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Discrimination on the Basis of HIV Infection: An Economic Analysis

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I. INTRODUCTION: THREATS OF DISCRIMINATION

It hurt. I tried to ignore the name-calling.

Ryan White, May 1988¹

Ryan White developed AIDS (Acquired Immune Deficiency Syndrome or Acquired Immunodeficiency Syndrome) as a child, and he was unable to attend school in December 1984. When Ryan attempted to return to school in the fall of 1985 after recovering from his acute illness, the superintendent of schools in Kokomo, Indiana prevented him. After an extensive legal and administrative battle, Ryan attempted to resume his education in February 1986.² Parents of other school children, however, fought to exclude him and they were successful in obtaining a court order barring him from school.³ Ryan finally was able to continue his education in August 1986 after another Indiana judge ruled in his favor because he had a health certificate declaring that he was not infectious to other children.⁴

In January 1984 Raytheon Company refused to let its long-term employee, John Chadbourne, return to work after an absence due to his infection with AIDS.⁵ On February 10, 1987, the California Fair Employment and Housing Commission decided that AIDS was a physical handicap under the Fair Employment and Housing Act and ordered his reinstatement. On appeal, the Superior Court found that AIDS was a handicap, thus finding discrimination based upon the AIDS virus was prohibited by state law.⁶ Unfortunately, Mr. Chadbourne died before the hearing. Despite Mr. Chadbourne's death, the Commission ordered Raytheon to pay his estate \$4359 in back pay, plus attorney's fees, since reinstatement was no longer a viable alternative.

In March 1987 the State of South Carolina placed a woman under quarantine because she was HIV seropositive. She was first ordered confined to her house trailer, and when she violated that order, she was placed in a state mental hospital for observation.⁷ Although the woman's chief means of support was apparently

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1. USA Today, June 2, 1988, at 2A, col. 2.

2. See *Bogart v. White*, No. 86-144 (Ind. Cir. Ct. Feb. 21, 1986).

3. *Bogart*, No. 86-144 (temporary restraining order granted).

4. *Bogart*, No. 86-144 (dissolution of temporary restraining order).

5. Department of Fair Employment and Housing v. Raytheon Co., No. FEP 83-84, L1-031p, L-33676, 87-04 (Feb. 13, 1987) (cited in 3 AIDS Pol'y & L. (BNA) No. 8, at 1 (May 4, 1988)).

6. *Raytheon Co. v. Fair Employment and Hous. Comm'n*, No. 167995 (Cal. Super. Ct., Santa Barbara Cty. Apr. 25, 1987).

7. 3 AIDS Pol'y & L. (BNA) No. 8, at 1 (May 4, 1988); see also *Doe v. Sercy*, No. 3:88-1068-16 (D.S.C. Apr. 25, 1988).

prostitution, she was confined without a hearing, or the immediate prospect of one. Similar statutes in the State of Georgia and the City of Newark, New Jersey compel the testing of persons convicted of prostitution for HIV antibodies. In the State of New York, the societies of surgeons, orthopedic surgeons, obstetricians, and gynecologists have threatened to sue the state Health Commissioner to declare AIDS a sexually transmitted or communicable disease so that county public health officials could be given the power to quarantine, require mandatory antibody testing, and conduct contact tracing.⁸

Eaton Life Assurance Company of Canada has decided specifically to exclude coverage for any disease or infection resulting from AIDS on all its direct-mail health insurance policies. These policies, which pay \$75 per day to insureds while they are hospitalized, do not exclude any other disease or illness.⁹

In 1987, the grandparents of a minor child in New York City asked the family court to order the child's father to submit to an HIV test in a custody hearing that took place after the mother had passed away. The grandparents were hoping to be able to use the father's infection (if he were found to be infected) as proof that he was unfit to be a parent.¹⁰ New York also deprives a prisoner and his wife the opportunity to participate in a conjugal visit program when the prisoner has AIDS.¹¹ Likewise, a New York trial court held that a person accused of rape could be denied bail if he tested positive for the HIV antibody.¹²

In August 1987 a school teacher was removed from his classroom in Orange County, California because he had AIDS. The Ninth Circuit ordered his reinstatement since the court believed the teacher's removal to be violative of the Rehabilitation Act.¹³ Likewise, several children have been removed from their classrooms because they either tested positive for HIV or were diagnosed with ARC (AIDS-related complex).¹⁴

These current examples form the tip of the iceberg in terms of the ways in which HIV infection has been a basis for attempted discrimination. There are two reasons for the discrimination against those people infected with HIV. The first reason is the mistaken fear that HIV is easily transmittable. Thus, quarantines or segregation are proposed to keep carriers of the virus away from "innocent" people who are not infected. The second reason for the discrimination has been expressed by those who believe that AIDS is punishment for moral failings, usually for the "sin" of being a homosexual. The first reason is factually incorrect.¹⁵ The second reason is irrational discrimination.

8. 3 AIDS Pol'y & L. (BNA) No. 8, at 3 (May 4, 1988).

9. 3 AIDS Pol'y & L. (BNA) No. 8, at 8 (May 4, 1988).

10. Doe v. Roe, 526 N.Y.S.2d 718 (Sup. Ct. 1988). The court, however, denied the motion for that order.

11. Doe v. Coughlin, 71 N.Y.2d 48, 518 N.E.2d 536, 523 N.Y.S.2d 782 (1987).

12. This was overturned on writ of habeas corpus. People *ex rel.* Glass v. McGreevy, 134 Misc. 2d 1085, 514 N.Y.S.2d 622 (Sup. Ct. 1987).

13. Chalk v. United States Dist. Court Cen. Dist. of Cal., 840 F.2d 701 (9th Cir. 1988), *explaining*, 832 F.2d 1158 (9th Cir. 1987). See also 29 U.S.C. § 794 (1982).

14. Parents of Child, Code No. 870901W v. Coker, 676 F. Supp. 1072 (E.D. Okla. 1987); Martinez v. School Bd., 675 F. Supp. 1574 (M.D. Fla. 1987); Doe v. Belleville Pub. School Dist. No. 118, 672 F. Supp. 342 (S.D. Ill. 1987); Ray v. School Dist., 666 F. Supp. 1524 (M.D. Fla. 1987).

15. See *infra* text accompanying notes 28-35.

Both of these forms of discrimination may lead to inefficiencies in the distribution of societal resources.¹⁶ Two types of losses exist when a person is deprived of benefits because of irrelevant characteristics. First, and most obviously, those infected lose many social benefits granted to noninfected individuals. This distributional change will usually not lead to inefficiencies, unless a person is (or a group of people are) consistently the losers in competitions for opportunities. The second possible cost comes about when a less qualified person is chosen, based upon irrelevant attributes. In this case, the loss to society is more straightforward—the chosen person will produce less, or learn less, than the person discriminated against. In section III, a model of the effects of irrational discrimination will be applied to the problem of HIV infection.

II. DESCRIPTION OF THE DISEASE

*If you don't abide by scientific principles, chaos will ensue.*¹⁷

AIDS is the name given to a complex of opportunistic infections that develop when a person's immune system has broken down. AIDS occurs in people who have been infected by HIV (Human Immunodeficiency Virus). Not everyone who has been infected by HIV, however, has AIDS. Most are merely seropositive.¹⁸ When a person is seropositive, a blood test would reveal the presence of antibodies to HIV, indicating infection without clinical symptoms.¹⁹ Many have relatively few clinical symptoms and are classified as having ARC.²⁰

16. Efficiency, as the term is commonly used in law and economic literature, denotes the allocation of resources in which value—human satisfaction as measured by aggregate consumer willingness to pay for goods and services—is maximized. See R. POSNER, *ECONOMIC ANALYSIS OF LAW* 12 (3d ed. 1986) [hereinafter R. POSNER]. This definition does not account for explicit treatment of both transaction costs and distributional considerations. See *infra* section III for further discussion of these topics.

17. R. SHILTS, *AND THE BAND PLAYED ON* 169 (1987).

18. It may take up to three months for an infected person to become seropositive, although they will be infected and able to spread the virus. *Transfusion-Associated Human T-Lymphotropic Virus Type III/Lymphadenopathy-Associated Virus Infection from Seronegative Donor-Colorado*, 35 *MORBIDITY AND MORTALITY WEEKLY REP.* 389, 390 (1986).

The reason for the two viruses in the title of the article comes from the scientific history of the discovery of the virus that causes AIDS and is now called HIV (Human Immunodeficiency Virus). Robert Gallo of the National Cancer Institute, who unearthed the Human T-Lymphotropic Virus Type I (HTLV-I), was one of the discoverers of the virus. He named it after his previous breakthrough as it had certain similarities with HTLV. Gallo & Wong-Staal, *A Human T-Lymphotropic Retrovirus (HTLV-III) as the Cause of the Acquired Immunodeficiency Syndrome*, 103 *ANNALS OF INTERNAL MED.* 679 (1985). Luc Montagnier of the Pasteur Institute in Paris was the codiscoverer and did not believe that it was a leukemia virus. He called it Lymphadenopathy-Associated Virus (LAV). Montagnier, *Lymphadenopathy-Associated Virus: From Molecular Biology to Pathogenicity*, 103 *ANNALS OF INTERNAL MED.* 689 (1985). HIV is the compromise name. It was adopted in 1986 by a subcommittee of the International Committee for the Taxonomy of Viruses. Coffin, Haase, Levy, Montagnier, Oroszlan, Teich, Temin, Toyoshima, Varmus, Vogt & Weiss, *Human Immunodeficiency Virus*, 232 *SCIENCE* 697 (1986). It will be used throughout this Article. Any references in the citations to HTLV-III or LAV should be presumed to refer to HIV.

19. In 1985, more than one million people in the United States were estimated to be seropositive. Curran, Morgan, Hardy, Jaffe, Darrow & Dowdle, *Epidemiology of AIDS: Current Status and Future Prospect*, 229 *SCIENCE* 1352, 1354 (1985) [hereinafter Curran]. The most recent estimate is that between one and one and one-half million persons are infected. *Human Immunodeficiency Virus Infection in the United States*, 36 *MORBIDITY AND MORTALITY WEEKLY REP.* 801, 804 (1987) [hereinafter *HIV Infection*].

The blood tests currently in use are the Enzyme-Linked Immunosorbant Assay (ELISA) and the confirmatory test called Western Blot. Blattner, Biggar, Weiss, Melbye & Goedert, *Epidemiology of Human T-Lymphotropic Virus Type III and the Risk of Acquired Immunodeficiency Syndrome*, 103 *ANNALS OF INTERNAL MED.* 665 (1985).

20. The current definition of ARC, according to the Centers for Disease Control, requires at least two clinical symptoms that must last at least three months from the following list: lymphadenopathy, diarrhea, fatigue, fever, night sweats, and weight loss. In addition, there must be both a low ratio of T-helper to T-suppressor cells and a low number

AIDS was an unknown disease until 1980 when Dr. Michael Gottlieb of UCLA noticed a strange array of symptoms, including a rare pneumonia known as *Pneumocystis carinii* pneumonia (PCP) in a patient with low T-helper cell count.²¹ He then published a study²² concerning an outbreak of PCP in five homosexual men in Los Angeles. This was an unexpected incident in a population that had not previously been thought to be at risk. By the end of 1987, 73,747 cases of AIDS existed throughout 150 countries of the world; the United States comprised 48,139 of that total. In the first months of 1988, the number of cases in the world was increasing by nearly five percent per month. In the United States, however, the rate of increase was nearly seven percent per month.²³ Thus, AIDS is a rapidly growing disease. At the present rate of growth, there would be over 100,000 cases of full-blown AIDS in the United States and nearly 130,000 cases worldwide by the end of 1988.²⁴

In addition to its increased scope, AIDS is deadly. The lifespan of a person who has been diagnosed with AIDS is often measured in months and rarely exceeds five years.²⁵ Most importantly, AIDS is a leading cause of death of young men and women. "In New York City, AIDS is the first or second ranked cause of death for all men ages 20-50 and for women ages 20-40."²⁶ It is also a leading cause of death in infants in many cities.²⁷

While it has spread at an exponential rate through parts of the population, AIDS

of T-helper cells. Finally, there must be at least one further laboratory finding regarding the blood count: elevated levels of serum globulins, low white cell count, low red cell count, or low platelet count. Centers for Disease Control, *Classification System for Human T-Lymphotropic Virus Type III/Lymphadenopathy-Associated Virus Infection*, 105 ANNALS OF INTERNAL MED. 234 (1986).

For the official definitions of AIDS, see *Revision of the Case Definition of Acquired Immunodeficiency Syndrome for National Reporting—United States*, 34 MORBIDITY AND MORTALITY WEEKLY REP. 373, 373-75 (1985). The newer Centers for Disease Control classification includes a four stage classification, based on clinical symptomatology. Only the fourth stage is considered full-blown AIDS. The stages are:

1. Early acute, though transient, signs of disease;
2. Asymptomatic infection;
3. Persistent swollen lymph glands (lymphadenopathy);
4. Presence of opportunistic infections (i.e. *Pneumocystis carinii* pneumonia) and/or certain rare cancers (i.e. Kaposi's sarcoma). *Id.*

21. T-cells are a type of white blood cell that are a key component in the immune system. T-helper cells activate the specific disease fighting cells and produce the chemical signals to create antibodies. T-suppressor cells deactivate the system when the threat has ended. Jaret, *The Wars Within*, 169 NAT'L GEOGRAPHIC 702, 708 (1986).

22. *Pneumocystis Pneumonia—Los Angeles*, 30 MORBIDITY AND MORTALITY WEEKLY REP. 250 (1981). See also Gottlieb, Schroff, Schanker, Weissman, Fan, Wolf & Saxon, *Pneumocystis Carinii Pneumonia and Mucosal Candidiasis in Previously Healthy Homosexual Men*, 305 NEW ENG. J. MED. 1425 (1981); *Kaposi's Sarcoma and Pneumocystis Pneumonia Among Homosexual Men—New York City and California*, 30 MORBIDITY AND MORTALITY WEEKLY REP. 305 (1981); Masur, Michelis, Green, Onorato, Stouwe, Holzman, Wormser, Brettman, Lange, Murray & Cunningham-Rundles, *An Outbreak of Community-Acquired Pneumocystis Carinii Pneumonia*, 305 NEW ENG. J. MED. 1431 (1981).

23. World Health Organization (WHO) report in 3 AIDS Pol'y & L. (BNA) No. 2, at 12 (Feb. 10, 1988).

24. The worldwide figure is generally considered to be an underreport of actual cases. In particular, in Africa, the health authorities have neglected to report many cases. This is true in spite of the fact that AIDS was in existence in Africa before it made its way to Europe and the United States. The reasons given for the underreporting range from a lack of sophisticated data collection to social reticence of dealing openly with sexual matters. R. SHILTS, *supra* note 17, at 193, 392-93, 459.

25. The New York State Department of Health estimates that 47,000 residents of New York will have contracted AIDS by the end of 1991, of which they estimate that 35,000 will have died. In addition, the department estimated that between 60,000 and 100,000 additional people will have less serious symptoms associated with HIV infection. 3 AIDS Pol'y & L. (BNA) No. 6, at 4 (Apr. 6, 1988). See also N.Y. STATE DEP'T OF HEALTH, AIDS IN NEW YORK STATE (1988).

26. *Report Sees 35,000 Deaths, New Cases Doubling by 1991*, 3 AIDS Pol'y & L. (BNA) No. 6, at 4 (Apr. 6, 1988).

27. *Id.*

is not easy to transmit. AIDS is a communicable disease. HIV, however, is transmissible only by direct injection of "bodily fluids" into the bloodstream.²⁸ The sharing of needles provides an easy route of access for the virus as infected blood is deposited into the blood stream, just as the sharing of semen, vaginal, and cervical fluids can result in access of the virus to blood vessels in the anus, vagina, or penis.

It is not communicable by way of casual contact or in a normal work or school environment. It is not even transmissible by such intimate, nonsexual contacts like kissing²⁹ or sharing a toothbrush.³⁰ Even among health care workers who deal with AIDS patients on a day-to-day basis, the risk of communication of the virus has been so small as to approach zero. In studies of 1758 health care workers in the period from 1981 to 1985, only twenty-six tested seropositive. Of these twenty-six, twenty-two were otherwise in a high risk group.³¹

In fact, even sexual contact does not guarantee transmission. In a study of hemophiliacs who tested seropositive, only one out of nine female sexual partners became seropositive, and she regularly had both anal and vaginal intercourse with her partner.³² The most recent review of infection among sexual partners of seropositive hemophiliac patients found that only ten percent of the sexual partners were also seropositive.³³ Thus, even sexual transmission does not appear to be easy among heterosexuals, and it appears that it is much more efficient from males to females than vice versa.³⁴ On the other hand, sixty-nine percent of the children born to seropositive mothers are seropositive. It is not known whether this seropositivity implies that the mothers' antibodies passed to their children or if the children are actually infected with HIV. As of the date of this Article, none of these children had been diagnosed with AIDS.³⁵

In addition, even after the virus is transmitted, clinical symptoms of the disease do not readily manifest themselves. Rather, "HIV is a retrovirus and retroviruses depend upon co-factors, such as a suppressed immune system."³⁶ "[M]ost of the gay men who contracted AIDS also had antibodies to Epstein-Barr virus, Hepatitis B, and

28. See generally Green, *The Transmission of AIDS*, in *AIDS AND THE LAW* 28 (H. Dalton ed. 1987).

29. Even oral genital kissing is an unlikely source of HIV transmission. Lyman, Winkelstein, Ascher & Levy, *Minimal Risk of Transmission of AIDS-Associated Retrovirus Infection by Oral-Genital Contact*, 255 J. A.M.A. 1703 (1986).

30. Friedland, Saltzman, Rogers, Kahl, Lesser, Mayers & Klein, *Lack of Transmission of HTLV-III/LAV Infection to Household Contacts of Patients With AIDS or AIDS-Related Complex with Oral Candidiasis*, 314 NEW ENG. J. MED. 344 (1986). See also Abramson & Rothschild, *Sex, Drugs and Matrices: Mathematical Prediction of HIV Infection*, 25 J. SEX RES. 106, 111 (1988).

31. *Update: Evaluation of Human T-Lymphotropic Virus Type III/Lymphadenopathy-Associated Virus Infection in Health-Care Personnel—United States*, 34 MORBIDITY AND MORTALITY WEEKLY REP. 575 (1985). See also *Update: Prospective Evaluation of Health-Care Workers Exposed via the Parenteral or Mucous-Membrane Route to Blood or Body Fluids from Patients with Acquired Immunodeficiency Syndrome—United States*, 34 MORBIDITY AND MORTALITY WEEKLY REP. 101 (1985).

32. Melbye, Ingerslev, Biggar, Alexander, Sarin, Goedert, Zachariae, Ebbesen & Stenbjerg, *Anal Intercourse as a Possible Factor in Heterosexual Transmission of HTLV-III to Spouses of Hemophiliacs*, 312 NEW ENG. J. MED. 857 (1985) [hereinafter *Spouses*].

33. *HIV Infection and Pregnancies in Sexual Partners of HIV-Seropositive Hemophilic Men—United States*, 36 MORBIDITY AND MORTALITY WEEKLY REP. 593, 594 (1987) [hereinafter *Sexual Partners*].

34. Volberding, *AIDS—Variations on a Theme of Cellular Immune Deficiency*, 85 BULL. INST. PASTEUR 87, 90 (1987).

35. *Sexual Partners*, *supra* note 33.

36. *Spouses*, *supra* note 32.

other immunosuppressive disorders."³⁷ Another example of the difficulty in developing AIDS can be seen in the epidemiology of the hemophiliac population. Of the approximately 20,000 hemophiliacs in the United States, 18,000 became seropositive in 1981–82 before the transmissibility of AIDS through the blood supply had been accepted. Yet, despite the passing of six years since their infection with HIV, fewer than 250 cases of AIDS had materialized.³⁸

It is also an extremely unpleasant disease.

The clinical illness itself typically starts with vague, debilitating symptoms including drenching night sweats, sustained fevers, chronic diarrhea, and weight loss, sometimes associated with generalized enlargement of lymph glands (lymphadenopathy). Some, but not all, of the individuals who start with that set of symptoms then experience oral "thrush" (yeast infection of the mouth) or develop the purplish skin lesions of a previously rare kind of malignancy called Kaposi's sarcoma. Alternatively—or as well—strange chronic pneumonias develop, caused by microorganisms rarely seen and resistant to treatment. Over time, some AIDS patients also develop confusion and other signs of progressive neurologic degeneration, which may be caused by additional opportunistic microorganisms or the AIDS virus itself. By whichever dismal route, full-blown AIDS means a relentlessly downhill clinical course, whose social and psychological consequences have not been experienced on a large scale since the days of polio or, indeed, leprosy.³⁹

Much of the public concern about AIDS does not stem solely from these objective facts, although the fact that it is a rapidly growing deadly disease is undoubtedly a major reason for the apprehension. AIDS had a rather unique social epidemiology in the United States. The principal populations in which AIDS first arose were the male gay communities in New York, San Francisco, and Los Angeles.⁴⁰ One of the first widespread symptoms of the infection was Kaposi's sarcoma, which became known as "Gay Cancer." AIDS is spread by sexual contact, and it has apparently spread quite thoroughly throughout the gay districts in many cities. The syndrome was thus originally considered to be a disease associated solely with homosexuality.

The other major group that is considered to be at high risk according to the Centers for Disease Control is intravenous (IV) drug users who share contaminated needles.⁴¹ Both gays and IV drug users have been traditionally disfavored in the

37. *Id.* See also *Heterosexual Epidemic Seen Unlikely by Researchers*, 3 AIDS Pol'y & L. (BNA) No. 6, at 8 (Apr. 6, 1988).

38. Green, *supra* note 28, at 31. See also Levine, *The Acquired Immunodeficiency Syndrome in Persons with Hemophilia*, 103 ANNALS OF INTERNAL MED. 723 (1985).

39. Osborn, *The AIDS Epidemic: Discovery of a New Disease*, in AIDS AND THE LAW 19 (H. Dalton ed. 1987). The most common opportunistic infections in the western United States are cytomegalovirus (CMV), then *Pneumocystis carinii* pneumonia, *Mycobacterium avium/intracellulare*, then *Cryptococcus*. In the eastern United States they are: PCP, followed by *Candida*, *Cryptococcus*, CMV, herpes simplex, *Cryptosporidium*, and *Toxoplasma*. In Africa and Haiti, similar diseases are common, although again the order of frequency changes with the population. In addition to those manifestations, tuberculosis is quite common among Haitians. Furthermore, Kaposi's sarcoma is really only common among homosexuals, while PCP is much more common among blood-transfusion related cases. The reasons for these differences in epidemiology are not clear, but they point out the importance of cofactors in determining the course of the disease. Volberding, *supra* note 34, at 89.

40. See *supra* note 22.

41. Most estimates of the risk of infection among gay men range from 20% to 50% seroprevalence. That is, 20% to 50% of the gay men in the United States are estimated to be infected with HIV. Among IV drug users in the New York

United States. This disfavor stems from the fact that the activities conducted by these groups are usually illegal.⁴²

Much of the antipathy toward victims of AIDS can be explained by their presumed membership in one of these groups. Even when they are not infected with a communicable disease, they are discriminated against. Gays are obviously such a group.

Discrimination against lesbians and gay males is condoned through law, permitted by law, and sometimes required by law. For example, the law permits any of the states to make a crime of same-sex consensual sexual conduct in private and almost half of the states do so. . . . The law permits the United States military to prohibit lesbians and gay males from enlisting or to separate them from the military, no matter how good their service records, simply for the status of being lesbian or gay.⁴³

IV drug users are not only subject to criminal prosecution for their acts, but they are also most likely to be members of a racial minority. Fifty-one percent of the IV drug users who have AIDS are black and thirty percent are Latino.⁴⁴ These latter groups are the classically disfavored "suspect classes" in our society for whom the courts have traditionally used strict scrutiny analysis.⁴⁵

By 1986, twenty-five percent of the total number of AIDS patients were black and fourteen percent were Hispanic—while these groups make up only twelve and six percent of the general population respectively. Not all blacks and Hispanics who are AIDS patients, however, are drug users. Only half the minority AIDS patients in New York and New Jersey were drug users. In Florida, forty percent were Haitians. For women, the probability of having AIDS is far greater if they are a member of a minority group. The incidence of AIDS among black women is twenty-nine times greater than among white women. For Latinas, the ratio is eleven times the white incidence. For many women, the mode of transmission was heterosexual relations with a drug user.⁴⁶ For children, the great majority were black (fifty-eight percent) or Hispanic (twenty-two percent). Virtually all (ninety percent) of the children who

metropolitan area and Puerto Rico, between 50% and 65% are estimated to be seropositive. In the rest of the country, fewer than 5% of IV drug users are believed to be infected by HIV. *HIV Infection*, *supra* note 19.

42. Possession of most of the drugs that intravenous abusers use are illegal, as is possession of the paraphernalia (the injection apparatus). Sodomy is also illegal in many states.

Sodomy was a criminal offense at common law and was forbidden by the laws of the original 13 States when they ratified the Bill of Rights. In 1868, when the Fourteenth Amendment was ratified, all but 5 of the 37 States in the Union had criminal sodomy laws. In fact, until 1961, all 50 States outlawed sodomy, and today, 25 States and the District of Columbia continue to provide criminal penalties for sodomy performed in private and between consenting adults.

Bowers v. Hardwick, 478 U.S. 186, 192-94 (1986) (footnotes omitted).

43. NATIONAL LAWYERS GUILD, *SEXUAL ORIENTATION AND THE LAW* Intro.-1 (1985). See also *Bowers*, 478 U.S. 186 (upholding the constitutionality of the Georgia sodomy statute). But see *Watkins v. United States*, 837 F.2d 1428 (9th Cir.) (finding homosexuals to be a suspect class to which strict scrutiny applies), *superseded by* *Watkins v. United States Army*, 847 F.2d 1329, 1349 (9th Cir.), *reh'g en banc granted*, 847 F.2d 1362 (9th Cir. 1988).

44. O'Neill, *Intravenous Drug Abusers*, in *AIDS AND THE LAW* 254 (H. Dalton ed. 1987).

45. Nor need we enquire whether similar considerations enter into the review of statutes directed at particular religious, or national, or racial minorities: whether prejudice against discrete and insular minorities may be a special condition, which tends seriously to curtail the operation of those political processes ordinarily to be relied upon to protect minorities, and which may call for a correspondingly more searching judicial inquiry. *United States v. Carolene Prods. Co.*, 304 U.S. 144, 152 n.4 (1938) (citations omitted).

46. *Acquired Immunodeficiency Syndrome (AIDS) Among Blacks and Hispanics—United States*, 35 MORBIDITY AND MORTALITY WEEKLY REP. 655 (1986) [hereinafter *Blacks and Hispanics*].

contracted AIDS *in utero* were black or Hispanic, while most children who contracted AIDS from a transfusion (fifty-eight percent) were white.⁴⁷

AIDS has spread through a number of groups in the United States that have traditionally been subject to discrimination on other grounds.⁴⁸ Consequently, these groups fear that not only are they likely to be subject to discrimination because others incorrectly believe them to be infectious through casual contact, but they are also apt to suffer discrimination based upon their membership within a presumptively disfavored group with HIV infection merely serving as a proxy for the true reason for discrimination.

Seropositive individuals can be subject to various types of discrimination. As we have seen, they have been denied employment and education purely based upon unfounded fears and moral prejudice.⁴⁹ Medical providers have reportedly declined to care for infected persons, contrary to the ethics of their professions.⁵⁰ In addition, insurance companies claim that they are unable to estimate properly the costs and prognoses of HIV seropositive individuals; therefore, many insurance companies would like to be able to use antibody testing as a means of excluding individuals from life and health insurance coverage.⁵¹

Many persons with AIDS also fear that public authorities will attempt to segregate infected individuals in prisons or housing units. This separation could deprive otherwise qualified individuals from participation in government benefit programs. Finally, persons who are HIV seropositive fear the continuing threat of actual quarantine, as authorities in South Carolina have carried out, and as is threatened by such proposals as Proposition 69 sponsored by Lyndon LaRouche in California.⁵²

The various subgroups have special concerns. For example, gays have looked upon closure of bathhouses as symbolic of their powerlessness in the larger community. The question of whether bathhouses should be closed as public health hazards is undoubtedly the most controversial issue regarding the special treatment of gays during the AIDS epidemic. Bathhouses had been places where a person could go to enjoy indiscriminate sex with a large number of people during a short period of time. Since HIV is spread most easily under those conditions, many public officials, particularly in New York and San Francisco, saw bathhouses as places that encouraged the rapid spread of AIDS. Many gay leaders opposed the closing of the

47. *Id.* at 658.

48. For example, gays, blacks, Hispanics, and IV drug abusers have all been subject to discrimination.

49. *See supra* text accompanying notes 2-8. *See also* Ricklefs, *Living with AIDS*, Wall St. J., Sept. 2, 1988, at 1, col. 1.

50. *See, e.g., Minnesota Dentists Increasing Protections Against Infection*, 3 AIDS Pol'y & L. (BNA) No. 7, at 7 (Apr. 20, 1988) (only 38% of dentists in Minnesota willing to treat AIDS patients); *Two Dental Groups Disagree over Special Compensation*, 3 AIDS Pol'y & L. (BNA) No. 10, at 11 (June 1, 1988).

51. Eaton Life Assurance Co. excludes coverage for AIDS-related diseases. *British Columbia Insurer Bans AIDS-Related Benefits*, 3 AIDS Pol'y & L. (BNA) No. 8, at 8 (May 4, 1988). *See also 'Circumvention' of DC Law Charged by Ohio Couple*, 2 AIDS Pol'y & L. (BNA) No. 10, at 5 (June 3, 1987) (Bankers National Life Insurance Company reportedly avoided doing business in the District of Columbia to avoid the local prohibition against testing for HIV).

52. *See* Parmet, *AIDS and Quarantine: The Revival of an Archaic Doctrine*, 14 HOFSTRA L. REV. 53 (1985).

baths because of the symbolism of attacking an institution that came to stand for the gay lifestyle.⁵³

More importantly, homosexuality has been proposed as a proxy for discrimination on the basis of AIDS; likewise, AIDS has been used as a legitimizing reason for discriminating on the basis of sexual orientation. Insurance companies have attempted to screen their suspected gay applicants for HIV antibodies. They have used marital status, residential address, occupation, unrelated beneficiary, and medical history as proxies for being gay and then required HIV testing.⁵⁴ To the extent that seropositivity is an accurate predictor of shortened life span or increased medical costs, it may be reasonable to use it as a basis for adjusting rates, just as other diseases can be used to adjust rates or deny coverage. However, if HIV seropositivity is merely a screen to eliminate social undesirables from the insurance rolls and to leave them to the state or to charity, it is inefficient and irrational. Employers have also terminated employees based upon their sexual orientation. This is apparently done partly out of fear and partly because they may have been uncomfortable with gay employees in the first place.⁵⁵

This background is crucial both to understanding how the epidemic could have been ignored by public health and political officials for as long as it was and to beginning to develop plans for dealing with the problems that have occurred. In the next Part, I will analyze the social costs of AIDS and of discrimination against those who are infected with HIV. The Article concludes with recommendations for antidiscrimination policies that minimize the social costs of the epidemic.

III. SOCIAL COSTS OF DISCRIMINATION ON ACCOUNT OF AIDS

A. *Employment Discrimination*

The Orange County Board of Education relieved Vincent Chalk, a teacher of hearing impaired students, of his teaching duties due to fears that AIDS can be communicated through the type of casual contact present in the classroom.⁵⁶ He sued to be reinstated to his classroom duties under section 504 of the Rehabilitation Act.⁵⁷ He is the quintessential person whom section 504 is meant to protect. As with all antidiscrimination laws,⁵⁸ the easy cases are those where pure prejudice, without rational basis, serves as the rationale for removing the benefits of society from a person. His case was such an easy case and it forms the starting point for our discussion of the economics of discrimination based upon AIDS.

The principal purpose of laws forbidding discrimination is to assure that no one is denied the fruits of society based upon irrelevant characteristics. Specifically, they protect persons who are viewed by the majority or by those with powers to

53. See Senak, *The Lesbian and Gay Community*, in AIDS AND THE LAW 290, 293-94 (H. Dalton ed. 1987).

54. *Id.* at 297.

55. *Id.* at 298.

56. *Chalk v. United States Dist. Court Cent. Dist. of Cal.*, 840 F.2d 701 (9th Cir. 1988).

57. Rehabilitation Act of 1973 § 504, 29 U.S.C. § 794 (1982).

58. Congress patterned § 504 after Title VI of the Civil Rights Act of 1964, Pub. L. No. 88-352, 78 Stat. 241 (1964). *School Bd. of Nassau County v. Arline*, 480 U.S. 273, 277-79 (1987).

discriminate, as having characteristics that the majority would prefer not to tolerate. The Orange County Superintendent of Schools claimed that Mr. Chalk was reassigned from his position based upon the possibility that the plaintiff might communicate AIDS to children in the classroom. As Part II explained, there is simply no evidence that AIDS is communicable in any way other than by the sharing of infected blood or by direct sexual contact (when semen or vaginal fluid enters the blood stream through a sore).⁵⁹ Such was not the case for Mr. Chalk.

The Orange County Department of Education⁶⁰ discriminated against Mr. Chalk based upon his infection with AIDS, using the argument that at some time in the future it *might* be discovered that AIDS is communicable through casual contact.⁶¹ The department was thus arguing that, given that AIDS results in death, any risk of infection was too great. As the studies demonstrate,⁶² however, the known probability of HIV infection through casual contact is zero. To argue that a person might be dangerous and thus should be denied some societal benefit, when there is no evidence whatsoever of the danger, is the classic definition of prejudice. It would be like saying that a person *might* at some time in the future commit mayhem or murder, and thus he or she should be removed from his or her position in society. But the mere possibility that anyone could do harm in the future is an illogical and inefficient basis upon which to deny a person privileges or opportunities.

1. *Inefficiency Due to Discrimination in Employment*

Discrimination in employment is inefficient because investment in training is squandered and production is directly decreased. In addition, maldistribution caused by discrimination results in social costs. If employers may remove employees from their positions, based solely on unfounded fears, the investment made in their productivity will have been wasted. Even by reassigning a worker to a position for which he is not as well suited, as the Orange County Department of Education did in *Chalk*,⁶³ the worker will not be able to produce to his or her fullest capacity.

For this first type of discrimination, where a person is removed from an existing position (either reassigned or dismissed) due to misperception of his inappropriateness to the job, society loses in three ways. First, some of the expenditure in the worker's general training will go for naught, especially when the discrimination is common practice and the worker cannot be placed in alternative equal employment. Second, a worker who has been chosen to perform a certain job can be assumed to be more productive at that position than other available workers, otherwise the

59. Epidemiologic evidence has shown only that blood, semen, vaginal secretions, and possibly breast milk have served to transmit the Human Immunodeficiency Virus (HIV), which is the agent that causes the acquired immune deficiency syndrome (AIDS). *Recommendations for Prevention of HIV Transmission in Health-Care Settings*, 36 MORBIDITY AND MORTALITY WEEKLY REP. No. 2S, at 3S (1987).

60. The Orange County Department of Education is the informal name used in *Chalk* for the Orange County Superintendent of Schools office.

61. For a discussion of the evidence submitted by Dr. Steven Armentrout to the District Court, see *Chalk v. United States Dist. Court Cent. Dist. of Cal.*, 840 F.2d 701, 707 (9th Cir. 1988).

62. See *supra* text accompanying notes 28-34.

63. See *supra* note 56 and accompanying text.

employer would have hired another worker. Third, with time on the job, a worker develops further specific skills that are useful on the job, so the difference in productivity between the chosen worker and alternative workers should increase over time. When that worker is reassigned to a position for which he or she is not as well trained, society also loses the extra productivity that this particular worker possessed in the original job assignment.

In addition to these productivity costs to society, the individual who is being discriminated against loses relative to other workers who are similarly situated since someone else gains what the loser has lost. This simple distributive loss is often not a matter about which economists have any professional expertise.⁶⁴ However, when a small group of individuals is continually discriminated against, in a variety of ways, the social costs are readily apparent.

An example may make this point more clear. Assume that an employer will offer \$10,000 per year for a position for which there are two equally well-qualified candidates, *A* and *B*. If *A* is offered the position, *B* will lose \$10,000. But *A* has gained the \$10,000 and there is no social cost.⁶⁵ On the other hand, if *B* is often the loser in contests with *A*, then there may be social costs to choosing *A* over *B* in this context. If *A* is chosen over *B* ninety percent of the time, then *A* will have nine times as much wealth. If, in addition, *B* is discriminated against when he purchases goods by having higher prices charged for the same goods, then *B* will again have less real wealth. If *B* is also not chosen as often as *A* when admission to educational institutions is contested, then *B* will also have lower expected wealth due to his relative lack of education.⁶⁶ Since *B* has less wealth than *A*, due to this unfavorable treatment, he should be expected to have a higher marginal utility of wealth.⁶⁷ As *B* has higher marginal utility of wealth, society can increase its net utility by transferring more wealth (or wealth producing rights) to him.

One question that may have occurred to some readers is why would an employer ever discriminate if the worker is more efficient than alternate workers? After all, if the worker with AIDS has all this additional human capital formed by on-the-job training, and if he was more qualified than a replacement worker in the first place, would the employer not be irrational to replace the worker with AIDS?

There are two answers to this question. The first is the standard answer given in

64. Pareto optimality, which is the most conservative version of efficiency, is also the most widely accepted definition of efficiency. An allocation is Pareto optimal (P.O.) (or Pareto efficient) if no one can be made better off without making someone else worse off. Either allocation is P.O. when the choice is to give a position to one of two equally qualified applicants. See R. POSNER, *supra* note 16, at 12 for a definition of Pareto superiority.

65. If they were not equally well-qualified, and the person with the lower qualifications were hired, social costs would result. The less qualified person might only add \$12,000 to output, while the more qualified person might add \$12,500. Thus, hiring this less qualified person would result in a loss to society (but not to the workers) of \$500. For a discussion of marginal productivity theory, see W. BAUMOL & A. BLINDER, *ECONOMICS, PRINCIPLES AND POLICY* 593 (2d ed. 1982) [hereinafter W. BAUMOL].

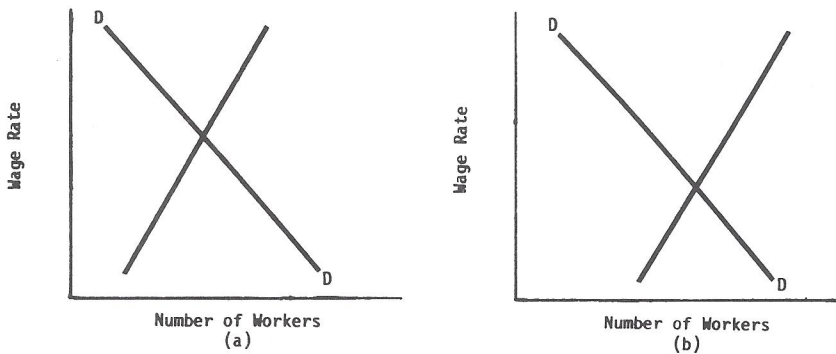
66. This is considered to be a loss of "human capital." The concept of human capital was first described by Professor Gary Becker of the University of Chicago. G. BECKER, *HUMAN CAPITAL* (1964). See also R. POSNER, *supra* note 16, at 433.

67. The law of diminishing marginal utility holds that the more of any good (including money income) that a consumer has, the less marginal utility an additional unit of that good will bring. W. BAUMOL, *supra* note 65, at 338. So if the first \$1000 in income brought *A* 1000 units of utility, the next \$1000 would bring somewhat less, say 997 units, and the tenth \$1000 would bring even less, say 950, and the 100th \$1000 would bring even less, say 750 units.

most economics texts: a firm that discriminates by using inappropriate characteristics will find itself at a cost disadvantage compared with firms that do not discriminate. The second answer assumes that employers may be able to act in concert when they discriminate. Following the standard answer, a firm would be irrational to discriminate.⁶⁸ However, if the attribute that is used to distinguish the worker is generally accepted as a relevant attribute, then there may be no competitive disadvantage to discrimination.

Consider an example to illustrate both how it is normally inefficient to discriminate and also why there may be no competitive disadvantage therefrom. If certain firms refuse to hire workers for certain positions due to an extraneous trait, such as skin color or infection with a virus, they will have fewer workers to choose among. If there are fewer workers in the pool, then we say that supply (of workers) is restricted. If supply is restricted, then the price (wage) will increase compared with firms that have an unrestricted supply. Thus, the standard economic explanation results in discrimination harming the discriminating firms.

FIGURE III-1



Wage Discrimination

Part (a) represents the supply and demand curve for workers in discriminatory firms, and part (b) represents the supply and demand for nondiscriminatory firms. Note that the supply curve for the discriminatory firms is restricted, that is, it is further to the left, compared with the (total) supply curve in (b). Firms in (a) only hire HIV seronegative workers, while firms in (b) hire both HIV seropositive and seronegative workers. This restriction of hiring practice results in wages being higher for firms in (a).

On the other hand, if employers have enough anxiety (disutility) from associating with the ostracized group, then they may be willing to suffer a monetary loss to keep a segregated work force. This is a departure from the assumptions of the competitive economic model. The neoclassical competitive economic model assumes

68. *Id.* at 651.

that all firms in long-run equilibrium operate at zero economic profit; they only receive a return on capital and on entrepreneurial skill.⁶⁹ If the economy had the characteristics of the model, discrimination would be impossible.

One exception to this impossibility of discrimination occurs if every (or nearly every) firm in an industry had similarly discriminatory employment practices. If this were the case, it would simply result in higher prices, a higher cost of capital, and a more intensive use of capital instead of labor. Thus, no firm would receive the signal that it is engaging in uneconomic behavior. If all firms discriminated, they would all pay a higher wage because the supply of workers in the acceptable pool is smaller than the total supply of workers. Let us imagine that the wage is five dollars per hour without discrimination, but six dollars with discrimination. As long as they are unwilling to breach the custom of limiting hiring to the favored group, firms have only two behavioral choices. They can use less labor, which will imply a higher cost of capital, or they can charge higher prices. If they charge higher prices, the quantity of their products demanded will decrease. If only some firms try this response, they will lose all their business to the firms that maintained the same price level. Therefore, discriminatory practices would be unlikely to exist absent collusion if other firms acted in a nondiscriminatory manner.

If discriminatory firms use capital more intensively, their demand for capital will increase and consequently its cost will increase—this result will decrease the return on the firm's own capital. As long as the return is as high as the return in other industries with similar risks, the industry will be in equilibrium. If discrimination results in a lower return on capital in an industry that discriminates, firms will move their capital out of the industry and the amount of production in that industry will shrink. Thus, the financial results of effective discrimination are either increases in the wage level in the discriminating industry, increases in the intensity of the use of capital, or decreases in the magnitude of production in the industry.

This requirement of near universality of bias may explain why there are only a few discrete and insular minority groups that are protected by antidiscrimination laws. Such laws are not efficacious to encourage firms to hire members of majority groups that are not usually excluded, because a firm that discriminated against a member of the majority group would suffer from the effects of competition. Those workers who failed to be hired would be able to find employment elsewhere. The firm would have restricted its supply of workers. This implies that most competitive firms would have a larger pool from which to choose and would be able to compete more effectively and drive the discriminating firm from the market. Thus, a discriminating firm would lose competitive advantage unless that worker was perceived to be less productive than others given the wage he commands.

Should infection with HIV be considered such a characteristic, along with race, sex, national origin, and physical handicap, so that it would constitute discrimination for intentional preclusion from opportunities and privileges? The short history of the social treatment of people with AIDS suggests that the universality of disfavor is

69. *Id.* at 424–25.

similar to, or worse than, that of the most disfavored insular groups.⁷⁰ Some regulation of the employment relationship is therefore appropriate when a person with HIV infection is reassigned, fired, or not hired.⁷¹

A second social cost occurs in circumstances when a person is a member of a group that is consistently denied social benefits. AIDS is clearly the type of condition that has caused both ordinary people who may not be able to use monopoly power, as well as those with such power, to shun its sufferers. Unlike other deadly diseases, such as leukemia or syphilis, which are apparently contagious in manners similar to HIV, no great uproar to segregate or quarantine the victims of those diseases has occurred. The nonmedical characteristics of those suffering from AIDS has led to a political, rather than a medical, response. In the words of Edward Brandt, who was the Assistant Secretary for Health, United States Department of Health and Human Services from 1981 until he resigned at the end of 1984:⁷²

In looking at the health policy issues two special features of AIDS must be considered: The first is that medical science had never encountered a disease like AIDS, although immunodeficiency syndromes had been recognized. These syndromes, however, generally affected infants or persons receiving exogenous immunosuppressants for transplants, malignancies, and other problems. There had been occasional [sic] reports of an unexplained immunodeficiency; however, it was the cases in adults that had no apparent cause that led to the recognition of a new disease entity. The second feature is that the syndrome was occurring mainly in gay men and intravenous drug users. *Because of the population affected, there are many sociopolitical factors that are not present in other outbreaks of disease. To some extent, the AIDS epidemic is unique in the history of the United States and I would suspect in the history of medicine.*

...
[B]ecause of the characteristics of the two groups of people in whom AIDS primarily occurs, patients risk societal repercussions if their disease is known. For example, it is illegal to use certain drugs and most intravenous drug users are susceptible to prosecution. In many jurisdictions in this country, various homosexual acts are also illegal. Because of the strong views many people hold about homosexuality, persons with AIDS could lose jobs, housing, and other societal benefits.⁷³

Partly because AIDS (or HIV infection) is used as a proxy for these other characteristics that are disfavored, AIDS has been almost unique as a disease used to exclude its subjects from association with others. Therefore, it is appropriate to assure efficiency, and not merely to meet the goals of fairness and justice,⁷⁴ that discrimination against workers who are infected with HIV be deterred. The question of what might be the appropriate remedies will be discussed in Part IV.

70. See the anecdotes in Part I for some examples.

71. The economic effects of discrimination for failure to hire or failure to promote are similar to the effects of firing or reassignment to a less productive job. The only differences are that the as yet unhired have not developed any specific human capital (job skills) as they pertain to the particular occupation and there is no evidence on whether the minority worker actually has greater relevant job skills than alternate unchosen workers.

72. R. SHILTS, *supra* note 17, at 492.

73. Brandt, *Implications of the Acquired Immunodeficiency Syndrome for Health Policy*, 103 ANNALS OF INTERNAL MED. 771, 772 (1985) (emphasis added).

74. See J. RAWLS, *THEORY OF JUSTICE* (1974).

2. Treatment of Distributive Costs by Congress

In addition to the social costs considered above, Congress has made a choice regarding how the political question of distribution of social benefits should be answered. In particular, Congress has decided that when a public employer decides whether to hire an *A* (nonhandicapped workers) or a *B* (workers with handicaps), public employers must demonstrate that reasons other than the trait (handicap) must be used if an employer chooses to hire an *A*. Congress, by passing section 504 of the Rehabilitation Act,⁷⁵ as amended by the Civil Rights Restoration Act,⁷⁶ has decided that it considers people who are handicapped, logically including those with AIDS,⁷⁷ as being in a group that requires legislation to assure their equal access to employment and education. Senator Humphrey, speaking in favor of the predecessor bill to the Rehabilitation Act in 1972,⁷⁸ said: "we have sufficient statistics clearly demonstrating the benefits to the national economy and the investment return of income tax revenues resulting from . . . job placement for these citizens. Where is the cost-effectiveness in consigning them to public assistance or 'terminal' care?"⁷⁹

The clear purpose of Congress in passing the Rehabilitation Act was to promote self-reliance on the part of handicapped individuals in the face of discriminatory treatment and shortcomings in rehabilitative training. If an employer covered by the nondiscrimination provisions of section 504 can consider a handicapped employee to be unqualified or "not otherwise qualified" in the terms of the section, purely on the basis of fear of unknown and unproven consequences, then the purpose of Congress to promote that self-reliance would be foiled.

Discrimination undercuts the distribution of burdens and benefits implied by Congress. Antidiscrimination laws protect two distinct interests. They protect the interests of victims of discrimination against unwarranted losses. They also protect societal interests. By requiring certain employers to make reasonable accommodations to handicapped persons, Congress has decided that some of the costs and other burdens imposed by those handicaps are better borne by those employers than by either the individuals alone or by the social welfare agencies of the state and federal governments.

If employers could discriminate against people with AIDS, their ability to care for themselves would be adversely affected. It has been estimated that the average AIDS patient will incur from \$20,000 to \$54,000 in medical expenses for each year that he or she survives.⁸⁰ If having AIDS (or perhaps even having antibodies for HIV

75. 29 U.S.C. § 794 (1982).

76. Pub. L. No. 100-259, 102 Stat. 28 (1988) (amending 29 U.S.C. § 794).

77. Senator Kennedy has proposed legislation to specifically extend antidiscrimination protection to those who test positive for HIV antibodies. 46 CONG. WEEKLY REP. 1168 (Apr. 1988). Senator Weicker has introduced legislation to extend the coverage of civil rights laws pertaining to the handicapped beyond those receiving federal assistance. Americans with Disabilities Act, S. 2345, 100th Cong., 2d Sess. (1988). For comments made by Senator Weicker, see 134 CONG. REC. S5106-10 (daily ed. Apr. 28, 1988).

78. President Nixon pocket vetoed the 1972 Act on October 27, 1972. For the text of his Memorandum of Disapproval, see S. REP. NO. 48, 93d Cong., 1st Sess. (1973).

79. 118 CONG. REC. 525 (1972).

80. Scitovsky & Rice, *AIDS: The Cost in Dollars*, THE INTERNIST, Apr. 1987, at 11. See also Scitovsky & Rice, *Estimates of the Direct and Indirect Costs of Acquired Immunodeficiency Syndrome in the United States, 1985, 1986, and*

without an infection) were enough to find a person "not otherwise qualified" under section 504, many victims of this disease would be likely to lose their jobs. If these otherwise employable workers are removed from their employment, they would also lose the medical insurance coverage associated with their employment.⁸¹ If AIDS patients are removed from their group health insurance coverage and are unable to purchase private medical insurance,⁸² they will be unable to care for themselves.

Congress has not included AIDS among the diseases for which Medicare provides total coverage. In 1983 H.R. 2880 was introduced, which would have required Medicare to cover all AIDS cases, as it does for end stage renal disease.⁸³ Congress declined, however, to pass that bill. It can be inferred by the failure to pass H.R. 2880, and by the affirmative action requirements of the Rehabilitation Act, as amended in 1978, that the intent of Congress was that the medical costs of AIDS should be spread in the traditional manner, including private employers among the cost spreaders. If an employer may dismiss a worker who has AIDS because of unfounded fears of the casual communicability of the disease, then this scheme can be defeated, contrary to the will of Congress.

In the debates preceding the passage of the Rehabilitation Act, Senators and Congressmen expressed the view that the employment of handicapped individuals was in the nation's interest, for it would increase their productivity and decrease the drain on the Federal Budget. For example, Senator Williams, quoting the testimony of Stephen Kurzman, Assistant Secretary for Legislation, United States Department of Health, Education, and Welfare, pointed out that this program "is not only humanitarian, it is cost effective. . . . [O]ne disabled individual may, during a lifetime, receive anywhere from \$30,000 to \$100,000 in public assistance payments. [I]f he were not dependent . . . the same individual . . . would pay taxes totaling over \$42,000 over his lifetime."⁸⁴

The costs to society of allowing employers to lay-off or to use employees in suboptimal positions is enormous. It has been estimated that more than 36,000 individuals have AIDS in the United States and that perhaps one and one-half million people are infected with the HIV virus. Of men between the ages of twenty and fifty, approximately one in thirty carries the HIV virus.⁸⁵ If all the people in the United States infected with HIV working only in the education and food handling industries lost their positions, the costs to those individuals and society in lost output could be

1991, 102 PUBLIC HEALTH REP. 5 (1987); Sisk, *The Costs of AIDS: A Review of the Estimates*, 6 HEALTH AFFAIRS 5 (1987) [hereinafter *Estimates*]. There are indications that new treatments, including AZT and home health care, are reducing the lifetime health care costs of treating AIDS. Ricklefs, *supra* note 49.

81. "[T]he employee is in the position of looking to the employer for both insurance and employment; . . . The possible effect of that duality upon the AIDS victim is clear; to lose the job because of the disease may be to lose insurance coverage as well." Hammond & Shapiro, *AIDS and the Limits of Insurability*, 64 THE MILBANK Q. 143, 163-64 (Supp. 1, 1986).

82. See *infra* Part III, subpart C.

83. The end stage renal disease program provides that kidney dialysis and other medical services will be provided to individuals determined to have end stage renal disease. 42 U.S.C. § 1395rr (1982).

84. 119 CONG. REC. 5898 (1973).

85. This is an estimate by James Curran of the Centers for Disease Control. Barnes, *AIDS: Statistics but Few Answers*, 236 SCIENCE 1423, 1425 (1987).

close to ten billion dollars per year.⁸⁶ Yet the mere possibility of HIV being communicable was the ground on which the Orange County Board of Education attempted to exclude Mr. Chalk as being not otherwise qualified.⁸⁷

A summary of the views of the vast majority of members of Congress who voted for this legislation can be shown by the statement of Congressman Wolff, who said: "The major thrust of the bill is to help the handicapped become independent and actively contributing members of our society."⁸⁸

It should be clear that the intent of Congress was to encourage the employment of handicapped workers to the fullest extent possible. Yet Congress was also mindful of the costs to the Treasury of training and education. If handicapped workers are not employed to their maximum potential, given the training that they have received, funds that went into their education would be wasted. If a person is trained to be a teacher of hearing impaired children, it is a waste of the funds used to educate him if he is removed from an available position solely due to unfounded fears regarding his handicap. By enacting section 504, Congress demonstrated its intent that the funds used to educate and train handicapped workers should not go to waste.

Removing handicapped workers from the positions for which they were trained destroys their human capital and removes incentives for them to train themselves. For a worker to become productive in a complex technological economy, he or she must be trained. That training is the product of the time, money, and efforts of the worker together with inputs from educational institutions. A person who makes the decision to learn the skills of a specific profession must expect that the extra wages and the particular working conditions will be sufficient to compensate for those costs. This view of a person investing in his or her "human capital" is the accepted mode of analyzing the choices people make in educating themselves.⁸⁹

If a worker is removed from his or her position in the work force, the result is to take that "human capital." This act has two effects. Most immediately, the actions of an employer removing a person from the position for which he or she has trained will decrease the return on the investment in that human capital. For this effect to occur, it is not even necessary for the worker to be terminated from employment. Even the reassignment of a worker can reduce the actual compensation that the worker receives. Given the years of training, it should be obvious that the salary is not the sole compensation that a teacher receives from his or her position. Other

86. Professors Anderson and Quigley of the Department of Economics at University of California at Berkeley estimated the effects of the Acquired Immune Deficiency Syndrome Initiative (Proposition 64) proposed to the voters of California in 1986. That initiative may have required that all workers infected with HIV in the State of California in the education and food handling industries would lose their jobs. They estimated the costs in lost output within the state would have been \$2.3 billion in 1987-88, increasing to \$4.9 billion in 1990-91. Of the 1 to 1.5 million individuals in the United States who are infected with HIV, 300,000 reside in California. Therefore, the costs to the United States of eliminating AIDS carriers from just these two industries would be approximately three to five times the costs to California or \$7 to \$12 billion in 1987-88. Anderson & Quigley, *The Economic Impact of the Adoption of Proposition 64, The LaRouche Initiative* (Aug. 1986) (on file with the *Ohio State Law Journal*).

87. *Chalk v. United States Dist. Court Cent. Dist. of Cal.*, 840 F.2d 701 (9th Cir. 1988).

88. 119 CONG. REC. 7113 (1973).

89. G. BECKER, *supra* note 66.

working conditions, including contact with students, in the case of Mr. Chalk,⁹⁰ can be as important as salary in choosing a profession.

It is not enough for the handicapped worker to be given a substitute job that does not fit his or her potential when he or she is removed from a position for which his or her training is more appropriate. As Senator Dole said in the debate before the passage of the Rehabilitation Act of 1973: "The primary goal of this bill is to assist handicapped individuals in achieving their *full potential* for participation in our society."⁹¹ An employer discriminates by removing a handicapped employee from the position for which he has qualified himself, due solely to the handicap, even when the employer substitutes another position at equal pay.

Both the loss of potential by the underemployment of the worker, and the stigma attached to the separation⁹² of the worker from a position of contact with others are contrary to the purposes of section 504. The sponsors of the Rehabilitation Act were clear that it would be considered discriminatory to segregate a handicapped person based upon the majority's mere unease from associating with the "different" one. Congressman Vanik cited a graphic case to show that separation based upon aversion should constitute illegal discrimination: "In one case a court ruled that a cerebral palsied child, who was not a physical threat and was academically competitive, should be excluded from public school because his teacher claimed his physical appearance 'produced a nauseating effect' on his classmates."⁹³ Thus, even the reassignment of an otherwise qualified handicapped person from a position with contact with other people to one in isolation is illegal discrimination under section 504.

The second effect is that people may be discouraged from pursuing certain career paths if they expect that they may not be able to receive all the compensation normally available to others choosing that occupation. The intent of Congress in passing the Rehabilitation Act of 1973 was that handicapped persons should not be discouraged from pursuing any occupation for which they are otherwise capable. Yet, if employers can remove handicapped workers from their positions based upon the *fears* others may have, handicapped workers will be dissuaded from choosing careers for which they are otherwise qualified. Therefore, discrimination based upon infection with HIV or upon having the symptoms associated with AIDS will result in inefficiencies in both 1) lost production that the AIDS sufferer could have performed, and 2) losses in human capital when people may be discouraged from investing in their training by learning skills appropriate to their chosen field due to fears of never being able to use the skills productively.

90. *Chalk*, 840 F.2d 701.

91. 119 CONG. REC. 24,589 (1973) (emphasis added).

92. As Chief Justice Warren noted in *Brown v. Board of Educ.*, 347 U.S. 483 (1954), speaking of the effects of segregation on young black schoolchildren: "To separate them from others . . . solely because of their race generates a feeling of inferiority as to that status that may affect their hearts and minds in a way unlikely ever to be undone." *Id.* at 494. The effects on handicapped persons is quite similar. Justice Brennan found in *School Bd. of Nassau County v. Arline*, 480 U.S. 273, 278 n.2 (1987) that "negative attitudes and practices toward the disabled resemble those commonly attached to 'underprivileged ethnic and religious minority groups.'" *Id.* at 1126 (citing tenBroek & Matson, *The Disabled and the Law of Welfare*, 54 CALIF. L. REV. 809, 814-15 (1966)).

93. 117 CONG. REC. 45,974 (1971).

B. *Discrimination in Education*

The incidents throughout the country that resulted in various children being excluded from school due to their infection with HIV are compelling testimony of the extent of the fear surrounding this disease. While these children are "innocent," either having contracted the infection by blood transfusion or the receipt of blood products to treat hemophilia, or occasionally *in utero* from their infected mothers, a combination of panic and hatred has resulted in some strenuous efforts to exclude infected children from school.⁹⁴

It is clear that the exclusion or segregation of children with HIV infection is inefficient. As with discrimination in the workplace, the only economic gain comes to those who choose to exclude. They receive psychic compensation from their ability to operate in an environment without infected individuals. Judge Posner described these in his treatise in the context of racial, religious, or ethnic discrimination:

Some people do not like to associate with members of racial, religious or ethnic groups different from their own and will pay a price to indulge their taste. [This contact] imposes nonpecuniary, but real, costs on those members of either race who dislike association with members of the other race.⁹⁵

On the other hand, if HIV were casually transmissible, then there could be significant pecuniary costs, due to increased risk of premature death and illness to the children and school employees with whom the infected child came in contact. These costs, while material, are not infinite and it still might be inefficient to exclude infected children from school. Suppose, contrary to our understanding of the infectiousness of the disease, that HIV were transmissible approximately three percent of the time over a one year period of casual contact.⁹⁶ This assumption would imply that in a classroom of thirty students, one additional child per year could be expected to become infected from the originally infected child. If twenty to thirty percent of those infected with HIV develop AIDS (or ARC) within five years,⁹⁷ then for every three to four infected children, AIDS would occur in one additional person. The best current estimate of the medical costs of treating a patient with AIDS is approximately \$100,000 over their lifetime,⁹⁸ while losses attributable to lost income for a child could easily exceed \$1,000,000. Consequently, for this set of assumed facts, if the costs to the presently infected children from being excluded from school exceeded twenty to thirty percent of the expected costs to the new AIDS patients

94. See, e.g., *Board of Educ. v. Cooperman*, 209 N.J. Super. 174, 507 A.2d 253 (Super. Ct. App. Div. 1986), *aff'd as modified*, 105 N.J. 587, 523 A.2d 655 (1987); *In re Dist. 27 Community School Bd. v. Board of Educ.*, 130 Misc. 2d 398, 502 N.Y.S.2d 325 (Sup. Ct. 1986).

95. R. POSNER, *supra* note 16, at 615.

96. As shown in Part II *supra*, the actual estimated rate of transmission through casual contact is zero percent. See *supra* note 28 and accompanying text.

97. This is the Public Health Service (PHS) estimate. *Human Immunodeficiency Virus Infection in the United States: A Review of Current Knowledge*, 36 MORBIDITY AND MORTALITY WEEKLY REP. 1, 4 (Supp. S-6 1987) [hereinafter *Review*].

98. It has been difficult to compile an accurate estimate of the medical costs of AIDS. The estimates vary by region, by the time when the disease was first diagnosed, and by the payor (government, private insurer, or patient). Estimates of lifetime hospital cost per patient vary from \$24,517 to \$147,000. *Estimates*, *supra* note 80, at 6. See also Ricklefs, *supra* note 49.

(\$220,000 to \$330,000), it would quite possibly make sense to keep contagious children in school. However, AIDS is not casually contagious so these estimates of losses are tremendously exaggerated and thus inapposite.

Two possible types of costs to the excluded students exist. Exclusion could be universal or only certain districts could discriminate. If the exclusion policy were universal, or nearly so, then the students would lose all the benefits of formal education. Two principal economic benefits of the formal educational system can be articulated: 1) developing interpersonal relationships (and developing the skills needed to form them)⁹⁹ and 2) enhancing human capital. It might be argued that while there are losses to HIV positive students from associational losses, forcing the majority to associate with the unwanted minority would likewise cause associational losses to the majority.¹⁰⁰ However, even if HIV infected children could be educated (and thus receive the human capital component) without contact with uninfected children, they would still lose more from forced segregation than would the majority from forced integration.

Judge Posner analyzed this situation in the context of racial segregation in the schools. He suggested that "[b]ecause blacks are an economic minority, the costs to them of the whites' prejudice are proportionately much greater than the costs to the whites."¹⁰¹ The reason for the disparity is associated with the economic importance of the majority.

Segregation reduces the opportunities for valuable associations between the races and these associations would be especially valuable to the blacks because of the dominant position of the whites in the society. The Court had recognized the point in *Sweatt v. Painter* [339 U.S. 629 (1950)], which held that blacks could not be excluded from state law schools. The Court pointed out that black students in a segregated law school would have no opportunity to develop valuable professional contacts with the students most likely to occupy important positions in the bench and bar after graduation. It rejected the argument that this disadvantage was offset by the disadvantage to white students of being barred from associating with black law students, noting that the blacks' weak economic position in the profession made such associations less valuable to white students.¹⁰²

The analysis of the losses from associational discrimination against schoolchildren with AIDS follows the same logic. There are far fewer children who are HIV positive than even those who are black.¹⁰³ If HIV seropositive students could only have contact with other HIV positive individuals, they would have an exceedingly small group from which to draw either personal friendships or potential business relationships. But the size of the pool is not the sole, or even the most important

99. The advantages of being together with the same age cohort are examples of the ways in which formal education fosters interpersonal skills.

100. This was the argument made by Professor Wechsler in his famous argument against the decision of the Supreme Court in *Brown v. Board of Educ.*, 347 U.S. 483 (1954). Wechsler, *Toward Neutral Principles of Constitutional Law*, 73 HARV. L. REV. 1, 34 (1959).

101. R. POSNER, *supra* note 16, at 619.

102. *Id.* at 617-18.

103. Approximately .2% (two-tenths of one percent) of women of childbearing age in Massachusetts are infected. The risks of HIV transmission from an infected mother to her fetus is approximately 40%. Therefore, less than .1% (one-tenth of one percent) of children receive the HIV virus from their mothers. Also, approximately 70% of persons with hemophilia A and 35% of those with hemophilia B are HIV positive. *Review*, *supra* note 97, at 3, 6-7.

measure of the losses from association. If a minority group that contained ten percent of the population also held fifty percent of the net wealth of the society, their exclusion from the rest of society would probably result in a net pecuniary benefit to them. They would find it easier to make contacts that would be useful in financial terms because the exclusivity of their associations increases the probability of their developing a relationship with someone who has some position or opportunity to offer to them. Thus, whether the wealthy group chooses to exclude itself from the rest of society, or the state enforces that exclusivity, *this* minority group would benefit to the detriment of the rest of society.

Children with AIDS are more similar to blacks than they are to the "blue bloods" in the socioeconomic advantages of associating with them. Children who are HIV positive tend to be poor, minority children of drug abusers. "Of the 350 AIDS patients who were children (i.e. < 15 years of age) and whose race/ethnicity was known, 204 (58%) were black and 77 (22%) were Hispanic."¹⁰⁴

Ninety percent of the children with perinatally acquired AIDS compared with 42% of the children with hemophilia—or transfusion associated AIDS were black or Hispanic. . . . As with adults, the proportion of pediatric patients who were black or Hispanic was highest in the transmission categories associated with IV drug abuse by at least one of the parents.¹⁰⁵

Children infected with HIV, like black children, are in a subgroup which would have significant social costs due to either exclusion from school or segregation within the educational system.

The other cost associated with AIDS discrimination is the loss by HIV infected children of some portion of their human capital. While no reported cases exist where a child has been permanently and totally excluded from all educational opportunities, the costs of missing a year or more of school while the judicial process is operating can be a very high cost to a child. Focussing only on the most obvious pecuniary cost, a child who is excluded from school for one year loses his or her last year of earning capacity, and must postpone every year of earning by one year. If a person would have earned \$25,000 upon graduation from college after sixteen years, and instead graduated after seventeen years, she would lose the difference in present value between sixteen and seventeen years in the future. The present value of \$25,000 at eight percent simple interest sixteen years in the future is \$7292.50. The present value of \$25,000 at eight percent simple interest seventeen years in the future is \$6750.00. Thus, even using such conservative assumptions as these, the loss in the *first year* from a one year delay due to the judicial process would be \$542.50.

Every working year thereafter would also manifest a similar, although progressively smaller, loss. For instance, the difference between earning the \$25,000 in the

104. *Blacks and Hispanics*, *supra* note 46, at 655.

105. *Id.* at 658. Of the 350 children, 18 had hemophilia or other clotting disorders, 49 were blood transfusion recipients, 200 were born to a mother who was an IV drug abuser or whose male sexual partner was an IV drug abuser. The other 33 were either children of bisexual men or of mothers with unknown risk factors. Of those who were infected through blood products 39 (58%) were white. Of those children whose parents were IV drug abusers 18 (9%) were white. *Id.* at 665 (reference to table 3).

fifth year after college instead of in the fourth year is \$397.32.¹⁰⁶ The total present value of the loss using these conservative assumptions (no raises or inflation and eight percent discount rate) is \$6757. Every additional year in which the child's education is postponed results in similar costs.

If a child is older than five when she is excluded from school and forced to postpone her education, higher costs will result. For example, if a sixteen year-old child must wait until she is seventeen to start her final year of high school, the *first year* loss will be \$1260 and each subsequent year of loss will also be larger than the younger child's succeeding years.¹⁰⁷

This type of loss, from postponement due to the judicial process, will also impact those suffering discrimination in the labor market. In fact, a person currently in the labor market will suffer considerably more from the postponement of one year of work. The first year loss to a person earning \$25,000 would be \$1851.85 using the same economic assumptions as in the education examples.¹⁰⁸

Consequently, quite significant costs associated with discrimination on account of HIV infection exist both against those in the labor market and against school children. Economic efficiency provides a strong argument for forbidding discrimination and for simplifying the judicial process so that a victim of discrimination might not be subject to the personally significant costs that delay engenders.

C. Insurance Issues

The average person with AIDS will incur approximately \$100,000 in medical costs over his or her remaining lifetime,¹⁰⁹ and the fatality rate is quite significant. Approximately seventy-five percent of those diagnosed with AIDS before January 1983 had died by the end of August 1985.¹¹⁰ In addition, approximately twenty-five percent of those infected with HIV will contract AIDS or ARC within the first five years of infection.¹¹¹ Such high rates of mortality and the substantial magnitude of health costs pose a problem for the private insurance industry that bears substantial portions of the risk of medical costs through health insurance, and of the risk of mortality losses through life insurance.¹¹² No easy answers have been proposed to dictate which rate differentials based upon HIV infection will be efficient and fair.¹¹³

106. That is the difference in the present value of \$25,000 21 years in the future (16 years plus 5) and 20 years in the future (16 years plus 4). $25,000/(1/1.08)^{20} - 25,000/(1/1.08)^{21} = 5363.71 - 4966.39 = 397.32$.

107. The example assumes that the child will graduate from college four years after high school. Thus, the postponement for one year implies that it will take six years (four years for college, one year postponement, plus one year for high school) rather than five years without the postponement. The difference in present value is thus $25,000/(1.08)^5 - 25,000/(1.08)^6 = 1260.34$.

108. $25,000 - (25,000/1.08) = \1851.85 . This is the difference between \$25,000 today and the present value of \$25,000 one year from today which is \$23,148.15. The person would also lose the \$25,000 in actual salary.

109. See *supra* note 98 and accompanying text.

110. Curran, *supra* note 19, at 1352.

111. See *supra* note 28 and accompanying text. AIDS alone will be contracted by approximately 15% of those infected with HIV within the first 5 years. Curran, *The Epidemiology and Prevention of the Acquired Immunodeficiency Syndrome*, 103 ANNALS OF INTERNAL MED. 657 (1985).

112. The costs of medical care for AIDS patients has been estimated to reach into the tens of billions of dollars per year in the next decade. O'Brien, *Will the Nation's Health Insurers Survive the AIDS Epidemic*, THE INTERNIST, Apr. 1987, at 14.

113. In a private insurance market, an efficient rate structure will be a fair one. There may be many ways to

Yet, it can be shown that the exclusion from coverage of those persons who are HIV seropositive can lead to inefficiencies in the insurance market. While HIV infection is a significant risk of increased death, it is not among the most significant risks even for the age group most at risk.¹¹⁴ For us to see the conditions under which variations in coverage are legitimate, we must begin with a basic understanding of the insurance market.

Insurance is the means by which the market spreads risks. An organization that has broad-based risks may be able to self-insure, that is, it may be able to spread its risks internally. For individuals and families who generally do not have the ability to spread risks of disasters internally, there are three sources of insurance: self-purchased, employer-provided, and government-funded. We use each of these forms of insurance to spread the risks of premature death (and the costs to the decedents' families) and of extended illness (and the attendant medical costs and decline in salary if the ill person is unable to work). It is important to remember that we cannot avoid these costs by shifting them, whether the costs of premature death and extended illness are borne by the individual or by society. Spreading the risk, however, will lessen their effect.

The advantage of cost spreading can be explained by a simple example. If there were one chance in one million that a farming family living in Iowa would lose their house, worth \$50,000, to a tornado, they could spread the risk in a number of ways. The family could assume all the risk. That would mean that one family would suffer a loss that could destroy their economic viability. They might be forced to lose their farm (as well as their home). They certainly would be less able to invest in improvements to their farm if they had to rebuild their home out of their savings. On the other hand, if there are one million families in Iowa who own homes, they could each buy insurance for \$0.05¹¹⁵ (plus a small handling charge) per year. This cost would not have a significant impact upon anyone who owns a \$50,000 home. Everyone participating in the insurance market would be better off (as long as they do not know whether they are going to be the one hit that year or not).

Insurance does not perform this social cost reduction function as well if people in the market know, with some increased certainty, that they will be the victim (and thus be paid). To take the most obvious example, if a person buys fire insurance for his factory knowing that he has hired an arsonist to burn it down, he is using his special knowledge of the circumstances to defeat the purpose (and social gain) from the insurance. No longer is insurance a means of spreading *risks*; there are no risks to this purchaser. The insurance contract is a fraud and it is used by the insured to redistribute money to himself.

categorize risk groups, either broadly or narrowly depending on the accurate information available to the underwriter. But within any structure, if an insured pays the expected costs of the risks to his or her group, plus a fee for administrative expenses, that premium will be efficient. It will also be fair in the sense that each insured will be paying for the service that he or she is actually receiving. For a detailed description of the structure of an efficient insurance system in the context of the AIDS epidemic, see Hammond & Shapiro, *AIDS and the Limits of Insurability*, 64 THE MILBANK Q. 143 (Supp. 1 1986).

114. See *infra* note 125 and accompanying text.

115. A one in a million chance of losing \$50,000 is equal to a nickel. $\$50,000/(1/1,000,000) = \0.05 .

Health insurance companies, when they are underwriting personal health insurance policies, typically exclude coverage for preexisting conditions. Thus, a person who already has developed the symptoms associated with AIDS or ARC would find it impossible to find private insurance coverage at market rates. This is a fair and efficient provision of both private health and life insurance policies.¹¹⁶ When a loss is certain, or nearly certain, the private insurance market is not an efficient risk spreader. The inefficiency arises because lower risk persons will refuse to pay premiums for policies in which they cannot expect to receive a fair return.¹¹⁷ They do not receive a fair return if certain insureds will receive *expected* benefits far in excess of their premiums. Anyone with an expensive preexisting condition, like AIDS, will receive that redistributive payment.

HIV infection poses a similar problem, but the solution is not simply to exclude those with an infection from all coverage. An asymmetry of knowledge of risks¹¹⁸ may defeat the function of insurance to spread risks fairly in cases that do not involve a certainty of loss. For example, assume smoking in bed significantly increases the risks of a house being destroyed by fire. If the insurance company neglected to inquire, or the smoker refused to answer accurately a question regarding this behavior, this might also decrease the efficiency of the insurance function. This type of asymmetry of information, however, may not defeat the risk-spreading function of insurance, as the arson example will. The solution to this problem is to adjust rates properly to mirror the risks posed by each particular set of behaviors.¹¹⁹

The question of how to classify risks is the most complex and controversial aspect of insurance rate setting. An insurer could charge the same rate to everyone it insures, as Health Maintenance Organizations do when they set rates by community costs. On the other hand, an insurance company could construct a complex matrix of factors to determine its rates. When an insurance company charges different rates for men and women, smokers and nonsmokers, those who work in an office and those who work in a factory or on a farm, and so forth, it is setting rates by risk factors. There are many methods of classifying risks; some may increase the efficiency and fairness of the system, while others may result in economically inefficient rates. If the insurer only requires that certain factors that tend to increase costs be revealed, that may not allow as accurate a spreading of risks as if no factors are known by the insurer.

116. This does not imply that a person who receives his or her health and life insurance through a group policy through an employer should also be excluded because of a preexisting condition. In the case of group health and life policies, the group itself will be the population among which the risk is spread. As insureds cannot drop out of the coverage without cost (they must either give up their employment or the free insurance they get with it), there is low risk of the loss of the risk spreading function. The employer will bear the extra costs of the employee with AIDS. These costs are the principal extra costs that would encourage the employer to discriminate in hiring decisions. But as we previously saw, that discrimination is inefficient. See *supra* Part III, subpart A.

117. See *infra* discussion at Table 2.

118. The literature on asymmetry of knowledge begins with Akerlof, *The Market for "Lemons": Quality Uncertainty and the Market Mechanism*, 84 Q.J. ECON. 488 (1970). See also O. WILLIAMSON, *MARKETS AND HIERARCHIES* (1976).

119. Even this solution may not always be efficient. Often the costs of ascertaining and measuring the full set of risks may increase administrative costs by more than the savings through proper pricing. In this case, a rational insurer would ignore risks that its underwriters believed would increase the probability of the insured event.

Another example may help to clarify this last point. Imagine that there are five classes of drivers. Class A is composed of drivers with less than five years of experience. Class B comprises drivers who were involved in an accident within the past five years. Class C drivers drive when intoxicated at least once a week. Class D drivers exceed the speed limit by twenty miles per hour at least ten percent of the time. Class E is made up of drivers who have none of the mentioned characteristics. Assume that an average automobile accident (regardless of who is involved) results in \$100,000 in costs, and the insurance policy is for \$100,000 in liability coverage. Also assume that in any year: class A drivers have a two percent chance of causing an accident; class B drivers have a one percent chance of causing an accident; class C drivers have a five percent chance of causing an accident; class D drivers have a three percent chance of causing an accident; and class E drivers have a 0.75% chance of causing an accident. Next assume that there are one million drivers, of whom fifteen percent are in class A; twenty percent are in class B; five percent are in class C; twelve percent are in class D; and forty-eight percent are in class E. The following TABLE 1 describes the costs and likelihood of accidents.

TABLE 1
RISK GROUPS AND INSURANCE

Group	Risk	No. of Insured		Cost	Per Driver
		Drivers	Accidents		
A	.02	150,000	3000	300,000,000	\$2000
B	.01	200,000	2000	200,000,000	\$1000
C	.05	50,000	2500	250,000,000	\$5000
D	.03	120,000	3600	360,000,000	\$3000
E	.0075	480,000	3600	360,000,000	\$ 750
Total		1,000,000	14,700	1,470,000,000	
Average	.0147				\$1470

This table demonstrates the nature of risk pooling in a situation with no rate differentials and with universal coverage. Groups B and E will on average subsidize groups A, C, and D. Members of group B can expect to incur only \$1000 in benefits from this insurance, which will cost each of them about \$1500. On the other hand, members of group C can expect to generate \$5000 in costs, for which they will only be charged \$1500, yielding a net expected benefit of \$3500. However, these are only *expected* benefits. Only if a member of group C is involved in an accident will he or she receive an actual net benefit. If they are accident free, they will be subsidizing all the members of the population, whether in group C or even E, who actually were involved in a collision.

Many insurance companies will base their rates or coverage on the expected risks imposed by members of identifiable groups. In these circumstances, if an insurance company only asked whether a person had been involved in an accident and denied coverage, based upon that categorization, that choice could result in a less efficient spreading of risks than not categorizing at all. Assume the company charges

a base rate of \$1500 per year to cover its expected losses and its administrative expenses and profit. Also assume that it refuses to insure class B. Thus, drivers in class B must self-insure. If class B drivers must self-insure, then the pool of insured drivers will be reduced as shown below in TABLE 2.

TABLE 2
RISK SPREADING WITH REDUCED POOLING POPULATION

Group	Risk	No. of Insured Drivers	Insured Accidents	Cost	Per Driver
A	.02	150,000	3000	300,000,000	\$2000
B	.01	0	0	0	0
C	.05	50,000	2500	250,000,000	\$5000
D	.03	120,000	3600	360,000,000	\$3000
E	.0075	480,000	3600	360,000,000	\$ 750
Total		800,000	12,700	1,270,000,000	
Average	.0159				\$1588 ¹²⁰

By refusing to insure a group of drivers whose risks are lower than the average risk, the insurance company has increased its own risks, increasing the costs to all drivers.¹²¹ Insured drivers pay more, and the uninsured drivers must bear the risks of accidents on their own. By choosing to use only certain characteristics, either because they are easy to identify or because there are societal pressures encouraging the insurer to classify only certain of the risks that it could identify, the advantages of risk-spreading are diminished. In addition, as the gap between the accurate price that should be charged to members of group E (somewhat above \$750) and the actual premium increases, increasing numbers of class E members will no longer purchase insurance from this company. This is the problem of adverse selection, in which low risk insureds choose to self-insure, or to find insurers who will do a better job of excluding (or properly pricing) higher risks.¹²²

To decrease the total costs of accidents, insurers attempt to identify high and low risk characteristics. It is believed that insurance itself may change the way in which certain people behave. This effect is known as moral hazard.¹²³ For example, if individuals have life insurance, they may be more willing to take risks that could end their life. This will be particularly true if a concern that their family is provided for is a significant factor in their desire to continue to live. Thus, life insurance may increase the risk of death. Another example demonstrates the income effect of insurance. If individuals have health insurance, they may be more likely to use medical facilities than if they are uninsured both because they are subsidized in their

120. This table was constructed to demonstrate the point that eliminating a low risk group would increase the total risk of this insured population. Clearly, varying the risks or the size of the groups would affect this outcome as the total risk and the proportion of the risk attributable to each group will change.

121. The risk of an accident by group B is 1%; the risk of the entire insured group is 2.1%. By eliminating a relatively low risk group, the rest of the insured drivers find themselves paying for a higher set of risks.

122. Hammond & Shapiro, *supra* note 113, at 150-51.

123. *Id.* at 148.

purchase of medical services and because they have more funds available for all purchases.¹²⁴ In this case, health insurance may increase the costs of medical care.

To the extent that moral hazard is identifiable, it might be worthwhile to try to adapt the insurance policy provisions in order to decrease this socially inefficient effect. Most life insurance policies refuse to cover suicide, and fire insurance policies exclude arson by the owner. Often health insurance and life insurance policies give discounts to nonsmokers (or increase the premium for smokers) in an attempt to encourage some smokers to stop smoking, thus decreasing the expected costs to the insurer.

Infection with HIV may be an appropriate characteristic upon which to base premiums for life and health insurance. However, it is unlikely to be an efficient reason for excluding a person from all life and health insurance. If a life insurer chose to exclude coverage for any insured single man who died of AIDS, that could result in a mismatching of risks and costs as in the example in Table 2. AIDS is simply not an unusually important cause of premature death. Of the 642,400 years of potential life lost by single men aged 25 to 44 years in this decade, accidents are by far the most important cause, with homicides and suicides approaching accidents in importance.¹²⁵ One hundred eighty-eight thousand years of potential life in this group were lost by accidental means and 174,600 were lost by homicide and suicide.¹²⁶ AIDS is comparable to cancer as a cause of premature death in this age and sex group: there are 39,500 years of potential life lost to cancer and only 32,300 to AIDS.

These facts demonstrate that AIDS is not an unusually important cause of death, nor is its exclusion necessary to prevent the destruction of the insurance market. It is, therefore, inappropriate to exclude coverage for costs attributable to AIDS from either group or individual health or life insurance policies unless all of the higher risk losses are also excluded. In addition, it would be inappropriate to exclude all HIV positive individuals from coverage. While HIV seropositivity does correlate with the occurrence of AIDS, there are equivalent factors which correlate with the more frequent causes of premature death.

For instance, there are identifiable persons who are more likely to be victims of homicide. Certain inner city neighborhoods have a much higher than average homicide rate, yet there is no exclusion from health or life insurance based upon such "red-lining." There are both genetic and environmental factors that correlate with the deaths by suicide or cancer, yet there is no exclusion of coverage based upon these factors. There is no reason to believe that the five percent annual probability of contracting AIDS if one is HIV positive is any higher than the conditional probability of death from the more common causes. Thus excluding HIV seropositive persons

124. This effect may or may not improve the health of the insured person. Sometimes marginal medical expenditures are not efficacious in curing or mitigating the effects of disease. For example, a person who believes she has a cold may not see a physician if uninsured, but may see her physician when she is insured. Sometimes that expenditure may result in the physician finding a pneumonia or influenza that is treatable, making the expenditure efficacious in disease treatment rather than just reassurance. Even reassurance has value, but it has less value than the ill person is willing to spend in the absence of insurance.

125. Years of potential life lost is the number of years below 65 that a person died. Curran, *supra* note 111, at 1353.

126. *Id.*

from health or life insurance results in the omission of low risk categories. This is the type of exclusion that the examples in Tables 1 and 2 show to result in inefficient risk-spreading.

Yet, if AIDS costs are to be covered, HIV seropositivity may provide a means for an infected person to use information asymmetry to purchase insurance at a discount below the fair and efficient rate. A person who is infected with HIV should know that he has a twenty-five percent chance of suffering from AIDS within five years, with its attendant \$100,000 in medical costs. Thus, he can expect to cost the insurance company \$25,000 more than a similar uninfected person over the eight year period of infectivity until death. Similarly, a person who knows he is infected has increased his chances of dying within eight years by nearly twenty percent.

It would not be inefficient to charge such a person for these increased risks, just as it is not inefficient to charge a smoker for the actual increased risks attributable to smoking. Life insurance premiums should increase by twenty percent and health insurance premiums by approximately \$3000 per year for a no copayment, non-deductible policy. This conclusion is dependent upon the insurer properly pricing not only the increased risks due to HIV, but also other factors that may increase the risks of poor health or death. Precancerous conditions, suicidal tendencies, susceptibility to homicide, behaviors that increase the risks of accidental death all should be included as pricing factors to be sure that persons who are HIV seropositive are charged efficient premiums.¹²⁷

There are overwhelming problems in constructing this complex system in which everyone pays the appropriate price for insurance based upon their own mix of existing risks. Two reasons exist for this quandary. First, it may be beyond the competence of the insurer to calculate the premium rates correctly for the various groups as the company will not have accurate knowledge of the risks.¹²⁸ Second, and more importantly, the company may not have knowledge of all the high risk characteristics of the insureds to assign each to the correct risk pool.

AIDS should be treated similarly to other causes of increased risk of death and medical expenses by adjusting the premium based upon HIV seropositivity. One danger with this formula is that, as the population that is at increased risk of contracting AIDS is comprised of groups that have traditionally been discriminated against, persons who are HIV positive will be excluded from insurance coverage when other groups with conceptually similar risks (sky divers, recreational fliers, drinkers, and so forth) will be treated as though they belong to a low risk population. The second danger is that if HIV testing becomes accurate, ubiquitous, and accessible enough for insurers to base premium calculations upon it, the test results could be used by others for purposes that are not socially beneficial: employment and housing discrimination, educational segregation, and decisions by medical personnel not to treat, as well as decisions of insurers not to issue a policy at any fair price.

But private insurance may not be the best means of spreading the costs of

127. See Hammond & Shapiro, *supra* note 113, at 161-62.

128. This is the problem of ratability. *Id.*

disease. The problems of adverse selection and of information asymmetry both imply that without fair and accurate prices that reflect the actual risks an individual faces, low risk individuals will be charged more than their expected costs. They will then opt out of the insurance market, presumably increasing prices to those remaining in the market. If risk pooling or the provision of adequate medical care are the principal goals of insurance, it is better to have as large a pool as possible, thus a national health insurance system would be preferred. However, it is beyond the scope of an article on AIDS to address adequately the myriad of issues involved in such a system.

IV. REMEDIES AND CONCLUSION

The nature of AIDS necessitates extraordinary measures to combat the disparate modes of discrimination that have and may manifest themselves. As a person with AIDS can expect to die within two years of diagnosis, the ordinary legal and administrative processes provide inadequate remedies. In addition, money damages are usually incapable of compensating the person with AIDS who has suffered from discrimination for the losses engendered by the intolerance. The early expected death of the AIDS sufferer implies that he or she will not be able to employ the money compensation to purchase those goods and services that would simulate the world without bias. Only the swift grant of an injunction could prevent the expected damage caused by the discriminatory acts.

Since most cases of AIDS are located in relatively few cities, and since these communities are probably most aware of the particular biases and issues that are confronted by AIDS sufferers, it would be preferable for cities to provide local review boards with the necessary powers to enjoin the bias or otherwise correct the consequences of discrimination.

The remedial measures needed to prevent and correct the effects of inefficient discrimination (bias) vary depending upon the characteristics of the population of HIV seropositive people. The concerns of upper-middle class gays will differ in many respects from the needs of lower class intravenous drug abusers. It will not be a sufficient response to minimize the social costs of AIDS, including the costs of bias, to assure that no one infected with HIV can be denied employment, education, or other civil rights based upon their seropositivity.

Unless society, in both its private and government sectors, continues to undertake positive steps to combat the spread of the disease, the social costs will continue to mount. It is unprincipled to suggest that people with AIDS or HIV infection will be able to combat the disease on their own. Intravenous drug users have shown themselves to be particularly unable either to provide for their own medical care or to change their own behavior to prevent the further spread of the disease. I will conclude this Article with suggested remedies that should be appropriate for the needs of the two principle communities that have had relatively higher incidence of AIDS: gay men and minority intravenous drug users.

A. Remedies for the Gay Community

The epidemic of HIV infection has increased the normally high degree of bias against gays in the United States.¹²⁹ If our society did not already discriminate against gays, there would be far fewer reasons to be anxious about bias against people with AIDS.¹³⁰ However, many gays feel that in order to succeed in our society they must hide facts that might reveal their sexual orientation from those who may have power over them concerning their employment, housing, education, and so forth. If discrimination on the basis of seropositive HIV antibody tests were legitimate, then employers, landowners, school officials, and insurance executives would have a tool by which they could identify gays and then exclude them.¹³¹ To prevent uneconomic discrimination, the HIV antibody test should not be used for any selection purposes (except for the purpose for which it was designed—to screen donated blood to prevent the spread of AIDS).

Two remedies exist that will help decrease the social costs the AIDS epidemic has placed upon the gay community. The first is a classic civil rights remedy. Discrimination on the basis of HIV infection should be prohibited. Persons who claim that they have suffered such discrimination should be able to apply to a court, or other tribunal, for a temporary restraining order that would prohibit the complained of exclusion until the tribunal could decide whether the ostracism was due to AIDS or some other legitimate reason.¹³²

The costs of a possibly mistaken preliminary decision by the court should determine whether a preliminary injunction should be granted.¹³³ The person being enjoined could have made a legitimate decision to refuse to hire, fire, admit, and so forth, based upon the lack of essential qualifications possessed by the plaintiff. A decision to grant a preliminary injunction involves two types of costs. First, the employer would be paying a wage to an employee who is not qualified for the position, or an insurer might grant a policy to a person who is not an acceptable risk given the terms of the policy. Second, and more importantly,¹³⁴ the employer or school may not be able to offer the position to a more qualified candidate losing the

129. *Fear of AIDS Stirs New Attacks on Homosexuals*, N.Y. Times, Apr. 24, 1987, at A12, col. 4.

130. See *supra* note 40 and accompanying text.

131. The tool, of course, is not a very good one; it may be overinclusive, revealing individuals to be seropositive who are not gay (or even drug users). The test may also be underinclusive, in that gays may be HIV seronegative and thus will not be detected by the test.

132. A temporary restraining order is an extraordinary equitable remedy granted to restrain changes in the status quo for a period of up to ten days. A temporary restraining order is granted after a summary or *ex parte* hearing. Irreparable injury and probability of success on the merits are the most significant factors to be considered by the judge when deciding whether to grant an application. 19 FED. PROC. L. ED. §§ 47:69-79 (1983).

133. The minimization of these transaction costs is a common goal in constructing a legal system. For example, to protect the parties in a long-term relationship from the risks of changes in that association, government regulation may be able to minimize the transaction costs inherent in recontracting. Both Goldberg and Williamson have shown how regulation in the area of public utilities has been able to minimize transaction costs while emulating the results that contracts could achieve only at higher costs. Goldberg, *Regulation and Administered Contracts*, 7 BELL J. ECON. 426 (1976); Williamson, *Franchise Bidding for Natural Monopolies—in General and with Respect to CATV*, 7 BELL J. ECON. 73 (1976).

134. See Coase, *The Problem of Social Cost*, 3 J. L. & ECON. 1 (1960) for the leading discussion of the primacy of these opportunity costs.

value of the difference between the "better" candidate and the plaintiff.¹³⁵ These costs would be incurred for the period of time from the injunction until final adjudication on the merits.

On the other hand, if the discriminator based his decision to ostracize the plaintiff upon irrelevant criteria, the plaintiff would lose all the benefits attached to that position. In addition, such bias would discourage other people with similar characteristics to the plaintiff from applying for the appointment or for similar openings. These costs would also be incurred for the period of time until a final adjudication on the merits was completed. The difference in effect between the two situations can only be seen when the attributes of the plaintiff and defendant are examined in detail.

Assume that a person in the same class as the plaintiff applies for similar openings or positions as the plaintiff. If there were no rampant discrimination against that class, he or she would qualify and be accepted for a variety of comparable positions. The loss would be limited to the lost time (and the concomitant lost opportunities) and the direct transaction costs of searching for an analogous situation.¹³⁶ On the other hand, if that person were subject to widespread discrimination, he or she would have to exert more effort and time in order to be accepted for a similar opening or position. Additionally, if the plaintiff had an abbreviated life expectancy, he or she might never be able to mitigate the damages by alternate placement, nor would money damages be received at a time when it could effectively lessen the impact resulting from discrimination. Since persons with AIDS have a shortened lifespan, coupled with omnipresent discrimination, they would seem to be the quintessential candidates for preliminary injunctions.¹³⁷

Certain employers, schools, or even insurance companies may have characteristics that provide cost-based arguments against presumptive preliminary injunctions. If an employer or other person who selects candidates for a position has very few slots into which candidates may be placed, the misselection for one slot may cost so much that the firm is forced out of business. For example, if a firm has three or even fifteen employees, one of whom is incapable of performing the required tasks of his or her position, the firm may be unable to absorb the temporary additional costs of that employee's salary and may be forced into bankruptcy.¹³⁸

For this reason, it may be sensible, when proposing antibias legislation that attempts to reduce the social costs of discrimination on account of HIV infection, to limit preliminary injunctions only to firms that are large enough to absorb the costs

135. Nothing in the arguments made in this Article should be construed as providing a basis for forbidding affirmative action. Affirmative action will reduce social costs when the selected candidate is a member of a group that requires special considerations to make up for past discrimination. *See Regents of Univ. of Cal. v. Bakke*, 438 U.S. 265 (1978).

136. In this situation, the only reason to allow any suit for the costs of discrimination is to discourage the defendant (and others similarly situated) from engaging in antisocial acts.

137. A preliminary injunction is a provisional equitable remedy granted after notice to the adverse party and a hearing. These injunctions are discretionary with the court considering these factors: 1) likelihood of success on the merits; 2) irreparable injury; 3) relative injury faced by the parties; and 4) effect on parties' interest. 19 *FED. PROC. L. ED.* §§ 47:47-62 (1983).

138. The Civil Rights Act of 1964, § 703, 42 U.S.C. §§ 2000e(2), 2000e-2(a) (1982) prohibits discrimination only in firms, in an industry which affects interstate commerce with fifteen or more employees.

of employing an occasional underqualified individual.¹³⁹ Small firms, however, should not be allowed to discriminate; it is argued only that they should remain free of preliminary injunctions when hiring or dealing with unwanted employees or purchasers. Therefore, even if a person claiming discrimination cannot enjoin his demotion or firing because of the costs involved in retaining an unqualified employee, money damages ought to be made available.¹⁴⁰

The only cogent argument against the application of antidiscrimination laws to persons with AIDS or HIV seropositivity is that social costs would be lowered by decreasing the spread of the disease. Thus, the law must not decrease the costs of contracting the disease through volitional behavior, such as unsafe sex or sharing contaminated hypodermic syringes. The assumption that punishment, in addition to the personal costs of contracting the disease, is needed to provide the appropriate incentives for changing unsafe behavior is simply not borne out by the facts.

Only in the relatively early years of the epidemic did gay men deny that their sexual practices ought to be changed to lessen the probability of contracting AIDS.¹⁴¹ In the past four years, gays have significantly changed their unsafe sexual practices, especially in locations where extensive education regarding safe sexual practices was encouraged. Between August 1984 and April 1985, the proportion of gay and bisexual men in San Francisco who abstained from unsafe sexual practices increased from nineteen to thirty-one percent.¹⁴² Clearly, the threat of premature death has been a sufficient deterrent from unsafe sex for the vast and expanding majority. Thus, there is little reason to expect that punishment in the form of loss of civil rights would be a greater incentive than the threat of painful death.

B. Remedies for IV Drug Users

Two characteristics differentiate drug users from gay men and indicate the need for special solutions. First, merely eliminating prejudice and its effects will not allow many drug abusers to compete for employment, education, or any of the benefits of a market economy when their drug use prevents them from being "otherwise qualified"¹⁴³ for positions. Second, to date no evidence exists that drug abusers have

139. Legislation is needed to assure that the social costs of discrimination are limited because the Rehabilitation Act only applies to discriminators who have accepted federal funds, and not every state has an antidiscrimination law that applies to handicaps due to communicable diseases. See Wasson, *AIDS Discrimination Under Federal, State, and Local Law After Arline*, 15 FLA. ST. U.L. REV. 221 (1987). The Americans with Disabilities Act of 1988, S. 2345, "[a] bill to establish a clear and comprehensive prohibition of discrimination on the basis of handicap," appears to have many of the needed provisions for appropriate antidiscrimination legislation for people with AIDS. 134 CONG. REC. S. 5106, 5107 (1988).

140. Under 42 U.S.C. § 1983, compensatory damages are recoverable for actual injury including lost wages or emotional distress. See, e.g., *Gurmankin v. Costanzo*, 626 F.2d 1115 (3d Cir.), cert. denied, 450 U.S. 923 (1980) (lost wages); *Carey v. Piphus*, 435 U.S. 247 (1977) (emotional distress).

141. See generally R. SHILTS, *supra* note 17, at 120-489.

142. Puckett, Bart, Bye & Amory, *Self-Reported Behavioral Changes Among Gay and Bisexual Men—San Francisco*, 34 MORBIDITY AND MORTALITY WEEKLY REP. 613 (1985). Twelve percent engaged in anal intercourse with secondary partners without a condom in the month of April 1985, down from 18% during August 1984. Seven percent engaged in oral sex with exchange of semen in April 1985, a 10% decrease from the 17% reported in August 1984.

143. Section 504 of the Rehabilitation Act prohibits discrimination only against those "handicapped individuals" who are "otherwise qualified." While there is some indication that drug addiction may be a handicap under § 504, some, although not all, persons whose drug habits include the sharing of needles, may be unable to function in many employment

altered their unsafe conduct on their own based upon fear of contracting AIDS. Heroin addicts undoubtedly find it quite difficult to alter their conduct, due to their addiction, even when they realize that behavioral changes might prolong their lives.

Since drug abuse itself is a growing source of discrimination, laws merely protecting a person against discrimination on the basis of HIV infection will do little to prevent the loss of employment, education, and other opportunities to members of this group. In addition, to the extent that HIV seropositivity can be used as a screening device¹⁴⁴ for drug use, as for homosexuality, drug users will have an additional incentive to avoid contact with services that could force them into a position where they could be tested, to the extent they fear the test may lead to their arrest.

This desire for confidentiality on the part of the infected drug users must be carefully considered in constructing any system to decrease the social costs of AIDS. A number of situations occur when discrimination may be particularly harmful in decreasing the spread of AIDS. Drug users who are, or suspect they are, HIV positive must be able to get treatment for both their addiction and for any symptom related to their infection without fear that they will be arrested or denied either the treatment or any other social benefits that they currently enjoy. The ability of a drug user to live "underground," out of the reach of the authorities, limits the ability of the state to use disincentives, including threats of jail and loss of civil rights, to curb either drug use or the unsafe practice of sharing infected needles.

The costs to society of attempting, by punitive measures, to decrease the use of addictive narcotics include: increasing police surveillance (with both budgetary costs and costs in decreased privacy); possible loss of otherwise qualified individuals from participation in productive activities (with its attendant decrease in production); and likely decreases in attendance in voluntary rehabilitative activities (with decreased costs of running these programs but with increased costs of continued drug use and other socially detrimental activities, including spreading AIDS). The benefits plausibly include decreasing the number of users, including deterring some nonaddicted individuals from beginning to use illegal, addictive substances. A balancing of these costs and benefits is difficult, but it points in the direction of few punitive sanctions for those already addicted. This implies that the law must be structured to assure addicted AIDS patients of nondiscriminatory treatment both for AIDS as well as for their addiction.

If, however, many addicted persons are not employed, governments must

situations. For findings that drug addiction is a handicap, see 28 C.F.R. § 42.540(k)(1) and (2) (1987); 38 C.F.R. § 18.403(j)(2)(C) (1987); 45 C.F.R. § 84.53 and pt. 84, app. A, subpart 4 (1987). See also *Davis v. Bucher*, 451 F. Supp. 791 (E.D. Pa. 1978).

Recent amendments to the Act clarified Congress' intent that *current* drug abusers would have little protection. The amendments excluded from the Act's coverage a "drug abuser whose current use of alcohol or drugs prevents him from performing the duties of the job in question or whose employment, by reason of such current alcohol or drug abuse, would constitute a direct threat to property or the safety of others." 29 U.S.C. § 706(8)(B) (Supp. 1987).

144. An HIV test could be used as a proxy for homosexuality or drug abuse as the principal modes of transmission have been gay sexual conduct and the sharing of needles by drug abusers. The proxy is a poor one on two grounds. First, it is overinclusive as many people have become infected by straight sexual practices or by the receipt of infected blood products or by infants from their infected mother. See *supra* text accompanying notes 31-35. Second, it is underinclusive as many gays and IV drug users still remain uninfected.

actively perform outreach to assure that they receive the education, medical care, and counseling necessary to abate the spread of the disease. A right to equal treatment is not enough in this case. The same attributes that disqualify drug addicts from employment, namely lack of attention to detail and inability to remain focused on tasks, also make it unlikely that they will change their HIV spreading activities (sharing of needles and unprotected sex) without an adequate program of supervised care.

Lowering the social costs of AIDS requires a two-pronged attack. First, antidiscrimination legislation is important to protect those persons who are HIV seropositive from irrational and inefficient discrimination. Second, positive programs are also needed to prevent similar harms from befalling those individuals who are unable to merit the needed services through the market system. Programs that educate, encourage, and motivate those who have not yet been reached by the public outreach are the only available tool to prevent the further spread of the disease.

Finally, research into new and more effective means of treating or mitigating the effects of the disease will be seen as worthwhile for a disease that may infect several million persons at a cost of several hundred thousand dollars per person. With social costs of that magnitude, continued growth of medical research is simply an efficient investment.