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Introducing AIDS Education in Connecticut Schools

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Most of the nation's schoolchildren are not infected with the AIDS virus (HIV). Since AIDS is a preventable disease, no one need become infected. In order to protect themselves, everyone, including children, must understand exactly how HIV is and is not contracted. The message of prevention, however, is controversial, since it must include advice on safer sex and drug use.

In 1984, Connecticut was forced to face the issue of a child with HIV infection entering school. The state responded by creating guidelines for prevention of disease transmission in schools and by subsequently developing an AIDS curriculum. Obstacles to AIDS education in school include inability to decide upon curricular content as well as political concerns on the part of school administrators. In Connecticut, committee representatives of state and local agencies of health and education and of academia are working together to overcome these obstacles.

As of December 7, 1987, 580 cases of AIDS had been reported in Connecticut. This figure represents approximately 1.2 percent of the total cases nationally. Children under thirteen years of age make up 3.2 percent of the total cases in Connecticut, compared to 1 percent nationally. The state ranks fifth in the nation in identified cases of AIDS in women. Thirty-five percent of the state's adult cases are in heterosexual intravenous drug users, compared to 17 percent nationally.

Infectious-disease experts at the National Institutes of Health and the Centers for Disease Control estimate that nationally, in comparison to those persons who have AIDS, there are 5 to 10 times as many people with AIDS-related complex (ARC), and 50 to 100 times as many who, if their blood were tested, would prove to be human immunodeficiency virus (HIV) antibody-positive and probably infected with the disease. We do not know whether the proportions among children are the same as among adults. We do know that many infected children will be well enough to attend school, and many of them present school policy problems. Most children with HIV infection have experienced

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transmission from their mother in utero. The principal school policy issue concerning these children is their admission to school. I shall not, in this article, be addressing that issue. I have focused my attention, instead, on how to prevent future infection in the vast majority of our students, who are currently uninfected and often not yet at risk.

Need for Education of Youth

Everyone needs to understand that AIDS is a preventable disease. No one, youth or adult, need become infected with HIV. In order to get the prevention message across, adults must face up to certain facts:

1. Some of our youth are sexually active with their own or the opposite gender or will be in the near future, and many will experiment with illicit drugs.

2. Any prevention message must be explicit and sensitive enough to provide youth with the necessary skills to protect themselves and their partners, including safer sex practices, proper condom use, and safe drug practices. Abstinence must be stressed.

In Connecticut, the age range with the most new AIDS cases reported in 1987 was the group between twenty and twenty-nine. Because of the long incubation period (the time between viral infection and the demonstration of symptoms), it can be assumed that many of these people may have become infected while still teenagers. The following facts, recently compiled by the Connecticut State Department of Education, are indicators of teenage sexual activity in Connecticut:[1]

- In 1987, there were more than 2,300 cases of sexually transmitted diseases in fifteen- to nineteen-year-olds and more than 200 cases in ten- to fourteen-year-olds.

- In 1985, 45 percent of new patients (4,601) at the state's Planned Parenthood clinics were seventeen years of age or younger.

- Thirty-three percent of all clients at Planned Parenthood clinics in Connecticut (15,615 persons) were nineteen years old or younger.

- Connecticut hospitals and clinics performed 5,448 abortions on young women in the nineteen-year-old age group.

Teenagers who are engaging in unprotected sexual activity now or who do so as they reach adulthood will be the AIDS cases of the 1990s. The goal of public health and education is to prevent those infections *now.*

Each child in this country has the right to a public education. Children need to understand the circumstances that make it safe to be in a classroom with a schoolmate who has AIDS or ARC or who is infected with HIV. School administrators, parents, teachers, and community are responsible for educating themselves about precise behaviors that may

transmit HIV; only in this way can all children attend school in an environment that is conducive to learning and that avoids irrational fears and bigotry.

An important question is, Where can youth who do not attend school be reached? Many adolescents at greater risk for AIDS in Connecticut are not necessarily enrolled in school. In the past, dropouts, runaways, and unemployed youth have been difficult to reach. Innovative methods need to be devised. For example, AIDS-information programs could be developed with the cooperation of video game parlors, movie theaters, and youth groups.

With respect to children who do attend school, there are obstacles to providing education about AIDS. The decision to teach about AIDS in schools has probably already been made in districts that have comprehensive health curricula or in those with existing "family life" programs. A common question arises among educators: At what age should students be exposed to AIDS education? The problem of deciding can delay the implementation of effective programs.

Misinformation on the part of the general public, including parents, teachers, and school administrators, has exacerbated the problem. Because of sensationalism on the part of the press, AIDS is considered largely a disease of homosexual men and intravenous drug users. The epidemiological term "risk groups" has been used too freely to describe the types of people who get AIDS. Consequently, those in the community at large, including youth, have denied that AIDS is a disease they could get. Lack of concern has created an attitude that AIDS is someone else's problem.

Any discussion of AIDS prevention requires open discussion of sexual activity, including sexual orientation, drug practices, and prostitution. Few teachers are comfortable discussing such issues. How can we expect comprehensive programs to develop without the aid of teachers who are willing to discuss the facts and the complicated social problems that are associated with AIDS?

The concept of traditional family values is intimately entwined with the refusal of some school districts to provide education about AIDS. Some districts consider discussion of AIDS immoral and irreligious. There is a great fear of offending church groups and parents, many of whom believe that any discussion of sex or drugs will promote such behavior. To complicate matters, some communities are blessed with very vocal individuals of extreme conservative/moralist viewpoints.

Not a small problem is the fear of political consequences for careers of school administrators. An administrator's position is often dictated by the will of the community. Some administrators have much to lose by not advocating the will of parents. In certain instances, a superintendent may have taken a public position against teaching about AIDS. It may be difficult to reverse that decision without losing face.

Working Together to Provide AIDS Education

It is the duty of both state education and health officials to work together to develop AIDS education programs that will be acceptable to the community and that will halt HIV transmission. In 1984, a Connecticut child with ARC was denied admission to a New Haven public school. The superintendent of schools was not convinced of the safety of having such a child in a classroom. The response of the state Departments of Education and Health Services was the development of a task force that produced guidelines published jointly by the two departments in April 1985. The guidelines state that each child in Connecticut has a "Constitutional right to a free, suitable program of educational experi-

ences." After task force members learned about AIDS, and after much compromise, a unanimous decision reached by active task force members stated that "as a general rule, a child with AIDS/ARC should be allowed to attend school in a regular classroom setting." The guidelines have served as a model for school boards throughout the country.[2]

The Stratford/Bridgeport Survey

In 1986, a survey was undertaken to determine the knowledge, attitudes, and beliefs of Connecticut's high school students concerning AIDS. The effort was organized by a Yale epidemiologist in conjunction with the state Department of Health Services and two local school and health districts.[3] The group determined that many students were misinformed about basic AIDS facts. Most students said they wanted to learn more about AIDS; half said they wanted to learn in school. Many said they wanted to learn from a nurse, doctor or teacher, lectures, talks, radio, television, and, not surprisingly, videos. Most did not want to read about AIDS. An education intervention program was developed and implemented. Local physicians and teachers were trained by this author. These teams were provided with educational materials and a video to inform students of their misconceptions and answer their questions.[4] Another survey of young people, done by Ralph J. DiClemente, Jim Zorn, and Lydia Temoshok, has revealed a marked variability in knowledge about AIDS.[5]

On September 30, 1986, with the aid of information garnered from the Stratford/Bridgeport School Survey, an outline for an AIDS curriculum was presented at a Yale University seminar.[6]

By late 1986, the overwhelming demand for AIDS education materials for students resulted in the creation of another joint task force. This second effort, which included representatives from health agencies and from school and community organizations, resulted in the development of a curriculum for secondary schools, which was modeled after the guidelines presented at the September Yale conference.

In addition to distributing the curriculum to all school districts in Connecticut, the state Departments of Education and Health Services have worked together to train representative teachers for each region in the state in the use of materials. The resource packet contains background information, learning objectives, pre- and post-test video resources (which include a discussion guide), and transparency masters. (Learning objectives can be found in appendix A at the end of this article, on page 342.) Even though the curriculum is not mandated, by June 1987 it was estimated that 90 percent of Connecticut's high school students had received some form of AIDS education.[7] The task force has begun to address the development of programs for younger children. A K-8 curriculum is expected by the spring of 1988.

Public pressure and the individual commitment of state officials to implement an AIDS education program quickly was responsible for Connecticut's timely institution of education programs for older children. In order to educate all children effectively, though, AIDS curricula materials must be incorporated into a comprehensive health education program that is acceptable to the community.

In September 1987, the Connecticut State Department of Education was awarded one of the nation's first AIDS education cooperative agreements with the federal Centers for Disease Control. The department plans to formulate AIDS education programs for kindergarten through the twelfth grade and increase the number of schools that will incorporate them into comprehensive health education/prevention programs. Detailed evaluation plans are now being implemented.[8]

Questions of Content and Substance

What should AIDS education include, and at what age? Surgeon General C. Everett Koop has suggested that AIDS education be taught beginning in kindergarten and extending through the twelfth grade.[9] The message of prevention for secondary-school children must include specific advice on how to keep HIV from entering the body. Most dangerous behaviors include anal and vaginal intercourse and sharing blood-contaminated needles. The virus survives in blood, vaginal secretions, and semen. The prevention messages must stress abstinence from sex and drugs as the first line of defense; both kinds of abstinence are viable alternatives for many adolescents, even though lifelong sexual abstinence is rarely acceptable. Without the message of abstinence, few school boards will tolerate an AIDS curriculum.

In order to prevent cases of AIDS among teenagers of the 1990s, sexually active and drug-using children and those who are considering these activities must immediately acquire positive life skills and the knowledge necessary for responsible decision making and behavior. The community must understand the need for and must support AIDS education/prevention programs. Secondary-school children must understand that sex without condoms and sharing injection equipment are dangerous to them and their partners.

Skills for implementing safety concepts would best be developed in a context of a comprehensive health education curriculum that underscores the relationships between personal behavior and health. Information about AIDS and other sexually transmitted diseases should be included. Assertiveness training, decision making, the ability to say no, and responsibility for one's behavior should be stressed.

Children who are in the sixth or seventh grade are in what the author considers the "gray area" of AIDS education. Some eleven- or twelve-year-old children are completely oblivious of sex or drugs, or both. Others are somewhat sophisticated. During one of my first school lectures on AIDS, one seventh-grader asked, "What about oral sex?" while other students remained glassy-eyed and disinterested. Teachers of this age range should be particularly sensitive to the degree of sophistication that is present.

The least well developed AIDS education has been for elementary grades. Why teach AIDS at such an early age? The most obvious answer is that children do not grow up in a vacuum. They listen to adult conversation, watch television, and talk to older children. Unless they understand the basics of AIDS, ignorance will beget unnecessary fear and anxiety. Young children should understand that to be in a classroom with an HIV-infected classmate is not dangerous. They should also be aware of infectious diseases in general. Educators should explain to them how they can use good hygiene to prevent many diseases.

Early interventions should include the development of self-esteem and self-worth, and the cultivation of individual abilities. Why do we, as a society, shape homophobia and perpetuate pressures that lead to drug abuse? By not addressing these issues in a progressive fashion, we risk causing unhealthy behavior patterns in adolescents which may continue into adulthood.

Any AIDS message aimed at kindergartners through twelfth-graders must appeal to youth. Videos, role-playing, and peer education are examples of successful techniques. Of course, the message should be ethnically and culturally sensitive.

Who Will Deliver the Message?

The message about AIDS, delivered to children, must be handled by individuals who are credible and who are comfortable with the material. In Connecticut, even though hun-

dreds of teachers have been trained, few feel comfortable teaching about AIDS, especially answering questions about it. Teachers who are not comfortable answering AIDS questions should never feel compelled to do so. They probably would answer inappropriately. Both the state Department of Health Services and Department of Education still get requests for "experts" to teach the children. There is no easy solution to this problem. A technique that might be helpful: identify those teachers who are comfortable teaching about AIDS and publicize their presence among faculty and students. These teachers, who are already willing to talk to students about AIDS, could be provided with telephone numbers of local AIDS service organizations; names of speakers' bureaus; locations of anonymous counseling/testing sites; and names of knowledgeable and sensitive physicians and clergy who are willing to provide AIDS services. Given such information, these teachers could be an effective resource during the initial training of other teachers.

Teachers in Connecticut who are most comfortable with AIDS issues are those who have already taught family life programs. This group includes health educators, school nurses, and physical education teachers. Ultimately, the responsibility for AIDS education of youth must be borne by teachers. The burden cannot be borne by "experts" outside the school system. Parents will not bear the burden, or may be too ignorant of the facts themselves to do so. Sometimes, parents are too religiously or culturally restricted. Seminars for parents and teachers about the need to talk to children about AIDS and how to do so may present the opportunity to discuss sexuality, hygiene, and other sexually transmitted diseases besides AIDS.

Reaction of the Connecticut Community

Ironically, the greatest obstacle to AIDS education has been parents. In order for AIDS education to be allowed in the schools, parents and community first need to understand AIDS. This means that they need to have their questions answered by a credible professional, usually at a community forum. Parents need to hear that we are trying to save the lives of children. Even among health care providers and public health professionals, only a few are effective in presenting this information at public forums. It behooves organizers of such events to select speakers carefully. In Connecticut, the most effective presenters have included public health professionals such as nurses and health educators who are comfortable answering AIDS questions. Panel discussion is often useful. Including a person with AIDS or a family member of someone with AIDS can be particularly effective, since it humanizes the issues. Because of discrimination, few people with AIDS have been brave enough to come forward. However, in Connecticut, two individuals made videotaped presentations before they died. Both of these videos have been invaluable in helping Connecticut's residents accept the AIDS reality.

What Has Yet to Be Done?

There is no time to wait. The challenge seems formidable, but what needs to be done can be broken down into manageable tasks. Connecticut is fortunate. The state Department of Education has already begun to implement all of the following projects through a cooperative agreement with the Centers for Disease Control.[10]

- AIDS education programs need to be translated into Spanish and disseminated throughout Connecticut's Hispanic community.

- Regional workshops should be implemented for youth in prisons and detention centers.

- A survey of the extent of youth-oriented AIDS education in Connecticut should be implemented.

- All education interventions should be evaluated, using pre- and post-test survey instruments.

- After education interventions, a survey measuring attitude and knowledge change among teachers, students, and parents should be implemented.

Connecticut communities whose consciousness has already been raised through AIDS education efforts understand the importance of AIDS prevention advice for teenagers *now.* Other states should learn from Connecticut's experience. The availability of an AIDS curriculum sanctioned by two state agencies allowed secondary-school officials and parent/teacher organizations to discuss the issues. The author believes that dissemination of an elementary school curriculum will have the same effect.

If we as a nation do not succeed immediately in informing and motivating our youth, they will pay the penalty with their health and their lives.

Appendix A
General Answers for AIDS Learning Objectives

Goal 1 **Each student will be able to describe the spectrum and natural history of AIDS.**

Objectives: **The student will be able to**

- define the acronym AIDS.

  AIDS is an acronym for acquired immunodeficiency syndrome. AIDS is a disease that breaks down a part of the body's immune system, leaving a person vulnerable to a variety of unusual, life-threatening illnesses.

- identify the cause of AIDS.

  AIDS is caused by a blood-borne virus called HIV. These all refer to the same virus, which is also called the AIDS virus.

- define AIDS virus infection and the asymptomatic carrier state.

  This is when a person has a positive antibody test. This means that the person has been exposed to the virus. These people have no signs or symptoms of any illness; however, they are presumed to be infectious. The number of these people who will go on to develop ARC or AIDS is unclear at this time.

- define the spectrum of disease caused by the AIDS virus.

  Following the asymptomatic carrier state, the next stage is ARC (AIDS-related complex). At this stage, a person is positive for the AIDS virus and in addition may have some symptoms, including slight fever; night sweats; swollen glands (neck, armpits, groin); unexplained weight loss; diarrhea; fatigue; and loss of appetite. Opportunistic infection (for example, *Pneumocystis carinii* pneumonia) is not present.

  The next stage is AIDS, whose signs and symptoms include unexplained, persistent fatigue; unexplained fever, shaking chills, and/or drenching night sweats lasting longer than several weeks; unexplained weight loss of more than ten pounds; swollen glands (enlarged lymph nodes, usually in the neck, armpits, or groin) that are otherwise unexplainable and that last more than two months; pink or purple flat or raised blotches or bumps occurring on or under the skin, inside the mouth, nose, eyelids, or rectum; persistent white spots or unusual blemishes in the mouth; persistent diarrhea; persistent dry cough that has lasted too long to be caused by a common respiratory infection, especially if accompanied by shortness of breath.

  In addition to these, a person is positive on the antibody test and develops opportunistic infections or diseases.

Goal 2 **Each student will understand how the AIDS virus affects the human immune system.**

Objectives: **The student will be able to**

- explain the role of the T-helper cell in the immune system and how it is affected by the AIDS virus. An explanation follows.

  Lymphocytes are white blood cells that play crucial roles in the immune system. Lymphocytes are divided into two groups: B-lymphocytes (B-cells) and T-lymphocytes (T-cells).

  T-cells are further divided into T-helper cells and T-suppressor cells.

When antigen invades the body, the T-helper cells send a message to the B-cells to start antibody production. In people infected with the AIDS virus, the virus specifically invades and destroys the T-helper cells. As a result, antibody production and other defense mechanisms are impaired. Because of the decrease in the number of T-helper cells, the person becomes more susceptible to a wide range of infections.

- define *antigen* and *antibody* and discuss their relationship.

  Antigen is something that invades the body and is seen by the body as being "foreign" or "nonself."

  Antibody is what our body makes in response to antigen (foreign invader or nonself). Specific antibody is made in response to the specific antigen, with the intent of ridding the body of this foreign invader.

  In the case of AIDS, the antibodies that are made in response to this infection do not kill the virus. Therefore, the presence of antibody is a sign of infection, not immunity.

- explain the significance of a positive or a negative antibody test.

  The AIDS antibody test is an inexpensive screening test developed to protect the blood supply. By showing the presence or absence of antibody to the virus, the test tells whether a blood specimen has been infected with the AIDS virus. The test is also used to screen donor semen for artificial insemination, and it is recommended for other organ donations to protect recipients of organ transplants. Some individuals have taken the antibody test to determine whether or not they have been infected by the AIDS virus.

  A positive antibody test means that a person has had exposure to the AIDS virus and that antibody has been produced in response. It does not mean that a person has AIDS or that he or she will necessarily go on to develop AIDS. A person with a positive test must assume that he or she is capable of passing the virus on to others.

  A negative antibody test may mean that the person has not been infected with the virus *or* that the person has been infected but has not yet produced antibodies.

Goal 3 **Each student will be able to describe the transmission of the AIDS virus.**

Objectives: **The student will be able to**

- list and explain the ways in which AIDS is transmitted.

  AIDS is not easily transmitted from person to person. It is transmitted by the blood, semen, or vaginal secretions of an infected person. AIDS is spread by sexual contact and needle sharing. Blood, semen, or vaginal secretions of one person must enter the bloodstream of another person. Intravenous (IV) drug users who have the virus may also transmit it sexually. The virus may be transmitted from infected mother to infant, before or during birth.

- list misconceptions about AIDS virus transmission.

  The infection is not spread through casual, nonsexual contact with persons infected with the virus, ARC, or AIDS. AIDS cannot be contracted by the act of donating blood.

- identify "risky behaviors" that increase the chances of getting AIDS. These behaviors include
  - vaginal and anal sex without condoms.
  - oral sex.
  - sharing needles during IV drug use.

Goal 4 **Each student will be able to describe prevention techniques/control of AIDS virus infection.**

Objectives: **The student will be able to**

- describe the decisions that individuals must make in order to prevent AIDS transmission. These include the following:
  - Seek AIDS information and share this information with family and friends.
  - Abstain from risky behaviors (see explanation under objectives for Goal 3).
  - Always use a condom during sexual intercourse.
  - Do not use IV drugs; if one does use such drugs, he or she should enter a treatment program.
  - Do not share needles.
  - Do not have sex with multiple partners. Know your sex partner and whether he or she is at risk for AIDS.
  - Do not share razors or toothbrushes.
- explain how an individual may play an active role in bringing the AIDS epidemic under control.
- stay informed about AIDS.
- identify resources for information regarding AIDS.
- describe current methods of control of AIDS virus infection, including drugs or other treatment modes.
- know that there is no vaccine and that experimental drugs such as AZT may control infection but are not cures.
- educate family and friends and follow the suggestions listed above.

Special thanks are extended to Elizabeth Veit of the Connecticut State Department of Health Services for writing these student learning objectives.

Notes

1. Elaine Brainerd, Connecticut State Department of Education, telephone conversation with author, September 1987.
2. Joint Task Force, "Prevention of Disease Transmission in Schools: AIDS," Connecticut State Departments of Health and Education (Hartford, 1984).
3. S. Helgerson, L. Peterson, W. Sabella, et al., "Junior and Senior High School Students' Knowledge About AIDS: They Want to Learn More and Want to Learn It in School." Manuscript, October 1987.
4. The title of the video is *Sex, Drugs and AIDS* (O.D.N. Productions, New York City).
5. Ralph J. DiClemente, Jim Zorn, Lydia Temoshok, "Adolescents and AIDS: A Survey of Knowledge, Attitudes, and Beliefs about AIDS in San Francisco," *American Journal of Public Health* 76 (12): 1443–1445 (December 1986).
6. William Sabella and Jane Burgess, "AIDS and the School-Aged Child, A Seminar," Yale University (New Haven, 1986).

7. Elaine Brainerd, Veronica Skerker, Connecticut State Department of Education, telephone conversations with author, October 1987.
8. Elaine Brainerd, Connecticut State Department of Education, telephone conversation with author, November 1987.
9. C. Everett Koop, M.D., "Surgeon General's Report on Acquired Immune Deficiency Syndrome," U.S. Public Health Service (Washington, D.C., 1986).
10. Elaine Brainerd, Connecticut State Department of Education, telephone conversation with author, November 1987.

"The only thing I'd really like to stress is in my coming to know a lot of people who have been beating the odds, or as someone said, not having AIDS properly. There do seem to be a few common threads, and humor is obviously one of them. We all have to lighten up a little bit, because we all can't be grim and sad all of the time, we can't cry all of the time. The other fact is, and I think the three words Body, Mind, and Spirit really say it, finding ways to have your support system encompass all those areas. And taking time to make the search. My experience is that there are an awful lot of people out there to support you and what you do have to do is ask."