In sentinel surveillance studies, HIV infection levels in blood donors vary among the different hospital sites. These sites showed an increase in HIV levels from 1986 to 1990. Nsambya is the exception, which has a mixed trend.

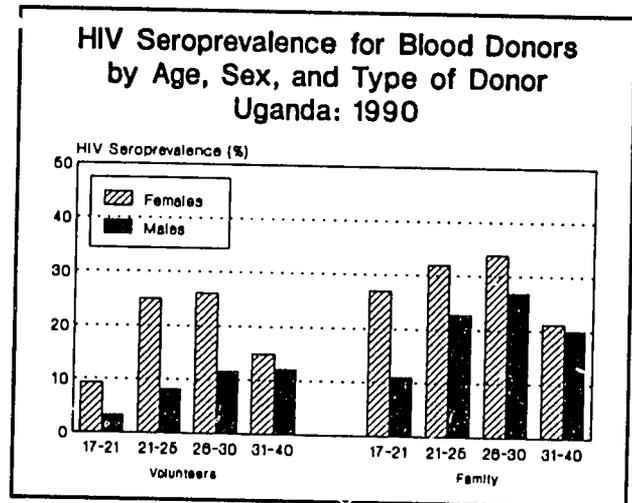


Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

- According to this study, HIV infection levels among blood donors in and around Kampala seem to be slowly decreasing. Family members have higher rates of infection than volunteer blood donors.



- In another study, family donors were once again found to have higher HIV infection than volunteer donors. Also, female blood donors had a higher level of HIV infection than males regardless of age and type of donor.



Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

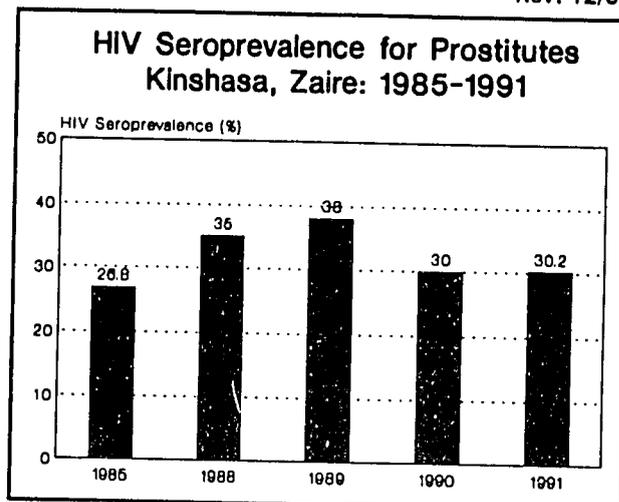
## Sources for Uganda

- A0086 Asimwe, G., G. Tembo, W. Naamara, et al., 1992, AIDS Surveillance Report: June 1992, Ministry of Health, AIDS Control Programme Surveillance Unit, Entebbe, Uganda, unpublished report.
- C0038 Carswell, J. W., 1987, HIV Infection in Healthy Persons in Uganda, AIDS, vol. 1, no. 4, pp. 223-227.
- H0066 Hellmann, N. S., S. Desmond-Hellman, P. S. J. Nsubuga, et al., 1991, Genital Trauma During Sex is a Risk Factor for HIV Infection in Uganda, VII International Conference on AIDS, Florence, Italy, 6/16-21, Poster M.C.3079.
- K0156 Kasirye, J., P. Senyonga, P. Kataaha, et al., 1993, HIV in Voluntary and Relative Blood Donors from 1989 to 1992 in Kampala, IX International Conference on AIDS, Berlin, 6/6-11, Poster PO-C21-3132.
- T0053 Twa-Twa, J., G. Tembo, G. Asimwe, et al., 1991, AIDS Surveillance Report (First and Second Quarter) for the Year 1991, Ministry of Health, AIDS Control Programme Surveillance Unit, Entebbe, Uganda, unpublished report.
- T0067 Tembo, G., J. Twa-Twa, G. Asimwe, et al., 1991, AIDS Surveillance Report: December 1991, Ministry of Health, AIDS Control Programme Surveillance Unit, Entebbe, Uganda, unpublished report.
- W0050 Watson-Williams, E. J., P. Kataaha, P. Ssenyonga, et al., 1991, Development of Uganda Blood Transfusion Service. Sept. 1988 - Jan. 1991, VII International Conference on AIDS, Florence, Italy, 6/16-21, Poster W.D.4089.
- W0056 Waver, M. J., D. Serwadda, S. D. Musgrave, et al., 1991, Dynamics of Spread of HIV-1 Infection in a Rural District of Uganda, British Medical Journal, vol. 303, no. 6813, pp. 1303-1306.

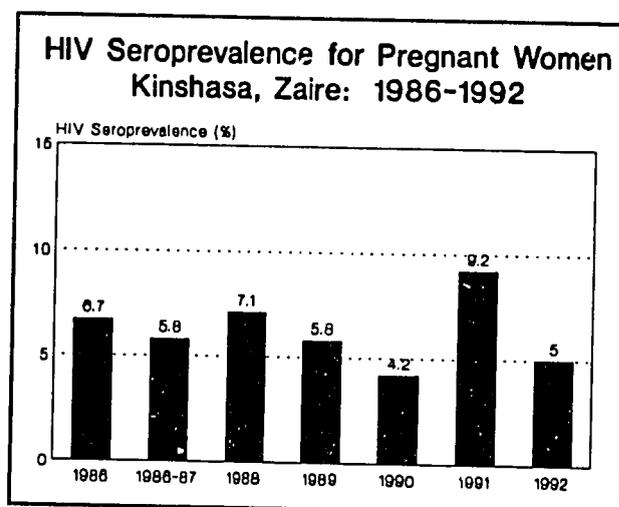
## Zaire

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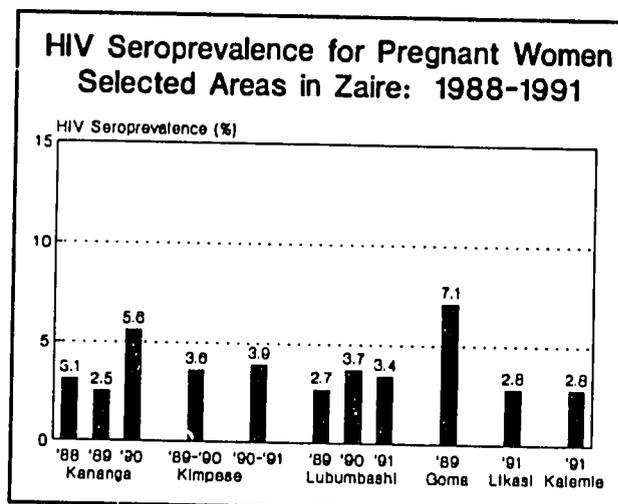
- In the capital city of Zaire, Kinshasa, the HIV infection level for prostitutes was reported as early as 1985 to be high, 36.8 percent and continued to increase to 38 percent in 1989. In the early 1990's, the HIV infection level remains around 30 percent.



- Also, in Kinshasa, the level of HIV infection in samples of pregnant women continues to hover around 7 percent.

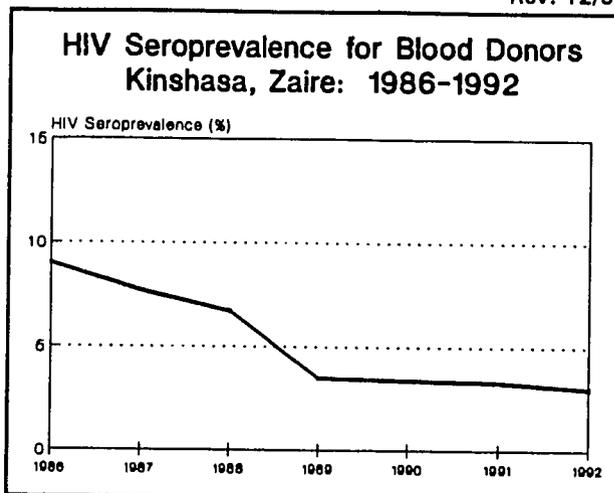


- In Kananga, the capital city of the west Kasai Region, HIV infection levels reached 6 percent among pregnant women in 1990. Data for 1989 in Goma found HIV levels to be 7.1 percent, in Likasi, Kalemie and Lubumbashi for 1991, around 3 percent, and in Kimpese for 1990-91, 3.9 percent among pregnant women.

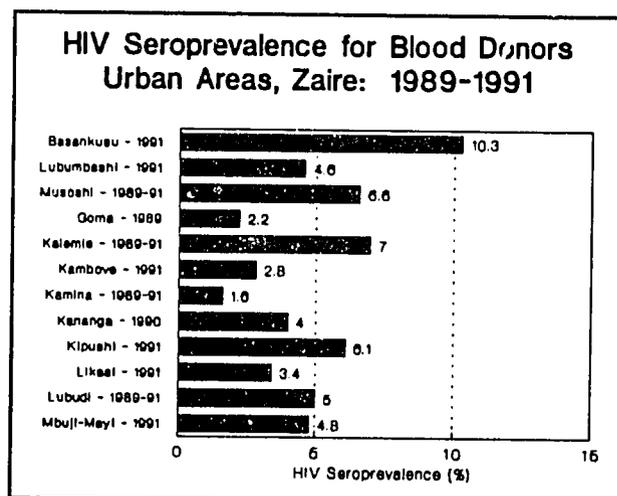


Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

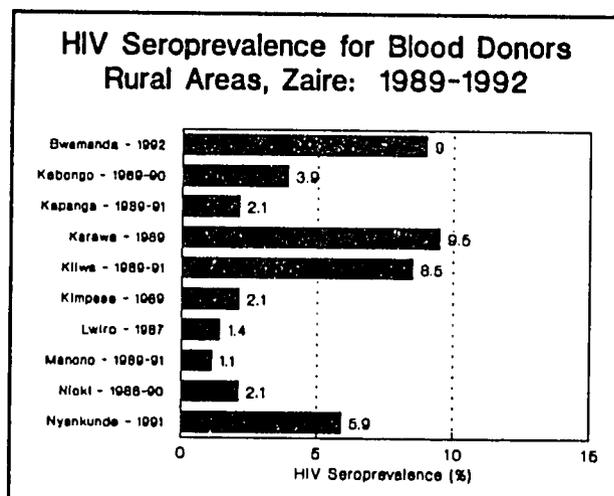
- In Kinshasa, HIV seropositive levels for blood donors underwent a statistically-significant decline between 1986 and 1989. In 1986, the seroprevalence of donors was 9.0 percent, dropping to 3.6 percent in 1989, and continues to slowly decline. This may be due to donor screening programs and reduced donations from high risk individuals.



- Several studies among blood donors have been carried out in various urban areas of Zaire. The range of HIV infection was 1.6 percent in Kamina to 10.3 percent in Basankusu.



- In the rural areas of Zaire, the HIV infection levels among blood donors are in the same range as those for the urban areas. For the rural areas, studies show the range to be from 1.1 percent to 9.0 percent.



Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

## Sources for Zaire

- B0096 Brown, R., K. Kawunda, 1990, Sero-Surveillance of HIV Infection in Kananga, Zaire, V International Conference: AIDS in Africa, Kinshasa, Zaire, Oct. 10-12, Poster T.P.E.35.
- B0106 Brown, R. C., 1990, Seroprevalence and Clinical Manifestations of HIV-1 Infection in Kananga, Zaire, AIDS, vol. 4, no. 12, pp. 1267-1269.
- G0092 Goubau, P., K. Kazadi, H. Carton, et al., 1991, HTLV-1 in Zaire and its Relationship to HIV, VI International Conference on AIDS in Africa, Dakar, Senegal, 12/16-19, Poster T.A.159.
- G0098 Green, S. D. R., J. K. L. Mokili, M. Nganzi, et al., 1992, Seroprevalence and Determinants of HIV-1 Infection in Pregnancy in Rural Zaire, VIII International Conference on AIDS, Amsterdam, 7/19-24, Poster PoC 4016.
- H0021 Hardy, I., S. R. Green, W. A. M. Cutting, et al., 1989, HIV-1 Seroprevalence in Rural Zaire, V International Conference on AIDS, Montreal, 6/4-9, Poster M.G.P. 18.
- K0097 Kashala, O., R. Marlink, M. Ilunga, et al., 1991, HIV-1, HTLV-1 and HTLV-II Infection among Leprosy Patients and Their Contacts in Zaire, VII International Conference on AIDS, Florence, Italy, 6/16-21, Abstract M.C.3311.
- M0057 Mann, J. M., N. Nzilambi, P. Piot, et al., 1988, HIV Infection and Associated Risk Factors in Female Prostitutes in Kinshasa, Zaire, AIDS, vol. 2, no. 4, pp. 249-254.
- M0147 Magazani, K., G. Laleman, et al., 1990, Sentinel Surveillance of HIV in the Shaba Province (Zaire), V International Conference: AIDS in Africa, Kinshasa, Zaire, Oct. 10-12, Poster T.P.E.7.
- M0252 Malulu, S., M. Nsuami, B. Matela, et al., 1992, Stabilization of HIV-1 Infection Prevalence in Women in Kinshasa: between 1986 and 1989, VII International Conference on AIDS in Africa, Yaounde, Cameroon, 12/8-11, Poster T.P.013.
- M0253 Maholo, F., N. Ilunga, M. Mbayo, et al., 1992, Evolution de la Seroprevalence de l'Infection VIH a Kinshasa, Zaire - Donnees de la Banque de Sang de l'Hopital Mama Yemo, VII International Conference on AIDS in Africa, Yaounde, Cameroon, 12/8-11, Abstract T.P.153.
- M0262 Magazani, K., G. Laleman, J. H. Perriens, et al., 1993, Low and Stable HIV Seroprevalence in Pregnant Women in Shaba Province, Zaire, Journal of Acquired Immune Deficiency Syndromes, vol. 6, no. 4, pp. 419-423.
- M0265 Minister of Public Health, 1993, Serosurveillance Report of HIV Infection, Republic of Zaire, National Control Programme Against AIDS, Central Coordination Bureau, BCC/SIDA, Official Report.
- N0027 N'Galy, B., R. Ryder, H. Francis, et al., 1988, HIV Prevalence in Zaire, 1984 to 1988, IV International Conference on AIDS, Stockholm, 6/13-14, Poster 5632.
- P0089 Pepin, J., L. Ethier, C. Kazadi, et al., 1992, The Impact of Human Immunodeficiency Virus Infection on the Epidemiology and Treatment of Trypanosoma Brucei Gambiense ..., American Journal of Tropical Medicine and Hygiene, vol. 47, no. 2, pp. 133-140.
- R0021 Ryder, R. W., W. Nsa, S. E. Hassig, et al., 1989, Perinatal Transmission of the Human Immunodeficiency Virus Type 1 to Infants of Seropositive Women in Zaire, New England Journal Medicine, vol. 320, no. 25, pp. 1637-1642.
- W0070 Welo, K., M. Almaviva, W. Maganga, et al., 1991, Seroprevalence du VIH 1 au Zaire, La Presse Medicale, vol. 20, no. 35, pp. 1717-1719.

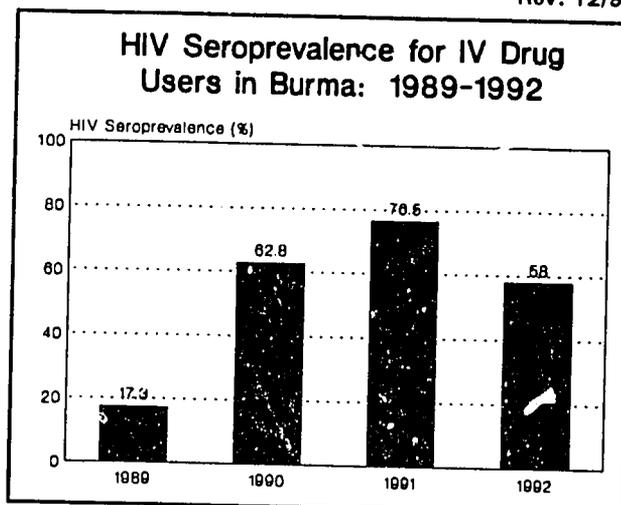
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**ASIA**

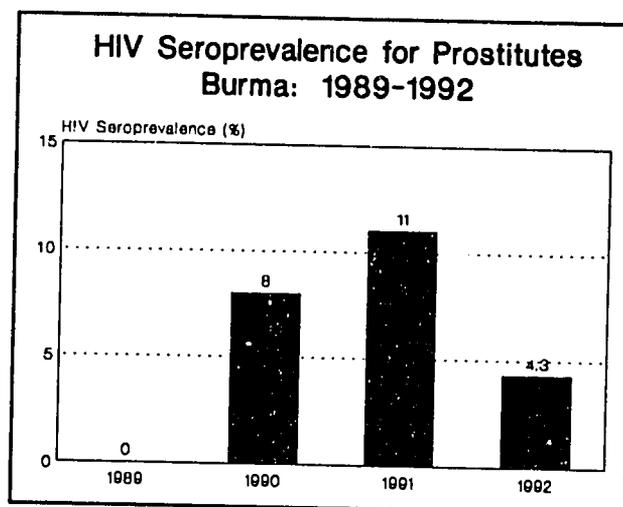
## Burma

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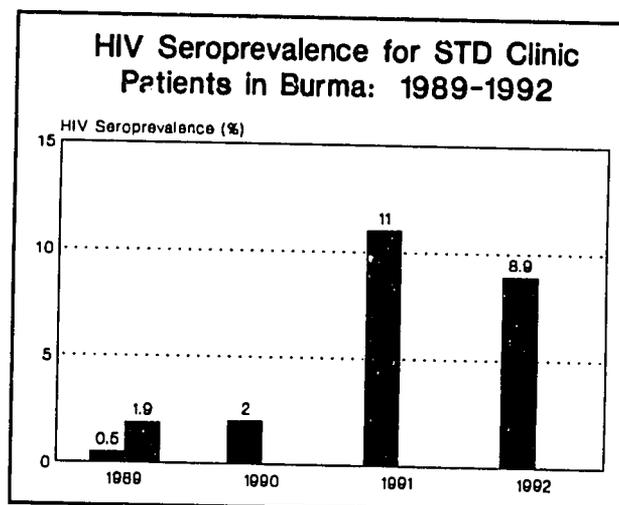
- A study of intravenous drug users from 1989 to 1991 show HIV infection increasing from 17.3 to 76.5 percent. A 1992 sentinel surveillance survey reported HIV infection level to be 58 percent.



- Data from a summary report conducted in Burma found the HIV infection levels among prostitutes to have gone from no evidence of the virus in 1989 to 11 percent in early 1991. A sentinel surveillance study from April-May 1992 reports the HIV infection level to be 4.3 percent.

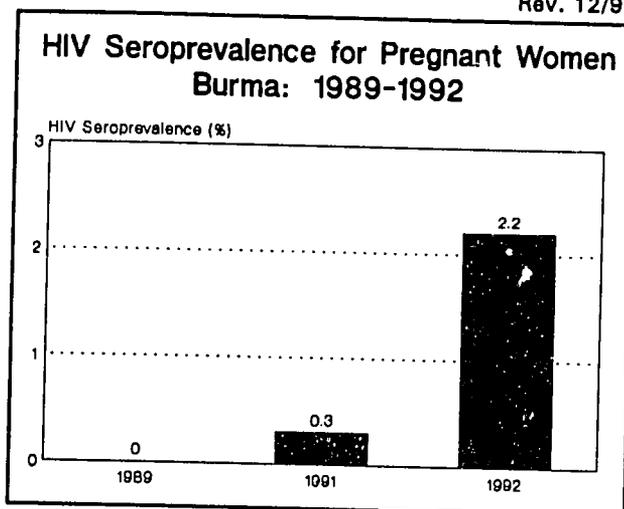


- The HIV seroprevalence levels have steadily increased among STD clinic patients over a three year period. By early 1991, the HIV level had reached 11 percent. In the 1992 sentinel surveillance study, the overall level of HIV was 8.9 percent. This study found 11.4 percent of females and 6.4 percent of males to be infected.

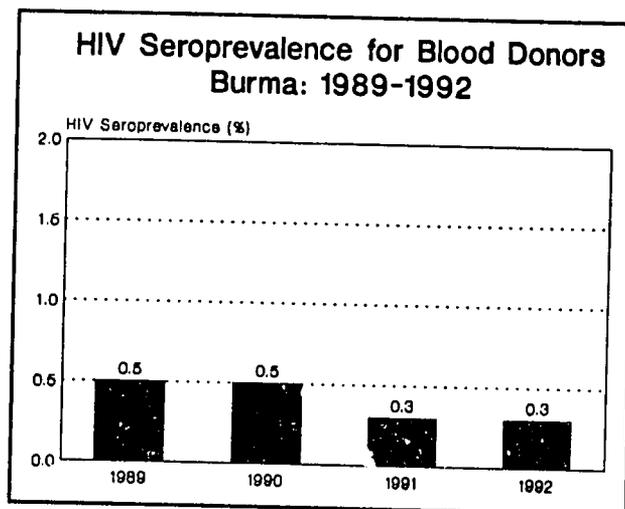


Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

- In 1989, no evidence of HIV infection was detected among pregnant women in Burma. However, in early 1991, a study showed that the level of infection was 0.3. In 1992, a sentinel surveillance study reported the HIV infection level had increased to 2.2 percent.



- According to the same sentinel surveillance studies done in Burma, the percent of HIV positive blood donors has remained relatively the same.



Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

## Sources for Burma

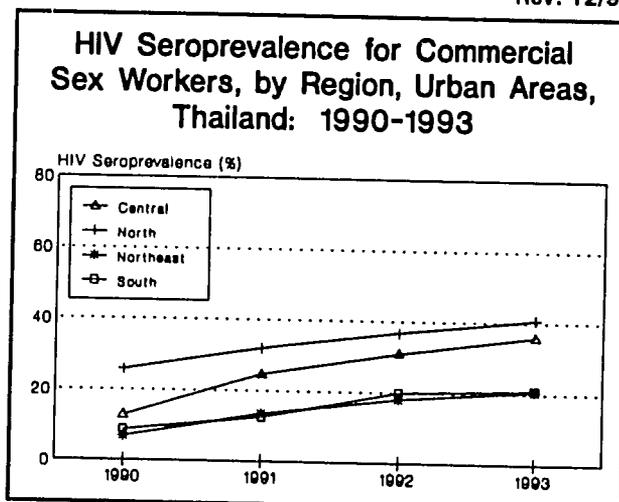
- F0055 Frerichs, R. R., M. T. Htoon, M. Eskes, et al., 1992, Comparison of Saliva and Serum for HIV Surveillance in Developing Countries, *Lancet*, vol. 340, no. 8834/8835, pp. 1496-1499.
- V0049 Voice of Myanmar, 1991, AIDS Cases, Summary of World Broadcasts, July 10, Third Series FE/W0187, pp. A7-A8.
- W0063 Weniger B. G., P. Thongcharoen, J. T. John, et al., 1992, The HIV Epidemic in Thailand, India, and Neighboring Nations: A Fourth Epidemiologic Pattern Emerges in Asia, VIII International Conference on AIDS, Amsterdam, 7/19-24, Poster PoC 4087.
- Y0013 Yeoh, E., 1990, The Growing Problem of AIDS in Asia, VI International Conference on AIDS, San Francisco, 6/24, Closing Ceremony, vol. 3, p. 93.

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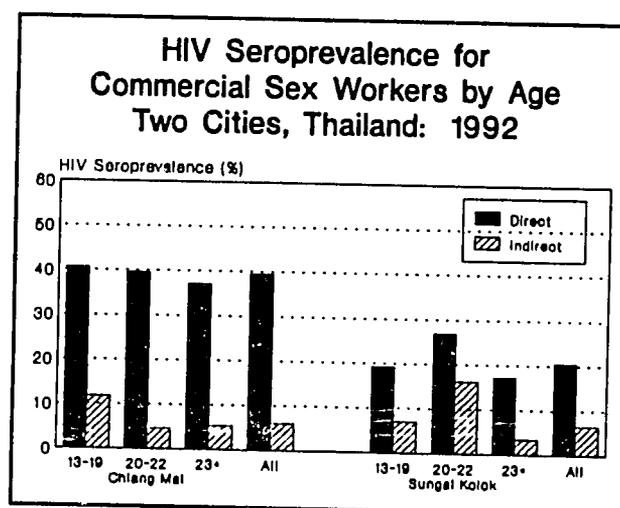
## Thailand

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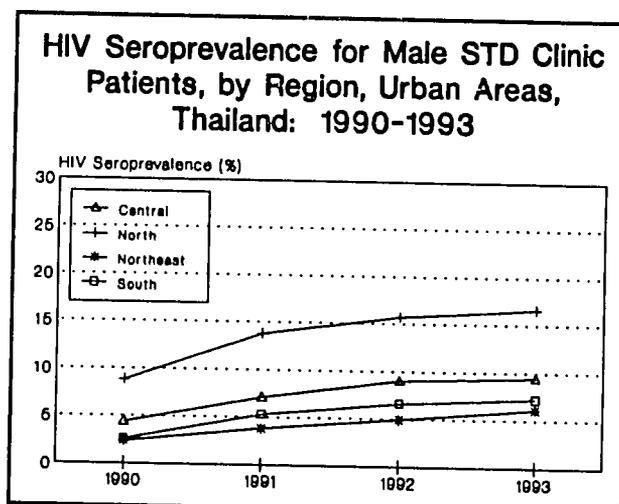
- The AIDS situation has exploded in Thailand within the past few years. Based on sentinel surveillance data, since June 1990, the virus is increasing at a fast rate among commercial sex workers in the North and Central regions. The Northeast and South regions show an increase in HIV infection but not as rapidly.



- HIV seroprevalence among commercial sex workers continues to grow throughout Thailand. In this 1992 study of HIV seroprevalence among commercial sex workers in the northern urban area of Chiang Mai and the southern urban area of Sungai Kolok, higher levels were found for those working in brothels versus those working in more indirect settings.

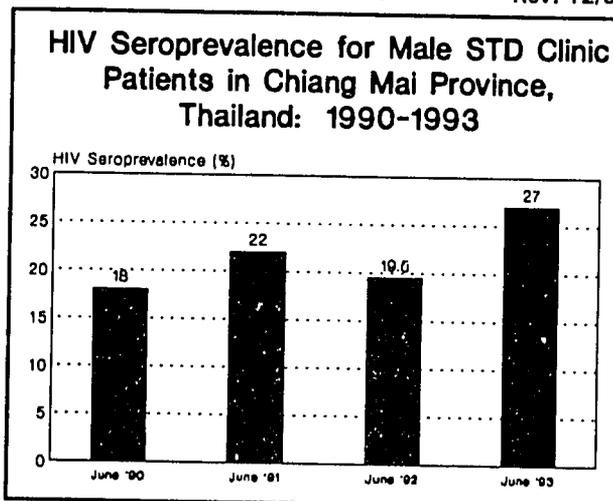


- For the period of June 1990 to June 1993, Thailand's sentinel surveillance system has documented a near doubling of HIV infection among urban STD clinic attendees in all regions of the country. However, the North region has the highest level.

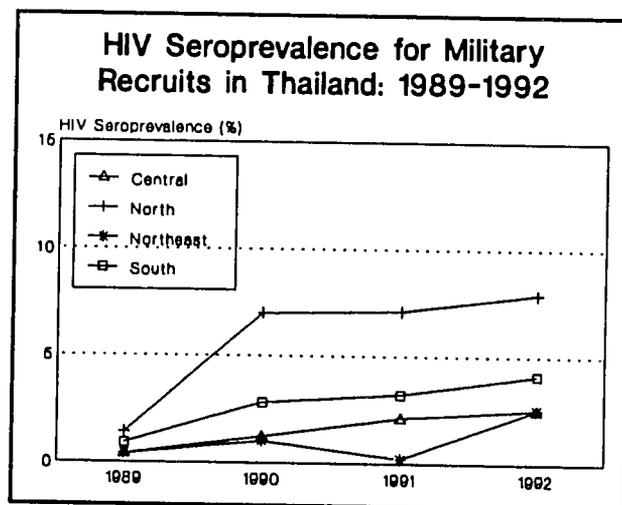


Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

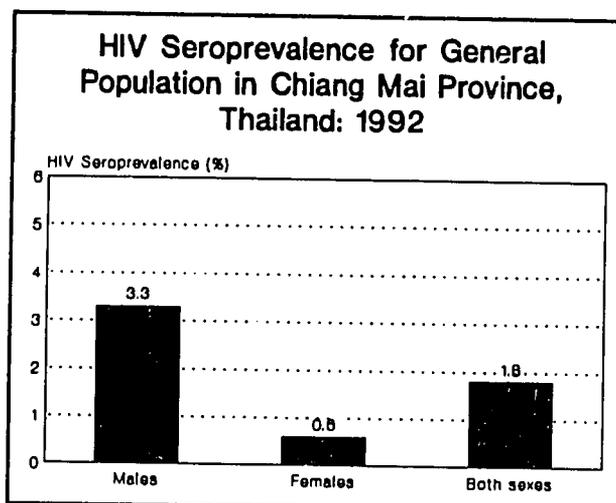
- In the city of Chiang Mai, northern Thailand, HIV infection levels among STD clinic patients increased to 27 percent for June 1993.



- During this study period, HIV-1 seroprevalence continued to increase among young adult males entering the Royal Thai Army in all regions of Thailand. Prevalence rates are the highest in the North region, reaching 7.7 percent in 1992. All other regions had prevalence rates over 2 percent for 1992.

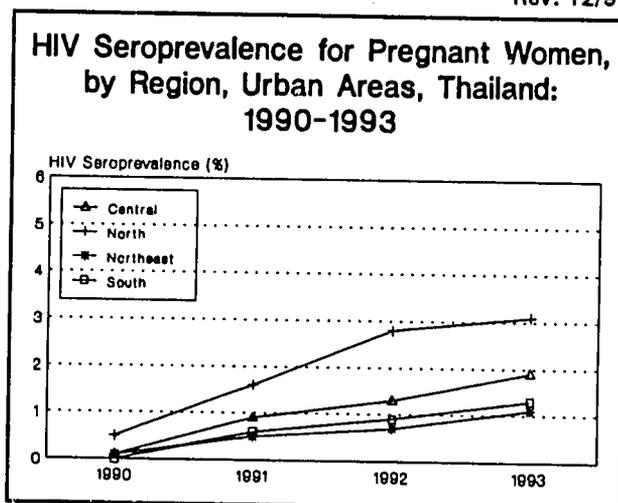


- The overall HIV prevalence among residents of four villages in northern Thailand was 1.8 percent. The prevalence level for males is about three times higher than females.

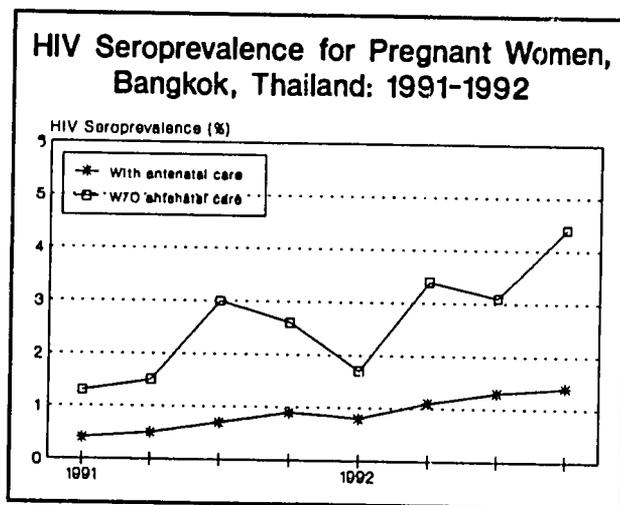


Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

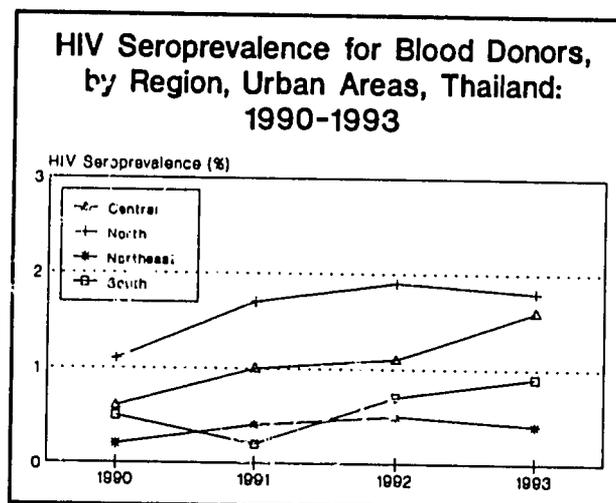
- HIV infection levels among pregnant women are also increasing in all regions, based on sentinel surveillance data. HIV levels in the North region have approximately doubled each year while the HIV levels in the other regions of Thailand are still under 2 percent.



- A study conducted among pregnant women in Rajvithi hospital, a large public hospital in Bangkok, showed an increase in HIV infection. HIV seroprevalence among pregnant women delivering with no antenatal clinic care had a threefold higher level of HIV than those women receiving antenatal clinic care.



- The rates of infection in blood donors show a marked increase over the 4 year period in the South and Central regions. As seen among other groups, HIV levels in the North region are the highest, however, there is a very slight decline in 1993. Also, the level in the Northeast region declines in 1993.



Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

## Sources for Thailand

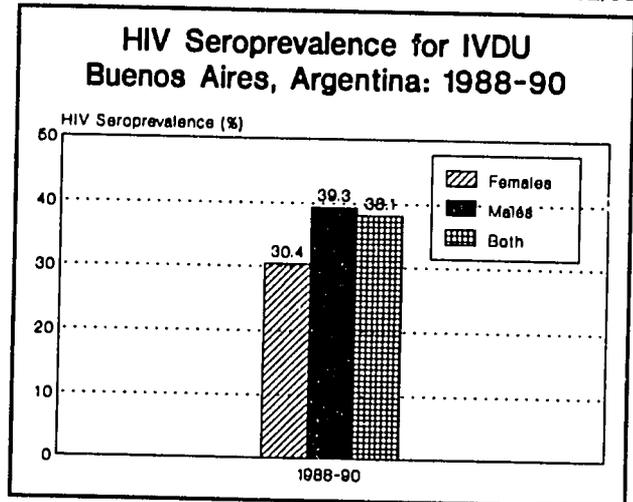
- C0146 Chaisiri, N., V. Danutra, B. Limanonda, 1993, Prevalence of Syphilis and Anti-HIV-1 Seropositive among Prostitutes in Two Urbans Areas of Thailand, IX International Conference on AIDS, Berlin, 6/6-11, Poster PO-C14-2896.
- N0103 Nelson, K. E., V. Suriyanon, E. Taylor, et al., 1993, Incident HIV Infections in N. Thailand: Association with Hepatitis B and C (HBV, HCV) Infections, IX International Conference on AIDS, Berlin, 6/6-11, Abstract PO-C08-2774.
- S0213 Siriwasin, W., S. Singhaneti, G. Kaewchaiyo, et al., 1993, Rapid Rise in Maternal HIV-1 Seroprevalence, Bangkok, Thailand, IX International Conference on AIDS, Berlin, 6/6-11, Poster PO-C08-2767.
- S0214 Sirisopana, N., K. Torugsa, J. Carr, et al., 1993, Prevalence of HIV-1 Infection in Young Men Entering the Royal Thai Army, IX International Conference on AIDS, Berlin, 6/6-11, Poster PO-C08-2778.
- T0045 Thailand Ministry of Public Health, 1991, National Sentinel Surveillance Survey, Unpublished tables.
- T0058 Thailand Ministry of Public Health, 1991, National Sentinel Seroprevalence Survey, Oct. 28, unpublished tables.
- T0079 Thailand Ministry of Public Health, 1992, National Sentinel Seroprevalence Survery, June, unpublished tables.
- T0100 Thailand Ministry of Public Health, 1993, National Sentinel Seroprevalence, June, unpublished tables.

# **LATIN AMERICA/CARIBBEAN**

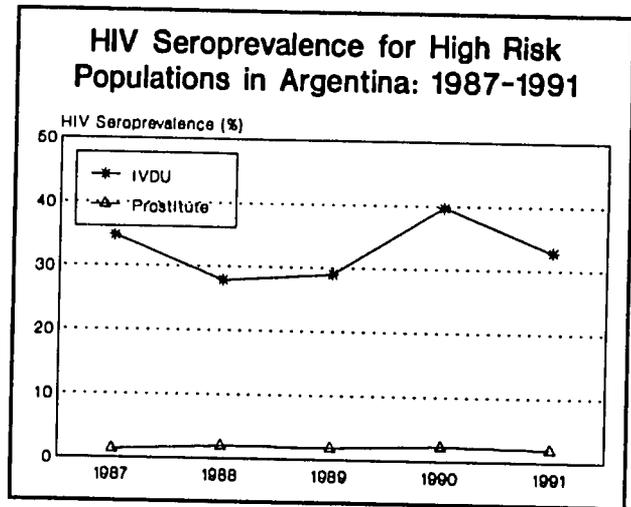
# Argentina

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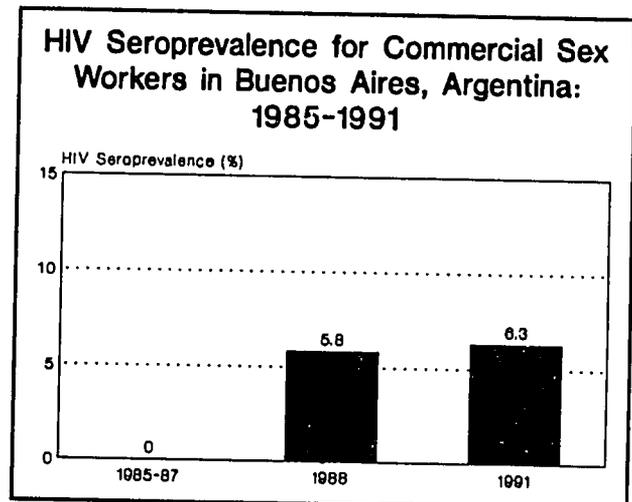
- The prevalence of HIV among intravenous drug users admitted to a drug treatment center in Buenos Aires between June 1988 and July 1990 was extremely high, 38 percent. The HIV infection level for males was higher than for females.



- One study conducted among different communities in Argentina, over a 5 year period found high HIV infection levels in IVDU. IVDU in these communities showed the greatest impact of HIV infection compared to the prostitutes in the same communities. The infection levels among IVDU were much higher than those among prostitutes in the same communities.

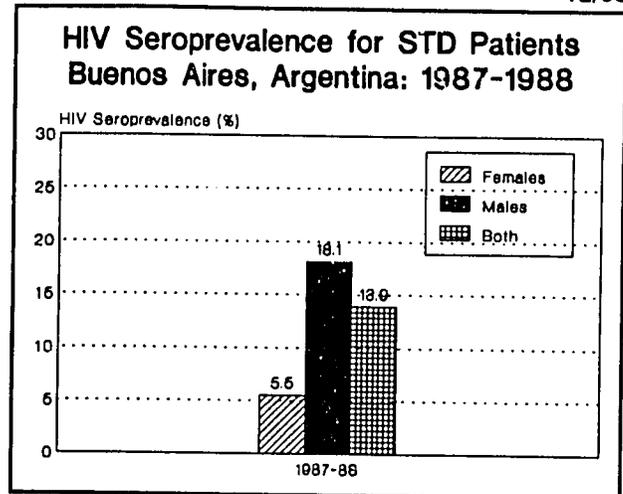


- Since 1985, serological testing for HIV antibodies has been carried out in Buenos Aires city among commercial sex workers. However, no evidence of the virus was found until 1988.

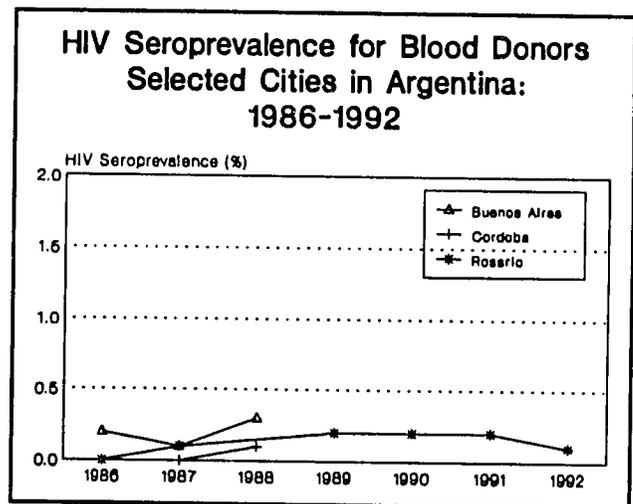


Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

- In a study of STD clinic patients in Buenos Aires from 1987-1988, 18.1 percent of the males were HIV infected. This is more than triple the HIV infection level of 5.5 percent for females.



- Seroprevalence studies among blood donors from blood banks show the level of HIV infection under 0.5 percent in three major cities.



Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

## Sources for Argentina

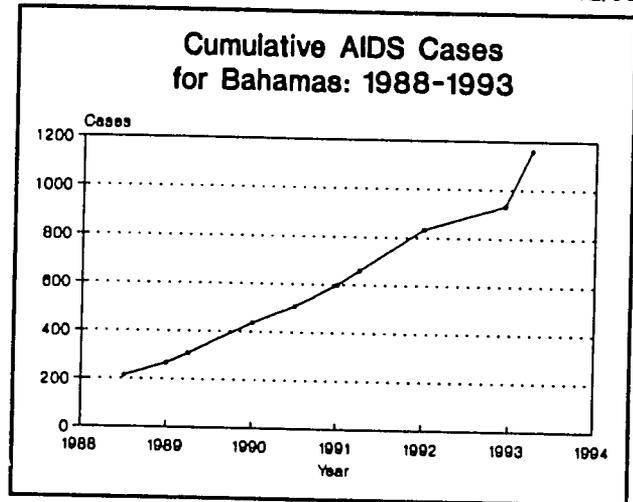
- B0063 Boxaca, M., L. Belli, R. Casco, et al., 1989, HIV Infection in Heterosexual from Buenos Aires City Consulting for Venereal Disease, V International Conference on AIDS, Montreal, 6/4-9, Poster W.G.P. 18.
- B0175 Bonvehi, P. E., O. Gomez-Marin, I. Cassetti, et al., 1993, HIV Infection and Associated Factors among Intravenous Drug Users in Buenos Aires, IX International Conference on AIDS, Berlin, 6/6-11, Poster PO-C15-2918.
- F0024 Fay, O., G. Muchnik, J. Rey, et al., 1989, HIV-Infection in Voluntary Blood Donors in Argentina, V International Conference on AIDS, Montreal, 6/4-9, Poster M.G.O. 29.
- F0037 Fay, J., M. Taborda, A. Fernandez, et al., 1991, HIV Seroprevalence among Different Communities in Argentina after Four Years of Surveillance, VII International Conference on AIDS, Florence, Italy, 6/16-21, Poster M.C.3263.
- F0060 Fay, O., R. Viglianco, A. Fernandez, et al., 1993, Reduction of HIV Positive Blood Donors in Rosario, Argentina, IX International Conference on AIDS, Berlin, 6/6-11, Poster PO-C06-2707.
- M0065 Muchnik, G. R., G. R. Picchio, M. B. Bouzas, et al., 1988, Seroepidemiology of Human Immunodeficiency Virus in Low and High Risk Groups in Buenos Aires, Argentina, AIDS-Forschung, vol. 3, no. 2, pp. 89-93.
- M0088 Multare, S., M. Zarate, M. Boxaca, et al., 1989, Anti-HIV Antibodies in Male and Female Streetwalkers in Buenos Aires City, V International Conference on AIDS, Montreal, 6/4-9, Poster W.G.P. 21.
- M0104 Muchnik, G., G. Picchio, B. Livellara, et al., 1987, HIV Antibody in Blood Donors in Argentina, Boll 1st Sieroter Milan, vol. 66, no. 6, pp. 491-492.
- Z0030 Zapiola, I., M. B. Bouzas, G. Muchnik, et al., 1992, HIV-1 and HTLV-1/II among Prostitutes in Buenos Aires, Argentina, VIII International Conference on AIDS, Amsterdam, 7/19-24, Poster PoC 4661.

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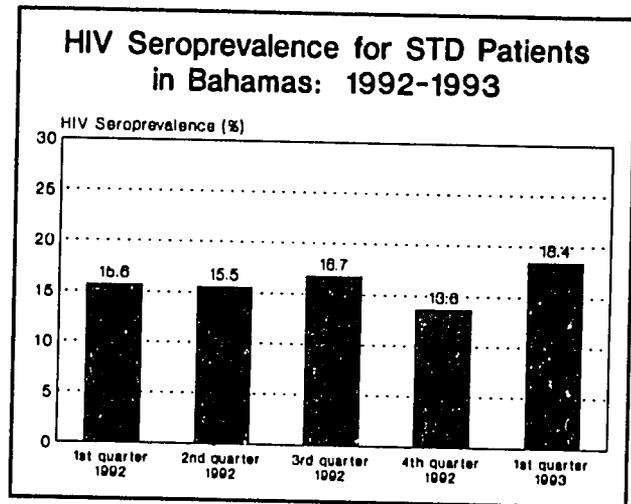
## Bahamas

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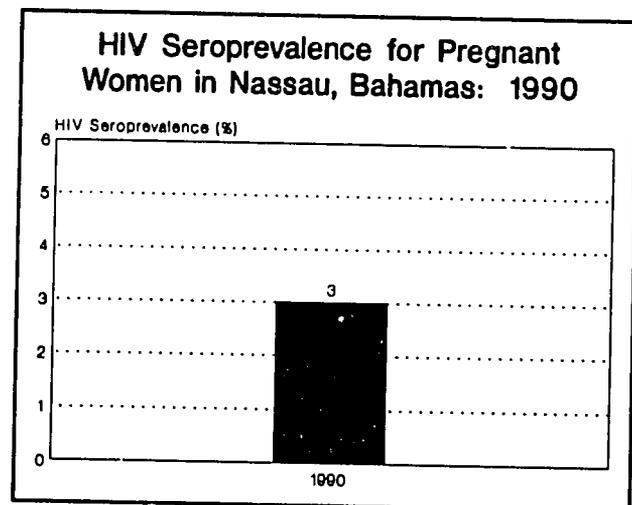
- The Bahamas reported one of the highest number of cumulative AIDS cases within the Caribbean to the World Health Organization. As a result, the Bahamas has one of the highest cumulative incidence rates, 4.42 per 1,000 population, of reported AIDS cases in the Caribbean and the Americas.



- The Bahamas Ministry of Health Community Health Service reported HIV infection levels among STD clinic patients by quarters ranging from 13.6 percent to 16.7 percent for 1992. There was a reported increase in the first quarter of 1993 to 18.4 percent.

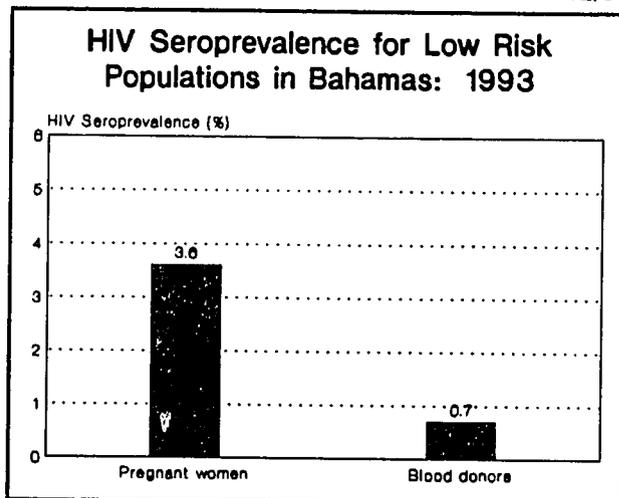


- There is limited amount of data from Nassau, the capital city, on HIV seroprevalence among pregnant women. However, one recent study in Nassau shows the HIV infection level to be 3 percent among pregnant women.



Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

- In the same reports from the Bahamas Ministry of Health, the first quarter of 1993 shows an HIV infection level of 3.6 percent among pregnant women and 0.7 percent among blood donors.



Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

## Sources for Bahamas

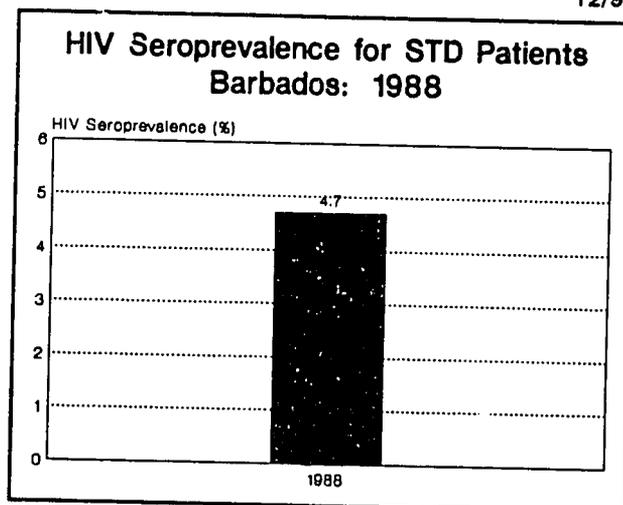
- B0176 Bahamas Ministry of Health, Community Health Service, 1992, PAHO/WHO HIV Surveillance, Apr. 30, Pan American Health Organization/World Health Organization.
- B0177 Bahamas Ministry of Health, Community Health Service, 1992, PAHO/WHO HIV Surveillance, Aug. 25, Pan American Health Organization/World Health Organization.
- B0178 Bahamas Ministry of Health, Community Health Service, 1993, PAHO/WHO HIV Surveillance, Feb. 17, Pan American Health Organization/World Health Organization.
- B0179 Bahamas Ministry of Health, Community Health Service, 1993, PAHO/WHO HIV Surveillance, May 18, Pan American Health Organization/World Health Organization.
- G0123 Gayle, C., J. Farley, 1993, Trends in Patterns of Transmission Over 10 Years of the AIDS Epidemic in the English-Speaking Caribbean and Suriname, IX International Conference on AIDS, Berlin, 6/6-11, Poster PO-C06-2710.
- W0013 World Health Organization, 1988, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 2, no. 6, pp. 487-490.
- W0032 World Health Organization, 1989, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 3, no. 6, pp. 405-406.
- W0033 World Health Organization, 1989, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 3, no. 9, pp. 619-620.
- W0042 World Health Organization, 1990, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 4, no. 6, pp. 605-606.
- W0045 World Health Organization, 1989, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 4, no. 12, pp. 1305-1306.
- W0047 World Health Organization, 1991, Statistics from the who and the Centers for Disease Control, AIDS, 5(6):785-790.
- W0057 World Health Organization, 1992, World Health Organization Global AIDS Statistics, AIDS Care, vol. 4, no. 1, pp. 125-128.
- W0058 World Health Organization, 1992, World Health Organization Global AIDS Statistics, AIDS Care, vol. 4, no. 2, pp. 231-234.
- W0072 World Health Organization, 1993, World Health Organization Global AIDS Statistics, AIDS, vol. 5, no. 1, pp. 125-128.
- W0079 World Health Organization, 1993, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 7, no. 9, pp. 1287-1291.

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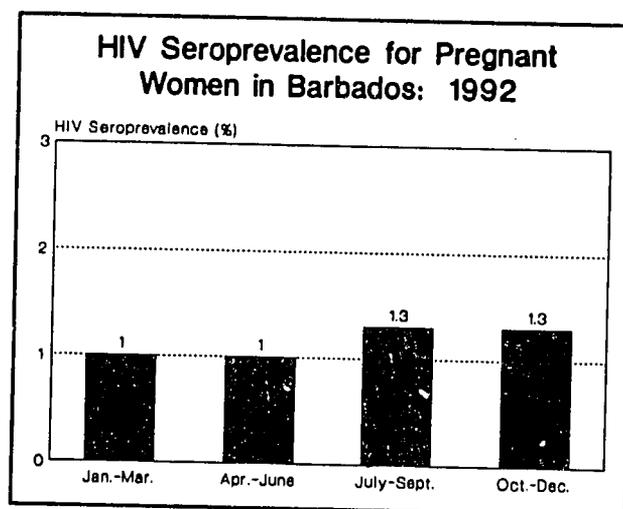
## Barbados

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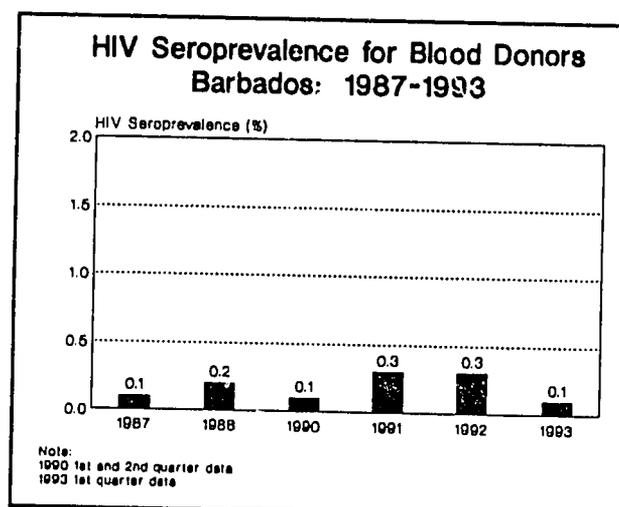
- Very few studies of HIV infection among STD patients in Barbados have been published. However, this study shows the level of HIV infection for 1988 to be 4.7 percent.



- Data obtained from the Pan American Health Organization (PAHO) indicate the HIV infection level among pregnant women to be 1 percent for the 1st semester and 1.3 percent for the 2nd semester of 1992.



- Between 1987 and 1993, HIV infection in the blood donors of Barbados is very low. Recent reports show HIV levels reached 0.3 percent for 1992. Data for the first quarter of 1993 show the infection level to be 0.1 percent.



Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

## Sources for Barbados

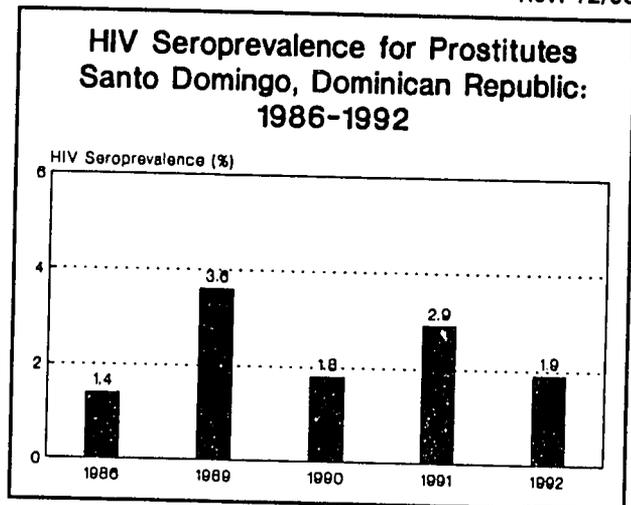
- B0183 Barbados, 1987, PAHO/WHO HIV Surveillance, Pan American Health Organization/World Health Organization.
- B0185 Barbados Ministry of Health, 1993, PAHO/WHO HIV Surveillance, Apr. 26, Pan American Health Organization/World Health Organization.
- B0186 Barbados Ministry of Health, 1993, PAHO/WHO HIV Surveillance, Jan. 13, Pan American Health Organization/World Health Organization.
- B0187 Barbados Ministry of Health, 1992, PAHO/WHO HIV Surveillance, Oct. 23, Pan American Health Organization/World Health Organization.
- B0188 Barbados Ministry of Health, 1992, PAHO/WHO HIV Surveillance, Aug. 17, Pan American Health Organization/World Health Organization.
- B0189 Barbados Ministry of Health, 1992, PAHO/WHO HIV Surveillance, Apr. 6, Pan American Health Organization/World Health Organization.
- B0190 Barbados Ministry of Health, 1992, PAHO/WHO HIV Surveillance, Jan. 31, Pan American Health Organization/World Health Organization.
- B0191 Barbados Ministry of Health, 1991, PAHO/WHO HIV Surveillance, Oct. 8, Pan American Health Organization/World Health Organization.
- B0192 Barbados Ministry of Health, 1991, PAHO/WHO HIV Surveillance, Aug. 29, Pan American Health Organization/World Health Organization.
- B0193 Barbados Ministry of Health, 1991, PAHO/WHO HIV Surveillance, July 8, Pan American Health Organization/World Health Organization.
- B0194 Barbados Ministry of Health, 1990, PAHO/WHO HIV Surveillance, Oct. 14, Pan American Health Organization/World Health Organization.
- B0175 Barbados Ministry of Health, 1990, PAHO/WHO HIV Surveillance, Apr. 12, Pan American Health Organization/World Health Organization.
- G0123 Gayle, C., J. Farley, 1993, Trends in Patterns of Transmission Over 10 Years of the AIDS Epidemic in the English-Speaking Caribbean and Suriname, IX International Conference on AIDS, Berlin, 6/6-11, Poster PO-C06-2710.

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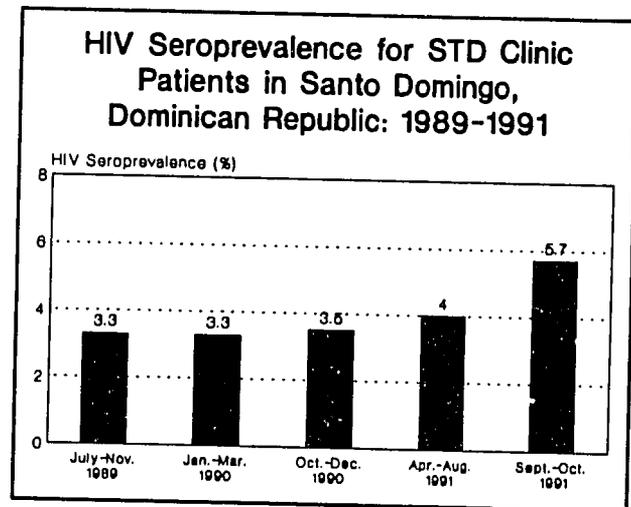
## Dominican Republic

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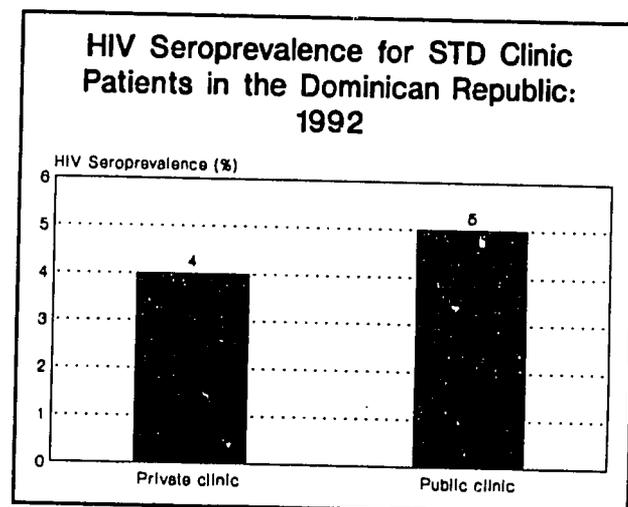
- In the capital city, Santo Domingo, the HIV infection level among prostitutes has fluctuated around 2 - 3 percent between 1990-1992.



- Data reported to the Pan American Health Organization (PAHO) from Santo Domingo show HIV prevalence among STD clinic patients to be steadily increasing from 3.3 percent for 1989 to 5.7 percent for 1991.

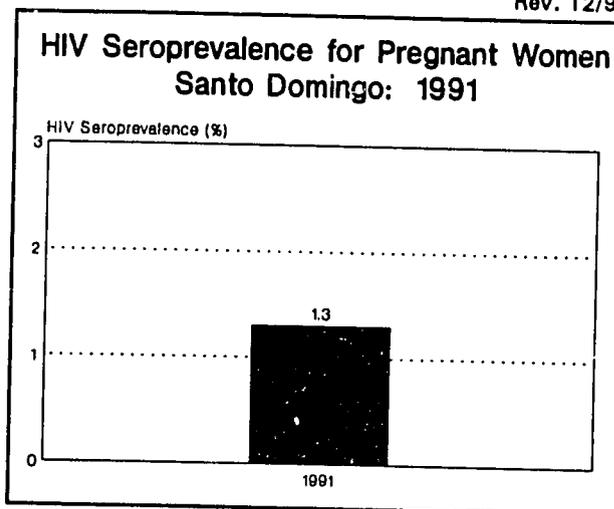


- A study in 1992 of STD clinic patients attending public and private clinics showed no difference in HIV infection. The public clinic reported 5 percent prevalence while the private clinic reported 4 percent prevalence.

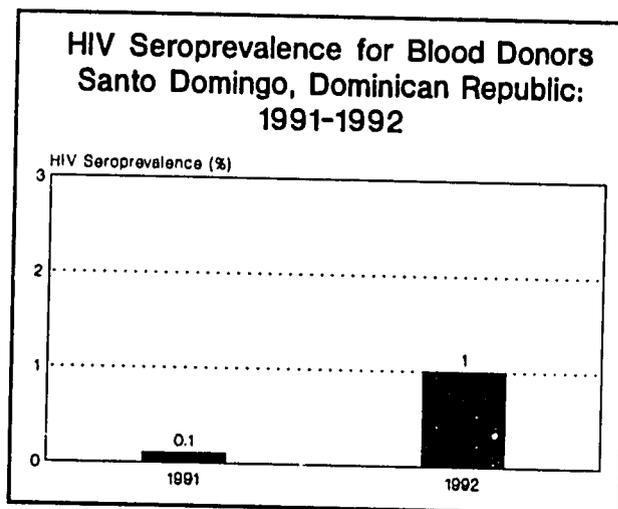


Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

- In 1991, a seroprevalence survey conducted in Santo Domingo among the pregnant women reported an HIV infection level of 1.3 percent. This survey suggests that HIV infection is moving into the general population.



- In Santo Domingo, the HIV infection level among adult blood donors increased from 0.1 percent in 1991 to 1 percent in 1992 according to these studies.



Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

## Sources for Dominican Republic

- B0214 Bancos de Sangre, 1991, PAHO/WHO HIV Surveillance, Pan American Health Organization/World Health Organization.
- D0115 Ducos, J., M. Espinal, S. Rosario, et al., 1993, Trends in Syphilis, Gonorrhoea and HIV Infection among Female Prostitutes Attending an STD Clinic in Santo Domingo, IX International Conference on AIDS, Berlin, 6/6-11, Abstract PO-C20-3093.
- D0123 Dominican Republic, 1990, PAHO/WHO HIV Surveillance, Pan American Health Organization/World Health Organization.
- G0067 Guerrero, E., E. M. Rodriguez, E. A. De Moya, et al., 1990, Seroprevalence of HIV-1 and HTLV-I in STD Clinics in the Dominican Republic, VI International Conference on AIDS, San Francisco, 6/20-24, Poster F.C.587.
- G0100 Gomez, E., A. Ramirez, C. Pena, et al., 1992, Sentinel Seroprevalence Surveys for HIV-1 Infection in the Dominican Republic, VIII International Conference on AIDS, Amsterdam, 7/19-24 Poster PoC 4066.
- G0106 Goodman, S., V. Calventi, M. Lavendera, et al., 1992, Risk Behaviors for HIV among Women of Childbearing Age in the Urban Dominican Republic, VIII International Conference on AIDS, Amsterdam, 7/19-24, Poster PoC 4363.
- G0136 Gomez, E., 1991, PAHO/WHO HIV Surveillance, SESPAS-PROCETS, Pan American Health Organization/World Health Organization.
- K0005 Koenig, R. E., L. De Castro, J. Acra, et al., 1987, Prevalence of Antibodies to HIV in Prostitutes and Dominican and Haitian Cane Cutters in Dominican Republic, III International Conference on AIDS, Washington, D.C., 6/1-5, Abstract TP.187.
- N0112 Notificacion Bancos de Sangre de Rep. Doninicana, 1992, PAHO/WHO HIV Surveillance, Pan American Health Organization/World Health Organization.
- P0111 PROCETS, 1990, PAHO/WHO HIV Surveillance, Pan American Health Organization/World Health Organization.
- P0114 PROCETS/HIAID, 1990, PAHO/WHO HIV Surveillance, Pan American Health Organization/World Health Organization.

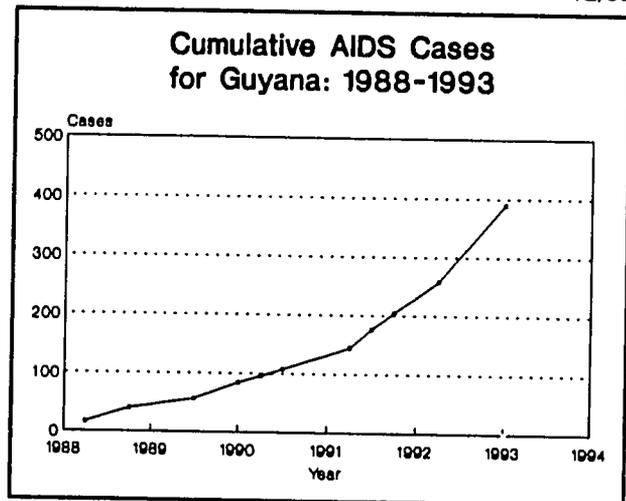
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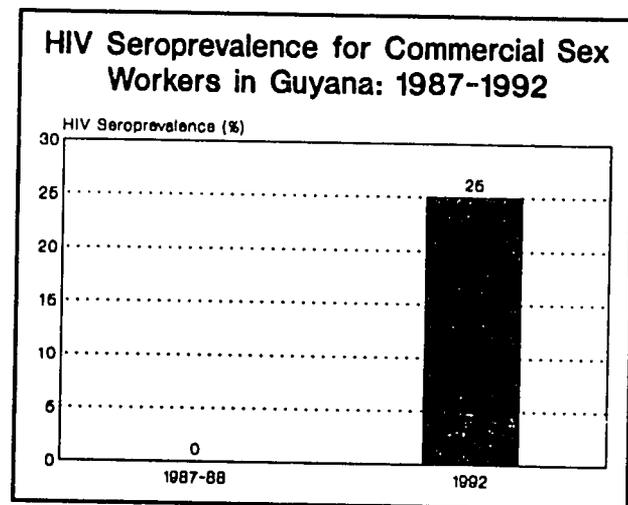
## Guyana

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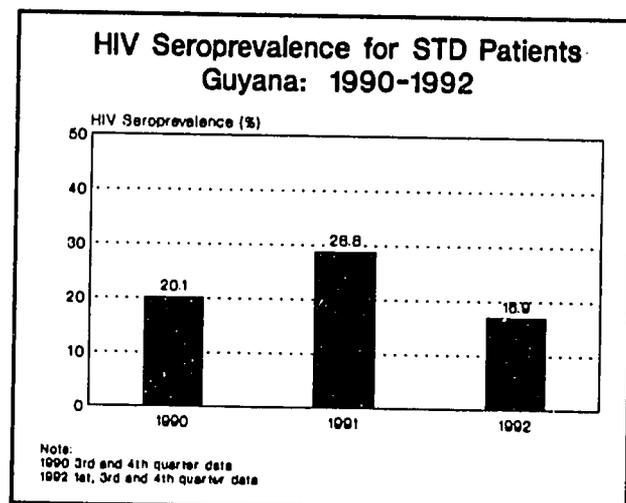
- The cumulative number of AIDS cases reported by Guyana to the World Health Organization has steadily increased. The cumulative incidence rate of 0.53 per 1,000 population places Guyana among the highest rates seen in African countries.



- In 1987-88, no HIV infection was detected among commercial sex workers, but by 1992 the infection level was 25 percent.

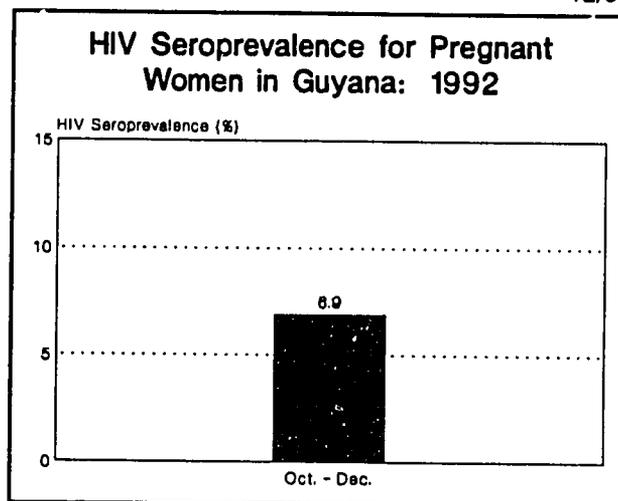


- Reports in the early 1990's from Guyana's Ministry of Health's AIDS Programme provided by the Pan American Health Organization show overall HIV seroprevalence ranging from 17 percent to 29 percent among STD patients.

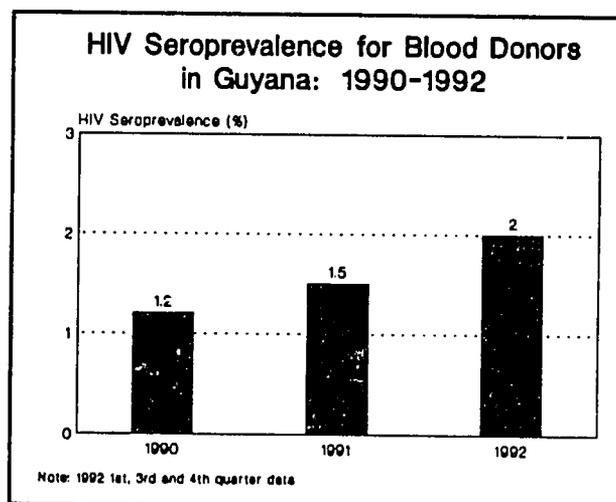


Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

- The HIV infection level reported among pregnant women in Guyana for the last quarter of 1992 was 6.9 percent.



- Levels of HIV seropositivity has been slowly but steadily increasing in Guyana among blood donors. These reports show levels of HIV infection increased from 1.2 percent in 1990 to 2.0 percent for three quarters in 1992.



Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

## Sources for Guyana

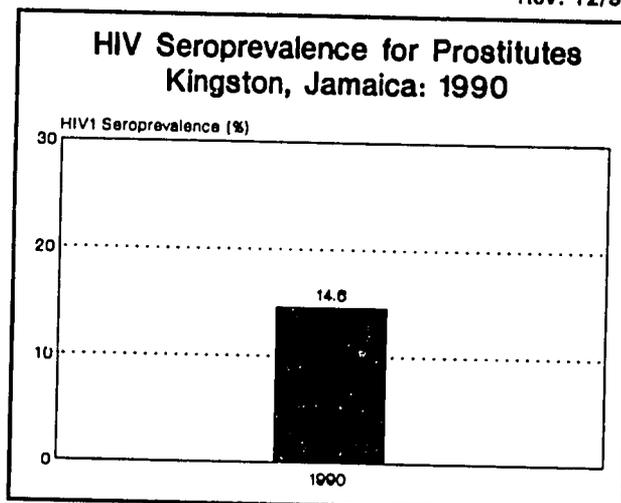
- G0123 Gayle, C., J. Farley, 1993, Trends in Patterns of Transmission Over 10 Years of the AIDS Epidemic in the English-Speaking Caribbean and Suriname, IX International Conference on AIDS, Berlin, 6/6-11, Poster PO-C06-2710.
- G0128 Guyana Ministry of Health AIDS Programme, 1991, PAHO/WHO HIV Surveillance, Mar. 8, Pan American Health Organization/World Health Organization.
- G0129 Guyana Ministry of Health AIDS Programme, 1991, PAHO/WHO HIV Surveillance, Apr. 3, Pan American Health Organization/World Health Organization.
- G0130 Guyana Ministry of Health AIDS Programme, 1992, PAHO/WHO HIV Surveillance, Oct. 23, Pan American Health Organization/World Health Organization.
- G0131 Guyana Ministry of Health AIDS Programme, 1992, PAHO/WHO HIV Surveillance, May 5, Pan American Health Organization/World Health Organization.
- G0132 Guyana Ministry of Health AIDS Programme, 1992, PAHO/WHO HIV Surveillance, Mar. 12, Pan American Health Organization/World Health Organization.
- G0133 Guyana Ministry of Health AIDS Programme, 1991, PAHO/WHO HIV Surveillance, Dec. 13, Pan American Health Organization/World Health Organization.
- G0134 Guyana Ministry of Health AIDS Programme, 1991, PAHO/WHO HIV Surveillance, Aug. 8, Pan American Health Organization/World Health Organization.
- G0135 Guyana Ministry of Health AIDS Programme, 1991, PAHO/WHO HIV Surveillance, Apr. 22, Pan American Health Organization/World Health Organization.
- G0137 Guyana Ministry of Health AIDS Programme, 1993, PAHO/WHO HIV Surveillance, Feb. 1, Pan American Health Organization/World Health Organization.
- W0033 Narain, J. P., B. Hull, C. J. Hospedales, et al., 1989, Epidemiology of AIDS and HIV Infection in the Caribbean, In: AIDS Profile of an Epidemic, PAHO, Scientific Publication no. 514, pp. 61-71.
- W0003 World Health Organization, 1989, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 3, no. 3, pp. 187-188.
- W0013 World Health Organization, 1988, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 2, no. 6, pp. 487-490.
- W0033 World Health Organization, 1989, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 3, no. 9, pp. 619-620.
- W0040 World Health Organization, 1990, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 4, no. 9, pp. 937-941.
- W0042 World Health Organization, 1990, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 4, no. 6, pp. 605-606.
- W0045 World Health Organization, 1989, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 4, no. 12, pp. 1305-1306.
- W0047 World Health Organization, 1991, Statistics from the who and the Centers for Disease Control, AIDS, 5(6):785-790.
- W0057 World Health Organization, 1992, World Health Organization Global AIDS Statistics, AIDS Care, vol. 4, no. 1, pp. 125-128.
- W0058 World Health Organization, 1992, World Health Organization Global AIDS Statistics, AIDS Care, vol. 4, no. 2, pp. 231-234.
- W0067 World Health Organization, 1992, World Health Organization Global AIDS Statistics, AIDS Care, vol. 4, no. 3, pp. 365-368.
- W0079 World Health Organization, 1993, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 7, no. 9, pp. 1287-1291.

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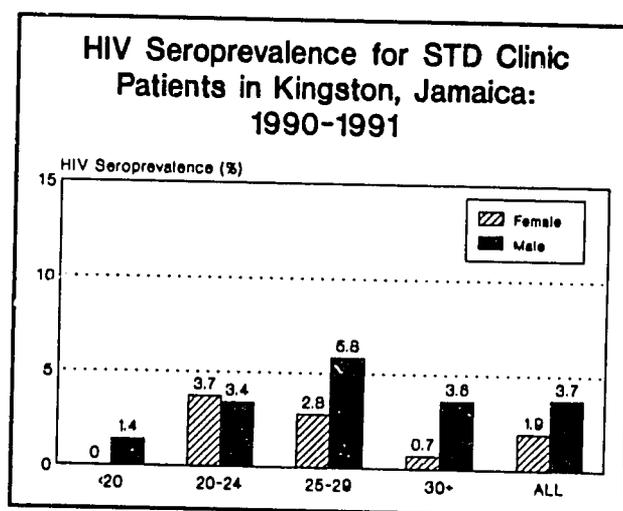
## Jamaica

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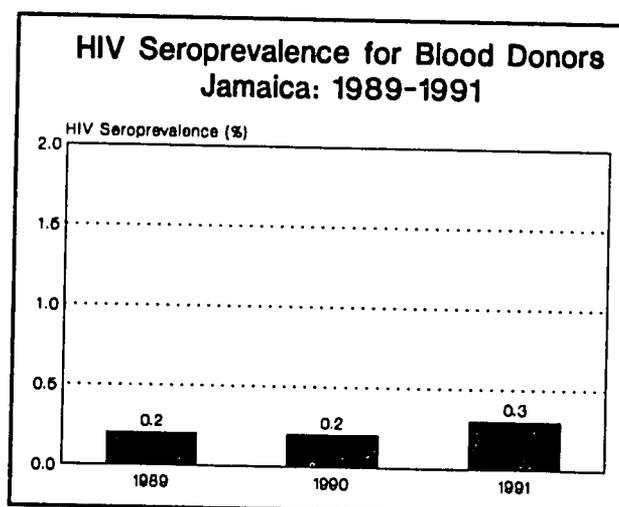
- Very few studies of HIV infection in prostitutes for Jamaica have been published. However, a study conducted in 1990 shows significant levels of HIV infection in this group.



- In Kingston, the capital city, a survey was conducted between November 1990 and January 1991 among heterosexual male and female STD clinic attendees. HIV prevalence level among males was double that of females. Observing the age pattern, HIV infection in females peaked at 3.7 percent in ages 20-24 years while infection levels in males peaked at 5.8 percent in ages 25-29 years.



- Based on several studies HIV infection among blood donors for the last 3 years has been relatively low, less than 0.5 percent.



Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

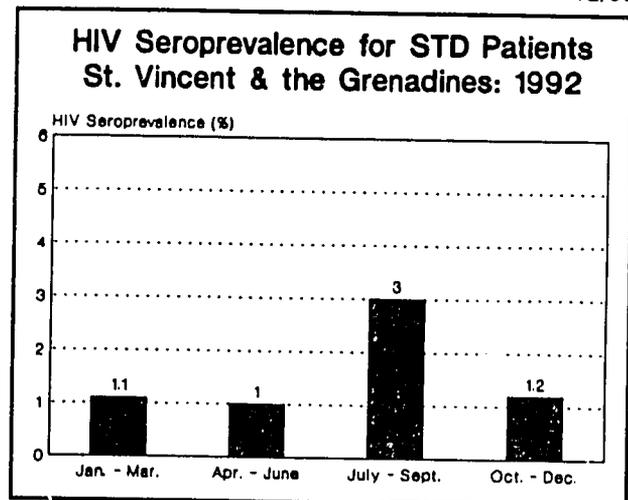
## Sources for Jamaica

- F0043 Figueroa, J. P., A. Brathwaite, J. Morris, et al., 1992, Risk Factors for HIV in Heterosexual STD Patients in Jamaica, VIII International Conference on AIDS, Amsterdam, 7/19-24, Poster PoC 4322.
- G0123 Gayle, C., J. Farley, 1993, Trends in Patterns of Transmission Over 10 Years of the AIDS Epidemic in the English-Speaking Caribbean and Suriname, IX International Conference on AIDS, Berlin, 6/6-11, Poster PO-C06-2710.
- J0034 Jamaica Ministry of Health Epidemiology Unit, 1991, PAHO/WHO HIV Surveillance, May 1, Pan American Health Organization/World Health Organization.
- S0058 St. John, R. K., M. Clifford, F. R. K. Zacarias, 1989, The Epidemiology of AIDS in the Americas, V International Conference on AIDS, Montreal, 6/4-9, Poster T.G.P. 2.
- W0036 White, E., P. Weller, J. P. Figueroa, et al., 1990, National AIDS Control Program, Jamaica Program Director, University of California, San Francisco, VI International Conference on AIDS, San Francisco, 6/20-24, Abstract F.C.591.

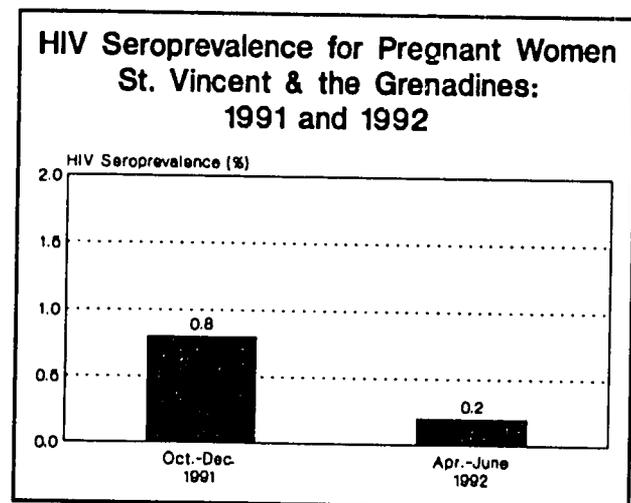
## St. Vincent and the Grenadines

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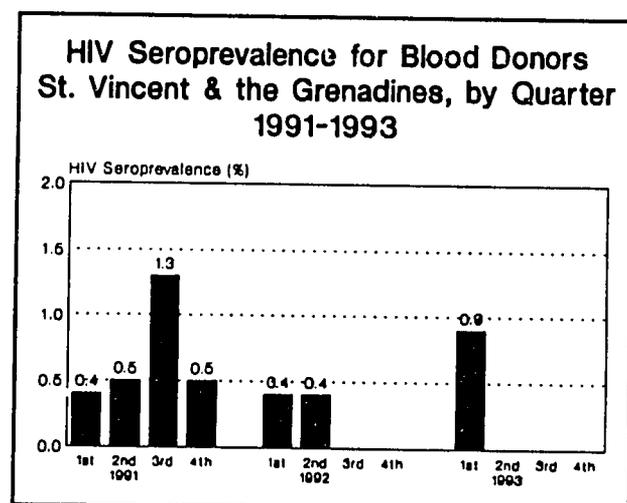
- Reports from St. Vincent and the Grenadines Public Health Department indicate that HIV infection levels by quarter for 1992 range from 1 to 3 percent among STD clinic patients.



- From the same reports, a low prevalence of HIV infection was found among pregnant women. HIV prevalence for the fourth quarter of 1991 was 0.8 percent and for the second quarter of 1992 it was 0.2 percent.



- Based on the same reports from the Public Health Department, between 1991 and 1993, HIV infection levels among blood donors showed a quarterly range of 0.4 to 1.3 percent.



Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

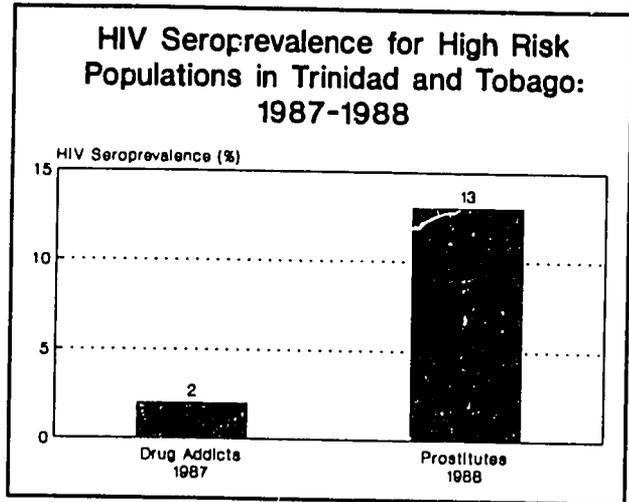
## Sources for St. Vincent & the Grenadines

- S0232 St. Vincent & the Grenadines Public Health Department, 1993, PAHO/WHO HIV Surveillance, Apr. 22, Pan American Health Organization/World Health Organization.
- S0233 St. Vincent & the Grenadines Public Health Department, 1993, PAHO/WHO HIV Surveillance, Jan. 28, Pan American Health Organization/World Health Organization.
- S0234 St. Vincent & the Grenadines Public Health Department, 1992, PAHO/WHO HIV Surveillance, Apr. 13, Pan American Health Organization/World Health Organization.
- S0235 St. Vincent & the Grenadines Public Health Department, 1992, PAHO/WHO HIV Surveillance, July 21, Pan American Health Organization/World Health Organization.
- S0236 St. Vincent & the Grenadines Public Health Department, 1992, PAHO/WHO HIV Surveillance, Oct. 5, Pan American Health Organization/World Health Organization.
- S0237 St. Vincent & the Grenadines Public Health Department, 1992, PAHO/WHO HIV Surveillance, Feb. 3, Pan American Health Organization/World Health Organization.
- S0238 St. Vincent & the Grenadines Public Health Department, 1991, PAHO/WHO HIV Surveillance, Oct. 14, Pan American Health Organization/World Health Organization.
- S0239 St. Vincent & the Grenadines Public Health Department, 1991, PAHO/WHO HIV Surveillance, July 3, Pan American Health Organization/World Health Organization.
- S0240 St. Vincent & the Grenadines Public Health Department, 1991, PAHO/WHO HIV Surveillance, Apr. 30, Pan American Health Organization/World Health Organization.

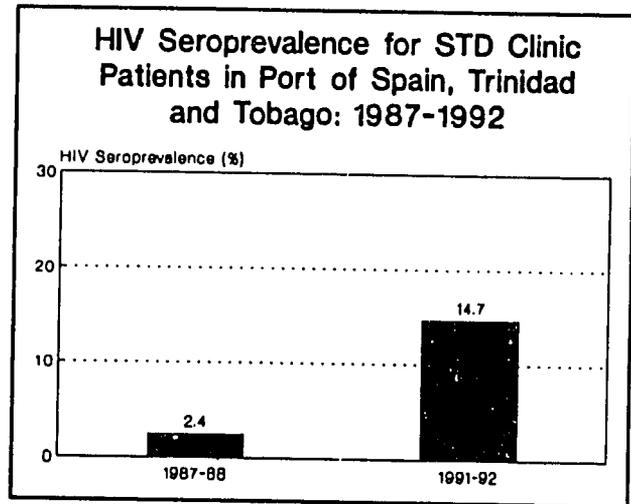
# Trinidad and Tobago

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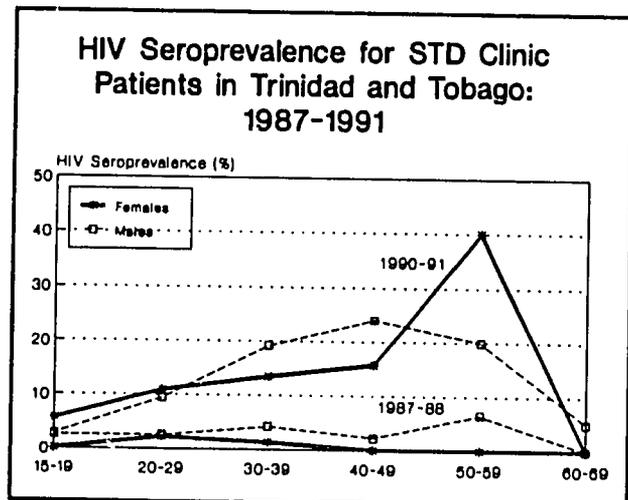
- While studies of HIV infection among low risk groups in the late 80's showed low or no evidence of HIV infection, studies among high risk groups during that same time period reported significant levels of HIV infection. HIV infection levels were the highest among prostitutes at 13 percent. Among IV drug users, the HIV infection level was 2 percent.



- Data for STD clinic patients in Port of Spain, Trinidad and Tobago in the late 1980's showed levels of HIV infection to be 2.4 percent. More recent data shows the HIV levels to have increased more than fivefold to 14.7 percent.

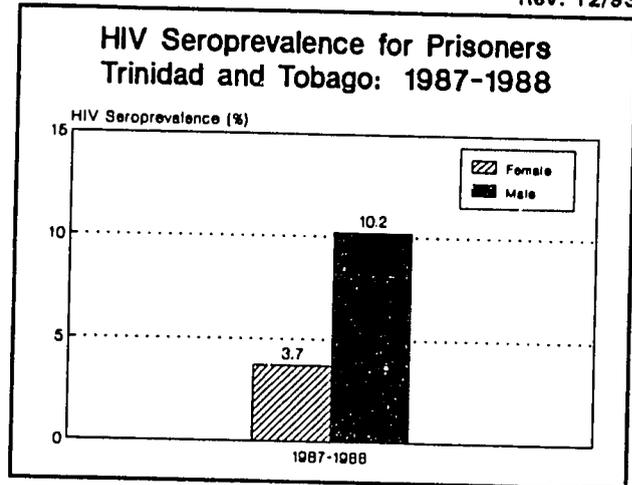


- From another study of STD clinic patients, the specific age pattern shows an increase in HIV infection over time. The high level of HIV infection in females, age 50-59, may be related to a small sample size.

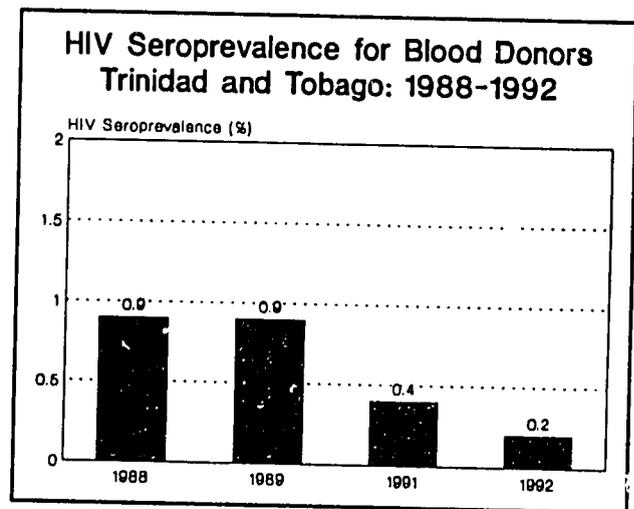


Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

- In this study, conducted in 1987-1988, the HIV level of infection among male prisoners was more than double that of the female prisoners.



- Levels of HIV infection in blood donors has remained under 1 percent. The decrease seen in 1991 and 1992 may be due to donor screening.



Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

Lola

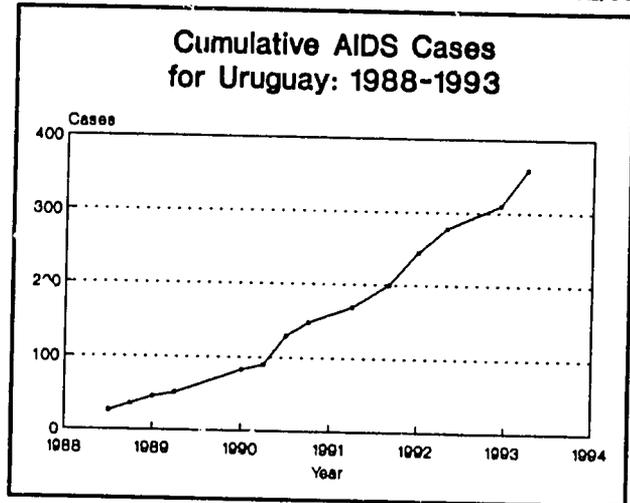
## Sources for Trinidad & Tobago

- C0143 Cleghorn, F., M. Jack, M. Greenberg, et al., 1993, HIV-1 Seroincidence in an STD Clinic in Trinidad: Rapid Spread of an Mn-like Virus, IX International Conference on AIDS, Berlin, 6/6-11, Abstract WS-C14-3.
- C0145 Cleghorn, F., M. Jack, J. Edwards, et al., 1993, Risk Factors for HIV-1 among STD Clinic Clients in Trinidad, IX International Conference on AIDS, Berlin, 6/6-11, Poster PO-C03-2617.
- G0123 Gayle, C., J. Farley, 1993, Trends in Patterns of Transmission Over 10 Years of the AIDS Epidemic in the English-Speaking Caribbean and Suriname, IX International Conference on AIDS, Berlin, 6/6-11, Poster PO-C06-2710.
- J0019 Jack, M., F. Cleghorn, J. Murphy, et al., 1992, Rising Seroprevalence of HIV-1 and HTLV-1 in STD Patients in Trinidad and Tobago, VIII International Conference on AIDS, Amsterdam, 7/19-24, Poster PoC 4324.
- N0033 Narain, J. P., B. Hull, C. J. Hospedales, et al., 1989, Epidemiology of AIDS and HIV Infection in the Caribbean, In: AIDS Profile of an Epidemic, PAHO, Scientific Publication no. 514, pp. 61-71.
- S0058 St. John, R. K., M. Clifford, F. R. K. Zacarias, 1989, The Epidemiology of AIDS in the Americas, V International Conference on AIDS, Montreal, 6/4-9, Poster T.G.P. 2.
- T0091 Trinidad & Tobago Ministry of Health, 1993, PAHO/WHO HIV Surveillance, Jan. 20, Pan American Health Organization/World Health Organization.
- T0092 Trinidad & Tobago Ministry of Health, 1992, PAHO/WHO HIV Surveillance, Nov. 5, Pan American Health Organization/World Health Organization.
- T0093 Trinidad & Tobago Ministry of Health, 1992, PAHO/WHO HIV Surveillance, July 18, Pan American Health Organization/World Health Organization.
- T0095 Trinidad & Tobago Ministry of Health, 1992, PAHO/WHO HIV Surveillance, Apr. 13, Pan American Health Organization/World Health Organization.
- T0096 Trinidad & Tobago Ministry of Health, 1992, PAHO/WHO HIV Surveillance, Jan. 27, Pan American Health Organization/World Health Organization.
- T0097 Trinidad & Tobago Ministry of Health, 1991, PAHO/WHO HIV Surveillance, Oct. 14, Pan American Health Organization/World Health Organization.
- T0098 Trinidad & Tobago Ministry of Health, 1991, PAHO/WHO HIV Surveillance, Aug. 16, Pan American Health Organization/World Health Organization.
- T0099 Trinidad & Tobago Ministry of Health, 1991, PAHO/WHO HIV Surveillance, May 6, Pan American Health Organization/World Health Organization.

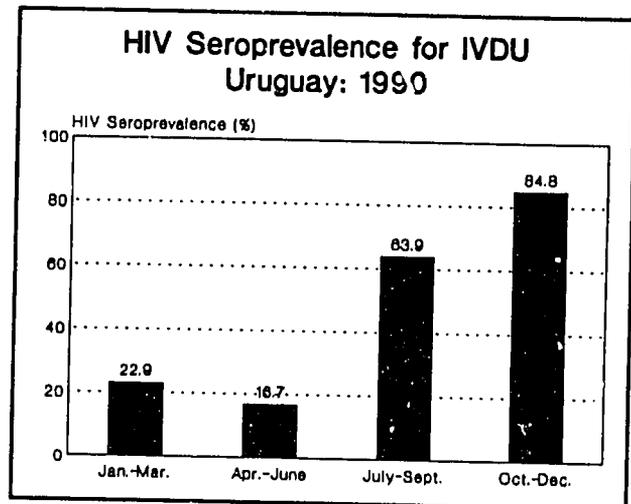
# Uruguay

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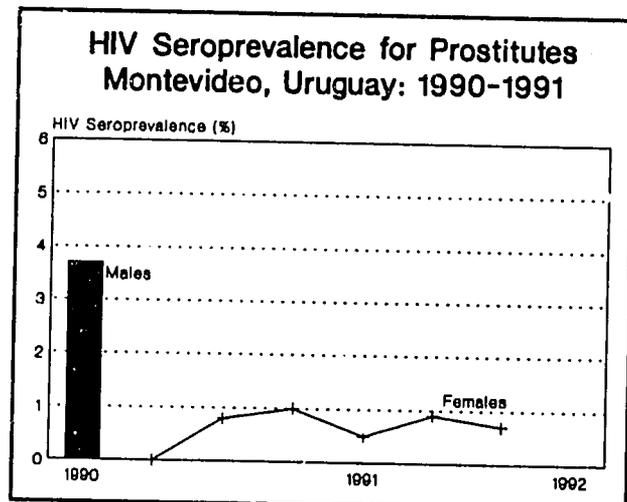
- By March 1993, Uruguay had reported 359 cumulative AIDS cases to the World Health Organization. This corresponds to a cumulative incidence rate of 0.11 cases per 1,000 population.



- HIV infection levels among IVDU as reported to the Pan American Health Organization for 1990 were extremely high.

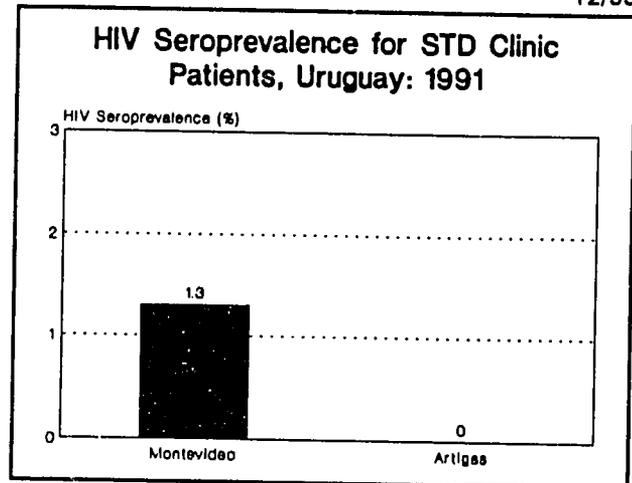


- In the capital city, Montevideo, studies were conducted among male and female prostitutes. HIV prevalence among the females was consistently low for the study period. In 1990, the HIV level for males was much higher, 3.7 percent.

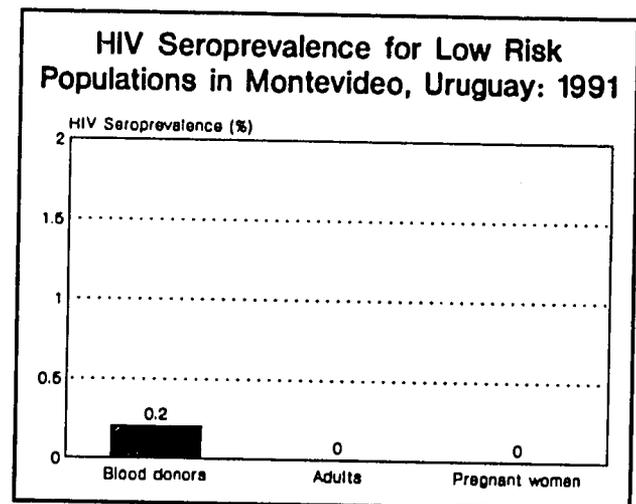


Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993.

- In 1991, patients attending two sexually transmitted disease (STD) clinics were studied. Results found HIV seroprevalence levels among STD patients from the Montevideo clinic to be 1.3 percent and no evidence of HIV infection was found in the patients from the clinic in Artigas.



- During a study in 1991, in Montevideo, the prevalence of HIV seropositivity was very low in blood donors, 0.2 percent. As of 1991, no evidence of HIV infection was found among pregnant women and adults from the general population.



Source: Center for International Research, U.S. Bureau of the Census, HIV/AIDS Surveillance Data Base, Dec. 1993

## Sources for Uruguay

- A0121 Arago, Somma, 1991, PAHO/WHO HIV Surveillance, Pan American Health Organization/World Health Organization.
- A0124 Amestoy, Blanco, Somma, 1991, PAHO/WHO HIV Surveillance, Pan American Health Organization/World Health Organization.
- B0150 Berriolo, R., L. Colistro, J. Rostkier, et al., 1992, HIV Seroprevalence Surveys in Uruguay, AIDS, vol. 6, no. 8, pp. 884-885.
- H0095 Hospital Maciel, Laboratorio de Salud Publica ETS, 1990, PAHO/WHO HIV Surveillance, Pan American Health Organization/World Health Organization.
- H0101 Hospital Maciel, 1991, PAHO/WHO HIV Surveillance, Pan American Health Organization/World Health Organization.
- L0132 Laboratorios Hospital Maciel, 1990, PAHO/WHO HIV Surveillance, Pan American Health Organization/World Health Organization.
- L0139 Laboratorios Maciel, SEISP, 1990, PAHO/WHO HIV Surveillance, Pan American Health Organization/World Health Organization.
- L0140 Laboratorios Hospital Maciel, 1990, PAHO/WHO HIV Surveillance, Pan American Health Organization/World Health Organization.
- W0003 World Health Organization, 1989, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 3, no. 3, pp. 187-188.
- W0013 World Health Organization, 1988, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 2, no. 6, pp. 487-490.
- W0032 World Health Organization, 1989, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 3, no. 6, pp. 405-406.
- W0034 World Health Organization, 1989, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 3, no. 12, pp. 863-864.
- W0040 World Health Organization, 1990, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 4, no. 9, pp. 937-941.
- W0041 World Health Organization, 1990, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 4, no. 3, pp. 277-278.
- W0042 World Health Organization, 1990, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 4, no. 6, pp. 605-606.
- W0046 World Health Organization, 1991, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 5, no. 3, pp. 349-350.
- W0047 World Health Organization, 1991, Statistics from the who and the Centers for Disease Control, AIDS, 5(6):785-790.
- W0057 World Health Organization, 1992, World Health Organization Global AIDS Statistics, AIDS Care, vol. 4, no. 1, pp. 125-128.
- W0058 World Health Organization, 1992, World Health Organization Global AIDS Statistics, AIDS Care, vol. 4, no. 2, pp. 231-234.
- W0067 World Health Organization, 1992, World Health Organization Global AIDS Statistics, AIDS Care, vol. 4, no. 3, pp. 365-368.
- W0072 World Health Organization, 1993, World Health Organization Global AIDS Statistics, AIDS, vol. 5, no. 1, pp. 125-128.
- W0079 World Health Organization, 1993, Statistics from the WHO and the Centers for Disease Control, AIDS, vol. 7, no. 9, pp. 1287-1291.

## Appendix

For some countries, the most recent information is provided in a previous research note. The following list identifies those countries and the location of the most recent update.

<u>Country</u>	<u>Research Note</u>
<b>Africa</b>	
Benin	#8
Burkina Faso	#8
Burundi	#10
Cameroon	#10
Central African Republic	#10
Congo	#10
Cote d'Ivoire	#10
Djibouti	#10
Ethiopia	#8
Gabon	#8
Gambia, The	#8
Ghana	#10
Guinea	#5
Kenya	#10
Madagascar	#5
Mali	#8
Mozambique	#5
Niger	#8
Senegal	#10
Sierra Leone	#10
Swaziland	#8
Togo	#8
Zambia	#10
Zimbabwe	#10
<b>Asia</b>	
India	#10
Philippines	#5
<b>Latin American/Caribbean</b>	
Brazil	#8
Haiti	#8
Honduras	#10
Martinique	#5
Mexico	#8