



# Communicable Diseases Intelligence

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Editor Dr I.F. Cook

VIRUS REPORTING SCHEME: A total of 1 348 reports were processed for this period.

Thirteen cases of Q fever were reported (7 from New South Wales, 5 from Queensland and 1 from South Australia). Occupational exposure data were available for only 3 cases, all from Queensland, one 16 year old male farmer and two meatworkers, one a 35 year old male and the other a 34 year old female. None of the thirteen patients was involved in the Q fever vaccine field trial conducted in South Australia.

Three cases of Chlamydia psittaci were reported (2 from New South Wales and one from Victoria). Exposure data were only available for the Victorian case, a 52 year old male presenting with a severe lower respiratory tract infection complicated by a concomitant Klebsiella pneumoniae infection. The patient had worked with chickens.

Echovirus 11 was isolated from the faeces of a 1 year old female who had been diagnosed as having colitis following bone marrow transplantation. Bone marrow allograft recipients have profoundly suppressed immunological responses during the immediate post-transplant period, including the ability to mount a humoral immune response. Viral induced diarrhoea in such instances is difficult to distinguish from graft-versus-host enteropathy.

## AIDS SURVEILLANCE - AUSTRALIA

To 19 September 1986, 296 cases of AIDS fulfilling the criteria of case definition have been reported to the National Health and Medical Research Unit in AIDS Epidemiology and Clinical Research. The distribution of those patients by State or Territory of notification and by risk group are shown below:-

Table 1: AIDS patients by State or Territory of notification

| STATE/TERRITORY | CASES |        |       | DEATHS |        |       |
|-----------------|-------|--------|-------|--------|--------|-------|
|                 | Male  | Female | Total | Male   | Female | Total |
| NSW             | 198   | 7      | 205   | 86     | 6      | 92    |
| VIC             | 44    | -      | 44    | 22     | -      | 22    |
| QLD             | 22    | 2      | 24    | 15     | 2      | 17    |
| WA              | 13    | 2      | 15    | 6      | -      | 6     |
| SA              | 3     | -      | 3     | -      | -      | -     |
| NT              | 2     | -      | 2     | 1      | -      | 1     |
| TAS             | 1     | -      | 1     | 1      | -      | 1     |
| ACT             | 2     | -      | 2     | 1      | -      | 1     |
|                 | —     | —      | —     | —      | —      | —     |
|                 | 285   | 11     | 296   | 132    | 8      | 140   |

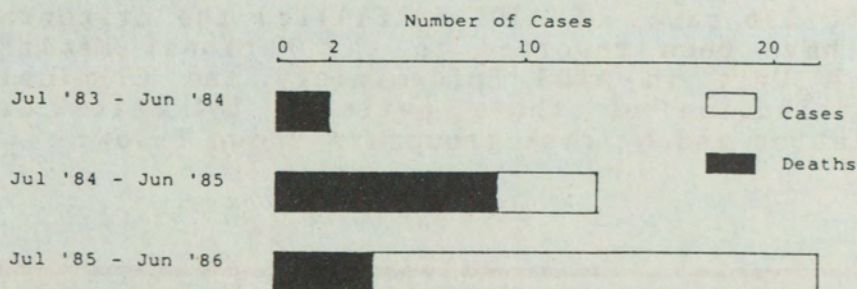
Table 2: AIDS patients by risk category

| RISK GROUP                     | CASES | DEATHS |
|--------------------------------|-------|--------|
| Homo-/Bi-sexual                | 260   | 111    |
| IV drug abuser                 | 1     | -      |
| Homo-/Bi-sexual IV drug abuser | 6     | 3      |
| Blood transfusion recipient    | 22    | 20     |
| Person with haemophilia        | 4     | 4      |
| Heterosexual transmission      | 2     | 2      |
| None of the above              | 1     | -      |
|                                | —     | —      |
|                                | 296   | 140    |

## AIDS SURVEILLANCE - VICTORIA

(Contributed by S. Paine, B. Monheit and G. Lavoipierre, Health Department of Victoria)

At 30 June 1986, 37 cases of AIDS have been notified in Victoria, with the first case diagnosed in July 1983. During the 3 year interval, 15 patients have died. The yearly incidence of disease cases and deaths is shown below:



All 37 cases were males:

. in the following age groups:

| <u>Age Groups (years)</u> | <u>20-29</u> | <u>30-39</u> | <u>40-49</u> | <u>50-59</u> |
|---------------------------|--------------|--------------|--------------|--------------|
| <u>Number of cases</u>    | 4            | 19           | 10           | 4            |

. belonging to the following risk groups:

| <u>Risk Groups</u>                | <u>Number of cases</u> |
|-----------------------------------|------------------------|
| 1. Homo-/Bi-sexual                | 35                     |
| 2. Homo-/Bi-sexual IV drug abuser | 1                      |
| 3. Person with haemophilia        | 1                      |

. diagnosed with the following infections:

| <u>Infections</u>  | <u>Number of cases*</u> |
|--|-------------------------|
| 1. Pneumocystis carinii pneumonia  | 22                      |
| 2. Kaposi's sarcoma  | 6                       |
| 3. Other (HSV-CMV-Candidiosis -<br>atypical Mycobacteria - Cryptosporidiosis<br>- Toxoplasmosis) | 9                       |

\* Five patients were diagnosed with more than one opportunistic infections.

The number of AIDS cases notified over the past 18 months appeared to suggest a doubling time of 9 months. If such notification trend continues the following cumulative number of AIDS cases can be estimated:

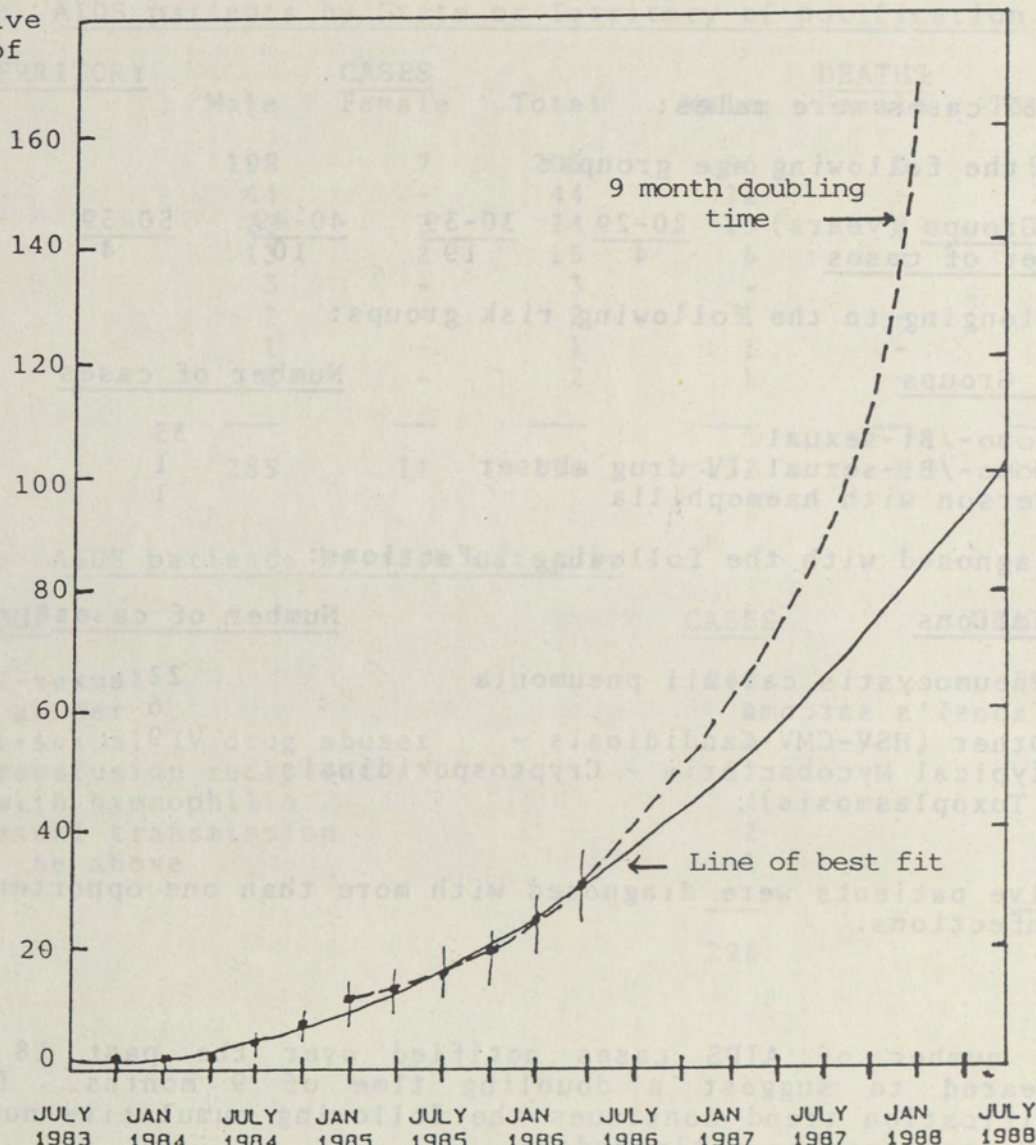
December 1986 - 59 cases  
December 1987 - 148 cases  
July 1988 - 253 cases

However, when the cumulative number of AIDS cases diagnosed between July 1983 and June 1986 is plotted, the line of best fit generated by the computer statistical package program would provide the following cumulative number of AIDS cases:

December 1986 - 47 cases  
December 1987 - 80 cases  
July 1988 - 103 cases

The two curves estimating the above cumulative number of AIDS cases are shown in the graph below:

Cumulative  
Number of  
Cases



The line of best fit was obtained by assuming a second order polynomial with the following equation:  
 $y = y_0 + K_1(x + a) + k_2(x + a)^2$ , where  $y$  = the no. of reported cases,  $x$  = months after July 1983,  
 $y_0 = 1.0887$ ,  $a = 0$ ,  $k_1 = 0.0213$  and  $k_2 = 0.0279$ .

The 9 month doubling time curve assumes the following equation:  $\log Y - \log X = 0.301 \times N$   
 $Y$  = no. of cases at  $t_2$ ,  $X$  = no. of cases at  $t_1$ ,  $N$  = no. of doubling times = time interval  $\div$  doubling time

In presenting the above data, the authors commented that:

- . AIDS notifications to the Victorian Health Department accurately reflect the true incidence of cases in Victoria.
- . AIDS cases have so far been confined to men in the following three risk groups:
  - . Homo-/Bi-sexual
  - . Person with haemophilia
  - . Homo-/Bi-sexual IV drug abusers.
- . despite the small number of cases, a definite acceleration of cases over the past six months is observed.

The authors also acknowledge the assistance of Fairfield Hospital medical staff for prompt reporting and thorough notification of data.

CDI Editorial Comment:

It is acceptable to assume that AIDS prevalence continues to increase in the near future, however any estimate of the cumulative number of AIDS cases, even in the short-term, may be predicted from one of the curves presented above. The number of AIDS notifications recorded in the future will determine the relative merit of each of these above predictors.

The rate of increase in the cumulative number of AIDS cases predicted by these curves is only determined by the current notification rate. Even assuming a reliable notification process, the curve predictors only reflect the rate of disease diagnosis and give little indication of the disease transmission and spread in the community.

In any case, any long-term and short-term predictors will be much influenced by the ongoing health promotion and campaign against HIV transmission, including blood bank screening of donors and safe sex practices currently in effect.

AIDS - SWITZERLAND

(based on WER No.37, 12 September 1986)

Since the first AIDS case was diagnosed in 1980, a total of 138 cases (124 males and 14 females) have been notified up to the end of June 1986. Seventy-one (52%) of them have died.

The distribution of AIDS cases by risk group is shown below:

| <u>Risk Groups</u>   | <u>Male</u> | <u>Female</u> |
|--|-------------|---------------|
| 1. Homo-/Bi-sexual   | 90          | -             |
| 2. IV drug abuser  | 9           | 3             |
| 3. Homo-/Bi-sexual IV drug abuser  | 7           | -             |
| 4. Person with haemophilia   | 1           | -             |
| 5. Heterosexual contact with AIDS patient<br>or person at increased risk of AIDS | 2           | 2             |
| 6. Other or no known risk group  | 15          | 9             |
| TOTAL  | <u>124</u>  | <u>14</u>     |

The 24 cases belonging to the 'no known risk group' included:

. 3 infants:

- one pediatric case was born to a woman with AIDS
- two were born to women originating from countries considered endemic for AIDS but no further additional information was available

- . 12 residents of countries considered to be AIDS - endemic.
- . 7 cases who had visited AIDS - endemic countries and who had sexual contact with the local population, including prostitutes.
- . 2 cases who claimed multiple sexual contacts with heterosexual - some of them anonymous - partners.

In its editorial note, WER stated that all blood donors and imported blood products are now tested for antibody to human

immunodeficiency virus (HIV), but it is estimated that about 20% of haemophiliacs may have been infected with HIV before this control measure was instituted.

#### CDI Editorial Comment:

In Australia, a number of measures have been undertaken to prevent the spread of AIDS.

The first National Conference on AIDS was held in Melbourne in 1985. The second will be held in Sydney in October 1986. The joint Commonwealth and State Governments have implemented programs to disseminate information, particularly among high risk groups; to take all possible steps to ensure that blood transfusions cannot transmit the disease; and, to educate people about modifying sexual and other behaviour which may transmit the disease.

- Australia was the first country in the world to put in place comprehensive and nationwide blood screening tests and these, together with the heat treatment of blood, have greatly reduced the threat of transmission through transfused blood. Blood transfusion services are now as secure as they possibly can be.
- All sexually active males and females are being advised to avoid sexual practices such as unprotected intercourse which can result in direct blood to blood contact or semen or vaginal fluid exchange.
- Male homosexuals and bisexuals who have had unprotected sexual contact with a number of partners are advised to assume they have been exposed to the AIDS virus and to avoid any sexual contact which involves the exchange of body fluids.
- IV drug users are urged not to share needles and syringes and to avoid unprotected intercourse.
- Occupational groups that may come into contact with AIDS patients are being instructed in safety precautions.
- Voluntary free testing is available for persons who wish to determine if they have been infected with the AIDS related virus. Testing is not recommended for the general public unless they feel they might be at risk.
- Sperm banks for artificial insemination and organ banks for transplantation are tested in the same way as blood donated for transfusions.
- Brochures, pamphlets and material for television advertising has been produced to educate the general public and specific risk groups about AIDS and these are available from the Commonwealth Health Departments and State Governments.

HUMAN IMMUNODEFICIENCY VIRUS: Agent Summary Statement  
(based on MMWR Vol. 35 No 34, 29 August 1986)

#### INTRODUCTION

In March 1984, CDC and the National Institutes of Health (NIH), in consultation with scientists, physicians, and public health workers in academia, industry, and government, published a manual entitled Biosafety in Microbiological and Biomedical Laboratories ("biosafety manual")\*(1). The manual describes

combinations of standard and special microbiologic practices, safety equipment, and facilities recommended for working with infectious agents in various laboratory settings. The recommendations are advisory and provide a voluntary code of safety practices.

A section of this manual is devoted to a number of specific "agent summary statements" consisting of brief descriptions of documented or anecdotal laboratory-associated infections, the nature of the laboratory hazards, and recommended precautions to be taken in handling and working with certain infectious agents. Contributors to the manual recognized that new agents would be discovered from time to time and recommended that a summary statement for each new agent be developed and published in the MMWR. The summary statement for human immunodeficiency virus (HIV) follows. All laboratory directors are requested to put a copy of this summary in each of their copies of the biosafety manual and bring it to the attention of laboratory personnel. The recommendations in the summary statement were compiled from published scientific reports and are consistent with the published guidelines for health-care workers<sup>(2-4)</sup>.

#### AGENT SUMMARY STATEMENT

As of August 15, 1986, no cases of acquired immunodeficiency syndrome (AIDS) that meet the CDC case definition and can be attributed to an inadvertent laboratory exposure have been reported in laboratory workers<sup>(5)</sup>. One laboratory worker<sup>(7)</sup> was included among the health-care workers who have had HIV antibody detected in their serum after sustaining a needlestick injury<sup>(2,3,6-10)</sup>, but the source of the infection could not be established. Persons who are infected with HIV may be asymptomatic, may have AIDS-related complex, or may manifest symptoms of overt AIDS<sup>(11)</sup>.

In 1985, two different reagent production laboratories reported that several laboratory workers may have been inadvertently exposed to an aerosol of concentrated HIV; one worker was cut by a piece of glass from a broken carboy that contained HIV infected cells and culture fluid. None of the potentially exposed persons had shown evidence of seroconversion after 6 months in one incident and 12 months in the other as a result of these occupational exposures.

Other reports dealing with HIV infection in health-care personnel, including laboratory workers<sup>(3,4,6,8-10)</sup>, indicate that the risk of bloodborne transmission from inadvertent exposure is considerably less for HIV than for hepatitis B virus infection. These reports illustrate the need for complete evaluation by a physician and serologic testing of each laboratory workers definitely or possibly exposed to HIV in a laboratory setting. It is recommended that the Public Health Service guidelines for health-care workers be followed in these instances<sup>(2,3)</sup>.

#### Laboratory Hazards

HIV has been isolated from blood, semen, saliva, tears, urine, cerebrospinal fluid, brain tissue, and cervical secretions and is likely to be present in other body fluids, secretions and tissues of infected humans or experimentally infected nonhuman primates. Percutaneous or parenteral inoculation and direct

contact of cuts, scratches, abrasions, or mucosal surfaces with suspensions of virus or specimens containing live virus are considered potential routes of infection. Possible transmission of infection via the parenteral route can occur through self-inoculation with needles, broken glass, or other sharp objects that contain HIV. Spillage is a possible means of exposure and infection, especially spills accompanied by spraying or splashing of infected cell cultures, viral concentrates and other infectious materials that may come into direct contact with abraded skin or mucous membranes of the eyes, nose, or mouth; however, there are no data documenting or suggesting that transmission of HIV has occurred in this manner. Ingestion and inhalation have not been documented as modes of transmission of the virus.

#### Recommended Precautions

1. Biosafety Level (BSL) 2 standards and special practices, containment equipment and facilities as described in the CDC-NIH biosafety manual are recommended for activities involving clinical specimens, body fluids, or tissues from humans or laboratory animals that may contain HIV. These are the same practices recommended for all clinical specimens. Emphasis is placed on the following practices, which are included in the manual<sup>(1)</sup>:
  - a. Use of syringes, needles and other sharp instruments should be avoided if possible. Used needles and cutting instruments should be discarded into a puncture-resistant container with a lid. Needles should not be resheathed, purposefully bent, broken, removed from disposal syringes or otherwise manipulated by hand.
  - b. Gloves should be worn by all personnel engaged in activities that may involve skin contact with potentially infectious fluids, tissues, or cultures and by laboratory workers with dermatitis or other lesions on the hands who may have direct or indirect contact with potentially infectious materials. Handwashing with soap and water should be a routine practice immediately after direct contact with potentially infectious materials and on completion of work, even when gloves are worn.
  - c. Generation of aerosols, splashes and spills of potentially infectious materials should be avoided in procedures involving body fluids or tissues, during necropsy of cadavers, and in similar procedures on animals experimentally infected with HIV. Laboratory workers should use a biological safety cabinet when propagating the virus to further reduce the risk of exposure. Although the major precautions are listed here, the CDC-NIH biosafety manual contains additional related precautions (see pages 11-13 for BSL 2 and pages 14-17 [1] for BSL 3 when large volumes or concentrates of HIV are involved). In all instances, the laboratory director is responsible for assessing the biosafety level to be used.
  - d. Human serum from any source that is used as a control or reagent in a test procedure should be handled at BSL 2 (see pages 11-13 [1]). Appended to this Agent Summary Statement is a statement (Addendum 1) issued by CDC on the use of all human control or reagent sera

shipped to other laboratories. The Food and Drug Administration requires that manufacturers of human serum reagents use a similarly worded statement.

- e. Animal BSL 2 practices, containment equipment, and facilities are recommended for activities involving nonhuman primates, experimentally infected with HIV. Laboratory coats, gowns, or uniforms should be worn by laboratory workers, as is customary for other BSL 2 or 3 practices, depending on the nature of the work, concentration of the virus and volume of material being handled. Because many animals bite, and some throw faeces, urine, or expectorate at humans, animal-care personnel must wear coats, protective gloves, coveralls or uniforms, and face shields as appropriate to protect the skin and mucous membranes of the eyes, nose, and mouth from potential exposure to these substances when working with animals likely to manifest such behaviour.
2. Activities such as growing research-laboratory-scale amounts of HIV or related viruses or virus-producing cell lines, working with concentrated virus preparations, or conducting procedures that may produce droplets or aerosols should be performed in a BSL 2 facility with the additional practices and containment equipment recommended for BSL 3<sup>(12)</sup>.
3. Activities involving industrial-scale, large-volume, or high-concentration production and manipulation of HIV are to be conducted with BSL 3 requirements<sup>(12)</sup>.
4. All laboratory glassware, equipment, disposable materials, and wastes suspected or known to contain HIV must be decontaminated, preferably in an autoclave, before washing, discarding, etc. Incineration of solid wastes may be used as an alternate method of disposal.
5. There is no evidence that laboratory clothing soiled with materials known or suspected to contain HIV poses a transmission hazard, and the handling of such clothing is covered under BSL 2 practices. However, to be consistent with BSL 3 recommendations (1), when laboratory clothing becomes contaminated with HIV preparations, it should be decontaminated before being laundered or discarded.
6. Work surfaces should be decontaminated at the end of each day on completion of procedures or when overly contaminated. Many commonly used chemical disinfectants with such active ingredients as sodium hypochlorite, formaldehyde, glutaraldehyde, or phenols<sup>(4,13-15)</sup> can be used to decontaminate laboratory work surfaces; they can also be used to decontaminate some laboratory instruments, specific areas of contaminated laboratory clothing, and spills of infectious materials. Prompt decontamination of spills and other overt contamination should be standard practice.
7. The prudent and recommended approach to handling human serum known or suspected to contain HIV is to use the same precautions that should be used routinely to prevent transmission of bloodborne infections, including

hepatitis B (16). Available data on the effectiveness of heat to destroy HIV suspected or known to be present in human serum are at variance because of variations in volume of serum, concentration of the virus, temperature, and duration of exposure to heat<sup>(14,15,17)</sup>. Similarly, results of chemical analyses or antibody assays may vary when sera are heated before testing according to the analysis or assay being performed<sup>(18-20)</sup>. However, there is agreement that testing heated serum for HIV antibody by enzyme immunoassays often yields false-positive results<sup>(21-23)</sup>.

8. No HIV vaccine has been developed, and no drugs have been shown to be safe and effective for therapy. As part of an ongoing medical surveillance program for employees, all laboratory workers before being assigned to activities with a high potential for exposure should have a serum sample obtained and stored at -40°C (-40 F) for possible future testing. Subsequent serum samples should be obtained and stored in accordance with laboratory policy or following an inadvertent laboratory exposure involving materials described above. When indicated, these serum specimens should be tested by a qualified laboratory using currently recommended procedures for HIV antibody. Furthermore, the physician requesting serologic testing of these serum specimens must first obtain informed consent from the laboratory worker and describe the confidentiality safeguards available to protect test results. The laboratory workers whose serum specimens are to be tested should understand how the test results are to be used, the implications of a positive or negative test result, and the limits, if any, of the confidentiality safeguards. An employee whose serum HIV antibody test is reactive and whose subsequent tests and evaluation confirm the presence of HIV infection should be counselled to follow the Public Health Service recommendations for preventing transmission<sup>(24,25)</sup>.
9. In addition to HIV other primary, as well as opportunistic pathogenic agents may be present in the body fluids and tissues of persons who are antibody positive or have AIDS-related complex or AIDS. Laboratory workers should follow accepted biosafety practices to ensure maximum protection against inadvertent laboratory infection with agents other than HIV that may also be present in clinical specimens.

#### ADDENDUM

CDC cautionary notice for all human serum samples used as controls or reagents.

**WARNING:** Because no test method can offer complete assurance that laboratory specimens do not contain HIV, hepatitis B virus, or other infectious agents, this specimen(s) should be handled at the BSL 2 as recommended for any potentially infectious human serum or blood specimen in the CDC-NIH manual, Biosafety in Microbiological and Biomedical Laboratories 1984.\*

One or more of the following statements should be included with the above warning statement:

- . This specimen is negative for hepatitis B surface antigen (HBsAg).
- . This specimen is negative for antibody to HIV.
- . This specimen is positive for hepatitis B surface antigen (HBsAg).
- . This specimen is positive for antibody to HIV.
- . This specimen has NOT been tested for hepatitis B surface antigen (HBsAg).
- . This specimen has NOT been tested for antibody to HIV.
- . This specimen has been heated at 56°C (133°F) for 30 minutes (which will not inactivate HBsAg but will inactivate HIV).

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\* Available from Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, Stock #01702300167-1, Price: \$4.00; and from National Technical Information Service, U.S., Department of Commerce, 5285 Port Royal Road, Springfield, Virginia 22161, Stock #PB84-206879. Price \$6.00

TUBERCULOSIS AND AIDS IN FLORIDA  
(based on MMWR (1986) 35(37): 587-90)

In 1985, 1 425 cases of tuberculosis were reported in Florida, representing an increase of almost 7% over the 1 335 cases reported in 1984. Concern about a possible association between human immunodeficiency virus (HIV) infection and increased tuberculosis morbidity<sup>(1, 2)</sup> led to an evaluation of data on AIDS and tuberculosis. Four subgroups of persons were identified and their characteristics compared: (i) AIDS patients with and without tuberculosis (AIDS/TB and AIDS/non-TB, respectively), and (ii) tuberculosis patients with and without AIDS (TB/AIDS and TB/non-AIDS, respectively).

AIDS PATIENTS WITH AND WITHOUT TUBERCULOSIS

Of the 1 094 persons meeting the CDC surveillance definition of AIDS<sup>(3)</sup> reported from Florida in the period 1981-1985, 109 (10%) were also diagnosed in the period 1978-1985 as having tuberculosis. The number of AIDS patients with tuberculosis by year of AIDS diagnosis rose progressively from zero in 1981 to a peak of 55 in 1984; this number fell to 26 in 1985. The interval between report of tuberculosis and diagnosis of AIDS ranged from 7 years before to 15 months after AIDS was diagnosed (median interval, 3 months before AIDS diagnosis). Sixty-two (57%) of the patients were reported to have tuberculosis more than 1 month before they were diagnosed as having AIDS; 30 (28%), within a month before or after they were diagnosed as having AIDS; and 17 (16%), more than a month after they were diagnosed as having AIDS.

AIDS/TB patients were similar to AIDS/non-TB patients with respect to age and sex. However, AIDS/TB patients were more frequently black (81%) than were AIDS/non-TB patients (37%), were more frequently foreign born (60% versus 25%), and were less frequently homosexual or bisexual men (21% versus 62%).

TUBERCULOSIS PATIENTS WITH AND WITHOUT AIDS

Of the 7 241 persons in Florida reported to have tuberculosis in the period 1981-1985, 105 (2%) also had AIDS (the remaining four of the 109 cases mentioned earlier in this article had been reported to have TB before 1981, when no detailed information on individual cases was available, and thus were excluded). In general, there has been an increase in the

number of TB cases with AIDS. The number of such cases rose from five in 1981 (0.3% of 1 553) to 33 in 1984 (2.5% of 1 335), but fell to 23 in 1985 (1.6% of 1 425). Compared with TB/non-AIDS patients, TB/AIDS patients were younger (median 30 years versus 49 years) and were more often black (79% versus 51%), male (83% versus 71%), and foreign born (60% versus 21%). TB/AIDS patients were also more likely to have extrapulmonary tuberculosis (38% versus 11%), particularly lymphatic and miliary forms, while pleural tuberculosis was extremely rare.

#### MMWR EDITORIAL NOTE

The total number of AIDS patients in the United States meeting the CDC surveillance case definition represents only a fraction of the number of persons with HIV infection. It has been estimated that, in 1985, for every case of AIDS, there were 50-100 persons with HIV infection<sup>(4)</sup>. The number of tuberculosis patients with HIV infection but without AIDS may also exceed the number who have overt AIDS. The fact that tuberculosis did not decline in the nation as a whole in 1985 and the increase in the incidence of tuberculosis in certain areas may be partly explained by the infection with HIV of persons who already had tuberculous infection<sup>(2)</sup>. There are an estimated 10 million persons with latent tuberculosis infection in the United States and as many as 1.5 million persons with HIV infections<sup>(4)</sup>. The degree to which these two infected populations overlap may be a factor in the number of tuberculosis cases that develop.

The fact that 10% of AIDS patients from Florida have been diagnosed as having tuberculosis suggests an association between AIDS and tuberculosis. Most of the tuberculosis among the AIDS patients may represent reactivation of latent tuberculous infection acquired in years past rather than progression from recently acquired infection. Immunodeficiency caused by HIV infection probably allows latent tuberculous to progress to clinical tuberculosis. However, radiographically, the presentation of tuberculosis in AIDS patients is often indistinguishable from primary forms of the disease as seen in patients without AIDS<sup>(5)</sup>. Thus, recently acquired tuberculous infection in this population cannot be ruled out.

The risk that persons with latent tuberculous infection who acquire AIDS (or HIV infection without AIDS) will develop clinically active tuberculosis cannot be quantified from currently available data. However, the 10% incidence of clinically overt tuberculosis is substantially higher than would be expected for any group, including tuberculin-positive contacts of tuberculosis cases<sup>(6)</sup>.

The reason for the decreased number of TB/AIDS patients reported from Florida in 1985 is unknown. It may represent reporting artifact or a decline in the number of susceptible individuals at risk.

Other health departments may wish to determine the degree to which tuberculosis morbidity is associated with AIDS and the prevalence of HIV infection in tuberculosis patients. As

recommended in recently published guidelines, as part of the evaluation of patients with tuberculosis, risk factors for HIV should be identified<sup>(7)</sup>. Voluntary testing of all persons with these risk factors is also recommended. In addition, testing for HIV antibody should be considered for patients of all ages who have severe or unusual manifestations of tuberculosis. Such additional studies would help to determine the magnitude of the AIDS/TB problem in other areas and further define the population characteristics of persons with both tuberculosis and HIV infection (with and without AIDS).

Treatment of tuberculosis patients who also have AIDS or HIV infection should be instituted in accordance with recently published guidelines<sup>(7)</sup>. Prevention of tuberculosis among persons with HIV infection will require the identification of both HIV and tuberculous infection and the administration of isoniazid prevention therapy as currently recommended<sup>(7)</sup>. Counselling of persons being tested for HIV infection should be provided in accordance with current recommendations to prevent the transmission of HIV<sup>(8)</sup>.

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## AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

REPORTING PERIOD - 16/9/86 - 29/9/86  
 VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES

| VIRUS OR VIRAL ANTIGEN                   | ICPMR                  | RAHC<br>(NSW) | PHH/<br>POW<br>(NSW) | FAIR-<br>FIELD<br>(VIC) | RCH<br>(VIC) | IMVS<br>(SA) | STATE        | STATE       | Total |
|--|------------------------|---------------|----------------------|-------------------------|--------------|--------------|--------------|-------------|-------|
|  | (NSW)/<br>WVH<br>(ACT) |               |                      |                         |              |              | LAB<br>(QLD) | LAB<br>(WA) |       |
| 0100 ADENOVIRUS NOT TYPED.....           | 2                      |               | 3                    | 1                       |              | 2            | 12           | 2           | 22    |
| 0101 ADENOVIRUS TYPE 1.....              |                        | 1             |                      | 1                       |              | 1            |              | 2           | 5     |
| 0102 ADENOVIRUS TYPE 2.....              | 2                      |               |                      |                         |              | 2            |              | 1           | 5     |
| 0103 ADENOVIRUS TYPE 3.....              |                        |               |                      |                         |              | 5            |              | 2           | 7     |
| 0105 ADENOVIRUS TYPE 5.....              |                        | 1             |                      | 2                       |              | 4            |              |             | 7     |
| 0106 ADENOVIRUS TYPE 6.....              | 1                      |               |                      |                         |              | 1            |              |             | 2     |
| 0108 ADENOVIRUS TYPE 8.....              |                        |               |                      | 2                       |              |              |              |             | 2     |
| 0111 ADENOVIRUS TYPE 11.....             | 1                      |               |                      |                         |              |              |              |             | 1     |
| 0120 ADENOVIRUS TYPE 20.....             | 1                      |               |                      |                         |              |              |              |             | 1     |
| 0201 INFLUENZA A VIRUS.....              |                        |               |                      |                         |              |              | 2            |             | 2     |
| 0203 INFLUENZA B VIRUS.....              | 1                      |               |                      |                         |              | 1            | 3            |             | 5     |
| 0206 INFLUENZA A VIRUS SUBTYPE H1N1..... |                        |               |                      | 1                       |              |              | 3            |             | 4     |
| 0301 PARAINFLUENZA VIRUS TYPE 1.....     |                        |               |                      | 1                       |              | 1            | 1            |             | 3     |
| 0302 PARAINFLUENZA VIRUS TYPE 2.....     | 1                      |               |                      | 2                       |              | 3            |              | 1           | 7     |
| 0303 PARAINFLUENZA VIRUS TYPE 3.....     | 3                      |               |                      | 2                       |              | 6            | 2            | 3           | 16    |
| 0400 RESPIRATORY SYNCYTIAL VIRUS (RS)... | 16                     | 6             | 4                    | 20                      |              | 20           | 66           | 6           | 138   |
| 0500 RHINOVIRUS (ALL TYPES).....         | 2                      |               |                      | 2                       |              | 7            |              |             | 11    |
| 0600 MYCOPLASMA PNEUMONIAE.....          | 8                      |               |                      | 2                       |              | 2            | 2            | 5           | 19    |
| 0700 ORNITHOSIS-PSITTACOSIS.....         | 2                      |               |                      |                         |              |              |              | 1           | 3     |
| 0816 COXSACKIEVIRUS A16.....             |                        |               |                      | 1                       |              |              |              |             | 1     |
| 1005 ECHOVIRUS TYPE 5.....               |                        |               |                      | 1                       |              |              |              |             | 1     |
| 1011 ECHOVIRUS TYPE 11.....              | 12                     | 2             | 1                    |                         |              |              |              | 11          | 26    |
| 1014 ECHOVIRUS TYPE 14.....              |                        |               |                      | 1                       |              |              |              |             | 1     |
| 1015 ECHOVIRUS TYPE 15.....              | 1                      |               |                      |                         |              |              |              |             | 1     |
| 1020 ECHOVIRUS TYPE 20.....              |                        |               |                      | 2                       |              |              |              |             | 2     |
| 1022 ECHOVIRUS TYPE 22.....              |                        |               |                      | 1                       |              |              |              |             | 1     |
| 1100 POLIOVIRUS NOT TYPED.....           |                        |               | 7                    |                         |              |              |              |             | 7     |
| 1101 POLIOVIRUS TYPE 1.....              |                        |               |                      |                         |              | 1            |              | 2           | 3     |
| 1102 POLIOVIRUS TYPE 2.....              | 1                      |               |                      |                         |              | 2            |              |             | 3     |
| 1103 POLIOVIRUS TYPE 3.....              |                        |               |                      | 1                       |              |              |              |             | 1     |
| 1200 MUMPS VIRUS.....                    | 1                      |               |                      |                         |              |              |              | 2           | 3     |
| 1300 HERPES VIRUS GROUP-NOT TYPED.....   | 16                     |               |                      | 3                       |              | 1            |              |             | 20    |
| 1301 HERPES SIMPLEX VIRUS NOT-TYPED..... |                        | 4             |                      |                         |              |              |              |             | 4     |
| 1302 EPSTEIN-BARR VIRUS (EB VIRUS).....  | 19                     | 3             |                      |                         |              |              | 4            | 10          | 36    |
| 1303 VARICELLA-ZOSTER VIRUS.....         | 7                      |               |                      | 1                       |              |              |              | 4           | 12    |
| 1306 HERPES SIMPLEX TYPE 1.....          | 22                     |               | 14                   | 29                      |              | 17           | 50           | 25          | 157   |
| 1307 HERPES SIMPLEX TYPE 2.....          | 93                     |               | 26                   | 53                      |              | 26           | 78           | 86          | 362   |
| 1401 COXIELLA BURNETI.....               | 7                      |               |                      |                         |              | 1            | 5            |             | 13    |
| 1502 PICORNA VIRUS-NOT TYPED.....        | 1                      |               | 4                    |                         |              |              | 11           | 5           | 21    |
| 1521 MEASLES VIRUS.....                  |                        |               |                      | 1                       |              |              |              |             | 1     |
| 1522 RUBELLA VIRUS.....                  | 13                     |               |                      |                         |              | 3            | 4            | 4           | 24    |
| 1532 HEPATITIS B ANTIGEN.....            | 40                     | 1             | 14                   | 18                      |              | 18           | 18           | 11          | 120   |
| 1535 HEPATITIS A ANTIBODY.....           | 3                      |               | 1                    | 6                       |              | 11           |              | 10          | 31    |
| 1541 CHLAMYDIA A - C TRACHOMATIS.....    | 11                     |               |                      |                         |              | 50           | 23           | 27          | 111   |
| 1556 CMV - CYTOMEGALOVIRUS.....          | 6                      |               |                      | 2                       |              | 7            | 11           | 7           | 33    |
| 1564 ROTAVIRUS.....                      | 27                     | 13            | 11                   |                         |              | 23           |              |             | 74    |
| 1571 ENTEROVIRUS TYPE 71 (BRCR).....     | 3                      |               |                      | 4                       |              | 2            |              |             | 9     |
| 1599 ENTEROVIRUS TYPING PENDING.....     |                        |               | 3                    |                         |              |              |              |             | 3     |
| 9992 ROSS RIVER VIRUS.....               |                        |               |                      |                         |              |              | 6            |             | 6     |
| 9994 SMALL VIRUS (LIKE) PARTICLE.....    |                        | 1             |                      |                         |              |              |              |             | 1     |
| Total.....                               | 323                    | 32            | 88                   | 160                     |              | 217          | 301          | 227         | 1,348 |

## AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

PERIOD : 16/9/86 to 29/9/86

Viral Identifications by Clinical Information Table 1.

Code 00,99 -No ill or data; 01,02,11,12 -Respiratory; E3 -Encephalitis; M3 -Meningitis; 04 -Paralysis; 05,13 -CNS other unspec.; 07,49 -GI; 17,47 -Hepatic; 19 -CVS; 89 -Urinary; 06 -Skin/mucous.

| VIRUS OR VIRAL ANTIGEN                        | No-ill<br>or<br>data | Respiratory | Encephalitis | Meningitis | Paralysis | CNS<br>other<br>unspec | GI | Hepatic | CVS | Urinary | Skin/<br>mucous<br>memb |
|---|----------------------|-------------|--------------|------------|-----------|------------------------|----|---------|-----|---------|-------------------------|
| 0100 ADENOVIRUS NOT TYPED.....                |                      |             | 1            |            |           |                        |    | 1       |     |         |                         |
| 0101 ADENOVIRUS TYPE 1.....                   |                      |             | 4            |            | 1         |                        |    |         |     |         |                         |
| 0102 ADENOVIRUS TYPE 2.....                   |                      |             | 2            |            | 1         |                        |    | 2       |     |         |                         |
| 0103 ADENOVIRUS TYPE 3.....                   | 1                    |             | 2            |            |           |                        |    | 2       |     |         |                         |
| 0105 ADENOVIRUS TYPE 5.....                   |                      |             | 5            |            |           |                        |    | 2       |     |         |                         |
| 0106 ADENOVIRUS TYPE 6.....                   | 1                    |             | 1            |            |           |                        |    |         |     |         |                         |
| 0111 ADENOVIRUS TYPE 11.....                  | 1                    |             |              |            |           |                        |    |         |     |         |                         |
| 0120 ADENOVIRUS TYPE 20.....                  | 1                    |             |              |            |           |                        |    |         |     |         |                         |
| 0201 INFLUENZA A VIRUS.....                   |                      |             | 1            |            |           |                        |    | 1       |     |         |                         |
| 0203 INFLUENZA B VIRUS.....                   | 1                    |             | 4            |            |           |                        |    |         |     |         |                         |
| 0206 INFLUENZA A VIRUS SUBTYPE H1N1           |                      |             | 4            |            |           |                        |    |         |     |         |                         |
| 0301 PARAINFLUENZA VIRUS TYPE 1....           |                      |             | 2            |            |           |                        |    |         |     |         |                         |
| 0302 PARAINFLUENZA VIRUS TYPE 2....           |                      |             | 7            |            |           |                        |    |         |     |         |                         |
| 0303 PARAINFLUENZA VIRUS TYPE 3....           | 2                    |             | 12           |            |           |                        |    |         |     |         |                         |
| 0400 RESPIRATORY SYNCYTIAL VIRUS<br>(RS)..... | 6                    | 129         |              |            |           |                        |    |         |     |         |                         |
| 0500 RHINOVIRUS (ALL TYPES).....              |                      |             | 10           |            |           |                        |    |         |     |         | 1                       |
| 0600 MYCOPLASMA PNEUMONIAE.....               | 1                    | 17          |              |            |           |                        | 1  |         |     |         |                         |
| 0700 ORNITHOSIS-PSITTACOSIS.....              |                      |             | 2            |            |           |                        |    |         |     |         |                         |
| 0816 COXSACKIEVIRUS A16.....                  |                      |             |              |            |           |                        |    |         |     |         | 1                       |
| 1005 ECHOVIRUS TYPE 5.....                    |                      |             |              |            |           |                        |    |         |     |         | 1                       |
| 1011 ECHOVIRUS TYPE 11.....                   | 1                    | 4           | 1            | 5          |           |                        | 4  |         |     | 2       | 1                       |
| 1015 ECHOVIRUS TYPE 15.....                   | 1                    |             |              |            |           |                        |    |         |     |         |                         |
| 1020 ECHOVIRUS TYPE 20.....                   |                      |             |              | 2          |           |                        |    |         |     |         |                         |
| 1022 ECHOVIRUS TYPE 22.....                   |                      |             | 1            |            |           |                        |    |         |     |         |                         |
| 1101 POLIOVIRUS TYPE 1.....                   |                      |             | 3            |            |           |                        |    |         |     |         |                         |
| 1102 POLIOVIRUS TYPE 2.....                   |                      |             |              |            |           |                        | 2  |         |     |         |                         |
| 1103 POLIOVIRUS TYPE 3.....                   |                      |             |              | 1          |           |                        |    |         |     |         |                         |
| 1200 MUMPS VIRUS.....                         | 2                    |             |              |            |           |                        |    |         |     |         | 1                       |
| 1301 HERPES SIMPLEX VIRUS NOT-TYPED           |                      |             |              |            |           |                        |    |         |     |         | 4                       |
| 1302 EPSTEIN-BARR VIRUS (EB VIRUS).           | 8                    |             | 2            |            |           |                        |    | 3       |     |         | 2                       |
| 1303 VARICELLA-ZOSTER VIRUS.....              | 2                    | 1           | 1            | 1          |           |                        |    |         |     |         |                         |
| 1306 HERPES SIMPLEX TYPE 1.....               | 11                   | 6           |              | 1          |           |                        |    |         |     |         |                         |
| 1307 HERPES SIMPLEX TYPE 2.....               | 13                   |             |              |            |           |                        |    |         |     |         |                         |
| 1401 COXIELLA BURNETI.....                    | 2                    |             |              |            |           |                        |    |         |     |         | 1                       |
| 1522 RUBELLA VIRUS.....                       | 2                    |             |              |            |           |                        |    |         |     |         | 9                       |
| 1532 HEPATITIS B ANTIGEN.....                 | 26                   |             |              | 1          |           |                        |    | 76      |     |         |                         |
| 1535 HEPATITIS A ANTIBODY.....                | 7                    |             |              |            |           |                        |    | 21      |     |         |                         |
| 1541 CHLAMYDIA A - C.TRACHOMATIS...           | 6                    |             |              |            |           |                        |    |         |     |         |                         |
| 1556 CMV - CYTOMEGALOVIRUS.....               | 3                    | 16          |              |            |           |                        |    |         |     | 4       | 2                       |
| 1564 ROTAVIRUS.....                           |                      |             |              |            |           |                        | 74 |         |     |         |                         |
| 1571 ENTEROVIRUS TYPE 71 (BRCR)....           |                      | 3           |              |            |           |                        |    |         |     |         | 6                       |
| 9992 ROSS RIVER VIRUS.....                    |                      |             |              |            |           |                        |    |         |     |         | 1                       |
| 9994 SMALL VIRUS (LIKE) PARTICLE...           |                      |             |              |            |           |                        | 1  |         |     |         |                         |
| Total.....                                    | 98                   | 237         | 4            | 13         |           |                        | 89 | 101     |     | 6       | 175                     |

## AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

PERIOD : 16/9/86 to 29/9/86

Viral Identifications by Clinical Information Table 2.

Code 10 -Eye; 59 -Genital; 39 -Endo/sal gland;

38 -RES; 29 -Muscle/joint; 69 -Congenital; P8 -PUO;

G8 -Fever/malaise; 09 -Other; A1 -SIDS ...

| VIRUS OR VIRAL ANTIGEN                        | Eye | Gen-ital | Endo/sal gland | RES | Muscle/joint | Con-genital | PUO | Fever/malaise | Other | SIDS |
|---|-----|----------|----------------|-----|--------------|-------------|-----|---------------|-------|------|
| 0100 ADENOVIRUS NOT TYPED.....                |     |          |                | 1   |              |             |     |               |       |      |
| 0103 ADENOVIRUS TYPE 3.....                   | 1   |          |                |     |              |             |     |               |       | 1    |
| 0108 ADENOVIRUS TYPE 8.....                   | 2   |          |                |     |              |             |     |               |       |      |
| 0301 PARAINFLUENZA VIRUS TYPE 1....           |     |          |                |     |              | 1           |     | 1             |       |      |
| 0303 PARAINFLUENZA VIRUS TYPE 3....           |     |          |                |     |              |             |     |               |       | 2    |
| 0400 RESPIRATORY SYNCYTIAL VIRUS<br>(RS)..... |     |          |                | 1   |              |             | 1   | 1             |       | 1    |
| 0600 MYCOPLASMA PNEUMONIAE.....               |     |          |                |     |              |             |     |               |       | 1    |
| 0700 ORNITHOSIS-PSITTACOSIS.....              |     |          | 1              |     |              |             |     |               |       |      |
| 1011 ECHOVIRUS TYPE 11.....                   | 2   |          |                |     |              |             | 1   | 4             |       | 3    |
| 1014 ECHOVIRUS TYPE 14.....                   |     |          |                |     |              |             |     | 1             |       |      |
| 1102 POLIOVIRUS TYPE 2.....                   |     |          |                |     |              |             |     |               |       | 1    |
| 1200 MUMPS VIRUS.....                         |     |          |                |     |              |             |     | 1             |       |      |
| 1302 EPSTEIN-BARR VIRUS (EB VIRUS).           |     |          | 11             | 7   | 1            |             | 1   | 3             |       | 3    |
| 1303 VARICELLA-ZOSTER VIRUS.....              |     |          |                |     |              |             |     | 1             |       |      |
| 1306 HERPES SIMPLEX TYPE 1.....               | 9   | 57       |                | 1   | 1            |             |     |               |       |      |
| 1307 HERPES SIMPLEX TYPE 2.....               | 1   | 280      |                |     |              |             |     |               |       |      |
| 1401 COXIELLA BURNETI.....                    |     |          |                |     | 1            |             | 3   | 7             |       | 1    |
| 1521 MEASLES VIRUS.....                       |     |          | 1              |     |              |             |     |               |       |      |
| 1522 RUBELLA VIRUS.....                       |     |          | 3              |     | 3            |             | 2   | 3             |       | 4    |
| 1532 HEPATITIS B ANTIGEN.....                 |     |          |                |     |              |             |     |               |       | 17   |
| 1535 HEPATITIS A ANTIBODY.....                |     |          |                |     |              |             |     |               |       | 3    |
| 1541 CHLAMYDIA A - C.TRACHOMATIS...           | 2   | 104      |                |     |              |             |     |               |       |      |
| 1556 CMV - CYTOMEGALOVIRUS.....               |     | 1        |                |     |              | 2           | 3   | 3             |       | 2    |
| 9992 ROSS RIVER VIRUS.....                    |     |          |                |     | 5            |             |     | 1             |       | 1    |
| Total.....                                    | 17  | 442      | 17             | 9   | 12           | 2           | 11  | 26            |       | 40   |