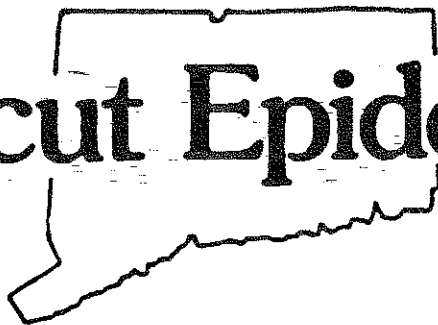


# Connecticut Epidemiologist



STATE OF CONNECTICUT DEPARTMENT OF HEALTH SERVICES

1985

Douglas S. Lloyd, M.D., M.P.H., Commissioner

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## AIDS UPDATE

## CONNECTICUT'S NEW AIDS PROGRAM

On September 30, 1985, Governor William O'Neill signed an Executive Order making the Department of Health Services (DHS) the lead State agency with regard to Acquired Immune Deficiency Syndrome (AIDS) policy and control. In response, Commissioner Douglas Lloyd announced a major expansion in DHS AIDS-related activities, including the creation of an AIDS program with ten new staff members. AIDS prevention will be a priority for the new program.

AIDS incidence continues to double annually in Connecticut as well as nationally. Since 1980, 14,084 cases have been reported nationally, 162 in Connecticut. The fatality rate within 2 years of diagnosis is 80 percent. AIDS is now recognized as the leading cause of death in New York City and San Francisco in men 25-44 years old and one of the leading causes of death in women in that age group. In Connecticut, 84 persons with AIDS (53%) have died. The number of individuals infected with human T-cell lymphotropic virus type III (HTLV-III) who may be capable of transmitting infection is estimated to be greater than 500,000 nationally and over 5,000 in Connecticut. These persons are also at risk for developing AIDS. Long-term neurologic sequelae of HTLV-III infection, especially dementia, have been described and could be a major problem for infected individuals who do not succumb to AIDS. An analysis by the Centers for Disease Control suggests the first 9,000 cases of AIDS cost an estimated \$5.6 billion in direct medical costs and in indirect costs such as lost earnings and productivity because of disability and premature death. In comparison, the direct and indirect costs of 910,000 cases of cancer diagnosed each year are estimated at \$50 billion.

Major questions surround efforts to prevent infection through immunization. The major exterior protein of HTLV-III has been found to vary considerably among clinical isolates. To establish a starting point for vaccine development, investigators are attempting to determine whether any antigenic sequence of the envelope protein remains constant. This exterior protein variability, also seen with influenza A viruses, suggests that HTLV-III may be able to mutate, potentially making antibodies stimulated by a stable single vaccine ineffective.

Treatment to prevent the development of immunodeficiency is in a very early stage. Although at least six drugs with some ability to inhibit replication or infection of new cells with HTLV-III have been identified, none has been proven to be clinically efficacious. In addition, all may have serious side-effects which preclude the long-term administration that will be necessary to suppress HTLV-III replication.

With vaccine development and therapeutic efforts in their infancy, it is essential that public health efforts be focused on prevention of new cases of HTLV-III infection. Prevention will depend on the education of persons who are infected with HTLV-III or who are at risk of infection. These persons must learn about AIDS so that they can avoid sexual and drug-using practices that promote HTLV-III transmission.

Not everyone needs the same message. Cooperation will be necessary. Individuals who already have a high-risk lifestyle need to be counseled and in some cases, they may need ready access to HTLV-III antibody testing. Individuals in their teens and 20's who are considering lifestyles that would put them at risk of exposure to HTLV-III need broad but accurate risk information. The recommended lifestyle changes are largely private and compliance is voluntary. A high degree of trust will be required for individuals to volunteer for HTLV-III antibody testing and counseling. Given the potential stigma and fear of being labelled "AIDS carrier", confidentiality of information must be guaranteed.

Counseling of HTLV-III antibody positive individuals will be based on limited data. It cannot be determined with complete certainty who is a carrier of living virus. Of those who are carriers, it is unknown how effectively they can spread HTLV-III to others, particularly one-time sexual partners, or from a mother to her child in utero or during childbirth. It is unknown how long the carrier state persists and there is as yet no practical means to routinely screen individuals for the presence of living virus.

It will be impossible to identify and counsel all possibly HTLV-III infected individuals. Many individuals, while in risk groups for AIDS, may not be easily reached for screening. Mandatory HTLV-III antibody screening might only alienate individuals

from undertaking voluntary lifestyle changes. Since counseling is labor-intensive, even if all infected individuals could be identified, only a minority could be effectively counseled given available staffing. Screening and counseling must be carefully targeted to those most at-risk and most apt to benefit. Since the usefulness of individual counseling and public education in reducing the rate of HTLV-III transmission has not been established, measures of evaluation need to be developed.

The following goals and objectives are part of the Connecticut program to reduce the rate of transmission of HTLV-III.

**I. Goal:** Prevention of infection in uninfected members of high-risk groups.

Objective 1: To develop and administer to members of high risk groups for AIDS a questionnaire specifically designed to measure the level of knowledge of AIDS, the prevalence of high-risk behavior, and the level of concern about the possibility of becoming infected. This information will be used to determine areas for emphasis in education materials.

Objective 2: To develop video and printed education materials focused on means of transmission, pathogenesis and prevention of HTLV-III infection. These materials will include referral information for individuals who wish to be tested for evidence of HTLV-III infection.

Objective 3: To identify local resources for the distribution of AIDS education materials. This will include any group or agency that provides targeted services of any kind to members of the gay and drug-using communities. Current activities of each with respect to AIDS education will be defined, as will the role each is willing to play in targeted AIDS-prevention education.

Objective 4: To identify a sub-population of members of risk groups for HTLV-III infection (eg, all new methadone program entrants). An annual serosurvey on a sample of that population will be done to determine HTLV-III antibody prevalence and evaluate the effectiveness of prevention activities.

**II. Goal:** Prevention of infection in the high-school and college age population.

Objective 1: To convene a statewide advisory group(s) of relevant individuals from the high school and college education systems to identify and recommend strategies for an AIDS prevention education initiative for students.

Objective 2: To develop and use a questionnaire specifically designed to measure the level of knowledge of transmission, pathogenesis and prevention of HTLV-III infection, the prevalence of high-risk behavior, and level of concern about infection in the high school and college-age population.

Objective 3: Based on information obtained in objectives 1 and 2, to develop up-to-date video and printed education materials focused on means of transmission, the risks associated with certain

lifestyles and types of sexual activity, pathogenesis and prevention of HTLV-III virus infection in this population. Referral information will be included for individuals who identify themselves as possibly being in a risk group for HTLV-III infection.

**III. Goal:** Prevention of transmission of HTLV-III infection in the possibly infected.

Objective 1: To ensure that counseling and testing services for possibly infected individuals are available and accessible in all major cities and the eight counties.

Objective 2: To encourage self-referral for HTLV-III testing and counseling by providing confidential services at no cost.

Objective 3: To identify and offer HTLV-III antibody screening and counseling to high-risk contacts (regular sexual partners; individuals with whom needles and syringes have been shared in the preceding 2 years) of all individuals diagnosed as having AIDS.

**IV. Goal:** Education of health care professionals.

Objective 1: To disseminate information relevant to the transmission and control of HTLV-III infection to health care providers.

Objective 2: To provide training in counseling persons at risk of and with documented HTLV-III infection.

Objective 3: To identify physicians and/or clinics in the major cities and eight counties to provide screening and counseling services for high-risk individuals.

**Editorial Note:** Readers' comments are welcome and should be addressed to: Dr. James Hadler, State of Connecticut Department of Health Services, Preventable Diseases Division, 150 Washington Street, Hartford, CT 06106.

References

Council on Scientific Affairs: Status report on the acquired immunodeficiency syndrome: Human T-cell lymphotropic virus type III testing. JAMA 1985; 254:1342-1345.

Curran JW, Morgan WM, Hardy AM, et al: The epidemiology of AIDS: Current status and future prospects. Science 1985; 229:1352-1357.

Echenberg DF: A new strategy to prevent the spread of AIDS among heterosexuals. JAMA 1985; 254:2129-2130.

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**AVAILABILITY OF HTLV-III TESTING**

The following four laboratories have been approved by the Connecticut Department of Health Services to do HTLV-III antibody testing:

1. University of Connecticut Health Center  
Contact: Dr. Richard Tilton (203-674-2864)

2. Hartford Hospital  
Contact: Dr. James McLaughlin (203-524-2242)
3. Roche Biomedical Laboratories, Inc.  
Call: 1-800-223-0631 or 1-800-631-5250
4. Yale-New Haven Hospital  
Contact: Dr. Joseph Bove (203-785-2441)

In each laboratory there is a fee charged for testing. These fees are in the range of \$25-30 for an ELISA screening test and \$25-90 for Western blot confirmation of a positive ELISA test. The State Department of Health Services plans to offer counseling and HTLV-III antibody testing services at selected outpatient sites beginning in the next few months.

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#### AIDS STATISTICS

Table 1. Adult AIDS Cases by Risk Group and Sex Connecticut, 1980 - October 31, 1985

Risk Group	Male	Female	TOTAL
Gay/Bisexual	93	0	93
IV User	23	10	33
Hemophiliac	3	0	3
Blood Transfusion	3	2	5
Other/Unknown	17	6	23
TOTAL	139	18	157

Table 2. Adult AIDS Cases by County of Residence Connecticut, 1980 - October 31, 1985

County	No. of Cases
Fairfield	59
New Haven	49
Hartford	33
New London	4
Middlesex	3
Litchfield	3
Windham	3
Tolland	2
Transient	1
TOTAL	157

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#### SOURCES OF AIDS INFORMATION

1. State of Connecticut Department of Health Services.  
Contact: William Sabella (566-5058).
2. AIDS Project New Haven (APNH) (624-AIDS).
3. Hartford AIDS Active Committee (HAAC).  
Contact: Pat Myslak (722-6719),  
Ann Darling (722-6741).
4. Northwest CT AIDS Project (567-4111).
5. AIDS Coordinator - YNHH (785-5303).

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#### ALERT: PENICILLINASE PRODUCING N. gonorrhoeae

Until recently, relatively few cases of penicillinase producing Neisseria gonorrhoeae (PPNG) have been reported in Connecticut. Since 1979, when the first

PPNG isolate in the State was found, the number of cases seen annually has never exceeded 28. Furthermore, through CY 84 over 85 percent were traceable to importation. There was no evidence of indigenous PPNG in the State.

A new pattern, however, is apparently developing. Through November 5, 1985, 48 PPNG cases have been reported in the State, 37 during the past three months. Eighty-five percent (41 of 48) are not traceable to importation, raising the likelihood that a significant PPNG reservoir may be developing in the State. Most of the isolates have been reported from the Hartford area (29 cases). However, the Bridgeport area, where eight of the ten most recently reported cases have been found, is also active. Thus far, no connection between the Hartford and Bridgeport outbreaks has been identified.

#### Reported Cases of Penicillinase Producing N. gonorrhoeae, 1984 and 1985 (through Nov. 5)

	CY 1984	JAN 1 - NOV 5 1985
Hartford	6	29
Bridgeport	6	8
Stamford	1	4
New Britain	0	2
Danbury	0	1
Middletown	0	1
New Haven	2	1
New London	3	1
Waterbury	0	1
East Haven	1	0
West Haven	2	0
TOTAL	21	48

The prompt identification and proper treatment of PPNG infections is vital for the control of this strain. In response to this dramatic increase in PPNG, the State Department of Health Services urges health providers and laboratories, particularly those in the Hartford and Bridgeport areas, to incorporate the following recommendations within their practices and procedures for testing and treating of gonococcal infections:

#### PPNG IDENTIFICATION AND CONTROL

##### Health Providers Are Encouraged To:

- o Culture all individuals having symptoms suggestive of gonorrhea, or any other sexually transmitted disease.
- o Culture all individuals who have been exposed to gonorrhea, or any other sexually transmitted disease.
- o Ensure that the laboratory processing gonorrhea cultures includes the routine beta-lactamase testing of all gonococcal isolates.
- o Initiate treatment of symptomatic patients and suspected sexual contacts immediately, following the Centers for Disease Control, Sexually Transmitted Diseases Treatment Guidelines, 1982 (see MMWR suppl, August 20, 1982, Vol. 31, No. 2S:37s-47s).

- Encourage all infected patients to return within three to five days upon completion of treatment for test-of-cure (TOC) cultures.

**Laboratories Are Encouraged To:**

- Test all gonococcal isolates for Beta-lactamase production.
- Test all positive post-therapy (test-of-cure) cultures for other antibiotic resistance.

**REPORTING PPNG POSITIVE FINDINGS**

Any laboratory or health provider finding a PPNG should report the finding immediately by telephone to the STD Control Program at 566-4493.

For complete information on testing procedures and treatment recommendations, please contact:

- Laboratory Testing . . . . . 566-5746 (Arthur Gandelman)
- Reporting, Treatment and Epidemiology . 566-4493 (Gordon Joachim)

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**NEW STAFF ASSIGNMENTS IN EPIDEMIOLOGY**

Patricia J. Checko, M.P.H. is on sabbatical from the Department of Health Services (DHS). She is working on a DrPH from the Department of Epidemiology and Public Health, Yale University School of Medicine.

Matthew L. Carter, M.D. has taken on the duties of Epidemiology Program Coordinator in Pat's absence. Matt was the EIS officer assigned to DHS last year by the Centers for Disease Control. He is also a preventive medicine resident at Yale.

Lyle R. Petersen, M.D. has been assigned to the DHS by the CDC. Dr. Petersen completed his

undergraduate work at the University of California, San Diego. He received his medical degree from the University of California, San Francisco and completed his Internal Medicine internship and residency at The Stanford University Hospital. From July 1984 to June 1985 he was a research associate with the Centro Internacional de Investigaciones Medicas in Cali, Colombia. His Connecticut assignment with the CDC is for two years.

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COMMUNICABLE DISEASES REPORTED			
CONNECTICUT			
WEEKS 1 - 43			
(THRU OCTOBER 25, 1985)			
Name	1985 To Date	1984 To Date	% Change From 1984
AIDS	68	30	+ 42.6
GONORRHEA	7019	7824	- 11.4
SYPHILIS P&S	174	150	+ 13.7
MEASLES	3	14	- 366.6
RUBELLA	1	0	+ 100.0
TUBERCULOSIS	128	137	- 7.0
HEPATITIS A	107	70	+ 34.5
HEPATITIS B	258	292	- 13.1
SALMONELLOSIS	888	735	+ 17.2
SHIGELLOSIS	111	97	+ 12.6

James L. Hadler, M.D., M.P.H., Chief                      Lyle R. Petersen, M.D.  
 Matthew L. Cartter, M.D., Editor  
 Leonard Gilmartin, Coordinator, Public Health Education Section

EPIDEMIOLOGY SECTION  
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