# COLUMBIA GAY HEALTH ADVOCACY PROJECT COLUMBIA UNIVERSITY HEALTH SERVICE NEW YORK, NEW YORK 10027 (212) 280-2878

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#### OUTLINE FOR AIDS TALK

Developed by Laura Pinsky
Michael G. Dowling

- I. Introduction
  - A. 1981 history
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    - 2. Percentages
    - 3. Predictions
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- II. Medical Information
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    - 2. Functions of the above
  - B. Oppotunistic Infections
    - 1. Examples--CMV, Thrush, TB, Toxoplasmosis, Cryptosporidiosis
    - 2. The Big Two
      - a. Kaposi's Sarcoma (KS)
      - b. Pneumocystis Carinii Pneumonia (PCP)
- III. CDC Definitions
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- IV. What Causes AIDS?
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- VI. Transmission
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## VII. Prevention

- A. No Exchange of Bodily Fluids
- B. Safe Sex
- C. IV Drug User Guidelines
- D. Women and Pregnancy
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# VIII. Implications for Society

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- A. PWAs
- B. Worried Well
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- C. Close Contacts

## X. Referrals

- A. CGHAP--x2878
- B. Gay Men's Health Crisis (GMAC) 24 Hour Hotline--(212) 807-6655

### XI. Reminders

- A. Stress Non-Transmissibility
- B. Never do a diagnosis; always refer to a physician

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#### COMMENTARY TO FOLLOW OUTLINE

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## IA and B

In 1981, AIDS was first recognized when an unusual form of pneumonia (PCP) killed five previously healthy young men in L.A. All five were gay and all suffered from a profound impairment of the immune system.

Since then, roughly \_\_\_\_ (get totals from Native) people have contracted AIDS, and half have died. Over \_\_\_\_ (Native) are in New York City.

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The cases are doubling every 13 months but they seem to be contained within several "high risk groups."

73%--gay/bisexual men 17%--IV drug users

2%--transfusion recipients

1%--hemophiliacs/coagulation disorders

1%--heterosexuals with sexual contact with risk group member

6%--no known risk factors

Over 1000 of these cases have been women ( $\frac{1}{2}$  drug users). There are expected to be 30,000 cases by the end of 1986. In NYC, AIDS is the #4 premature killer of men; #6 of women. By the end of 1986, it will be in the top 10 premature killers in the country.

#### IIA

AIDS is a disease in which damage is done to the white blood cells (WBCs) of the immune system, allowing lethal infections and cancers to develop. WBCs, for the most part, consist of neutrophils (N) and lymphocytes (L). Ls largely function as the systems intelligence; Ns, in turn function as a clean-up crew, chewing up bacteria and cellular debris. Ls primarily are composed of T-cells and B-cells which have interrelated functions. T-cells are produced by the thymus gland and stimulate the B-cells (from bone marrow) to produce antibodies. B-cells protect against bacterial and viral invasion. T-cells protect against parasites and fungus and against bacteria and viruses once they have enter the body's cells. There are eight subsets of T-cells, two of which concern us-T-4, or helper cells, and T-8, or suppressor cells.

T-4 cells are crucial because they "orchestrate" the activities of the many other immune system cells. They activate other cells and moderate the overall activity of the immune system so that it fights infection without damaging the body's own tissue. In an AIDS patient (pt.), there is a lack of T-4 cells in relation to the T-8 cells. Usually there is a T-4/T-8 ratio of 2:1; in AIDS, that ratio is 1:1 or less. This creates an inability to fight off many infections.

## IIB

As a result of this immune deficiency, AIDS pts. have developed a large variety of opportunistic infections (OI). OIs are, by definition ones that affect pts. with poorly functioning immune systems, such as chemotherapy pts., organ transplant pts., as well as AIDS pts. These diseases are naturally occurring and we are all exposed to most of them daily, but our intact immune systems can fight them off. CMV, thrush, TB, toxoplasmosis, cryptosporidiosis, KS, and PCP are common OIs in AIDS pts. (See Kassler book.)

- \*\* It is a combination of diseases like these which cause AIDS pts. to die.
- $\ensuremath{^{**}}$  We will leave aside the issue of a cure because there have been no major successes.

## IIIA and ${\tt B}$

The original CDC definition of AIDS was that the pt. was under 60 with an OI or cancer and no other known reason for immune suppression Now the definition has changed and is very complicated but it includes being HTLV-III/LAV positive and other illnesses not on the OI list. Remember, though, this is CDC-defined AIDS (or "full-blown AIDS"). In addition, a condition known as AIDS-Related Complex, or ARC, exists. ARC consists of immune suppression plus a variety of less lethal symptoms (sxs.). There are at least ten times as many people with ARC as there are pts. with AIDS. Approximately 10%-20% of the ARC cases go on to develop AIDS.

## IIIC

The sxs. of AIDS and ARD are common to many illnesses and it is best to see a physician if any of the sxs. are persistent. The most common sxs. are:

- --lymphadenopathy (swollen glands)
- --low grade fevers
- --drenching night sweats
- --persistent diarrhea
- --fatigue
- --thrush
- --unexplained weight loss of 151bs or 10% of ideal body weight
- --shortness of breath/dry cough
- --pink or purple spots on skin

## IVA and B

HTLV-III stands for Human T-Cell Lymphotropic Virus, Type III and was discovered by Robert Gallo of NIH. LAV stands for Lymphadenopathy Associated Virus and was discovered by Luc Montagnier of the Institut Pasteur in Paris. The viruses are identical and were discovered within a year of each other. There is presently a case in court to determine who gets the credit for initial discovery. In the laboratory, it has

been shown that the virus invades the T-4 cells, thus reducing their number and rendering the immune system incapable of fighting infection. HTLV-III/LAV is a retrovirus—it incorporates itself into the infected person's genetic makeup. Once in the body, it is there for life. This virus seems to be necessary but not sufficient to cause AIDS. There are many people who have been exposed to the virus, but do not have AIDS. ARC or any sxs. It is estimated that only 5%-20% of all pts. go on to develop AIDS or ARC. It appears that a co-factor is needed. Some physicians have considered CMV, hepatitis B, or "poppers" (amyl or butyl nitrate) as possibilities. There are perhaps a number of other co-factors, including the immunosuppressive effects of sperm when introduced into the blood stream through breaks in mucous membranes.

V

The antibody test was designed to screen the blood supply. It tests for the presence of antibodies to HTLV-III/LAV. The most common test is the ELISA (pronounced ELIZA) test. It stands for Enzyme Linked Immunosorbent Assay. The test has no diagnostic value and at times there are false positives (and a few false negatives). It is very effective at screening the blood supply but it does not tell if a pt. will develop AIDS or ARC or has developed an immunity. There are also civil liberties issues connected to the test, i.e., military testing, Texas/Colorado, insurance.

#### VIA-B-C

The first thing to keep in mind when discussing AIDS transmission is that there is no danger in casual contact. The virus is transmitted via bodily fluids such as blood and semen. IV drug users who share needles are particularly at risk as well as members of risk groups who participate in sexual activity where an exchange of bodily fluids takes place.

Viruses are very fragile and HTLV-III/LAV is a particularly fragile virus. Scientists have proven that it does not stay alive on inanimate objects. Regular household cleaning procedures kill it, as does chlorine.

HTLV-III/LAV has been found in blood, semen, saliva and tears but this does not mean that it is transmitted in al four. Epidemiologic evidence seems to show that the virus is transmitted in blood and semen, not in saliva and tears. The virus also seems particularly dangerous when entering the blood directly through shared IV needles and openings in damaged mucous membranes (as in anal intercourse).

The two most convincing pieces of evidence are taken from epidemiologic studies. Of all the health care workers who, over the years, have had contact with AIDS patients, only two non-risk group workers are sero-positive and neither has AIDS. In addition, no family member of a person with AIDS has contracted the disease despite shared beds, utensils, etc. This statement does exclude babies of infected mothers (in utero transmission and blood contact during birth) and sexual partners of people with AIDS.

#### VIIA-B-C-D

The primary rule to follow is do not exchange bodily fluids. It is necessary to explain this specifically. Gay activists designed and scientists refined what are called "Safe Sex Guidelines." These guidelines prescribe certain types of sexual activity that are considered safe, that is, they do not transmit HTLV-III/LAV. Basically, safe sex guidelines describe sexual activity in which the bodily fluids (blood, semen, feces, etc) of both partners does not enter each other's body. Kissing is generally considered safe, but deep kissing is questioned by some scientists as a possible route of transmission. It is important to note that nocases of AIDS have been attribute to saliva. Oral-genital sex is considered safe, for the most part. It is important that neither partner ejaculate in the other's mouth. Pre-ejaculatory fluid may contain HTLV-III/LAV, so extra precautions should be taken. Anal intercourse is considered unsafe because semem can enter the blood stream directly through tears in the rectal lining. If anal intercourse is engaged in, a condom should always be used and it is imortant to use adequate lubrication. K-Y jelly is ideal because it is water soluable and does not destroy the latex.

These safe sex guidelines are a good idea for everyone because they can reduce the transmission of sexually transmitted diseases. IV drug users should never share needles because the virus can be transmitted through blood which remains on the needle.

Women who are pregnant or thinking about becoming pregnant and who feel they are at risk (IV drug users or sexual contact with risk group members) should consult a physician. Women who are HTLV-III/LAV positive can pass the virus on to their children during pregnancy.

## VIIE

The issue of a vaccine is a complex one. A vaccine is difficult to produce because HTLV-III/LAV is constantly changing its outer shell. In order to make a vaccine, some stable part of the virus must be found to serve as a foundation for the vaccine.

#### VIIIA

As reported in the New York Times on January 10, 1986, the economic cost of the first 10,000 AIDS cases will total \$6.4 billion. This figure includes \$1.4 billion in hospital costs and \$5 billion in lost earnings due to disability and premature death. Of this \$5 billion, \$189 million were lost due to disability and \$4.6 billion in potential earnings due to premature death. Hospital expenses have averaged \$147,000 per AIDS pt. Keep in mind that these figures are only for the first 10,000 AIDs pts.; it does not include ARC pts., people who are HTLV-III/LAV positive, or AIDS pts. over the 10,000 point.

#### IXA-B-C

There are basically three categories of people who will require conseling on AIDS issues. Obviously, people with AIDS require special counseling which is best handled by professionals. The second group is the "worried well." These are people who are generally in good physical

health but are in a risk group. At times, the worried well will become sick and the possibility of it being AIDS enters their minds. In addition to going to a physician for a check-up, these people might have some sensitive issues to discuss. At other times, the worried well will not be sick but the threat of AIDS in their lives will cause them to seek more information or counseling. The third group that is likely to need counseling are people who have close contact with a person with AIDS. This can be family members, friends, co-workers, etc. Issues similar to those of the worried well arise. What is important in both of these instances is to be able to distinguish between those people whose needs can be met by a peer counselor and those people who should be referred to a professional therapist.

## REFERENCES

Kassler, Jeanne

1983 Gay Men's Health: A Guide to the AID Syndrome and Other Sexually Transmitted Diseases. New York: Harper and Row.