EPIDEMIOLOGY SECTION

Connecticut Epidemiologist

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AIDS UPDATE

As of April 27, 1984, Connecticut has reported 49 confirmed cases of AIDS in adults and one confirmed pediatric case to the Centers for Disease Control. Compared to national figures, Kaposi's sarcoma is seen less frequently in Connecticut cases, but this trend is not statistically significant (Table 1). However, an interesting and unexplained Connecticut pattern is the fact that only 1 of 49 cases has occurred in an individual whose residence was east of the Connecticut River. Furthermore, 74% of Connecticut cases reside in Fairfield (36.7%) and New Haven (38.7%) counties, which comprise 50% of the state's population. This dramatic geographic distribution is suggestive of a New York City connection. Epidemiologic follow-up of cases with in-depth interviews is planned to better define how many may result from transmission within Connecticut, and how many may be "imported" from New York City.

The rate at which reported cases are occurring continues to increase in 1984 (Figure 1).

DRUGS AND AIDS

Approximately 17% of all nationally reported cases of AIDS have occurred in intravenous (IV) drug abusers. However, because risk groups are categorized in a hierarchical manner for surveillance purposes, an individual who is gay or bisexual and is also a drug abuser will appear in the gay/bisexual category only. Therefore, illicit use of intravenous drugs may have a more significant role in the transmission of AIDS than is apparent at first glance. For example, in New York City, IV drug abuse is the primary risk factor for 23.6% of reported cases. However, 7.6% of homosexual/bisexual cases also use IV drugs, thereby increasing the level of IV drug use in AIDS cases to 31.2% (1).

TABLE 1
AIDS Cases In Each Illness Category
USA (as of March 26, 1984) and
Connecticut (as of April 27, 1984)

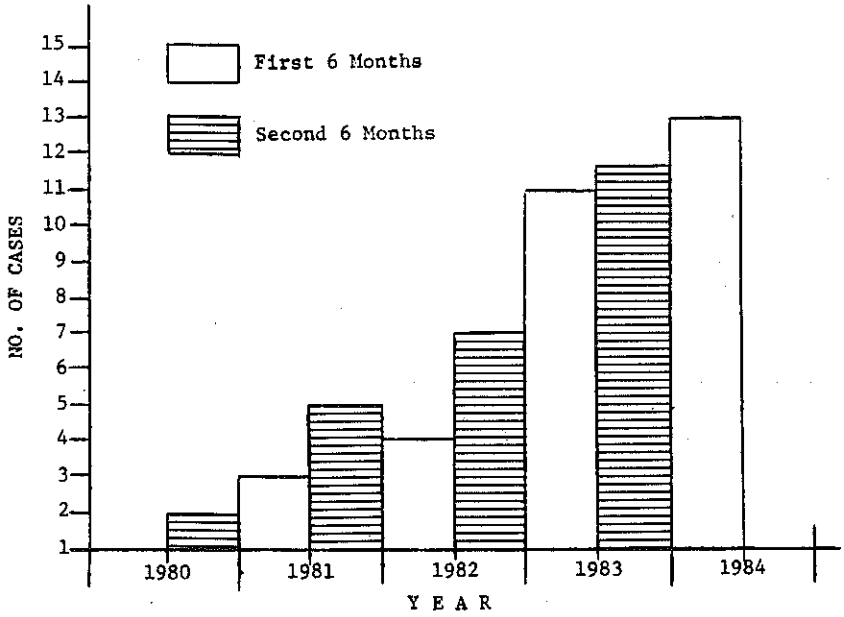
	UNITED STATES		CONNECTICUT	
PRIMARY DISEASE	Cases	% of Total	Cases	% of Total
KS without PCP	980	25.1	5	10.2
PCP without KS	2,012	51.6	31	63.2
Both KS and PCP	263	6.7	4	8.2
OI without KS or PCP	644	16.5	8	18.4
TOTAL	3,899	100.0	49	100.0

Figure 1

Six Month Incidence of AIDS Cases in Connecticut

By Date of Diagnosis

1980-1984



The same is true in New Jersey, where 50-55% of AIDS cases have used IV drugs (2) and in Connecticut where 24.4% of cases have used IV drugs (4 gay/bisexual cases also used IV drugs).

Dr. Don DeJarlais of the New York State Division of Substance Abuse has suggested that this overlap of pure IV drug users and gay/bisexual individuals who may also be IV drug users may be responsible for the amplification of AIDS in both risk groups at the same time, sharing of contaminated needles between these two groups being the mechanism of amplification (3).

There are approximately 1,000 "shooting galleries" in New York City where one may purchase drugs and also rent "the works" for shooting up, (i.e., needle and syringe in order to inject oneself immediately). Suburban residents, including some from Connecticut, frequent shooting galleries in New York City where standard practice is the reuse of needles and syringes. De Jarlais' data suggest that females are less likely to share needles and/or frequent shooting galleries. This may further explain the predominance of males with AIDS in this population.

It is suspected that reuse of blood contaminated needles and syringes in shooting galleries is a major risk factor for acquiring AIDS. In addition, a practice known as "booting" may insure transfer of the prutative agent from a contaminated syringe into the blood stream. Used to hasten the effect of the drug, the needle is inserted and blood is aspirated in and out of the syringe to mix the drug with the blood.

AIDS-RELATED COMPLEX

The NCI/NIAID Extramural AIDS Working Group has developed the term AIDS-Related Complex (ARC) to provide a consistent description for patients with illness that does not meet the CDC criteria for AIDS for research purposes.

At least two of the following clinical signs/symptoms lasting three or more months PLUS two or more of the following laboratory abnormalities, occurring in a patient in a cohort at increased risk for developing AIDS and having no underlying infectious cause for the symptoms.

Clinical:

1) Fever: ≥100° F, intermittent or continuous, for at least 3 months, in the absence of other identifiable cause.
2) Weight Loss: 10% normal body weight or ≥15 lbs.
3) Lymphadenopathy: persistent over at least 3 months, involving ≥ 2 extra-inguinal node-bearing areas.
4) Diarrhea: intermittent or continuous, ≥ 3 months, in the absence of other identifiable cause.
5) Fatigue, to the point of decreased physical or mental function.
6) Night Sweats: intermittent or continuous, ≥ 3 months, in the absence of other identifiable cause.

Laboratory:

1) Depressed helper T-cells. (≥2 standard deviations below the mean)
2) Depressed helper/suppressor ratio. (≥ standard deviations below the mean)
3) At least one of the following: leukopenia, thrombocytopenia, absolute lymphopenia or anemia.
4) Elevated serum globulins.
5) Depressed blastogenesis (Pokeweed, phytohemagglutinin [PHA] mitogens).
6) Abnormal intradermal tests for delayed cutaneous hypersensitivity (using Multi-Test or equivalent).

Because of the non-specific signs and symptoms and the need for expensive laboratory tests, this is not a useful surveillance definition of the problem. Many physicians object to the name and/or definition since they feel it can result in "labeling" of patients who have a non-specific illness. Until a specific diagnostic test is available, the State of Connecticut Department of Health Services will continue to report only cases which meet the CDC surveillance definition. Cases meeting the ARC criteria will be held in a pending file and the reporting physician will be contacted periodically to evaluate the status of the case.

AIDS MEDICAL ADVISORY COMMITTEE

The second meeting of the AIDS Medical Advisory Committee was held on March 1, 1984. Committee members include: Drs. L. Brettman, S. Donta, J. Dwyer, D. Evans, R. Garibaldi, W. Greene, E. Maderazzo, and R. Papac as well as Department of Health Services' representatives P. Checko, J. Hadler, E. Jones and W. Sabella. Agenda items included: prospective and retrospective surveillance, placement of AIDS patients in community facilities, social security and medicaid funds for AIDS patients, and transmission issues and interventions. The group agreed unanimously that there was no indication for the use of quarantine as a method to control transmission of AIDS.

REFERENCES

1. New York City Department of Health. AIDS-Surveillance Update. New York Department of Health, Surveillance Office, March 28, 1984.

2. Luce D. New Jersey State Health Department, personal communication.

3. DeJarlais D. Epidemiology of AIDS in narcotic abusers and related issues. New York City Department of Health Meeting on Acquired Immune Deficiency Syndrome. November 30, 1983.

A SYMPOSIUM ON INFECTIOUS DISEASES IN DAY CARE: MANAGEMENT AND PREVENTION

The Minnesota Department of Health and the University of Minnesota, Division of Epidemiology, School of Public Health and Department of Conferences will sponsor a symposium entitled "Infectious Diseases in Day Care: Management and Prevention" in Minneapolis from June 21-23, 1984. The purposes of this symposium are to characterize infectious diseases in day care and to develop appropriate prevention and management measures.

To date there has been virtually no unified approach by experts in different disciplines to define the scope of the problem of infectious diseases in day care or to define specific areas requiring further research. Current recommendations for the prevention of many diseases in day-care settings are based upon incomplete information and often do

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	AMEBIASIS	BOTULISM	BRUCELLOSIS	ENCEPHALITIS (TOTAL)	Primary	Post	FOODBORNE OUTBREAKS	GONORRHEA	HEPATITIS A	HEPATITIS B	HEPATITIS NON A NON B	HEPATITIS UNSPECIFIED	LEGIONELLOSIS	LEPROSY	MALARIA	MEASLES	MENINGITIS (All Types)	Aseptic	Hemophilus influenzae	Meningococcal	Other	MUMPS	PERTUSSIS	PSITTACOSIS	RABIES IN ANIMALS	REYE'S SYNDROME	ROCKY MT. SPOTTED FEVER	RUBELLA	SALMONELLA	SHIGELLA	SYPHILIS	TUBERCULOSIS (TOTAL)	Pulmonary	Other	TYPHOID FEVER
Total for March	5	0	0	2	2	0	2	773	2	30	1	6	1	0	1	0	12	1	5	9	2	1	0	0	0	0	0	0	32	9	15	9	6	3	1
Cumulative 1984	11	0	0	2	2	0	2	3033	9	60	5	9	5	0	5	0	42	3	10	18	11	4	0	0	0	0	0	0	128	29	52	32	25	6	1
Cumulative 1983	0	0	0	3	3	0	2	2128	7	74	13	2	12	0	1	1	50	4	13	18	15	9	0	0	0	0	0	0	154	81	54	33	26	7	0

not take into consideration the economic realities of day care or the day care environment.

Topics to be covered in plenary sessions include the development of child day care, the economic impact of infectious diseases in day care, strategies for the control and prevention of selected diseases, and those prototype illnesses that illustrate either some unique etiology or epidemiology relative to the day care environment. Diseases to be discussed will include invasive bacterial diseases such as Haemophilus influenzae, acute infectious diarrhea, viral hepatitis-type A, and respiratory illnesses. During workshops, conferees will discuss practical aspects of specific issues in detail and develop appropriate recommendations. Symposium proceedings will be published as an issue of Reviews of Infectious Diseases and will serve as a compendium of information on infections in the day care environment.

For further information regarding the symposium, contact Dr. Michael T. Osterholm, Chairperson, Minnesota Department of Health, Acute Disease Epidemiology Section, 717 Delaware Street SE, PO Box 9441, Minneapolis, Minnesota 55440; telephone: (612) 623-5414.

James L. Hadler, M.D., M.P.H., Chief Ellen E. Jones, M.D., P.M.R.
Patricia J. Checko, M.P.H., Editor
Leonard Gilmartin, Coordinator, Public Health Education Section

EPIDEMIOLOGY SECTION
PREVENTABLE DISEASES DIVISION
State of Connecticut Department of Health Services
150 Washington Street
Hartford, CT 06106