HIV TESTING OF HEALTH CARE WORKERS: CONFLICT BETWEEN THE COMMON LAW AND THE CENTERS FOR DISEASE CONTROL

MARK D. JOHNSON

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INTRODUCTION

On September 26, 1991, national attention focused on the congressional testimony of Kimberly Bergalis, a young woman dying of acquired immune deficiency syndrome (AIDS).1 Bergalis had con-
tracted AIDS from her dentist, Dr. David Acer, during oral surgery.\(^2\) She appeared before the House Subcommittee on Health and the Environment of the Committee on Energy and Commerce in support of a bill that would require doctors and other health care workers (HCWs) to be tested for the human immunodeficiency virus (HIV).\(^3\) Since Bergalis’ testimony, Congress has yet to enact any law mandating HIV testing of HCWs.\(^4\) Congress has passed, however, a law requiring state legislatures to enact practice guidelines for HIV-positive HCWs based on the guidelines promulgated by the Centers for Disease Control (CDC).\(^5\) The states may adopt either the CDC monic infection against which the body cannot defend itself. *Guide to Diseases, supra*, at 367.

Homosexual and bisexual men who are sexually active with multiple partners comprise the group most at risk for HIV infection. *Id.* at 366. Other at-risk groups include intravenous drug users (from contaminated needles), hemophiliacs, and children born to persons with the disease. *Id.* There is currently no cure for AIDS. *Id.* at 367. Drug research has centered around attempting to stop the growth of the virus and to restore the body's immune system. *Id.* Once the disease manifests itself as AIDS, more than 75% of the disease's victims die within two years. *Id.* at 366.


> I would like to say that AIDS is a terrible disease which we must take seriously. I did nothing wrong, yet I am being made to suffer like this. My life has been taken away. Please enact legislation so that no other patient or health care provider will have to go through the hell that I have.

*Hearings on H.R. 2788, supra*, at 128.


5. *See* Treasury, Postal Service and General Government Appropriations Act of 1992, Pub. L. No. 102-141, § 633, 105 Stat. 834, 876 (to be codified at 42 U.S.C. § 300ee-2) (detailing steps states must take regarding prevention of HIV and hepatitis-B virus (HBV) transmission in order to avoid becoming ineligible for assistance under Public Health Service Act). Senator Jesse Helms, a North Carolina Republican, originally succeeded in persuading the Senate to pass an amendment to this Appropriations Act that would have subjected HCWs to fines and prison terms in situations where an HCW knows that he or she is HIV positive and intentionally performs invasive medical procedures without giving the patient prior notification of his or her condition. *See* 137 Cong. Rec. S10,363 (daily ed. July 18, 1991) (listing results of vote on Helms amendment); *infra* note 244 and accompanying text (discussing and quoting Helms amendment); *see also* 137 Cong. Rec. S9778 (daily ed. July 11, 1991) (providing language of Helms amendment). Although Helms' initiative passed in the Senate, a conference committee subsequently rejected the amendment. 137 Cong. Rec. H7385 (daily ed. October 3, 1991). According to one source, the Helms amendment was killed "because it was recognized up front that the House would never accept it with that language in it." *See* Joyce Price, *AIDS Testing Likely To Pass, Wash. Times*, Sept. 29, 1991, at A3 (quoting Bob Maynes, spokesperson for Sen. Dennis DeConcini, ranking Democrat on conference committee). Instead, the conference committee adopted an amendment introduced by Senator Robert Dole (R-Kan.) that had previously passed by unanimous consent in the Senate. 137 Cong. Rec.
guidelines as promulgated or ones "equivalent" to those of the CDC. Additionally, the federal law requires a state's public health official to certify to the director of the CDC within a year of the bill's signing that guidelines have been instituted in the state. Failure to issue such guidelines will render the state ineligible for federal monies under the Public Health Service Act.

Specifically, the CDC guidelines do not require mandatory testing of HCWs, but rather urge HCWs to undergo voluntary testing for HIV infection. According to the guidelines, those HCWs who test positive for the virus should generally refrain from practicing "exposure-prone" procedures. Interestingly, the CDC leaves to each hospital and institution the responsibility of defining for itself what procedures should be classified as "exposure-prone." Further-
more, an infected HCW may perform exposure-prone procedures only if he or she first seeks the counsel of an "expert review panel," which will advise the HCW as to the circumstances, if any, under which he or she may continue to perform these procedures. Lastly, the CDC guidelines suggest that doctors seek consent from patients if the treating HCW is HIV-positive, but, in instances where an HIV-positive HCW performs an exposure-prone procedure without the patient's consent, postoperative notification of the patient should be decided on a case-by-case basis.

This Comment addresses two issues arising from the CDC guidelines: first, the distinction between voluntary and mandatory testing, and second, whether HCWs who are HIV positive should be required to obtain informed consent from patients. Part I analyzes the state of the law regarding principles of risk determination and mandatory testing. Part II discusses ways that the application of theories of informed consent and duty to warn third parties compel an HCW, under certain conditions, to reveal that he or she is HIV positive. Part III examines the CDC guidelines in detail and in relation to the legal principles discussed in Parts I and II. Questions discussed here include whether the CDC guidelines are consistent with or contradict the current state of the common law, and whether the CDC has provided effective guidance for the medical community. Part IV predicts future liabilities and litigation arising from current CDC guidelines and concludes with specific recommendations for future governmental and medical action.

I. COMMON LAW BACKGROUND, PRE-CDC GUIDELINES

The purpose of the CDC guidelines is to lessen the risk of transmission from HCWs to patients during invasive procedures. The guidelines define invasive procedures as those involving "surgical entry into tissues, cavities, or organs or repair of major traumatic injuries." The guidelines offer recommendations to the medical
community to reduce the risk of transmission during these procedures.\textsuperscript{16}

Legal efficacy of the CDC guidelines may be analyzed using a framework that courts have developed covering tort principles.\textsuperscript{17} Principles of tort law address risk of harm and its prevention. These principles give rise to duties of care\textsuperscript{18} that define the actions and precautions parties must take with respect to a particular risk so as to minimize the harm's chance of occurrence or lessen its effect, thereby protecting the safety of others.\textsuperscript{19}

\textbf{A. Risk Analysis in Tort for Determining Duties of Care}

One commentator suggests that in the health care context, an analysis of the magnitude of harm and the probability of its occurrence determines whether a risk is unacceptable.\textsuperscript{20} Specifically, section 293 of the \textit{Restatement (Second) of Torts} provides an analytical framework to use in making this risk assessment. The Restatement's framework includes an examination of (1) the social value the law attaches to the threatened interests; (2) the probability that the actor's conduct will invade the interests of another; (3) the possible extent of harm to the threatened interest; and (4) the number of persons potentially hurt if the harm were to occur.\textsuperscript{21} This commen-

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1) an operating or delivery room, emergency department, or outpatient setting, including both physician's and dentist's offices; 2) cardiac catheterization and angiographic procedures; 3) a vaginal or caesarean delivery or other invasive or obstetric procedure during which bleeding may occur; or 4) the manipulation, cutting or removal of any oral or perioral tissues, including tooth structure, during which bleeding occurs or the potential for bleeding exists.

\textit{Id.}

16. \textit{Recommendations for Preventing Transmission, supra} note 9, at 1.

17. \textit{See infra} notes 20-83 and accompanying text (setting forth framework courts have developed).

18. \textit{See} W. Page Keeton et al., \textit{Prosser and Keeton on the Law of Torts} § 53, at 356-59 (5th ed. 1984) (defining tort concept of duty). Specifically, a legal duty is "only an expression of the sum total of those considerations of policy which lead the law to say that the plaintiff is entitled to protection." \textit{Id.}

19. \textit{See id.} § 56, at 383-85 (listing custodial relationships that require parties to guard against foreseeable harm arising from protective element of relationships).

20. \textit{See} Gordon G. Keyes, \textit{Health-Care Professionals with AIDS: The Risk of Transmission Balanced Against the Interests of Professionals and Institutions}, 16 J.C. & U.L. 589, 603, 604 (1990) (referring to § 293 of the \textit{Restatement (Second) of Torts}). In his article, Keyes discusses the risk assessment analysis in the context of a Fifth Circuit case. \textit{Id.}; \textit{see} Usery v. Tamiami Trail Tours, Inc., 531 F.2d 224, 236 (5th Cir. 1976) (upholding tour-bus company's policy requiring its drivers to be less than 40 years old for safety reasons). Keyes writes that "[i]n upholding the bus company's rule, the court recognized that in assessing safety requirements it must consider both the likelihood and severity of the threatened harm. The greater the likelihood and severity of harm, the more stringent the job qualifications to promote safety may be." Keyes, \textit{supra}, at 604.

tator contends that this analysis should not attempt to determine the precise risk of an HIV-infected HCW transmitting the disease to a patient, but rather, the analysis should balance the value of having the HCW perform the invasive procedure against the degree of risk of disease transmission. This approach seems to imply that whenever practical, a non-HIV-positive HCW should perform the invasive procedure. Several issues remain unanswered by this analysis, however, such as how great the risk of transmission must be to compel an HCW to stop performing invasive procedures. And once an HCW is infected, the question becomes whether hospitals should restrict all or only some procedures that the HCW may perform. Courts use the above tort theories to address issues raised by HIV-positive HCWs.

1. Tort analysis of transmission risk in case law

Recent cases have adopted the framework of section 293 of the Restatement (Second) of Torts, but have introduced additional and arguably more dispositive elements into the analysis. In Estate of Behringer v. Medical Center, a New Jersey appellate court considered the proposition that courts should balance the risk of transmission against the utility of having infected HCWs perform invasive proce-

(a) the nature of the risk (how the disease is transmitted), (b) the duration of the risk (how long is the carrier infectious), (c) the severity of the risk (what is the potential harm to third parties) and (d) the probabilities the disease will be transmitted and will cause varying degrees of harm.


22. See Keyes, supra note 20, at 603-04 (stating that analytical structure and language of classic tort law offer sound framework for analyzing risk).

23. See Keyes, supra note 20, at 603-04 (basing supposition on probable availability of other qualified HCWs).

24. Cf. Keyes, supra note 20, at 603-04 (suggesting that attempting to determine actual rate of transmission is futile and counterproductive).

25. See, e.g., Leckelt v. Board of Comm'rs, 714 F. Supp. 1377, 1392 (E.D. La. 1989) (concluding that social value attached to plaintiff's not revealing HIV status to defendant hospital is necessarily subordinated to hospital's need to know plaintiff's HIV status in order to protect not only patients and co-workers, but plaintiff himself), aff'd, 909 F.2d 820 (5th Cir. 1990); Glover v. Eastern Neb. Community Office of Retardation, 686 F. Supp. 243, 249-50 (D. Neb. 1988) (concluding that as actor's conduct involved only casual contact between staff and clients, probability of transmission was zero, and therefore Fourth Amendment concerns prevailed over requirement of mandatory HIV testing of staff), aff'd, 867 F.2d 461 (8th Cir.), cert. denied, 493 U.S. 932 (1989); In re Milton S. Hershey Medical Ctr., 595 A.2d 1290, 1295, 1300 & n.6 (Pa. Super. Ct. 1991) (discussing state statute prohibiting disclosure of confidential HIV information absent compelling public need to prevent spread of AIDS), appeal docketed, No. 196 (Pa. Aug. 7, 1992). In addition, in School Board v. Arline, 480 U.S. 273 (1987), the Supreme Court adopted the AMA's criteria for determining the medical risks of employing someone with a contagious disease. These factors included the duration and severity of the condition, as well as the probability of transmission to others. Id. at 288.

dures, particularly in instances in which other non-HIV-positive HCWs qualified to perform the procedures are available. More importantly, this court looked beyond tort theory by employing a patient-centered approach to health care risk analysis. Fundamentally, the court found that where there is any risk of transmission to a patient of any disease, the HCW must refrain from performing invasive procedures. The court’s rationale for this rule rested on the fact that transmission of HIV means certain death for the infected patient. The court found that hospitals have a duty to restrict HCWs from performing invasive procedures where the procedures pose “any risk” of harm to the patient. In this case, the court determined that such a risk was present. Thus, the court held that the medical center acted properly by prohibiting the plaintiff, Dr. Behringer, from performing further surgery. The court


28. See id. at 1283 (adopting view that availability of another equally competent physician is factor that patient must have opportunity to consider when practicing HCW is seropositive for AIDS); see also Larry Gostin, Hospitals, Health Care Professionals, and AIDS: The “Right to Know” the Health Status of Professionals and Patients, 48 Md. L. Rev. 12, 23 (1989) (stressing that patients, if given choice, would generally not choose HCWs infected with HIV). In his article, Keyes also concluded that HCW substitution is a viable policy option because, in his view, only a small percentage of all providers will be excluded from performing only one aspect of health care, so restrictions due to HIV infection will only interfere with the provision of a very small fraction of the total health care services. All of these services can be adequately provided by non-infected practitioners.

29. See Behringer, 592 A.2d at 1283 (rationalizing adoption of patient-centered approach on New Jersey’s strong policy of supporting patient rights); see also Piller v. Kovarsky, 476 A.2d 1279, 1281 (N.J. Super. Ct. Law Div. 1984) (stating that New Jersey public policy supports patient-physician privilege because it enables “patient to secure medical services without fear of betrayal and unwarranted embarrassing and detrimental disclosure”).

30. See Behringer, 592 A.2d at 1283 (discussing obligations of HIV-infected HCW to patient).

31. See id. at 1281-82 (contending that possibility that transmission to patient will result in death must be considered relevant factor in determining acceptable level of risk); see also David Orentlicher, HIV-Infected Surgeons: Behringer v. Medical Center, 266 JAMA 1134, 1135 (1991) (contending that court in Behringer adopted analysis that attempts to eliminate all risks of transmission). Orentlicher further argues that this “zero-tolerance” limit goes too far because it would permit discrimination against HCWs in violation of the federal antidiscrimination laws. Orentlicher, supra, at 1135. Instead, he suggests that hospitals, and thus courts, should adopt the “significant risk” standard when imposing practice restrictions, which can be found in antidiscrimination laws, as opposed to an “appreciable,” “potential,” or “theoretical” standard. Id. at 1136; see also infra notes 55-57 and accompanying text (discussing “significant risk” standard).

32. See Estate of Behringer v. Medical Ctr., 592 A.2d 1251, 1283 (N.J. Super. Ct. Laws Div. 1991) (“Where the ultimate harm is death, even the presence of a low risk of transmission justifies the adoption of a policy which precludes invasive procedures when there is ‘any’ risk of transmission.”).

33. Id. (finding there was “‘reasonable probability of substantial harm’ if plaintiff continued to perform invasive procedures”).

34. Id. The court was also persuaded by the fact that the Medical Center acted without “any suggestion of prejudgment or arbitrariness.” Id. Further, the court was convinced that
rejected any attempt to quantify the magnitude of the risk of transmission and instead concluded that hospitals must prohibit infected HCWs from performing invasive procedures so as to eliminate all chances of transmission.35

According to the court in Behringer, an HIV-positive HCW who continues to perform invasive procedures increases, by definition, the probability of transmission of the virus to an unacceptable level.36 In this analysis, even though the risk of transmission in an individual operation may be small, the fact that a surgeon may perform over 300 operations each year multiplies the opportunities for transmission.37 If a seropositive38 HCW is permitted to perform multiple operations after being diagnosed as HIV positive, the specter of an incident causing transmission of the virus from surgeon to patient is an increasing hazard. The court in Behringer found such a continuing risk unacceptable, especially as transmission of this virus results in certain death.39

the Medical Center's decision represented "a reasoned and informed response to the problem." Id.

35. See id. (finding that because ultimate danger to patient is death, securing informed consent of patient combined with restrictions on performance of procedures presenting "any risk" to patient is justified).

36. Id.

37. Id. at 1283 n.20; see Ban Mishu et al., A Surgeon with AIDS: Lack of Evidence of Transmission to Patients, 264 JAMA 467, 467 (1990) (reporting study of Tennessee surgeon who died of AIDS and results of state investigation of possible transmission to patients). In January 1989 a general surgeon in Tennessee was diagnosed with AIDS. Id. Mishu and his colleagues developed a study to determine whether the surgeon had transmitted the HIV virus to any of his patients during surgery. Id. First, based on the HIV virus' median incubation interval, Mishu estimated that the surgeon may have been infected as early as 1982. Id. Mishu then compiled a list of patients on whom the surgeon had performed surgery between 1982 and 1988. Id. There were 2160 patients identified. Id. Only 1652 patients could be contacted, however. Id. Of these patients, 616 (37%) agreed to undergo testing for the HIV virus. Id. Only one of the 616 patients tested HIV positive, and his medical history strongly suggested that he had contracted the virus prior to undergoing surgery. Id. Based on the study's findings, Mishu concluded that the risk of surgeon-to-patient transmission is quite low. Id. at 470; see also Diana J. Schomu, Files of H.I.V.-Infected Dentist To Be Transferred, N.Y. TIMES, Jan. 31, 1992, at B1 (reporting that New York State Health Department ordered records of dentist who died of AIDS to be opened to determine whether any of dentist's 3060 patients had contracted HIV). The New York Health Department came to its decision to open the dentist's files because state investigators found evidence of poor sterilization and infection-control procedures practiced by the dentist. Id.

38. See James D. Henry, AIDS in the Workplace, in AIDS AND THE LAW 31, 35 (William H.L. Dornette ed., 1987) (defining seropositive for HIV as meaning patient is infectious, able to transmit virus, and blood will reveal presence of virus when tested); see also AMERICAN MEDICAL ASSOCIATION ENCYCLOPEDIA OF MEDICINE 895 (1989) (discussing use of blood testing to ascertain presence or absence of infectious organism in bloodstream, and thus in body).

39. See Estate of Behringer v. Medical Ctr., 592 A.2d 1251, 1280, 1283 n.20 (N.J. Super. Ct. Laws Div. 1991) (discussing fact that although risk to individual patient may be small, "cumulative risk to surgical patients ... is higher" if infected surgeon continues to perform invasive procedures). In other words, the risk to an individual patient never changes, but as the HIV-infected HCW performs an increasing number of invasive procedures, the chance that he or she will infect one or more of his or her patients increases.
2. Attempts to quantify the risk of transmission from infected HCW to patient

To date, Kimberly Bergalis and four other patients of Dr. Acer are the only documented cases of HIV transmission from an HCW to his or her patient.40 Nevertheless, the emerging consensus in the medical community is that, however small, the risk of transmission from HCW to patient is very real,41 and therefore, more research is needed to determine the exact level of this risk.42 As might be expected, the debate over the actual risk of transmission centers around those HIV-positive surgeons who perform invasive procedures.43 It is these procedures that involve the highest potential for

40. Update: Transmission of HIV Infection During an Invasive Dental Procedure—Florida, 40 Morbidity & Mortality Wkly. Rep. 21, 27 (1991) (summarizing findings of follow-up investigation in Bergalis case). The investigation revealed that, in addition to Bergalis, four other patients of Dr. Acer tested HIV positive. Id. at 21. Further, the investigation team found evidence to support the conclusion that at least three of these patients contracted HIV from the dentist himself. Id. at 26. The actual means of transmission in this case remains a mystery. Id. at 27.

41. See Letter from Nancy W. Dickey, AMA Trustee, to The Journal of the American Medical Association, 265 JAMA 2338, 2338 (1991) [hereinafter Letter from Nancy W. Dickey] (replying to letter from Dr. Michael M. Lederman to JAMA editor requesting that AMA withdraw its policy advising HIV-positive doctors to avoid performing invasive procedures). In her letter, Dickey recognizes that the risk of transmission from doctor to patient during invasive procedures has not been quantified. Id. Dickey contends, however, that the risk has been confirmed as "a small but real one." Id. Thus, Dickey asserts that "when there is a known but as yet unquantifiable risk of patient death that is avoidable, physicians should not engage in unnecessary procedures." Id.; see also Letter from Dr. Michael M. Lederman et al., Case Western Reserve University School of Medicine, to The Journal of the American Medical Association, 265 JAMA 2337, 2337-38 (1991) [hereinafter Letter from Dr. Michael M. Lederman] (arguing that risk of transmission from HIV-infected surgeon to patient is "not identifiable," but conceding that it cannot be said that no risk exists). Lederman's contention is that, absent more definitive data regarding the risk of transmission, the AMA should not have recommended that HIV-infected physicians either abstain from performing invasive procedures posing an identifiable risk of transmission, or inform their patients of their infection. Id.

42. See Letter from Nancy W. Dickey, supra note 41, at 2338 (stating that in order to formulate proper guidelines, better data are needed). Dickey contends that until better data can be acquired, "the burden of scientific uncertainty falls on the profession, not the patient." Id.; see also Mishu et al., supra note 37, at 470 ("Despite the substantial size of this study, a precise quantifiable risk to patients undergoing surgery is not yet possible. Future opportunities for similar investigations should further clarify this most important and difficult issue.").

43. See Preliminary Analysis: HIV Serosurvey of Orthopedic Surgeons, 1991, 40 Morbidity & Mortality Wkly. Rep. 309, 309-10 (1991) [hereinafter HIV Serosurvey of Orthopedic Surgeons] (attempting to determine rate of HIV infection among orthopedic surgeons, who, by definition, perform invasive procedures). The study, conducted by the CDC, summarizes findings from a voluntary and anonymous survey of HIV status among orthopedic surgeons. Id. Out of 3420 participants, two tested HIV seropositive (0.06%). Id. at 310-11; see also The Risk of Contracting HIV Infection in the Course of Health Care, 265 JAMA 1872, 1872 (1991) [hereinafter Risk of Contracting HIV] (asserting that "[t]ransmission of HIV infection from infected health workers to patients will best be prevented by reemphasized careful and rigorous training of all health care workers"). The article maintained that HIV-infected surgeons pose a "very low" risk to their patients. Risk of Contracting HIV, supra, at 1872. In support of this position, the article notes that despite 10 years of experience with HIV infection and numerous retrospective case studies on HIV-infected HCWs and their patients, there has been only one documented case of transmission of HIV infection from an HCW to a patient. Id.; Frank S. Rhame, The HIV-Infected Surgeon, 264 JAMA 507, 507-08 (1990) ("I believe it is an essential exercise,
the surgeon to be injured during surgery,\textsuperscript{44} causing HIV-infected blood to enter the patient’s body cavity and thereby possibly causing inoculation.\textsuperscript{45} Percutaneous (skin-piercing) injuries where a sur-

no matter how speculative, to estimate a probability of surgeon-to-patient HIV transmission before considering policy.”). Rhame estimates the probability of transmission from surgeon to patient at between one per 100,000 and one per million operations, although he cites no empirical data in support of this estimation. Rhame, supra, at 507. Rhame contends that, as long as the HIV-infected surgeon abstains from performing surgery requiring “blind, by feel manipulation of sharp instruments . . . the probability of an HIV transmission during other types of surgery is so low that no other proscription is warranted.” Id. at 508.

44. Letter from Marek Szpalski, Center Hospitalier Molière Longchamp, Brussels, Belgium, to The Journal of the American Medical Association, 266 JAMA 1361, 1361 (1991) (relaying results of Belgian survey of 250 surgeons and 100 anesthetists in which 63\% of surgeons and 45\% of anesthesiologists reported experiencing injuries during performance of invasive procedures within preceding three months). Szpalski contends that, given the number of injuries occurring in the operating room, puncture-resistant glove materials must be developed. Id. Szpalski further reports that only 26\% of surgeons in the survey take the elementary precaution of wearing double gloves during procedures on HIV-positive patients. Id. Further, only 15\% wore protective eyewear during such procedures. Id.

Another study found that operating room personnel are exposed to 5.6 “sharp” or “percutaneous” injuries (injuries that pierce the skin) per 100 procedures. See James G. Wright et al., Mechanisms of Glove Tears and Sharp Injuries Among Surgical Personnel, 266 JAMA 1668, 1668-71 (1991) (studying causes of glove tears and sharp injuries among operating room personnel and determining that greatest risk of hand injury occurs “(1) when the hand is retracting tissue and (2) when the hand is stationary and holding forceps or suture material over the wound”). Other studies put this rate at 1.2 per 100 procedures for surgical staff. See Adelisa L. Panlilio et al., Blood Contacts During Surgical Procedures, 265 JAMA 1533, 1536 (1991) (describing and quantifying types of blood contact occurring during surgical procedures and attempting to assess risk factors for such contacts). From his study, Wright found that the sharp injuries reviewed caused bleeding in 85\% of the reported incidents. Wright et al., supra, at 1670. According to Wright, this finding contradicts previous studies suggesting that most percutaneous exposures are “superficial.” Id.

Conversely, percutaneous exposure of a surgeon’s blood to a patient’s blood has been calculated to occur in 1.7\% to 4.9\% of all surgical cases. Julie L. Gerberding & William P. Schecter, Surgery and AIDS: Reducing the Risk, 265 JAMA 1572, 1572 (1991). Further, the average risk of HIV transmission from patient to surgeon where a percutaneous needle stick has occurred is estimated at between 0.3\% and 0.4\%. Id. These ranges were derived by reviewing results of prior studies. Id.

At least one author disagrees with these studies. See Gostin, supra note 28, at 16-23 (citing various studies attempting to determine rates of transmission of HIV from HCWs to patients and vice versa, and concluding that risk in either direction is too low to “justify the personal and financial costs of systematic screening”). Gostin concludes that mandatory HIV screening of HCWs is not justified because (1) the risk of transmission would not be reduced significantly; (2) screening would not decrease the risk; and (3) the human and economic costs of mandatory HIV screening outweigh the benefit to be achieved. Id.

45. See Wright et al., supra note 44, at 1668-71 (discussing causes and types of exposures from HCW to patient in operating room). Wright’s study classified exposures into three types: (1) glove tears, (2) sharp injuries, and (3) gown leaks. Id. at 1669. As part of its plan in promulgating the guidelines, the CDC chose not to include a list of invasive procedures that it considered risky to patients when performed by HIV-infected HCWs. Recommendations for Preventing Transmission, supra note 9, at 5. Instead, the CDC recommended that each hospital or other medical institution develop its own list, reflecting the procedures performed at the particular institution. Id. In response, the nation’s major medical institutions and groups agreed to develop these lists, but after protests from members, the organizations refused to follow the CDC recommendations. CDC Won’t Dictate Rules on Health Workers, AIDS, ATLANTA CONSTITUTION, June 16, 1992, at D4 (reporting that members opposed developing lists because such lists would be “medically unnecessary and scientifically unsound”). Subsequently, the CDC and the Department of Health and Human Services (HHS) proposed to amend the July 1991 guidelines, dropping the recommendation that medical groups and institutions de-
Surgeon's blood is released are not uncommon. Moreover, many percutaneous injuries occur during surgery performed blindly, or "by feel," so that there may be no way for an HIV-positive surgeon to know if his or her blood infected the patient.

Some medical and legal commentators regard the Bergalis incident as a tragic yet rare occurrence. These authorities maintain that the risk of transmission is too low at present to meaningfully quantify. A retrospective study done on patients of a surgeon who died of AIDS-related symptoms and had performed invasive procedures supports this view. The study included tests of more than 600 of the surgeon's patients and found no evidence linking the surgeon to HIV infection in any of the patients. Furthermore, public health records indicate that in the seven years preceding the surgeon's death, none of the 2160 patients on whom the physician had operated reported incidences of HIV infection or AIDS that could be traced to him. The Bergalis incident, however, demonstrates that such a transmission can occur. This possibility is underscored by the fact that of roughly five million HCWs in this country, 3550,

*develop these lists of at-risk procedures. See Marlene Cimons, Plan to Ease Curbs on AIDS-Infected Doctors Is Scrapped, L.A. TIMES, June 14, 1992, at A13 (reporting decision by federal health officials to abandon proposal easing restrictions on AIDS-infected HCWs). This proposal was dropped, however, after officials discovered that the newest recommendations might violate Congress' wishes. Id. Presently, no list of procedures is being considered. Id.; see also infra notes 275-79 and accompanying text (discussing effect of stalemate between CDC and medical groups regarding compilation of at-risk procedures list).

46. See Gerberding & Schecter, supra note 44, at 1572-73 (listing rates of percutaneous injuries among surgical staff).

47. See Rhame, supra note 43, at 507 (stating that exposure rate is strongly influenced by type of procedure and that "blind" procedures should have higher exposure rate). One study has shown that gynecological and trauma surgery have the highest rates of percutaneous injury among surgeons per procedure. Panlilio, supra note 44, at 1534 (detailing data collected regarding rates of percutaneous injuries experienced during various surgical procedures).

48. See Risk of Contracting HIV, supra note 43, at 1872-73 (advocating use of standardized surgical and invasive procedural precautionary measures as sufficient means, without mandatory HCW testing, to control spread of HIV from HCW to patient).

49. See Letter from Dr. Michael M. Lederman, supra note 41, at 2337 (arguing that risk of transmission from HIV-positive physician is not identifiable); cf. Scott H. Isaacman, The Other Side of the Coin: HIV-Infected Health Care Workers, 9 ST. LOUIS U. PUB. L. REV. 499, 492 (1990) (contending that it is virtually impossible to prove that HIV-positive HCWs do not pose threat to patients). Isaacman states that no studies have proven that HIV-positive HCWs pose an actual hazard to patients. Isaacman, supra, at 492. He thus calls for a resistance to blanket policies requiring mandatory testing of HCWs until more information about the actual risk posed is known. Id. Isaacman defends his "conservatism approach" by stating that "[o]nce we lose the expectations of privacy and fourth amendment rights, we may experience difficulty in trying to recover them." Id.

50. See Mishu et al., supra note 37, at 467-70 (detailing results of study of HIV-infected surgeon and his patients).

51. See Mishu et al., supra note 37, at 467-70 (reporting that only one patient tested HIV positive and that patient's medical history suggested that virus was not transmitted from surgeon). Two hundred and sixty-four of the surgeon's patients died prior to the commencement of the study. Id. None of those deaths could be attributed to HIV infection. Id.

52. Mishu et al., supra note 37, at 467-70.
or 0.07%, are seropositive for HIV.53

Commentators and courts, however, are in disagreement as to the meaning of the data and the corresponding level of risk that should be tolerated. For example, the court in Behringer adopted a zero-risk standard.54 One commentator criticizes this standard as unworkable.55 This commentator argues that the “zero-tolerance” standard goes too far because it may induce discrimination against HCWs, thereby violating federal antidiscrimination laws.56 This commentator suggests that hospitals, and thus courts, should instead adopt the “significant risk” standard57 used in these antidiscrimination laws.58 This author also contends that the zero-tolerance standard is unwarranted because it would suggest that no

53. Isaacman, supra note 49, at 443 & nn.22-24. In a June 1991 survey conducted on 3420 orthopedic surgeons, all of whom performed “invasive procedures,” two were HIV seropositive (0.06%). HIV Serosurvey of Orthopedic Surgeons, supra note 43, at 309-11. Both of these surgeons reported having operated either on patients from a high-risk group or on patients known to have the HIV virus or AIDS. Id. Both surgeons also reported nonoccupational risk factors for HIV infection, however. Whether transmission from patient to surgeon occurred during an operation could therefore not be determined. Id.

54. See supra notes 26-35 and accompanying text (discussing patient-centered approach of court in Behringer whereby any risk of transmission from HCW to patient is not tolerated); cf. In re Milton S. Hershey Medical Ctr., 595 A.2d 1290, 1297-98 (Pa. Super. Ct. 1991) (upholding hospital’s decision to inform patients postoperatively of HCW’s HIV infection based on risk of transmission, however slight). The Pennsylvania court added, “Dr. Doe’s medical problem was not merely his. It became a public concern the moment he picked up a surgical instrument and became a part of a team involved in invasive procedures.” Id. (emphasis omitted). By this statement, the court adopted the patient-centered approach articulated by the New Jersey court in Behringer. See id. at 1297-99 (articulating theory of patient-centered approach to medicine and its application where AIDS is involved).

55. See Orentlicher, supra note 31, at 1136-37 (criticizing decision in Behringer).

56. Orentlicher, supra note 31, at 1135. According to Orentlicher, the “zero tolerance” risk standard violates the Americans with Disabilities Act. Id. He claims that the Act would protect HCWs from discrimination based on their HIV status unless the HCWs’ infections posed a “significant risk” to their patients. Id.; see Americans with Disabilities Act of 1990, Pub. L. No. 101-336, §§ 101(3), 103(b), 104 Stat. 327, 330, 334 (to be codified at 42 U.S.C. §§ 12111, 12113) (using “significant risk” standard as threshold test for violations of antidiscrimination provisions of statute). Moreover, he says studies have failed to prove that HIV-infected HCWs pose a “significant risk” to their patients. Orentlicher, supra note 31, at 1135.

57. Orentlicher, supra note 31, at 1136; see also Larry Gostin, The HIV-Infected Health Care Professional: Public Policy, Discrimination, and Patient Safety, 18 LAW, MED. & HEALTH CARE 303, 307-08 (1990) (contending that “significant risk” standard is more reasonable given present-day infection control procedures and assessments of other risks inherent in medical environment).


Both Professor Gostin and Professor Barnes cite the opinion in School Board v. Arline as the Supreme Court’s adoption of the “significant risk” standard. Mark Barnes et al., The HIV-Infected Health Care Professional: Employment Policies and Public Health, 18 LAW, MED. & HEALTH CARE 311, 316 (1990); Gostin, supra note 57, at 307.
level of risk is acceptable, but, given present research, it remains unclear whether the actual risk of transmission has reached such a threshold level to invoke the significant risk standard, let alone the zero-tolerance one.59

In 1988, the New York State Legislature adopted this significant risk standard and directed the state’s Department of Health to define “significant risk.”60 The department’s definition of the phrase did not include instances in which proper infection control/barrier practices were being used.61 Consequently, the definition permitted infected HCWs to continue to perform invasive procedures as long as the medical institution established proper infection-control

59. Orentlicher, supra note 31, at 1136.
60. See N.Y. PUB. HEALTH LAW § 2786(1) (McKinney Supp. 1992) (providing that “[t]he Commissioner . . . shall promulgate regulations to identify those circumstances which create significant risk of contracting, or transmitting HIV”); see also N.Y. COMP. CODES R. & REGS. tit. 10, § 63.9 (1992) (defining “significant risk” in context of HIV transmission). Under the New York State Official Compilation of Codes, Rules, and Regulations, three factors are necessary to create a significant risk of contracting or transmitting the HIV virus: “(1) the presence of a significant risk body substance; (2) a circumstance which constitutes significant risk for transmitting or contracting HIV infection; and (3) the presence of an infectious source and a noninfected person.” N.Y. COMP. CODES R. & REGS. tit. 10, § 63.9(a) (1992). “Significant risk body substances” are defined as “blood, semen, vaginal secretions, breast milk, tissue and the following body fluids: cerebrospinal, amniotic, peritoneal, synovial, pericardial, and pleural.” Id. § 63.9(b). Further, circumstances constituting a “significant risk of transmitting or contracting HIV infection” include:

1) sexual intercourse (vaginal, anal, oral) which exposes a noninfected individual to blood, semen or vaginal secretions of an infected individual; (2) sharing of needles and other paraphernalia used for preparing and injecting drugs between infected and noninfected individuals; (3) the gestation, birthing or breast feeding of an infant when the mother is infected with HIV; (4) transfusion or transplantation of blood, organs, or other tissues from an infected individual to an uninfected individual, provided such blood, organs or other tissues have not tested negatively for antibody or antigen and have not been rendered noninfective by heat or chemical treatment; (5) other circumstances not identified in paragraphs (1) through (4) of this subdivision during which a significant risk body substance (other than breast milk) of an infected individual contacts mucous membranes (e.g., eyes, nose, mouth), nonintact skin (e.g., open wound, skin with a dermatitis condition, abraded areas) or the vascular system of a noninfected person. Such circumstances include, but are not limited to needle-stick or puncture wound injuries and direct saturation or permeation of these body surfaces by the infectious body substance.

61. N.Y. COMP. CODES R. & REGS. tit. 10, § 63.9 (1992). The regulatory definition states that circumstances involving a significant risk do not include:

1) exposure to urine, feces, sputum, nasal secretions, saliva, sweat, tears or vomitus that does not contain blood that is visible to the naked eye; (2) human bites where there is no direct blood to blood, or blood to mucous membrane contact; (3) exposure of intact skin to blood or any other substance; or (4) occupational settings where individuals use scientifically accepted barrier techniques and preventive practices in circumstances which would otherwise pose a significant risk.

Id. § 63.9(d) (emphasis added).
procedures.62

Despite the inconclusiveness of the data regarding the rate of transmission of the HIV virus from an infected HCW to his or her patient, the law should not ignore the possibility of transmission. Indeed, the need for a legal framework will increase as the number of infected HCWs rises corresponding to the general population.63 To address this need, common law concepts provide viable mechanisms to guide the medical and legal communities.

B. Common Law Creation of a Duty for Mandatory HIV Testing

Mandatory testing of individuals, with or without particularized suspicion,64 is not a new practice in this country.65 Courts have upheld the use of mandatory testing in a variety of circumstances, including examinations of blood-alcohol levels of persons arrested for drunk driving,66 whether drugs or alcohol played a role in railroad accidents,67 evidence of drug use in connection with job promotion

62. See Barnes et al., supra note 58, at 316 (noting that New York's final version of definition essentially allows HIV-positive HCWs to work unrestricted as long as they are competent in infection-control procedures, not epidemiologically linked to any previous incident of transmission, and functionally able to perform medical procedures at issue).

63. See Heterosexual Contact Accounts for Most New HIV Cases, Wash. Post, Feb. 13, 1992, at A10 (reporting that World Health Organization (WHO) estimates number of AIDS cases occurring since early 1980s stands at approximately two million). According to the WHO, the number of persons currently infected by the AIDS virus is between 10 to 12 million. Id. The organization predicts that this number will increase to between 30 and 40 million by the year 2000. Id.

64. See INS v. Delgado, 466 U.S. 210, 222, 223-34 (1984) (defining "particularized suspicion" as whether there is either cause or "reasonable grounds for believing that [a] person is involved in some unlawful activity" and holding that INS policy of indiscriminate questioning of all Hispanic factory employees to find illegal aliens is unconstitutional).


67. See Skinner v. Railway Labor Executives' Ass'n, 489 U.S. 602, 630-34 (1989) (upholding Federal Railroad Administration regulations requiring testing for drugs and alcohol, even in absence of individualized suspicion, in blood of certain employees involved in "safety-sensitive tasks" following certain specified events such as major train accidents).
procedures, and indeed, the presence of the HIV virus. As a rule, mandatory testing must pass constitutional muster before it will be upheld.

1. Constitutional analysis of mandatory HIV testing

Generally, mandatory testing implicates the Fourth Amendment's search and seizure clause. Similar to developments in the criminal arena, courts have devised a Fourth Amendment balancing test that weighs the intrusion of mandatory testing on an individual's Fourth Amendment interests against the promotion of legitimate or compelling state interests. In determining the de-

68. See National Treasury Employees Union v. Von Raab, 489 U.S. 656, 668-79 (1989) (permitting Customs Service to require urinalysis of employees seeking transfer or promotion to positions involving drug interdiction or carrying of firearms, but remanding case for further findings of fact where handling classified material was condition of such transfer or promotion, although maintaining that testing may be justified in such instances where truly sensitive material is handled); see also Harmen v. Thornburgh, 878 F.2d 484, 491-93 (D.C. Cir. 1989) (sanctioning random drug testing of Department of Justice employees with access to classified information but not random testing for all federal prosecutors and employees with access to grand jury proceedings), cert. denied, 493 U.S. 1056 (1990).

69. See Dunn v. White, 880 F.2d 1188, 1195-97 (10th Cir. 1989) (upholding AIDS testing of federal prisoners), cert. denied, 495 U.S. 1059 (1990); see also Local 1812, Am. Fed'n of Gov't Employees v. United States Dept't of State, 662 F. Supp. 50, 53-55 (D.D.C. 1987) (upholding State Department policy of mandatory AIDS testing for all employees being sent overseas in order to test fitness for duty, not to control spread of AIDS).

70. See U.S. CONST. amend. IV (providing, in pertinent part, that "[t]he right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated").

71. See Schmerber v. California, 384 U.S. 757, 767 (1966) (rejecting notion that constitutional concerns of mandatory testing center on Fifth Amendment self-incrimination privilege, but rather "plainly involve[ ] the broadly conceived reach of a search and seizure under the Fourth Amendment"). The Court in Schmerber held that the Fifth Amendment only protects a defendant from having to testify or "otherwise provide the state with evidence of a testimonial or communicative nature" against him or herself. Schmerber, 384 U.S. at 761. The forced withdrawal of blood, the Court stated, was not within the scope of this protection. Id. "[C]ompulsion which makes a suspect or the accused the source of 'real or physical evidence' does not violate [the Fifth Amendment's privilege]." Id. at 764; see also Von Raab, 489 U.S. at 665 (holding that mandatory drug testing program is subject to Fourth Amendment analysis).


73. Fourth Amendment interests are those interests that relate to an individual's expectations of privacy. See, e.g., Maryland v. Buie, 494 U.S. 325, 333 (1990) (discussing Buie's Fourth Amendment expectation of privacy in rooms police had not searched before his arrest); O'Connor v. Ortega, 480 U.S. 709, 719 (1987) (discussing balancing of "employees' legitimate expectations of privacy against the government [employer]'s need for supervision, control, and the efficient operation of the workplace"); Arizona v. Hicks, 480 U.S. 321, 328 (1987) (suggesting that balancing of governmental interests and Fourth Amendment privacy interests supports "reasonable-suspicion standard for the cursory examination of items in plain view").

74. This balancing test was first articulated in Camara v. Municipal Court, 387 U.S. 523, 536-37 (1967) (stating that there is "no ready test for determining reasonableness other than by balancing the need to search [or seize] against the invasion which the search [or seizure] entails"). In Camara, the Court stated that to enforce minimum standards for housing codes, "routine periodic inspections" were required. Id. at 535-36. These decisions to inspect are
gree of intrusiveness caused by the state, courts look to the nature of the state action that the individual must endure. Examples of state action include requiring the individual to undergo questioning, detention, urinalysis, or the taking of blood.\textsuperscript{75} Courts determine whether the interests of the state are legitimate by considering elements such as the purpose of the program,\textsuperscript{76} whether the program is limited in scope,\textsuperscript{77} and the program's effectiveness.\textsuperscript{78} More specifically, mandatory testing falls within the subcategory of Fourth Amendment law known as administrative searches.\textsuperscript{79}

not based on a specific building's characteristics, but rather on the characteristics of an entire area. \textit{Id.} at 536. In order to search private property, however, a warrant must be obtained. \textit{Id.} at 538-39. It is here that the balancing test is applied. \textit{Id.} at 539. If the anticipated intrusion is reasonable, that is, if a "valid public interest" exists, then there is probable cause for a warrant to be issued. \textit{Id.}

The Supreme Court also employed this balancing test in the criminal context in \textit{Terry v. Ohio}, 392 U.S. 1, 20-22 (1968), to develop a theory of reasonable suspicion to permit frisking for concealed weapons. The Court held that this type of search is justified for the protection of police officers and nearby people and must be confined to the discovery of weapons that would lead to assault. \textit{Id.} at 29.

These cases provide the groundwork for the requirement that the government's mandatory testing program must be "sufficiently productive" to justify intrusion on Fourth Amendment protections. See, \textit{e.g.}, National Treasury Employees Union v. Von Raab, 489 U.S. 656, 673 (1989) (citing Delaware v. Prouse, 440 U.S. 648, 658-59 (1979)) (finding that Delaware's random spot check program did not sufficiently aid in control of drunken driving to justify use of such coercive testing system under Fourth Amendment).

\textit{Id. at} 536. \textit{Id. at} 538-39. It is here that the balancing test is applied. \textit{Id.} at 539. If the anticipated intrusion is reasonable, that is, if a "valid public interest" exists, then there is probable cause for a warrant to be issued. \textit{Id.}

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\textit{Id.} at 539. If the anticipated intrusion is reasonable, that is, if a "valid public interest" exists, then there is probable cause for a warrant to be issued. \textit{Id.}
2. Mandatory testing as administrative search

Many governmental searches conducted as part of an administrative plan have withstood judicial scrutiny. Courts have allowed drug testing for certain classes of employees, in job hiring and promotion, and following railroad accidents. The Supreme Court's holding in National Treasury Employees Union v. Von Raab solidified the legal standards for administrative searches. In Von Raab, unionized employees of the U.S. Customs Service brought suit to enjoin the Service from testing certain employees for the presence of drugs. The Service's testing program covered employees seeking promotions or transfers to positions involving the direct interdiction of illegal drugs, carrying of firearms, or having access to sensitive information. The union argued that the drug-testing plan constituted an unreasonable search in violation of the Fourth Amendment. The district court agreed, finding the service's plan overly intrusive because it was predicated on a lack of probable cause or reasonable suspicion, and therefore violated the employees' expectations of privacy.

The Supreme Court, however, upheld the Customs Service's testing program. In doing so, the Court held that the program, as a

administrative searches); Lynn S. Searle, Note, The "Administrative" Search from Dewey to Burger: Dismantling the Fourth Amendment, 16 Hastings Const. L.Q. 261, 267-68 (1989) (claiming that Supreme Court's rationale for warrantless administrative searches has failed to "develop[] and define[] consistent criteria," and that "[i]ts decisions ... have dealt with cases on an ad hoc basis").


81. See National Treasury Employees Union v. Von Raab, 489 U.S. 656, 668-79 (1989) (upholding drug testing of Customs Service employees seeking transfer or promotion to positions directly involved with drug interdiction and use of firearms and, in general, upholding testing of employees with access to classified information).

82. See Skinner v. Railway Labor Executives' Ass'n, 489 U.S. 602, 630-34 (1989) (upholding testing of railroad employees for presence of drugs and/or alcohol following train accidents or other incidents).


85. Id. at 660-61.

86. Id. at 663.


88. Id. at 387.

search, must meet the Fourth Amendment's reasonableness requirement. While a search generally must be preceded by the issuance of a warrant, the Court stated that this was not always necessary. Instead, it employed a balancing test to measure the relative importance of an individual's expectations of privacy versus the government's interests, where the government's interest was beyond "normal" law enforcement needs. The Court questioned whether a warrant based on individualized suspicion was required and whether it was impractical in this situation. Furthermore, the Court held that the Service's interest in ensuring that employees involved in drug interdiction are beyond reproach in integrity and judgment was a compelling one. In balancing this compelling interest against the degree of state intrusion, the Court found the level of intrusion sufficiently narrow and specific because administering officials work with limited discretion. By balancing the compelling interest of the government with this limited degree of intrusion, the Court determined that the drug-testing program was reasonable and rationally related to the goal of ensuring the quality of the Service's agents. Moreover, the Court found that employees requesting transfers or promotions to these "at-risk" positions should expect to be subjected to certain "operational realities," thereby resulting in a diminished expectation of privacy.

Generally, as articulated by Von Raab, when reviewing administrative searches that include mandatory testing programs, courts must undertake a balancing test that weighs the individual's expectation of privacy and a program's level of intrusiveness against the governmental interests that conflict with those expectations. To warrant testing, there must be a clear nexus between the scope of an individual's expectations of privacy and a program's level of intrusiveness against the governmental interests that conflict with those expectations.

91. Von Raab, 489 U.S. at 665.
92. Id.
93. Id. at 665-66 (positing that purpose of program is to stop promotion of drug users to sensitive positions and arguing that fact that test results cannot be used in criminal prosecution "justifies departure from the ordinary warrant and probable cause requirements").
94. Id. at 670 (maintaining that nation's interest in protecting itself against drug trafficking could be "irreparably damaged" if Customs' officers were "unsympathetic to their mission of interdicting drugs").
95. Id. at 677-78. The Court, however, found that, while testing of employees with access to classified information is not in itself objectionable, the Customs Service's testing program was not shown to test only such employees. The Court therefore remanded the case for proceedings "to clarify the scope of this category of employees subject to testing." Id. at 677-78.
96. Id. at 671. The Court, however, found that, while testing of employees with access to classified information is not in itself objectionable, the Customs Service's testing program was not shown to test only such employees. The Court therefore remanded the case for proceedings "to clarify the scope of this category of employees subject to testing." Id. at 677-78.
97. Id. at 665-66 (finding that testing program's purpose of stopping promotion of drug users to sensitive positions justifies abandonment of normal warrant requirement).
ual's responsibilities and the danger posed to the government by a compromised employee. Furthermore, policy considerations may compel administrative searches where the government seeks to prevent the creation of a dangerous situation that could not be effectively addressed if an individualized suspicion were necessary to authorize testing prior to every search. This point is germane to mandatory testing for AIDS in certain specific and defined situations.

Courts have upheld mandatory testing for the presence of AIDS in two instances. First, courts sustain mandatory testing for the AIDS virus for prisoners as a routine precaution prior to incarceration. In *Dunn v. White*, the Court of Appeals for the Tenth Circuit used the balancing approach articulated in *Von Raab* to uphold this type of testing program. In applying the balancing test, the court weighed the security interests of a prison against a prisoner's Fourth Amendment privacy interests. The court required that there be a "'valid, rational connection'" between the governmental interest at stake and the means proffered to protect that interest.

99. *See Harmon v. Thornburgh*, 878 F.2d 484, 490-91 (D.C. Cir. 1989) (declaring that Department of Justice testing program, without additional tailoring of program's scope, lacked sufficient nexus to its goals under *Von Raab*).


101. Dunn, 880 F.2d at 1193 (citing Skinner v. Railway Labor Executives' Ass'n, 489 U.S. 602, 613-17 (1990)).

102. *See Dunn*, 880 F.2d at 1195-97 (determining that mandatory AIDS test of incarcerated prisoners to control spread of disease is reasonable search under Fourth Amendment).


104. *See Dunn*, 880 F.2d at 1194-95 (stating that routine blood testing procedure was limited intrusion on prisoner's privacy and that prisoner's privacy interest is further reduced by incarceration, and that "attempt to ascertain the extent of AIDS problem is certainly a legitimate penological purpose"). The U.S. Court of Appeals for the Eighth Circuit similarly concluded that the prevalence of drug use in prisons warranted the drug testing of prisoners. Spence v. Farrier, 807 F.2d 753, 755 (8th Cir. 1986). But cf. *Berry* v. District of Columbia, 833 F.2d 1031, 1035-36 (D.C. Cir. 1987) (remanding case to determine whether drug testing of prisoners as condition of pretrial release is related either to prisoner's commission of crimes or failure to appear for scheduled hearings). The court in *Dunn* distinguished *Berry* by the fact that if the inmates refused to undergo drug testing, they would remain in custody, and therefore, testing had no impact on detention. Dunn, 880 F.2d at 1192. In addition, prison officials in *Berry* reasoned that drug testing would prevent the release of those prisoners at risk to society or that presented a flight risk while waiting for trial. *Berry*, 833 F.2d at 1035. Because there was not a sufficient factual connection between the means and purpose of the drug testing program in *Berry*, it was invalidated until more fact finding could be done. *Id.* at 1034.

105. Dunn, 880 F.2d at 1194 (quoting Turner v. Safley, 482 U.S. 78, 89-90 (1987)). Furthermore, the court of appeals in *Dunn* rejected the argument that a prison HIV testing pro-
In other words, for the testing plan to be rendered valid in Dunn, the use of a blood test to detect HIV infection had to be rationally related to the prevention and spreading of AIDS in the prison community.107

The court in Dunn also upheld the HIV testing plan because the plan's routine implementation of mandatory HIV testing met the requirements of an administrative search.108 Although the circumstances litigated in Dunn arose in a criminal context, the administrative search balancing test applies equally in the civil context.109 In Dunn, the court found that the governmental interest in preventing the spread of AIDS, coupled with the prisoner's diminished expectation of privacy,110 were sufficiently strong and compelling factors to sustain mandatory testing.111 The court, however, went a step further. It maintained that the government's interest in general public health may be strong enough to allow similar searches of "free world residents."112

In particular, the court noted its 1973 decision in Reynolds v. McNichols,113 where it upheld the City of Denver's power to test prostitutes for venereal diseases even though the prostitutes were neither

gram required individualized suspicion. Dunn, 880 F.2d at 1196. As the prison had a "substantial interest" in AIDS prevention, no requirement of individualized suspicion was necessary. id. at 1196-97. In addition, the court suggested that a requirement of individualized suspicion would render the program inoperative. Cf. id. at 1193 (relying on Skinner v. Railway Labor Executives' Ass'n, 489 U.S. 602, 624 (1989), for proposition that nature of government's interest makes individualized suspicion, based on warrant requirement, unnecessary).

107. Dunn, 880 F.2d at 1196-97 (explaining that although allegations were made that prison lacked "current medical response" to AIDS epidemic, allegations would not control prison's collection of information for future action, because "[t]he prison will ultimately bear responsibility for decisions on segregation and treatment, and certainly it is reasonable [for the prison operators] to attempt to avoid making such decisions in a vacuum").

108. See id. at 1193 (relying on elements enunciated in Von Raab denoting routine administrative function designed to prevent hazardous conditions in work environment); see also supra notes 93-96 (discussing Von Raab elements).

109. See id. (concluding that administrative searches, whether ultimate governmental objectives are either civil or criminal, must still be analyzed by balancing level of governmental intrusion against privacy interests of individual); see also O'Connor v. Ortega, 480 U.S. 709, 723-26 (1987) (upholding work-related searches of employee offices generally after balancing government's interests in workplace against employee's privacy expectations in workplace); Colorado v. Bertine, 479 U.S. 367, 371-73, 375 (1987) (upholding governmental interest in conducting inventory search of automobiles before impoundment against individual's diminished expectation of privacy as long as search conducted according to standardized procedures).


111. Id. at 1195 (asserting that attempt to learn extent of AIDS infection in prisons is "legitimate penological purpose").

112. Id. (suggesting that under certain circumstances, public health concerns may justify mandatory blood testing within suspicious class of citizens).

113. 488 F.2d 1378 (10th Cir. 1973).
under arrest nor individually suspected of being infected with such diseases. 114 Nevertheless, the court in Dunn held that controlling the spread of venereal disease may be compelling enough to allow “coerced medical testing” of those within a suspected class. 115 Individualized suspicion is not required, 116 although the court required the state to show that the search, in this case the blood test, was a “sufficiently productive mechanism to justify [its] intrusion upon Fourth Amendment interests.” 117 The court in Dunn held that the mandatory HIV testing of prisoners met this “sufficiently productive mechanism” test. 118

In the second case, a federal district court upheld mandatory HIV testing outside of the criminal context. In Local 1812, American Federation of Government Employees v. United States Department of State, 119 the U.S. District Court for the District of Columbia upheld a State Department policy that provided for routine HIV testing of foreign service professionals selected to serve overseas. 120 The employees’ union challenged the Department’s policy as an unreasonable search. 121 After investigation, the court found that because the State Department added the HIV test to an already existing policy whose purpose was to establish general fitness for duty and em-

114. Reynolds v. McNichols, 488 F.2d 1378, 1382 (10th Cir. 1973) (stating that it is reasonable for city to attempt to control known source of venereal disease). In a somewhat analogous situation, the mandatory immunization of children has been held constitutional. Prince v. Massachusetts, 321 U.S. 158, 166-67 (1944) (suggesting that parent’s authority over child is limited where state seeks to protect child and community from communicable disease); Jacobson v. Massachusetts, 197 U.S. 11, 37-38 (1905) (holding that Massachusetts was justified in attempting to protect health of citizens through compulsory vaccination program).

115. Dunn v. White, 880 F.2d 1188, 1195 (10th Cir. 1989) (suggesting that even if threat of AIDS is no greater in prison than in general population, “prison’s strong interest in determining who in the population currently carries AIDS” would not be significantly weakened), cert. denied, 493 U.S. 1059 (1990).

116. Id. at 1195-96.


118. Id. (quoting Von Raab, 489 U.S. at 673 (quoting Prouse, 440 U.S. at 658-59)). The court was constrained to view the facts of the case in a light most favorable to the plaintiff. Id. Thus, the court assumed that the prison was not responding to the AIDS information it gathered. Id. The court held, however, that because the prison would eventually make decisions on the management of prisoners with AIDS, it was reasonable for prison administrators to be informed when making these choices. Id. It further stated that according to Bell v. Wolfish, 441 U.S. 520, 559 (1979), the scope, conduct, and justification of a particular intrusion are relevant in “balancing the prison’s need against plaintiff’s interest . . . .” Dunn, 880 F.2d at 1196-97. The court found, however, that the plaintiff did not “allege that the manner or place of the test was unreasonable,” and therefore, the issue was reduced to whether AIDS testing, in itself, was a violation of a prisoner’s Fourth Amendment rights. The court held that such testing was not. Id. at 1197.


121. See id. at 53 (arguing, additionally, that State Department’s policy violated Fifth Amendment due process and federal discrimination laws).
employee health protection while serving abroad,\textsuperscript{122} the addition of the HIV test created a means to ensure fitness of duty and was a rational way to reach that goal.\textsuperscript{123} The court therefore refused to enjoin the State Department from implementing the testing program.\textsuperscript{124}

Governmental interests in HIV testing, however, have not always survived judicial scrutiny. A federal district court employed the Fourth Amendment balancing test to strike down mandatory HIV testing of state employees who supervise retarded patients in the state's care. In \textit{Glover v. Eastern Nebraska Community Office of Retardation},\textsuperscript{125} the State of Nebraska had instituted a mandatory HIV testing program for staff members after two patients tested positive for the virus and after a staff member died from AIDS-related complications.\textsuperscript{126} The testing policy itself applied to all employees whose positions "involve[d] extensive contact" with patients that might lead to injuries that could possibly draw infected blood.\textsuperscript{127}

The district court's application of the balancing test weighed the employees' reasonable expectations of privacy against the state agency's interest in a safe living environment for the patients in its care.\textsuperscript{128} After determining that the involuntary blood test constituted a search and seizure under the Fourth Amendment,\textsuperscript{129} the court in \textit{Glover} balanced the competing interests to determine whether the mandatory test met a reasonableness standard.\textsuperscript{130} Because there was no medical evidence linking casual contact, such as

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  \item \textsuperscript{122} See \textit{id.} at 52-53 (articulating concerns about lack of proper medical care for AIDS patients abroad and higher rates of infectious diseases in foreign countries as factors motivating adoption of State Department policy).
  \item \textsuperscript{123} \textit{Id.} at 53.
  \item \textsuperscript{124} \textit{Id.} (finding present record insufficient to justify injunction based on likelihood that constitutional claim would prevail).
  \item \textsuperscript{125} 686 F. Supp. 243 (D. Neb. 1988), aff'd, 867 F.2d 461 (8th Cir. 1989).
  \item \textsuperscript{127} \textit{Id.} In addition, the court stated that while there was some evidence of sexual abuse of clients at the centers, there was no evidence of a sexual abuse problem, and therefore, the court did not examine what affect this would have on its holding. \textit{Id.} at 248.
  \item \textsuperscript{128} \textit{Id.} at 250 (acknowledging that court must not "over-react and permit unreasonable invasions into a carefully formulated and preserved constitutional right as a response to this concern" about AIDS).
  \item \textsuperscript{129} \textit{Id.;} see \textit{Schmerber v. California}, 384 U.S. 757, 767-71 (1966) (holding that blood test constitutes Fourth Amendment search and seizure, but may be reasonable where suspect is arrested for drunk driving).
  \item \textsuperscript{130} \textit{Glover}, 686 F. Supp. at 250. There are other examples of ways in which this balancing test is applied. See \textit{O'Connor v. Ortega}, 480 U.S. 709, 726 (1987) (maintaining that standard requires that goal and scope of intrusion are both reasonable); United States v. Place, 462 U.S. 696, 703-10 (1983) (weighing nature and extent of intrusion against individual's Fourth Amendment rights where suspect was stopped at airport on suspicion of carrying contraband and finding that brief stop would be reasonable but that length of time of this particular stop was unreasonable); \textit{Camara v. Municipal Court}, 387 U.S. 523, 537-38 (1967) (balancing need to search buildings, which has "long history of judicial and public acceptance," and public interest to prevent "dangerous conditions" against "relatively limited inva-
the care performed by the state employees, to HIV transmission, the court struck down the mandatory testing policy. Furthermore, the court found that while the state's desire to protect its patients and employees from HIV infection was a worthy goal, the plan to accomplish that goal did not "reasonably serve that purpose." The differences between the factual context of the mandatory HIV testing program in *Glover* and the "at-risk" procedures focused on by this Comment lead to a conclusion that the constitutionality of mandatory HIV testing of those HCWs who perform at-risk procedures remains an open question. The holding in *Glover* does not proscribe all mandatory HIV testing programs, but remains fact specific. It is conceivable, therefore, that a mandatory HIV testing program in a different factual context will be able to satisfy the Fourth Amendment balancing test as applied to administrative searches. The prison cases discussed above lead to such a conclusion. Indeed, the court in *Dunn* suggested the point that, under the proper circumstances, mandatory HIV testing outside of the criminal context may withstand constitutional scrutiny. An institutional HIV testing program has yet to be challenged in the courts, however. Interestingly, though, in response to the CDC guidelines examined by this Comment, many state legislatures have called for mandatory testing of HCWs. The issue, therefore, may soon come directly before the courts.

3. Creation of a duty to test HCWs

   a. School Board v. Arline: Section 504 mandates inquiry into health condition of employees

Section 504 of the Rehabilitation Act of 1973 prohibits dis-
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crimination against handicapped persons who are employed by govern-
ment or who are working for private employers that receive federal aid or assistance. 137 The statute requires that an employer refrain from using a person's handicap as a basis for denying employment opportunities if the person is "otherwise qualified" to perform the job. 138 The Court in School Board v. Arline 139 examined this antidiscrimination provision. 140

In Arline, the county school board forced an elementary school teacher to resign after she suffered a series of tuberculosis relapses. 141 In response, the teacher brought suit in federal court alleging that her discharge violated section 504 of the Rehabilitation Act. 142 The Supreme Court agreed with the teacher, holding that tuberculosis is a disease, and therefore is covered under section 504. 143 Moreover, the Court unequivocally concluded that a contagious disease constitutes a "handicap" for purposes of section 504. 144 In so concluding, the Court found that if a handicapped party is "otherwise qualified" to perform a job, or if reasonable accommodations could be made to allow that person to continue to work in a related capacity, then the person may not be discharged on the basis of the handicap. 145 In applying this standard, employ-

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138. Section 504 provides: "No otherwise qualified handicapped individual in the United States . . . shall, solely, by reason of his [or her] handicap, be excluded from participation in, be denied benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance . . . ." Rehabilitation Act of 1973, § 504, 87 Stat. at 394 (codified as amended at 29 U.S.C. § 794). A "handicapped" individual under this provision is "any person who . . . has a physical or mental impairment which substantially limits one or more major life activities, . . . has a record of such an impairment, or . . . is regarded as having such an impairment." 45 C.F.R. § 84.3(j)(1) (1991). A "qualified handicapped person" means, "[w]ith respect to employment, a handicapped person who, with reasonable accommodation, can perform the essential functions of the job in question." Id. § 84.3(k)(1).
A person who has a contagious disease may not be considered "handicapped" for purposes of § 504 where he or she is an individual who has a currently contagious disease or infection and who, by reason of such disease or infection, would constitute a direct threat to the health or safety of other individuals or who, by reason of the currently contagious disease or infection, is unable to perform the duties of the job.
141. Id. at 276.
142. Id.
143. Id. at 284-86.
144. Id. at 282, 285-86. The Court stated that "[a]llowing discrimination based on the contagious effects of a physical impairment would be inconsistent with the basic purpose of § 504 . . . ." Id. at 284.
145. Id. at 287-88. The case was remanded to determine whether the teacher was "otherwise qualified" for her job or if reasonable accommodations could be made so that she could continue teaching. Id. at 277. In Southeastern Community College v. Davis, 442 U.S. 397 (1979), the Court discussed whether a woman with a hearing impairment who had to rely on
ers must "conduct an individualized inquiry" of employees, and should defer to the "reasonable medical judgments of public health officials" when making the requisite findings of fact. Accordingly, this holding suggests that a medical institution employer, as part of its "individualized inquiry" into an employee's health, would need to know the status of the employee's disease if the employer is to make reasonable accommodations for that employee. It follows, therefore, that to correctly determine an employee's suitability for continued employment, HIV testing of that individual may be required.

b. HIV testing of HCWs required under affirmative duty to provide safe work environment

Two recent cases place a prospective duty on health care institutions to know the HIV status of their HCWs, thus compelling, by implication, the use of individualized mandatory testing. In Leckelt
"v. Board of Commissioners,"\textsuperscript{148} the court found that a hospital had an affirmative duty to provide a "'safe environment, and safeguard[[] the health of all patients and employees.'"\textsuperscript{149} The court inferred this duty from the hospital's routine use of infection-control procedures and requirements intended to prevent the transmission of contagious diseases between patients and HCWs.\textsuperscript{150} Accordingly, when an employee contracts a contagious disease or is suspected to be at risk of contracting such a disease, the hospital must reassign or restrict as necessary the operators and procedures that employee may perform.\textsuperscript{151} The hospital's ability to exercise this duty, however, is contingent upon it obtaining information regarding each employee's health. Therefore, in \textit{Leckelt}, the health care institution had to know whether its employee was HIV positive,\textsuperscript{152} information that comes only from administering an HIV test.\textsuperscript{153}

In \textit{Estate of Behringer v. Medical Center},\textsuperscript{154} the Superior Court of New Jersey ruled that a physician has an affirmative duty to withdraw from performing invasive procedures that pose risks to patients.\textsuperscript{155} The court justified its adoption of this rule by relying on section 293

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  \item \textsuperscript{148} 714 F. Supp. 1377 (E.D. La. 1989), aff'd, 909 F.2d 820 (5th Cir. 1990).
  \item \textsuperscript{149} Leckelt v. Board of Comm'rs, 714 F. Supp. 1377, 1379 (E.D. La. 1989) (quoting from hospital's infection control procedures), aff'd, 909 F.2d 820 (5th Cir. 1990).
  \item \textsuperscript{150} See \textit{id.} at 1377, 1388, 1392 (finding that it is reasonable under circumstances to require testing of employees exposed to infectious diseases in order to control spread of such diseases). Therefore, testing for HIV infection falls under the rubric of these procedures. \textit{id.} at 1379.
  \item \textsuperscript{151} \textit{Leckelt}, 714 F. Supp. at 1388-89. The Supreme Court's holding in \textit{School Board v. Arline}, 480 U.S. 273 (1987), provided the justification, according to the court in \textit{Leckelt}, for the hospital to investigate the health status of an employee to determine if "reasonable accommodations" are possible or not. \textit{See Leckelt}, 714 F. Supp. at 1388 (concluding that \textit{Arline} required health care institutions to investigate health of employees who are suspected of carrying contagious diseases). Absent such information, the hospital could not know what accommodations are "reasonable." \textit{id.} This knowledge is needed for both the benefit of patients coming into contact with the infected employee and for the employee's health. \textit{See id.} at 1388 (concluding that infected employee stands at risk if treating patients infected with highly contagious diseases).
  \item \textsuperscript{152} \\textit{Leckelt}, 714 F. Supp. at 1382, 1388. The court drew support from \textit{Wright v. Olin Corp.}, 697 F.2d 1172 (4th Cir. 1982), for the principle that employers must sometimes discriminate against an employee based on his or her handicap where the performance of certain job-related tasks would expose the handicapped individual or others to a potential for injury or illness. \textit{Leckelt}, 714 F. Supp. at 1388 (citing \textit{Wright v. Olin Corp.}, 697 F.2d 1172, 1189 (4th Cir. 1982)). Again, it follows that the medical institution must know the employee's HIV status to fulfill that responsibility. \textit{Leckelt}, 714 F. Supp. at 1388.
  \item \textsuperscript{153} \\textit{Leckelt}, 714 F. Supp. at 1388-89 (holding that monitoring of HCW's health status is permitted "to protect patients and co-workers and to accommodate any current or future handicap of the employee").
  \item \textsuperscript{154} \textit{Estate of Behringer v. Medical Ctr.}, 592 A.2d 1251 (N.J. Super. Ct. Law Div. 1991).
  \item \textsuperscript{155} \textit{Estate of Behringer v. Medical Ctr.}, 592 A.2d 1251, 1283 (N.J. Super. Ct. Law Div. 1991). The court found that the policy of restricting surgical privileges of HCWs who pose "any risk of HIV transmission to the patient" was a reasonable exercise of the hospital's authority. \textit{id.} at 1255.
\end{itemize}
of the Restatement (Second) of Torts. 156 Specifically, the court required the hospital to show that its policy of temporarily suspending and thereafter restricting a doctor's surgical privileges was substantially justified by a reasonable probability of harm to the patient. 157 This probability of harm, the court explained, arises not only from the probability of actual transmission, but also from the possibility that the occurrence of an accident during surgery would require postoperative testing for HIV infection. 158 The court stressed that testing in such circumstances is inherently traumatic for the patient and could potentially cause changes in the patient's lifestyle until his or her HIV status is ascertained. 159 Relying on these postulates as proof of potential harm, the court in Behringer determined that the policy of restricting the scope of HIV-infected surgeons' practices is a proper means of preventing transmission of the virus and of protecting the physical and emotional health of patients. 160

In summary, the courts in Leckelt and Behringer found that a compelling societal interest takes precedence over the individual Fourth Amendment rights of HCWs. Society's need to know a health care worker's HIV status leads to the inevitable topic of mandatory testing. Because these decisions hold that the government's interest in protecting patients from HCWs infected with HIV is paramount, the next logical step is that mandatory testing of HCWs is justified in certain circumstances. 161

Accordingly, the court in Leckelt applied the "individualized inquiry" duty articulated in Arline and found that the requisite conditions existed to require that the HCW turn over the results of his HIV test to his employer, the hospital, because the hospital had a right to require HIV testing in order to fulfill its health care obliga-

156. Id. at 1281-82 (using analytical framework of Restatement to justify balancing risk against utility of HCW performing invasive procedures).
157. See id. at 1255 (finding that response of hospital was not based on arbitrariness or prejudgment, but resulted from reasoned analysis).
158. Id.
159. Id. at 1266.
160. See id. at 1283 (holding that hospital acted reasonably in restricting plaintiff from performing invasive procedures as there was "reasonable probability of substantial harm") (quoting Jansen v. Food Circus Supermarkets, 541 A.2d 682, 688 (N.J. 1988)). Another factor in the court's analysis was that the risk of transmission involving this surgeon could be completely prevented by using a different surgeon. Id.; see also supra note 28 (discussing substitution of surgeons as "viable policy option").
161. But see Orentlicher, supra note 31, at 1135 (arguing that mandatory testing is unreasonable and unnecessary). Orentlicher contends that the court's attempt in Behringer to eliminate all risk of transmission from HCW to patient by a policy of mandatory testing and prohibition of all invasive procedures was unnecessary. Id. Additionally, he contends that voluntary testing is an adequate response because the moral, ethical, and legal obligations in the medical community are adequate to control the risk of transmission from HCW to patient. Id. at 1136-37.
tions. Because an HIV-positive individual is a "handicapped individual" as defined in section 504, a hospital has a duty to determine if this HCW is otherwise qualified to do the job, or if it could provide reasonable accommodations so the HCW can perform his or her job. Thus, the Leckelt court found that the only logical way for a hospital to fulfill its duty to accommodate a handicapped employee is to become informed about the employee's health status. Furthermore, it found that protecting patients and co-workers of HIV-infected employees from being exposed to the virus is a legitimate reason for a health care institution to inquire into a worker's HIV status. Accordingly, the hospital in Leckelt suspended the plaintiff's employment activities until his HIV test results became available.

As applied in Leckelt, therefore, Arline mandates that the suspected HCW be tested for the AIDS virus. Once the AIDS test result is received, the institution is able to evaluate the HCW's condition and, if the worker is infected, can determine whether the HCW poses a risk to patients or other employees and whether "reasonable accommodations" can be made to allow the HCW to work in some capacity. The subsequent codification of Arline resulted in an administrative policy classifying AIDS as a contagious disease and therefore as a handicap. The statute seems also to require, at

162. Leckelt v. Board of Comm'rs, 714 F. Supp. 1377, 1379 (E.D. La. 1989), aff'd, 909 F.2d 820 (5th Cir. 1990); see supra notes 146-47 and accompanying text (describing Arline duty of "individualized inquiry" and discussing appropriate responses).
163. See supra note 138 and accompanying text (discussing relevant definitions contained in § 504 of Rehabilitation Act).
164. See supra note 138 (noting definition in § 504 that "qualified handicapped person" is one who, with reasonable accommodation, can perform job requirements).
166. Id.
167. Id. at 1384-85; see id. at 1388 (observing that in order to begin evaluating and dealing with situation surrounding suspected infected HCW, knowledge of that HCW's HIV status is required).
168. See id. at 1388 (holding that inquiring into health status of suspected HIV-positive HCW is not enough because condition of infected HCW, once known, must be monitored as part of continuing duty under Arline). During congressional debate preceding codification of the Arline duty, Representative Don Edwards (D.-Cal.) stated that the Arline duty requires "a medical assessment of whether exclusion is necessitated by the degree of risk involved in the particular situation.... The outcome of each case will depend on the medical facts concerning the particular infectious condition, how that infection is transmitted, and the nature of the job in question." 134 CONG. REC. H584 (daily ed. Mar. 2, 1988), quoted in Leckelt v. Board of Comm'rs, 714 F. Supp. 1377, 1388 (E.D. La. 1989), aff'd, 909 F.2d 820 (5th Cir. 1990). Representative Edwards further added that this amendment was fashioned "in such a way that the courts will continue to adjudicate cases involving AIDS, HIV infection and other communicable conditions on a case by case basis." 134 CONG. REC. H584 (daily ed. Mar. 2, 1988) (remarks of Rep. Don Edwards).
170. See Memorandum from Douglas W. Kmiec, Acting Attorney General, U.S. Department of Justice, Office of Legal Counsel, to Arthur B. Culvahouse, Jr., Counsel to the Presi-
least in practice, that employees be tested. Employers can act best when they are informed of all pertinent facts, not when making decisions on the basis of prejudice and apprehension. Section 504, however, only applies to those institutions that receive federal monies. Nevertheless, the interpretation of section 504’s requirement of an individualized inquiry may have broad implications even for those institutions not receiving federal monies. They too may have a duty to conduct this individualized inquiry.

II. INFORMED CONSENT AND "SPECIAL RELATIONSHIP" THEORIES COMPEL DISCLOSURE OF HIV-POSITIVE STATUS

The CDC guidelines address the issues of patient consent and the HIV-positive HCW. The guidelines specify whether and under what conditions an HIV-infected HCW has an affirmative duty to disclose the fact of his or her infection to patients. In considering these issues, courts have applied theories of medical malpractice and patient informed consent.

A. HIV-Positive Status as Material Information

The theory of medical malpractice arises from tort principles as HCWs perform work requiring special skills that demand a minimum of particularized knowledge and ability. HCWs therefore must exercise care that is reasonable given their special skills, knowledge, and ability. An HCW’s liability for malpractice is predicated on the satisfaction of two conditions. First, an HCW must act or fail to act in such a way that his or her behavior is inconsistent with the medical profession’s standards of practice. Sec-
ond, violation of these standards of practice must cause injury to the patient. Tort law imposes an affirmative duty on the HCW to inform the patient of the risks inherent in any proposed treatment and even in alternative treatments not being advocated by the HCW. The difficulty arises when attempting to determine whether the information actually imparted to the patient satisfies the above requirements so that the patient is then capable of giving informed consent to the treatment.

Resolution of this difficulty is based on whether the information given, or, as the case may be, the information withheld, was "material" to the patient's decision to undergo the treatment. Traditionally, the medical community was responsible for defining "material," but a modern trend has supplanted this approach


176. See, e.g., Mann v. United States, 904 F.2d 1, 2 (2d Cir. 1990) (requiring plaintiff who alleged that medical malpractice during surgery caused harm to prove that doctor failed to exercise average skill in performance of surgery); Fitzgerald v. Manning, 679 F.2d 341, 342-47 (4th Cir. 1982) (requiring plaintiff to prove that physician failed to provide standard of care where alleged malpractice caused patient to lose lung); Sewell v. United States, 629 F. Supp. 448, 455 (W.D. La. 1986) (holding that physicians are not held to standard of perfection but are liable where their actions fall below ordinary standard of care in case where alleged misdiagnosis resulted in neurological deficit and paraplegia); see also Boyce v. Brown, 77 P.2d 455, 457-58 (Ariz. 1938) (articulating general factors to be considered in determining presence of malpractice).

177. See Marino v. Ballestas, 749 F.2d 162, 167 (3d Cir. 1984) (indicating that patient needs to know alternative treatments and risks of those treatments before informed consent can be given); Keeton et al., supra note 18, § 32, at 190 (discussing scope of disclosure necessary to enable patient to reach intelligent, informed decision). This duty arises out of the principle that each person has a right to determine what may be done to his or her body as a matter of personal autonomy. Keeton et al., supra note 18, § 32, at 190; see also Harbeson v. Parke Davis, Inc., 746 F.2d 517, 522 (9th Cir. 1984) (stating that doctrine of informed consent "is premised on the fundamental principle that a competent individual has a right to determine what shall be done with [his or] her own body"). Thus, the patient needs to be informed adequately to make an intelligent decision whether to consent to a particular treatment. Harbeson, 746 F.2d at 522.

178. Keeton et al., supra note 18, § 32, at 190-91; see also Marino v. Ballestas, 749 F.2d 162, 167-68 (3d Cir. 1984) (recognizing need for patient to be informed of nature and possible consequences of operation before informed consent can be given); Pegrn v. Sisco, 406 F. Supp. 776, 780 (W.D. Ark.) (treating patient consent to operation as ineffective where patient was not informed of dangers of operation), aff'd mem., 547 F.2d 1172 (8th Cir. 1976); Scott v. Bradford, 606 P.2d 554, 557 (Okla. 1979) (holding that doctor may still breach duty to inform, even where consent has been given, by failing to inform patient of options and risks, assuming injury occurs).

179. See Harbeson, 746 F.2d at 522 (stating that materiality is guide for disclosure); Flannery v. President & Directors of Georgetown College, 679 F.2d 960, 962-63 (D.C. Cir. 1982) (concluding that doctors have duty "to provide specific warnings of material risks"); Lambert v. Park, 597 F.2d 236, 238-39 (10th Cir. 1979) (choosing materiality rather than common practice of other doctors as guide for disclosure).

180. See Keeton et al., supra note 18, § 32, at 191 (defining concept of "materiality" as being grounded in professional medical standard, which is gauged as what reasonable physi-
with a standard centered on the individual patient. In other words, the information is deemed material if the patient would consider such information necessary in reaching a decision whether or not to undergo treatment. Today courts adopt either a totally subjective approach, or they adopt an approach based on a reasonable person in the patient’s position. A reasonable patient is defined as a prudent person in the patient’s position, taking into account the patient’s medical history and any other factors that could help determine the materiality of risk to that patient. Under either approach, tort principles require the injured patient to

181. See, e.g., Davis v. Omitowoju, 883 F.2d 1155, 1169 (3d Cir. 1989) (using subjective standard rather than reasonable person standard in determining whether physician gained patient’s informed consent); Harbeson, 746 F.2d at 522 (using standard of reasonable person in patient’s position to determine materiality of undisclosed information); Hartke v. McKelway, 707 F.2d 1544, 1548 (D.C. Cir.) (using standard of reasonable person in patient’s position to determine materiality of risk), cert. denied, 464 U.S. 983 (1983); Henderson v. Milobsky, 595 F.2d 654 (D.C. Cir. 1978) (holding that patient, not medical community, determines scope of information needed to achieve informed consent); Scott, 606 F.2d at 557-58 (holding that standard for disclosure is set by patient’s need to know and not by medical community); see also Cobbs v. Grant, 502 P.2d 1, 10 (Cal. 1972) (noting that “unlimited discretion in the physician is irreconcilable with the basic right of the patient to make the ultimate informed decision”).

182. See Harbeson v. Parke Davis, Inc., 746 F.2d 517, 522 (9th Cir. 1984) (maintaining that patient must show that different course of treatment would have been chosen had material risk been disclosed); Goldstein v. Kelleher, 728 F.2d 92, 39 (1st Cir.) (requiring patient to show that surgery would have been declined had she been fully aware of risk), cert. denied, 469 U.S. 852 (1984); Avakian v. United States, 739 F. Supp. 724, 731 (N.D.N.Y. 1990) (requiring showing that reasonable person in plaintiff’s circumstances would have refused to undergo treatment had risks been fully disclosed).

183. Compare Scott v. Bradford, 606 P.2d 554, 557-58 (Okla. 1979) (holding that risk is material and therefore must be communicated if it would likely affect patient’s decision to go forward with treatment) with Canterbury v. Spence, 464 F.2d 772, 787 (D.C. Cir.) (attaching liability where “reasonable patient’s” decision to undergo treatment would have been affected by disclosure of information in question), cert. denied, 409 U.S. 1064 (1972).

show a breach of the HCW's duty and then a causal link from the breach to the injury.  

An HCW's duty to obtain informed consent from patients is imposed by the tort system in an attempt to address the risks arising from prescribed treatments. The question remains, however, whether the HIV status of the responsible HCW is a material fact that must be conveyed to the patient as a prerequisite to obtaining informed consent. The court in *Estate of Behringer v. Medical Center* settled the issue by concluding that because there was a risk of transmission that would result in the death of the patient, the HIV-positive status of the surgeon was material. The court did not focus on the risk of transmission inherent in the particular procedure, but based its decision on the fact that the possibility of transmission exists whenever an HIV-positive HCW performs an invasive procedure. The court also considered that if an incident...
does occur during surgery, the patient is subjected to HIV testing for a period of up to one year to ascertain whether the HIV virus was transmitted. The court held that where invasive procedures are performed, a surgeon's HIV-positive status must be disclosed because it is a material element of informed consent.

Commentators, however, are not in agreement with the conclusions drawn by the court in Behringer regarding the necessity of patient informed consent. Professor Gostin contends that the risk of transmission is too small to be controlling, and therefore, informed consent is not necessary. Gostin offers two reasons for this conclusion. First, he argues that the theory of informed consent does not apply to the "highly remote or unforeseen risks" presented in this situation. Second, Gostin asserts that requiring informed consent would invite irrational discrimination against infected HCWs, potentially ruining the HCWs' professional and personal lives. Instead, Gostin argues that an infected HCW's employer and the licensing authorities should be informed. These groups, according to Gostin, are better able to monitor the professional competency of the HCW and to determine whether any risks to patients are posed. Gostin further believes that the infected HCW's HIV status should only be revealed where there is a sufficiently "compelling public health benefit" to be attained by releasing the information, but he contends that disclosure to patients does not

its decision, that there may be a duty to warn third parties requiring HIV-positive surgeons to disclose their HIV status to patients. Behringer, 592 A.2d at 1281 n.19.

190. Id. at 1266; see also GUIDE TO DISEASES, supra note 1, at 366 (stating that diagnosis of AIDS usually occurs between one and three years after exposure).

191. Behringer, 592 A.2d at 1280 (basing decision partially on fact that period of waiting for HIV test results will create great anxiety in patients and may induce changes in lifestyle and child-bearing decisions even if test results are negative).

192. Id. at 1279-83.

193. See Gostin, supra note 57, at 304 (discussing costs and benefits of disclosing HIV-positive status of HCWs to patients); Orentlicher, supra note 31, at 1136 (characterizing approach of court in Behringer to issue of informed consent as both "unnecessary and counterproductive").

194. Gostin, supra note 57, at 304.

195. Gostin, supra note 57, at 304 (comparing HCW's failure to disclose HIV-positive status with routine practice of not informing patients of other low risk items such as infections or relative skill of provider).

196. Gostin, supra note 57, at 304-05 (adding that retrospective disclosure of HCW's HIV status would create needless anxiety in patient and suggesting that problem be solved by making HIV testing of patients routine).

197. Gostin, supra note 57, at 304-05 (asserting that limiting scope of informed consent to benefits and risks of medical procedures is something that employers and licensing authorities can best evaluate).

198. Gostin, supra note 57, at 304 (asserting that informed consent alone cannot protect patients in absence of professional and licensing authorities' enforcement of professional standards).
meet this standard, and thus is not warranted in this situation.\textsuperscript{199}

The decision in \textit{Behringer} has been criticized for its “zero-risk tolerance” standard. The American Medical Association (AMA) Office of the General Counsel contends that this standard is “both unnecessary and counterproductive”\textsuperscript{200} and that requiring informed consent would likely result in irrational discrimination.\textsuperscript{201} Even if dissemination of an HCW’s HIV status were to remain ‘within a small group, the AMA argues, no patient would permit an HIV-positive HCW to perform any procedure, whether or not the procedure posed a health risk.\textsuperscript{202} The result, of course, would be an effective end to any practice by an infected HCW.\textsuperscript{203} If representative of the medical community at large, the AMA commentaries indicate that a large gulf exists between the opinion of the medical community and the courts.

B. “Special Relationship” and the Duty to Control the Conduct of Others

The requirement of informed consent, predicated on both HCWs’ expertise and the need for patient autonomy over health care decisionmaking, mandates that infected HCWs reveal their conditions.\textsuperscript{204} The nature of the doctor-patient relationship dictates that the patient rely heavily on the ability, honesty, and integrity of the

\textsuperscript{199} Gostin, \textit{supra} note 57, at 304 (contending instead that disclosure would create anxiety in patients and foster unjustified discrimination against HIV-positive HCWs). \textit{But see In re Milton S. Hershey Medical Ctr.}, 595 A.2d 1290, 1295-96 (Pa. Super. Ct. 1991) (finding “compelling need” to disclose surgeon’s HIV-positive status to patients). The court in \textit{In re Hershey} found this “compelling need” to disclose, based on a Pennsylvania statute, by balancing “the need for disclosure against the privacy interest of the individual and the public interests which may be harmed by disclosure.” \textit{Id.} at 1295 ( quoting 35 PA. CONS. STAT. ANN. § 7608(c) (1992)). The court considered the damage to the physician’s professional life, the effect of requiring disclosure on the price of medical care and malpractice insurance, and the disincentives for HCWs to treat HIV-positive patients. \textit{Id.} The court found the interest in public health more compelling than these other factors and therefore required disclosure. \textit{Id.} at 1296-97. More specifically, this “compelling need” to disclose had to be based on a “concrete medical need.” \textit{Id.} at 1295 n.6 (stating that need for result of HIV test must be to make “important medical decision” and cannot be based on simple “desire to know”).

\textsuperscript{200} Orentlicher, \textit{supra} note 31, at 1136 (suggesting that guidelines for disclosure established by “public health officials should guide decision to disclose risk of HIV transmission to patients”).

\textsuperscript{201} Orentlicher, \textit{supra} note 31, at 1136 (asserting that patients are reluctant to receive care from HIV-positive physicians regardless of nature of contact).

\textsuperscript{202} Orentlicher, \textit{supra} note 31, at 1136 (concluding that guidelines set by impartial public health officials are preferable to approach taken by court in \textit{Behringer}, which required disclosure to patient).

\textsuperscript{203} \textit{But see} Orentlicher, \textit{supra} note 31, at 1136 (noting that even after disclosure patient may still choose “unusually qualified” HIV-positive surgeon to perform difficult procedure or that patient in rural area may still choose HIV-positive physician rather than travel considerable distance to see another physician).

\textsuperscript{204} \textit{See supra} notes 174-91 and accompanying text (discussing informed consent and duty to reveal requirements where HCW is seropositive for HIV).
Patients place themselves, without reciprocation, into the hands of their doctors. Tort law recognizes this "special relationship" in several respects. Where the patient's conduct or emotional health poses a risk of harm to foreseeable third parties, the treating HCW has a duty to take action and attempt to prevent the harm from materializing by warning those parties put at risk.

Legal theorists apply this concept of "special relationship" across a spectrum of societal relationships. The case of *Tarasoff v. Regents of the University of California* stands as the benchmark for the application of this "special relationship" theory. In *Tarasoff*, the defendant, a psychologist named Dr. Lawrence Moore, counseled a patient who, during therapy, made specific death threats against Tatiana Tarasoff. Dr. Moore notified neither Tarasoff nor the police.

205. See Keyes, supra note 20, at 605 (discussing ethical considerations involved in doctor-patient relationship); see also Arnold S. Relman, *What Market Values Are Doing to Medicine*, Atlantic Monthly, Mar. 1992, at 100 (describing privileged position of HCWs in society resulting from public belief that HCWs will "faithfully discharge [their] fiduciary responsibility" outlined in ethical codes).

206. See Keyes, supra note 20, at 605 (maintaining that while doctors are responsible for their own health and their patients', patients are neither responsible for or able to ascertain their doctor's health).

207. See Restatement (Second) of Torts, §§ 315, 319 (1985) (articulating concept that "special relation" may exist between actor and another which creates duty upon actor to control other person, especially where that party shows "dangerous propensities"); see also Keeton et al., supra note 18, § 56, at 383-85 (suggesting that certain relationships are custodial in nature, imposing duty to control party exhibiting dangerous propensities toward others); Fowler V. Harper & Posey M. Kime, *The Duty to Control the Conduct of Another*, 43 Yale L.J. 886, 888-98 (1934) (discussing theory that society recognizes certain human relationships as triggering affirmative duty to control another's behavior and thereby prevent unreasonable risk to third party).

208. See infra notes 210-17 and accompanying text (discussing duty to warn concept as developed in *Tarasoff v. Regents of the Univ. of Cal.*, 551 P.2d 334 (Cal. 1976)).

209. The duty to control another arises in the following situations, among others: parent and child, master and servant, schools and students, prison officials and prisons, drivers and passengers, and hospitals and patients. Restatement (Second) of Torts §§ 315, 316 (1981) (commenting that duty arises from special relationship and not from ability to control another's conduct); Keeton et al., supra note 18, § 56, at 383 (maintaining that such relationships arise where relationship is protective or custodial in nature); Harper & Kime, supra note 207, at 888-98 (positing that duty arises where another person uses property in owner's presence, between parent and child, and in extraordinary situations).


212. *Tarasoff v. Regents of the Univ. of Cal.*, 551 P.2d 334, 339, 341 (Cal. 1976) (stating that patient informed Dr. Moore that he intended to kill woman whom he did not name but who was easily identifiable as Tarasoff, after her return from Brazil).
of these threats, and soon thereafter, the patient carried through with his threats. The California Supreme Court agreed with Tarasoff's estate, holding that Dr. Moore violated his duty to warn Tarasoff of the threats against her life. This duty, the court held, is not absolute, but is created where a party "stands in some special relationship to either the person whose conduct needs to be controlled or in a relationship to the foreseeable victim of that conduct." This duty to warn is limited, consequently, to harm that is foreseeable, and it is owed only to easily identifiable parties. This principle could seemingly be extended to HCWs and hospitals where HIV-infected HCWs practice.

1. Duty of HCWs: controlling themselves and patients

The common law assesses liability against any person who negligently exposes another to an infectious or contagious disease. To show negligence, a plaintiff must prove that a defendant knew of the disease's presence and of its contagious nature. For example, state courts have consistently held that persons infected with venereal disease must notify their sexual partners of their infection.

213. Id. at 340-41 (noting that Dr. Moore did notify campus police, who detained patient briefly, but released him after he promised "to stay away from Tatiana.").
214. Id. at 339, 341.
215. Id. at 347-48 (stating that "[t]he protective privilege ends where the public peril begins").
216. Id. at 342-43 (failing to address question of whether foreseeability, in absence of special relationship, would create duty to protect another person from harm).
217. Id. at 342 (stating that foreseeability is "the most important . . . consideration in establishing duty").
218. Cf. id. at 343 n.7 (quoting Vistica v. Presbyterian Hosp., 432 P.2d 193, 196 (Cal. 1967), which held that when hospital has knowledge of facts that put patient at risk, or its patient puts others at risk, hospital must use "reasonable care in the circumstances" to prevent that foreseeable harm); Harper & Kime, supra note 207, at 905 (discussing "elasticity" of duty to control conduct of another person). Harper and Kime concluded: The principles governing the duty of one person to control the conduct of another have this general elasticity which characterizes other principles of tort law. When, therefore, novel cases involving the problem arise, it will become the duty of the judges to examine the analogies of such cases as are discussed here and to determine whether, in the light of human experience as reflected in these decisions, the relations of the parties fall into one or the other of the general divisions mentioned. Harper & Kime, supra note 207, at 905. The authors conclude that the duty to control the conduct of another person arises in two situations: when a person has a special relationship with the potential victim or with the person whose conduct needs to be controlled. Id. at 904. In the case of an HIV-infected HCW, it is the provider's relationship with the patient at risk of contracting AIDS from the HCW that requires the provider to protect the patient.
219. See, e.g., Mussivand v. David, 544 N.E.2d 265, 269 (Ohio 1989) (holding wife's lover, who was infected with venereal disease, liable for negligence for failing to warn wife's husband that wife was at risk of contracting disease and passing it to husband).
221. See, e.g., Kathleen K. v. Robert B., 198 Cal. Rptr. 273, 276-77 ( Ct. App. 1984) (hold-
Liability has been predicated on the failure to warn foreseeable third parties of the possibility of venereal disease transmission.\textsuperscript{222} The opinion in \textit{Tarasoff} suggests the next logical step: an HCW could be held "liable to persons infected by his [or her] patient if [the HCW] . . . fails to warn members of the patient's family."\textsuperscript{223} Under this reasoning, HCWs have a duty to warn the known sexual partners of HIV-positive patients of the risk of transmission. The court in \textit{Behringer} acknowledged this duty and responded by extending it to require that HIV-infected HCWs must inform patients of the HCWs' infection.\textsuperscript{224} This holding suggests that HCWs must

\textsuperscript{222} See \textit{Mussivand}, 544 N.E.2d at 272 (holding defendant infected with venereal disease liable for failing to inform sex partner's husband that husband's wife, who was having affair with defendant, was at risk of contracting venereal disease from defendant and transmitting it to husband). The court based liability on foreseeability and public policy. \textit{Id.} at 270-71. First, the court noted that the defendant was a doctor and should therefore be particularly aware of the presence of a venereal disease and the high rate of its transmission through sexual intercourse. \textit{Id.} at 272. The court also noted that the defendant should have foreseen that a wife will have intimate relations with her husband. \textit{Id.} at 270, 272-73. Second, the court asserted that there is a public interest in protecting the health of citizens, especially from serious diseases that are easily transmitted. \textit{Id.} at 270, 271.

It is suggested by implication that negligent AIDS transmission creates similar liabilities. See \textit{C.A.U. v. R.L.}, 438 N.W.2d 441, 442-44 (Minn. Ct. App. 1989) (refusing to find defendant liable for failing to inform fiancée of HIV infection where defendant had neither constructive nor actual notice of his condition). The Minnesota court began its analysis by recognizing that under state common law a defendant could be found liable for negligent transmission of dangerous, communicable diseases. \textit{Id.} at 442-45 (citing \textit{R.A.P. v. B.J.P.}, 428 N.W.2d 103, 106-07 (Minn. Ct. App. 1986) (holding that husband could be held liable for transmitting genital herpes to his wife where he was aware of his illness); see also \textit{Barbara A. v. John G.}, 199 Cal. Rptr. 422, 426 (Ct. App. 1983) (allowing cause of action where man fraudulently told partner he was sterile and ectopic pregnancy resulted from subsequent sexual intercourse).

\textsuperscript{223} \textit{Tarasoff}, 510 N.Y.S.2d 104, 107 (App. Div. 1986) (holding that husband could be held liable for transmitting genital herpes to his wife where he was aware of his illness); \textit{Skillings v. Allen}, 173 N.W. 663, 664 (Minn. 1919) (discussing liability for transmitting scarlet fever)). At the time of the parties' engagement, defendant was unaware of his HIV infection, although a few months later he began treatment for symptoms now known to be related to HIV infection. \textit{C.A.U.}, 438 N.W.2d at 442. Upon being definitively diagnosed for AIDS, the defendant informed his fiancée. \textit{Id.} Subsequently, she tested positive for the virus. \textit{Id.} The defendant and plaintiff maintained a sexual relationship from approximately May 1984 to May 1985. \textit{Id.} The court found that not until late May 1985 did it become known that AIDS could be transmitted through heterosexual contact. \textit{Id.} In addition, it was not possible for an individual to obtain an anonymous HIV test until the end of July 1985. \textit{Id.} (noting that prior to July 1985, test for AIDS was only used for screening blood in Minnesota). The court concluded, therefore, that because the defendant had no knowledge, either actual or constructive, of his condition during his sexual relations with the plaintiff, he had no duty to inform his fiancée of his condition. \textit{Id.} at 443-44. Although the court did not impose liability, the implication arising from the court's analysis is that negligent or fraudulent transmission of the HIV virus will be treated no differently under the law than other communicable diseases. \textit{Cf. Id.} at 442-43 (discussing imposition of liability for negligent transmission of other communicable diseases).

\textsuperscript{224} \textit{Estate of Behringer v. Medical Ctr.}, 592 A.2d 1251, 1281 n.19 (N.J. Super. Ct. Law Div. 1991) (finding that physician's duty to warn sexual partner of HIV-positive patient also requires HIV-positive surgeon to warn patients of risk of transmission).
act based on their special relationship to patients. For the HIV-positive HCW, that duty requires that patients be warned.

2. Duty on medical institutions: controlling behavior of HCWs

Arguably, a “special relationship” also exists between HCWs and their associated hospitals. Where a hospital is aware of “dangerous propensities” of an employee, it must act to control that employee’s behavior. Health care institutions therefore must, as the hospital did in Behringer, restrict the practice of an infected HCW. In Behringer, the risk of transmission was foreseeable, and the surgeon’s patients were identifiable third parties. Absent practice restrictions on the performance of invasive procedures by infected HCWs, hospitals must enforce a policy of patient consent to treatment by seropositive HCWs. The “special relationship” between HCWs and hospitals additionally compels hospitals to inform patients postoperatively if the treating HCW subsequently tests positive for the AIDS virus. This prospective duty is predicated on hospitals having notice of an HCW’s infection. Because hospitals must provide a safe environment for their employees and patients, failure to inform and enact practice restrictions could open hospitals to nonfeasance liability.

III. Review of CDC Guidelines

A. History and Purpose of Guidelines

The CDC guidelines were issued in July 1991 amidst efforts within both the medical community and political arenas to address

225. See supra notes 209-18 and accompanying text (discussing liability arising from special relationships).
226. See Behringer, 592 A.2d at 1283 (noting that medical center’s decision to bar surgeon from practicing invasive procedures “represents a reasoned and informed response to the problem”).
227. See id. at 1283. But cf. Lawrence O. Gostin et al., The Case Against Compulsory Casefinding in Controlling AIDS—Testing, Screening and Reporting, 12 AM. J.L. & MED. 7, 47-50 (1987) (recognizing “special relationship” concept from Tarasoff but maintaining HCW’s duty to warn in HIV context is limited to foreseeable sexual partners).
228. But cf. supra notes 194-99 and accompanying text (discussing Professor Gostin’s theory that public disclosure of HIV status of HCW would destroy HCW’s life, without proportionate benefit to patients or society at large).
229. But see Gostin, supra note 57, at 305 (arguing that postoperative disclosure creates needless anxiety and that better solution is routine mandatory HIV testing of patients).
230. See Keyes, supra note 20, at 611 (stating that institution has duty to protect patient where institution is aware that HCW is HIV positive).
231. See supra notes 148-60 and accompanying text (examining medical institutions’ duty to provide safe work environment for employees and safe healing environment for patients).
232. See Keyes, supra note 20, at 612 (discussing applicability of Tarasoff principle to health care institutions and their patients).
233. Recommendations for Preventing Transmission, supra note 9, at 1-9.
the issues raised by HIV-positive HCWs. In January 1991, the American Dental Association (ADA) and the AMA announced their policies regarding HIV-infected dentists and doctors. The ADA adopted a policy whereby HIV-infected dentists either must notify their patients of their infection before performing any dental surgery or stop performing such procedures. The AMA’s statement cited an ethical responsibility on the part of infected HCWs not to perform any procedures that might pose a risk of transmitting the virus to their patients.

In addition, the AMA encouraged all doc-

234. See infra notes 235-49 and accompanying text (discussing positions taken by major medical associations on issues of informed consent and mandatory testing and legislative efforts to address same problems).

235. The AMA’s statement reads as follows:

The health of patients must always be the paramount concern of physicians. Consequently, until the uncertainty about transmission is resolved, the American Medical Association believes that HIV infected physicians should either abstain from performing invasive procedures which pose an identifiable risk of transmission or disclose their seropositive status prior to performing a procedure and proceed only if there is informed consent. As a corollary, physicians who are at risk of acquiring HIV infection, and who perform invasive procedures, should determine their HIV status.


236. Worthington, supra note 235, at 17. Philip Weintraub, the ADA’s spokesperson, stated that “[u]ntil the uncertainty about transmission is resolved, the ADA believes that HIV (AIDS virus)-infected dentists should refrain from performing invasive procedures or should disclose their seropositive (infected) status.” Id. at 17; see also Lawrence K. Altman, AIDS-Infected Doctors and Dentists Are Urged to Warn Patients or Quit, N.Y. Times, Jan. 18, 1991, at A18 (quoting statement of ADA issued Jan. 17, 1991).

237. Altman, supra note 236, at A18 (quoting AMA sources as stating that physicians have right to continue careers in professions that would pose no risk of transmission to patients and adding that AMA would help HIV-positive doctors find alternative careers). This suggestion follows earlier guidelines produced by the AMA’s Council on Ethical and Judicial Affairs, which state:

If the risk of transmission of an infectious disease from a physician to a patient exists, disclosure of that risk to patients is not enough; patients are entitled to expect that their physicians will not increase their exposure to the risk of contracting an infectious disease, even minimally . . . . If a risk does exist, the physician should not engage in the activity.

Karen H. Rothenberg et al., The AIDS Project: Creating a Public Health Policy—Rights and Obligations of Health Care Workers, 48 Md. L. Rev. 93, 119 (1989) (quoting from Council on Ethical & Judicial Affairs, Ethical Issues Involved in the Growing AIDS Crisis, 259 JAMA 1360, 1361 (1988)). This 1988 AMA statement has been construed as the definitive position of the medical community in its examination of the ethical problems inherent in HIV-infected HCWs’ practices. See Estate of Behringer v. Medical Ctr., 592 A.2d 1251, 1259 (N.J. Super. Ct. Law Div. 1991) (stating that AMA report set forth standard that had not previously existed). But cf. Barnes et al., supra note 58, at 315 (stating that other professional and public health organizations have opposed both screening of HCWs and banning them from areas of practice). This position, however, has not met with universal approval within the medical community. The AMA position, it is argued, seeks to implement a “no identifiable risk” standard that is unobtainable in practice. Id. For example, most HCWs normally carry with them many infectious conditions; these conditions are present during medical procedures because they cannot be eliminated
tors who perform surgery or other invasive procedures to be tested for the HIV virus.\textsuperscript{238}

On mandatory testing for HCWs, the major national medical associations have been equally consistent in their belief that mandatory testing is unwarranted and unnecessary. In June 1991, the AMA passed a resolution urging physicians to submit voluntarily to HIV testing.\textsuperscript{239} The purpose of this resolution was to provide support for the positions previously taken by the AMA that it is a doctor's ethical responsibility to ensure that patients are not exposed to unwarranted risks of transmission and that physicians who perform invasive procedures should know whether they are HIV positive.\textsuperscript{240} For similar reasons, the American Nurses Association (ANA) adopted a resolution in July 1991 calling for voluntary testing and disclosure by nurses.\textsuperscript{241}

Concurrent with the debate over these resolutions, Congress examined several differing proposals addressing the issue.\textsuperscript{242} In the House of Representatives, Representative William Dannemeyer (R-Cal.) introduced a bill to amend Title XXVI of the Public Health Service Act by calling for mandatory testing of all HCWs who perform invasive procedures.\textsuperscript{243} Following news of the Bergalis story,
Senator Jesse Helms (R-N.C.) succeeded in persuading the Senate to pass an amendment to the bill, once it was introduced into the Senate, that would have created fines and possible prison sentences for HCWs who, if aware they are HIV positive, do not notify their patients before performing invasive procedures.\textsuperscript{244} A conference committee rejected the Senate amendment\textsuperscript{245} and instead adopted an amendment proposed by Senator Robert Dole (R-Kan.), which had previously passed in the Senate\textsuperscript{246} and called for voluntary HIV testing of HCWs as expressed in the CDC guidelines.\textsuperscript{247} Congress also adopted a provision requiring states to enact the CDC guidelines or their equivalent within one year of the bill’s signing.\textsuperscript{248}

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(a) Whoever, being a registered physician, dentist, nurse, or other health care provider, knowing that he [or she] is infected with the Human Immunodeficiency Virus, intentionally provides medical or dental treatment to another person, without prior notification to such person of such infection, shall be fined not more than $10,000, or imprisoned not less than ten years, or both.


While the conference committee wisely rejected the Senate-passed provision requiring a mandatory jail sentence for any HIV-infected health care worker who does not inform patients of their [sic] infected status, we were forced by Senate negotiators to accept this alternative language. Make no mistake about it, the language before us is a vast improvement over what the Senate passed.\textsuperscript{Id.} The language referenced by Representative Skaggs that was before the House was contained in an amendment proposed by Senator Robert Dole (R-Kan.) and passed by the Senate on July 18, 1991. 137 Cong. Rec. S10,348-50, 10,356-63 (daily ed. July 18, 1991). This amendment requires states to adopt guidelines from the CDC that are designed to prevent HCWs from transmitting HIV to patients. 137 Cong. Rec. 10,348-50 (daily ed. July 18, 1991). The House subsequently concurred in this amendment, following the recommendation of the conference committee. 137 Cong. Rec. H7404-05 (daily ed. Oct. 3, 1991).

137 Cong. Rec. S10,348-50, 10,363 (daily ed. July 18, 1991).\textsuperscript{246} 137 Cong. Rec. S9978-79 (daily ed. July 15, 1991) (quoting from Recommendations for Preventing Transmission, supra note 9, at 1, 5).\textsuperscript{247} Congress adopted the following language from the CDC guidelines: ‘‘These guidelines do not include specific recommendations on testing HCWs for HIV or HBV infection.’’ and ‘‘HCWs who perform exposure-prone procedures should know their HIV antibody status.’’ 137 Cong. Rec. S978-79 (daily ed. July 15, 1991) (quoting from Recommendations for Preventing Transmission, supra note 9, at 1, 5).


Notwithstanding any other provision of law, each State Public Health Official shall,
States that fail to meet this requirement risk losing Public Health Service Act funds provided by the Federal Government to the states.249

B. Details of Guidelines

The CDC guidelines as released attempt to find a middle ground between the positions of advocates who call for mandatory testing of all HCWs and of those who argue that no testing should be required.250 The guidelines encourage that HCWs performing “at risk” procedures should undergo HIV testing voluntarily251 and that medical institutions should define for themselves what procedures to consider “at risk.”252 The guidelines do not mandate practice restrictions for HIV-positive HCWs, but rather suggest that an expert medical panel impose restrictions after review of each individual case.253 Patient consent for “at risk” procedures is needed if the practicing HCW is infected,254 but postoperative notification is again left to the discretion of the medical institution.255 Much of the CDC’s analysis is based on its reliance on the efficacy of “universal precautions” (UPs) as the procedures best able to reduce the risks of

not later than one year after the date of enactment of this Act, certify to the Secretary of Health and Human Services that guidelines issued by the Centers for Disease Control, or guidelines which are equivalent to those promulgated by the Centers for Disease Control concerning recommendations for preventing transmission of the human immunodeficiency virus and the hepatitis B virus during exposure prone invasive procedures, except for emergency situations when the patient’s life or limb is in danger, have been instituted in the state.

Id. § 633, 105 Stat. at 876 (to be codified at 42 U.S.C. § 300ee-2).

249. Id. The provision makes the following statement:

Compliance with such guidelines shall be the responsibility of the State Public Health Official. Said responsibility shall include a process for determining what appropriate disciplinary or other actions shall be taken to ensure compliance. If such certification is not provided under this section within the one-year period, the state shall be ineligible to receive assistance under the Public Health Service Act . . . until such certification is provided, except that the Secretary may extend the time period for a State, upon application of such State, that additional time is required for instituting said guidelines.

Id. § 633, 105 Stat. at 876-77 (to be codified at 42 U.S.C. § 300ee-2).

250. See Lawrence K. Altman, U.S. Would Curtail Doctors with AIDS, N.Y. TIMES, July 16, 1991, at A1 (stating that guidelines excluded mandatory testing, much to surprise of those fearing CDC would call for such testing and anger of those advocating it). But see Malcolm Gladwell, CDC Urges AIDS Testing for All Hospital Patients, WASH. POST, Sept. 20, 1991, at A3 (discussing draft report of CDC recommending that all patients be offered and encouraged to take test for HIV as routine procedure).

251. Recommendations for Preventing Transmission, supra note 9, at 5-6 (suggesting that HCWs who perform procedures that are prone to transmission should know whether they are HIV positive, though not through mandatory testing).

252. Recommendations for Preventing Transmission, supra note 9, at 5.

253. Recommendations for Preventing Transmission, supra note 9, at 5.

254. Recommendations for Preventing Transmission, supra note 9, at 5 (requiring patient notification for at risk procedures).

255. Recommendations for Preventing Transmission, supra note 9, at 6.
transmission to acceptable minimums.\textsuperscript{256} An analysis of the guidelines' provisions follows.

1. **Efficacy of universal precautions (UPs)**

   The CDC's philosophy in advocating UPs is that the best way to reduce the risk of transmission is to reduce the incidence of exposure.\textsuperscript{257} UPs include the use of various barrier devices and procedures to prevent contact with blood and certain other bodily fluids that are considered infectious for HIV, hepatitis-B (HBV), or other bloodborne pathogens, whether or not the fluids actually contain these viruses.\textsuperscript{258} The devices and procedures include hand washing, protective barriers,\textsuperscript{259} certain handling and disposal techniques for needles and other sharp instruments, and high-level sterilization of equipment that comes in contact with blood and other fluids that could contain pathogens.\textsuperscript{260} It is the CDC's belief that proper training, use, and monitoring of UPs will reduce the chance of transmission of infectious diseases to an acceptable minimum.\textsuperscript{261}

\textsuperscript{256} See Recommendations for Preventing Transmission, supra note 9, at 1-2 (stating that precise application of UPs will help decrease risks of transmission of HIV between HCWs and patients).

\textsuperscript{257} Recommendations for Preventing Transmission, supra note 9, at 5 (recommending UPs in order to reduce risk of transmission and implying that risk of exposure will decrease as result); see OSHA: Occupational Exposure to Bloodborne Pathogens, 56 Fed. Reg. 64,023 (1991) (comments to final rule) (rule to be codified at 29 C.F.R. § 1910.1030) [hereinafter OSHA Comments on Bloodborne Pathogens] (explaining Occupational Health and Safety Administration's (OSHA) methodology in developing safety regulations for bloodborne pathogens in work environments based on assessments of methods and rates of transmission). OSHA views bloodborne pathogens differently from, for example, toxic chemicals, where the risk in the latter case is associated with cumulative dosages over a period of time. OSHA Comments on Bloodborne Pathogens, supra, at 64,023. Exposure to HBV or HIV may or may not result in transmission. \textit{Id.} Repeated exposure increases the likelihood of transmission, but each instance presents the same risk, which depends on the "virulence of the pathogen, the size of the delivered dose, and the route of exposure, among other factors, and not upon any prior exposure." \textit{Id.} OSHA has therefore concluded that for bloodborne pathogens, "the best way to reduce the risk of transmission [sic] is by reducing the exposure." \textit{Id.}

\textsuperscript{258} See OSHA: Occupational Exposure to Bloodborne Pathogens, 56 Fed. Reg. 64,175-82 (to be codified at 29 C.F.R. § 1910.1030) [hereinafter OSHA Rule on Bloodborne Pathogens] (listing standards of prevention employers must implement, including UPs).

\textsuperscript{259} See Recommendations for Preventing Transmission, supra note 9, at 2, 5 (providing examples of protective barrier measures, including double gloving, eye goggles, gowns, and masks to cover HCWs' mouths and noses).

\textsuperscript{260} Recommendations for Preventing Transmission, supra note 9, at 2. The recent OSHA final rule on bloodborne pathogens requires employers, both in the health industry and otherwise, to develop an appropriate program of UPs and to bear the cost of protecting their employees. OSHA Comments on Bloodborne Pathogens, supra note 257, at 64,124-39.

\textsuperscript{261} Recommendations for Preventing Transmission, supra note 9, at 2 ("Proper application of these principles will assist in minimizing the risk of transmission of HIV . . . from patient to HCW, HCW to patient, or patient to patient."). Studies appear to bear out the CDC's position, at least to some extent. See Edward S. Wong et al., \textit{Are Universal Precautions Effective in Reducing the Number of Occupational Exposures Among Health Care Workers?}, 265 JAMA 1123, 1126 (1991) (discussing results of UPs efficacy study). The study determined that the use of UPs lowered the number of occupational exposures that resulted in direct contact with blood and
Despite the CDC’s support for UPs and the favorable view the medical community holds of them, there are problems with UPs that suggest serious deficiencies. First, although the key provision in UPs is the use of gloves for invasive procedures and for other procedures involving blood or bodily fluids, there are drawbacks to a strong dependency on the efficacy of gloves. A recent study found that most glove tears are the result of an unknown mechanism. For example, a tear may be noticed incidentally during or at the end of a procedure, after the patient’s blood or open body cavity has already been exposed to the surgeon’s skin or blood released from a percutaneous injury. The study advocated the use of double gloving as an added precaution. Double gloving, however, has not met with universal approval for certain at-risk procedures. The use of two gloves, or even of a single glove, albeit to a lesser degree, reduces tactile ability during surgical procedures and results in greater numbers of injuries caused by sharp instruments.

thus, by implication, reduced the risk of transmission accordingly. The authors indicated, however, that the potential for exposure was not reduced, but rather that UPs provided effective barriers to those exposures. The study found that the rate of exposure incidence was not affected by the implementation of UPs but that the likelihood of avoiding exposures increased threefold with the use of barrier devices.

See, e.g., Wong et al., supra note 261, at 1123 (discussing study conducted by doctors in which 277 physicians participated and concluded, based on efficacy of UPs, that UPs were beneficial to medical community).

See Wong et al., supra note 261, at 1126 (concluding that use of gloves is “largest contributor to the efficacy of UPs”). OSHA’s recent ruling on workplace bloodborne pathogens strenuously urged the use of gloves in all procedures involving blood or other potentially contagious body fluids and not only in procedures where sharp instruments are being used. See OSHA Comments on Bloodborne Pathogens, supra note 257, at 64,133 (reporting that OSHA deems gloves to be “a basic precept of prevention of occupational transmission of bloodborne pathogens”).

Wright et al., supra note 44, at 1668-69 (reporting that in 168 of sample of 249 glove tears (67%) mechanism causing tear could not be ascertained).

Wright et al., supra note 44, at 1670 (noting that glove tears caused by unknown mechanisms are less noticeable and therefore are more likely to result in prolonged exposure of patient to HCW’s blood and vice versa).

Wright et al., supra note 44, at 1670 (suggesting that regular use of double gloves “may significantly reduce the exposure to blood-borne pathogens”).

See OSHA Comments on Bloodborne Pathogens, supra note 257, at 64,012 (noting that gloves and other protective devices cannot consistently prevent against wounds arising from use of sharp instruments, including needles); id. at 64,133-34 (listing arguments made by HCWs who perform phlebotomies (drawing of blood) that even single gloves should not be required because they reduce tactile ability and cannot prevent needle sticks); see also Wright et al., supra note 44, at 1670 (maintaining that injuries caused by sharp instruments are especially serious and that simple barrier devices cannot always prevent such injuries and accompanying potential pathogen exposures).

Wong et al., supra note 261, at 1123 (“The possibility exists that UPs may even increase certain kinds of exposures; for example, the use of gloves may interfere with tactile input and increase the number of injuries with sharp instruments during procedures.”); see also Wright et al., supra note 44, at 1669 (noting that although impenetrable gloves would completely eliminate glove tears and injuries from sharp instruments, those available today have proved too stiff and thick to use for delicate surgical procedures that cause majority of
Second, it has been suggested that HCWs often do not adhere to UPs with consistency, due to the high cost of implementing the procedures. Estimates of the cost of implementing UPs are not insignificant, averaging $327 million per year for the necessary personal protection equipment and additional annual sums of $134 million for training, $107 million for vaccination for HBV and postexposure follow-up treatment, and $102 million for housekeeping. OSHA’s Final Rule on Bloodborne Pathogens, specifically HBV and HIV, has put the cost burden on hospitals and other health care institutions to provide protective barriers for their employees.

The CDC is less than clear as to the procedures it considers “at-risk.” The agency separates invasive procedures into two classes, comprised of invasive procedures generally and “exposure-prone procedures.” Exposure-prone procedures are those invasive procedures for which, according to the CDC, UPs are ineffective in preventing transmission from HCW to patient, although UPs may safeguard other classes of invasive procedures. Although it has named the classes of procedures in generalities, the CDC has reserved to individual institutions the responsibility for determining which procedures are exposure prone. This decision has caused injuries to HCWs). The CDC has as much as admitted this fact. In its recommendations to HCWs, the CDC agreed that routine use of gloves neither prevents most injuries from sharp instruments nor eliminates the risk of transmission from HCW to patient. Recommendations for Preventing Transmission, supra note 9, at 3.

269. See Wong et al., supra note 261, at 1126 (noting that physicians performing emergency procedures used barrier devices and other precautions with much less frequency than physicians performing non-emergency procedures); see also Gerberding & Schecter, supra note 44, at 1575 (citing studies indicating that despite availability of UPs, only 50% of surgeons sampled recommended them and only 24% double gloved as matter of course).

270. OSHA Comments on Bloodborne Pathogens, supra note 257, at 64,039.

271. OSHA Comments on Bloodborne Pathogens, supra note 257, at 64,039.

272. OSHA Comments on Bloodborne Pathogens, supra note 257, at 64,039.

273. OSHA Comments on Bloodborne Pathogens, supra note 257, at 64,039.

274. OSHA Rule on Bloodborne Pathogens, supra note 257, at 64,177 (“The employer shall ensure that appropriate personal protective equipment in the appropriate sizes is readily accessible at the worksite or is issued to employees.”).

275. Recommendations for Preventing Transmission, supra note 9, at 4 (noting that procedures considered exposure prone include those in which transmission of HBV from HCW to patient has occurred, despite use of UPs, and those in which percutaneous injury often occurs).

276. Recommendations for Preventing Transmission, supra note 9, at 4.

277. See Recommendations for Preventing Transmission, supra note 9, at 4 (noting that certain oral, cardiothoracic, colorectal, and obstetric/gynecologic procedures as examples of exposure-prone procedures). General surgery, orthopedic, and trauma services are also considered exposure prone. Id.

278. See Recommendations for Preventing Transmission, supra note 9, at 5 (recommending that individual medical institutions identify for themselves those procedures to be considered “exposure prone”). The medical community, however, has so far refused to take this step and is pushing the CDC to come up with a definitive list. See Norman Daniels, HIV-Infected Professionals, Patient Rights, and the ‘Switching Dilemma’, 267 JAMA 1368, 1368 (1992) (noting that because medical organizations refused to create lists of exposure-prone procedures as requested...
a rift between the CDC and the medical community, resulting in a less than clear delineation as to what procedures are at risk and who makes that determination.\textsuperscript{279}

Indeed, the CDC and the Department of Health and Human Services (HHS) agreed in December 1991 to amend the guidelines, dropping the provision that local health officials develop the list of at-risk procedures.\textsuperscript{280} Subsequently, the CDC and HHS removed themselves from responsibility for this task as well, instead advising state and local health officials to decide on a case-by-case basis whether an infected HCW poses any risk to patients.\textsuperscript{281} This response has been heavily criticized as "pandering" to election-year political concerns.\textsuperscript{282} Despite this inconsistent federal action, Con-

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\textsuperscript{279} See Daniels, supra note 278, at 1368 (relating medical community's refusal to draw up lists of exposure-prone procedures and examining CDC's draft revisions that recommend risks imposed by infected HCWs be reviewed on case-by-case basis); Altman, supra note 278, at A19 (stating that many health care experts are very concerned about having many different interpretations of exposure-prone procedures and chaos that could result); Cimons, supra note 278, at A1, A26 (describing refusal of medical groups to submit requested lists of exposure-prone procedures to CDC and explaining that refusal is rooted in argument that no "scientific basis" exists to require designating procedures as "at-risk").

\textsuperscript{280} Marlene Cimons, Plan To Ease Curbs on AIDS-Infected Doctors Is Scrapped, L.A. TIMES, June 14, 1992, at A13. The CDC also agreed to drop the provision requiring HIV-positive HCWs to inform their patients of their infection. Id. The Federal Government decided to rewrite the July 1991 guidelines after further study revealed no additional cases of virus transmissions to patients from HIV-positive HCWs, other than the Bergalis incident. Id.

\textsuperscript{281} Lawrence K. Altman, U.S. To Let States Set Rules on AIDS-Infected Health Workers, N.Y. TIMES, June 16, 1992, at C7 (reporting CDC and HHS's decision to allocate authority to states). Dr. William L. Roper, head of the CDC, said of this shift of responsibility to the states:

\begin{quote}
We think we will learn more by letting states do various things on a state-to-state basis and seeing what we learn over the next few years. We may well come back to the issue in the future, but we do not plan a new set of guidelines or a single Federal list of exposure-prone procedures.
\end{quote}

\textsuperscript{282} Professor Gostin has called this decision untenable, saying that the Federal Government could be making "a very big mistake. The whole purpose of having the CDC come up with regulations is to make sure states don't pander to local constituencies and victimize HIV-positive health-care workers." Laurie Garrett, AIDS 'Rules' for Health Workers KO'd; Move Leaves Policing to States, NEWSDAY, June 16, 1992, at 4, 28. Other commentators pointed out that the states had a relatively short period of time, until only October 1, 1992, to develop these lists, compared to the CDC, which failed to accomplish the task in more than two years of study and hearings. Id. Dr. Neil Schram, head of the AIDS Task Force for the American Physicians for Human Rights, said the situation will force states to create "atrocious guidelines," resulting in absolute chaos between the states. Id.; see also Cimons, supra note 280, at A13 (quoting Dr. Schram as predicting havoc among states over creation of guidelines).
gress' requirement that states develop guidelines by the end of October 1992 or risk losing federal health care funding remains in effect.\textsuperscript{283}

2. **Comparing HIV to HBV**

The CDC's recommendations stress the use of UPs for prevention of HIV transmission by drawing on the experience of health care officials dealing with hepatitis-B virus.\textsuperscript{284} The transmission of HBV to patients from HCWs, and vice versa, is a comparatively common occurrence.\textsuperscript{285} Since the early 1970s, when serologic testing for HBV infection was introduced, there have been reports of over 300 patients infected with HBV through treatment by an HBV-infected HCW.\textsuperscript{286} Most of these reported transmissions occurred before health care officials were aware of the risk presented by bloodborne pathogens, as well as before the use of UPs was stressed.\textsuperscript{287} All the same, there is evidence that some instances of transmission still occurred after HCWs began wearing gloves.\textsuperscript{288} Because the AIDS virus has been found to be transmitted similarly to HBV, although at rates twelve to sixty times slower,\textsuperscript{289} the CDC applies the same theories of prevention for both HIV and HBV. There is a fundamental difference, however, between HBV and HIV. Unlike HIV, both im-

\textsuperscript{283}See Melillo, supra note 242, at 7 (noting that "[f]ailure to develop policies by Oct. 28 could mean the loss of as much as $2 billion nationally in Public Health Service Funds, which include grants for treatment of alcohol and drug abuse and mental illnesses as well as money to help prevent the spread of acquired immune deficiency syndrome (AIDS)").

\textsuperscript{284}See Recommendations for Preventing Transmission, supra note 9, at 2-3 (discussing background of infection control practices and 20-year history of published reports of HBV transmission).

\textsuperscript{285}See OSHA Comments on Bloodborne Pathogens, supra note 257, at 64,009 (referring to CDC estimates that there are approximately 8700 HBV infections of HCWs per year attributed to occupational exposure, causing 2100 cases of acute hepatitis with roughly 200 deaths of HCWs annually). The risk that an HCW will become infected through percutaneous exposure to HBV-positive blood is approximately 30\%. Recommendations for Preventing Transmission, supra note 9, at 3.

\textsuperscript{286}Recommendations for Preventing Transmission, supra note 9, at 2.

\textsuperscript{287}Recommendations for Preventing Transmission, supra note 9, at 3.

\textsuperscript{288}See OSHA Comments on Bloodborne Pathogens, supra note 257, at 64,012 ("Some HCWs continued to transmit HBV to patients in spite of the use of gloves and additional precautions."); Recommendations for Preventing Transmission, supra note 9, at 2-3 (noting that in 8 of 20 reported "clusters," or multiple transmissions associated with single sources of HBV transmission by HCWs to patients, transmission occurred despite glove use by HCWs). There have been 20 reported clusters of HBV transmission from HCWs to patients. OSHA Comments on Bloodborne Pathogens, supra note 257, at 64,012. A few clusters occurred where the HCWs, obstetricians/gynecologists and cardiovascular surgeons, were wearing gloves at the suspected time of transmission. Recommendations for Preventing Transmission, supra note 9, at 3.

\textsuperscript{289}Jerome A. Boscia, Surgery, AIDS, and Hepatitis B, 266 JAMA 1360, 1361 (1991) (citing public health study that found "the risk of infection to a health care worker following a needle stick from a carrier of the hepatitis B virus is between 6\% and 30\%, or 12 to 60 times greater than the risk following a needle stick from a patient infected with HIV").
munization and vaccination exist for the hepatitis-B virus. 290

The current vaccine for HBV was licensed in 1986291 and has been found to be 85% to 97% effective.292 In addition, pre-contraction immunization is equally effectual.293 As a result, the number of reported HBV cases between 1982 and 1988 dropped by 75%.294 Both OSHA and the CDC recommend that any HCW who has been exposed to a patient's blood receive the HBV vaccine if they have not already been immunized.295 Immunization or vaccination combined with the use of UPs has proved successful in minimizing the risk of HBV transmission.296 It follows that the same preventive procedures would be equally effective in battling HIV transmission. But there is no vaccine for HIV, and the virus amounts to a certain death sentence for infected persons.

Currently, the CDC guidelines permit HBV-infected HCWs to perform invasive procedures.297 Typically, employment restrictions are not imposed until the HCW infects a patient.298 When a transmission occurs, health officials are advised to review infection-control procedures in place during the time of the transmission and to make changes, including educating or restricting the HCW's practice, or both, to guard against future incidents.299 One author sug-

290. Id. at 1360-61 (discussing effectiveness of HBV vaccine and immunization).
291. Centers for Disease Control, Recommendations of the Immunization Practices Advisory Committee Update on Hepatitis B Prevention, 36 MORBIDITY & MORTALITY WKLY. REP. 353, 355 (1987) (discussing formulation of new HBV vaccine called Recombivax H, which was licensed by U.S. Food and Drug Administration in July 1986). An earlier vaccine manufactured from human plasma has been available in the United States since 1982. Id. at 353. The new vaccine is created when "a plasmid containing the gene for the hepatitis B surface antigen (HBsAg) subtype a & w" is inserted into common baker's yeast and then is harvested, purified, and filtered. Id. at 355.
292. OSHA Comments on Bloodborne Pathogens, supra note 257, at 64,012.
293. See Boscia, supra note 289, at 1360-61 (noting that immunization is one of most important weapons used to combat HBV).
294. Boscia, supra note 289, at 1361. In addition, since the introduction of these vaccines, OSHA estimates that 2,558,974 persons (2,029,189 HCWs) have been vaccinated for HBV in the United States. OSHA Comments on Bloodborne Pathogens, supra note 257, at 64,012.
295. OSHA Comments on Bloodborne Pathogens, supra note 257, at 64,013; Recommendations for Preventing Transmission, supra note 9, at 2 (recommending that hepatitis-B vaccine be given during period of professional training and before any foreseeable exposures can occur). Practitioners also make this same recommendation. See Boscia, supra note 289, at 1361 (recommending immunization of those HCWs who may be exposed to HBV).
296. See OSHA Comments on Bloodborne Pathogens, supra note 257, at 64,058 (noting that 87% of occupationally induced HBV exposure could be avoided by combination of vaccination, engineering controls, work practices, protective clothing, housekeeping, and training).
297. See Barnes et al., supra note 58, at 319, 328 nn.98 & 103 (discussing CDC guidelines and citing Walter W. Williams, Guideline for Infection Control in Hospital Personnel, 4 INFECTION CONTROL 326, 332 (1983) (recommending precautions but not practice restrictions)).
298. Barnes et al., supra note 58, at 320 ("Employment restrictions on workers with chronic HBV infection have not been routinely imposed unless and until the worker has infected a patient.").
299. See Barnes et al., supra note 58, at 320 (discussing process following transmission of HBV from HCW to patient, including: modification of infection control strategy, temporary
gests that this experience with HBV should be applied in situations involving HIV-infected HCWs.\textsuperscript{300} This proposition, however, is misplaced. While it is true that HIV is more difficult to transmit than HBV,\textsuperscript{301} both an inoculation and a vaccine exist for treatment or prevention of HBV, whereas neither option yet exists for HIV.

3. Voluntary testing of HCWs recommended

The CDC's guidelines do not recommend mandatory testing of HCWs to determine either their HBV or HIV status.\textsuperscript{302} The guidelines do state, however, that HCWs who perform exposure-prone procedures should know their HIV and HBV status.\textsuperscript{303} In other words, it is left to the individual HCW to decide whether to be tested for the viruses.\textsuperscript{304} This discretion conflicts with the prospective duty courts have assigned to hospitals and other institutions to provide a safe environment for their employees and patients,\textsuperscript{305} and, under section 504 of the Rehabilitation Act, conflicts with the requirement to test for infectious viruses in order to conduct the necessary inquiry into the health and safety risks posed by HCWs.\textsuperscript{306} To carry out this duty, medical institutions must have a right to investigate the health status of their employees.\textsuperscript{307} In addition, tort principles place a similar duty on parties to reduce or eliminate if withdrawal of HCW from practice, re-education of HCW, and change of HCW's practice techniques.

300. See Barnes et al., supra note 58, at 320 (inquiring rhetorically why HIV-infected HCWs should be treated differently than HCWs carrying HBV). Barnes implies that the two diseases are sufficiently similar to warrant applying HBV infection-control procedures to HIV, as opposed to establishing guidelines that call for a "case-by-case" review of HCWs or practice restrictions. \textit{Id}.

301. See Barnes et al., supra note 58, at 320 (noting that HBV is much more infectious and easily transmitted than HIV).

302. See \textit{Recommendations for Preventing Transmission, supra} note 9, at 6 ("Mandatory testing of HCWs for HIV antibody or [HBV antibody] is not recommended. The current assessment of the risk that infected HCWs will transmit HIV or HBV to patients during exposure-prone procedures does not support the diversion of resources that would be required to implement mandatory testing programs.").

303. See \textit{Recommendations for Preventing Transmission, supra} note 9, at 5 ("HCWs who perform exposure-prone procedures should know their HIV antibody status. HCWs who perform exposure-prone procedures and who do not have serologic evidence of immunity to HBV from vaccination or from previous infection should know their HBsAg [hepatitis-B surface antigen, which is early indicator of hepatitis-B viral infection] status and, if that is positive, should also know their HBeAg [hepatitis-B e antigen, whose presence is associated with higher levels of hepatitis in blood] status.").

304. See \textit{Recommendations for Preventing Transmission, supra} note 9, at 5-6 (recommending that HCWs who perform exposure-prone procedures should be aware of their HIV status by undergoing voluntary testing).

305. See supra notes 148-60 and accompanying text (outlining duty of medical institutions to provide safe environment for patients and employees).

306. See supra notes 136-47 and accompanying text (discussing required inquiry under § 504 of Rehabilitation Act).

307. See supra notes 143-47 and accompanying text (outlining duty to conduct "individualized inquiry" under \textit{Arlene}).
possible the risk of infection where the danger is great and there is a rational means to do so.\textsuperscript{308} Therefore, a program imposing mandatory testing of HCWs where suspicion of infection and risk of transmission exists is justifiable.\textsuperscript{309} By leaving the decision whether to test individual HCWs, the CDC’s guidelines fail to meet the obligations of health care institutions as enunciated by the courts.\textsuperscript{310}

4. \textit{Infected HCW and subsequent practice restrictions}

The next step after an HCW has been diagnosed with the AIDS virus is to determine what, if any, restrictions should be placed on the practice of that HCW. This determination is particularly important if the professional performs invasive procedures. The CDC has provided less than a definitive answer to this question, however.

According to the CDC, those HCWs who are either HBV or HIV infected should not continue to perform exposure-prone procedures until they have received guidance from an “expert review panel.”\textsuperscript{311} This panel should determine on a case-by-case basis those circumstances, if any, under which the infected HCW may continue to perform at-risk procedures.\textsuperscript{312} This requirement parallels the “individualized inquiry” required by section 504 and articulated in \textit{School Board v. Arline.}\textsuperscript{313} If the review panel modifies the HCW’s practice as a result of his or her infection, then whenever possible, the panel should also provide the HCW with “opportunities to continue appropriate patient-care activities,”\textsuperscript{314} which may

\textsuperscript{308} See \textit{Estate of Behringer v. Medical Ctr.}, 592 A.2d 1251, 1281-83 (N.J. Super. Ct. Law Div. 1991) (reviewing tort theories of risk and practical solutions); \textit{see also RESTATEMENT (SECOND) OF TORTS} \textsection\textsuperscript{298} (1981) (describing tort theories of risk analysis); \textit{supra} notes 19-21 and accompanying text (discussing tort duties in high-risk situations).

\textsuperscript{309} \textit{Cf. supra} notes 148-53 and accompanying text (discussing \textit{Leckelt v. Board of Commissioners} requirement of mandatory testing when certain conditions are present).

\textsuperscript{310} \textit{See supra} note 149 and accompanying text (discussing holding in \textit{Leckelt} that hospitals have duty to test HCWs for HIV); \textit{see also supra} notes 155, 160 (stating opinion in \textit{Behringer} that found medical center’s policies on testing and restricting HIV-infected HCWs were justified).

\textsuperscript{311} \textit{Recommendations for Preventing Transmission, supra} note 9, at 5. The panel may include, \textit{inter alia}, “a) the HCW’s personal physician(s), b) an infectious disease specialist with expertise in the epidemiology of HIV and HBV transmission, c) a health professional with expertise in the procedures performed by the HCW, and d) state or local public health official(s).” \textit{Id.}

\textsuperscript{312} \textit{See Recommendations for Preventing Transmission, supra} note 9, at 5 (“HCWs who are infected with HIV or HBV . . . should not perform exposure-prone procedures unless they have sought counsel from an expert review panel and been advised under what circumstances, if any, they may continue to perform these procedures.”).

\textsuperscript{313} 480 U.S. 273, 287 (1987) (holding that individualized inquiry is required under \textsection\textsuperscript{504} of Rehabilitation Act to effectively protect handicapped individuals while giving concurrent consideration to health and safety of others); \textit{see supra} notes 138, 144-47 (describing provisions of \textsection\textsuperscript{504} and \textit{Arlene’s} interpretation of them).

\textsuperscript{314} \textit{Recommendations for Preventing Transmission, supra} note 9, at 6. For HBV infection, an HCW’s practice may be modified as needed but should also be completely reinstated when re-evaluation determines that the HCW’s status has changed due to successful treatment of the
include exposure-prone procedures.315

The CDC's position is predicated on the belief that UPs, when appropriately employed, will minimize the risk of transmission.316 As has been explained, UPs do reduce the risk of transmission, but they do not eliminate it.317 The CDC itself recognizes that certain procedures are by nature "at-risk," despite the use of UPs.318 The CDC should mandate that once an HCW is found to be infected with the AIDS virus, all invasive procedures, whether "exposure prone" or not, must completely stop. The acceptable minimization of risk is the elimination of the risk.319 As a result of the availability of a vaccine, the use of an "expert review panel" makes sense where the HCW is infected with HBV. With HIV, however, the panel's use is a dangerous denial.

5. Requirements of patient consent and notification

The CDC has taken a solid stand with respect to informed consent; the guidelines unequivocally call for patient consent before either an HBV- or HIV-positive HCW performs any exposure-prone procedures.320 This provision satisfies the duties created by the courts.321 When the expert review panel determines the circumstances under which the infected HCW may work, one fundamental prerequisite must be notification of prospective patients of the HBV or HIV status of their physician before any at-risk procedures are performed.322 The CDC has acknowledged that patient awareness

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315. Cf. Recommendations for Preventing Transmission, supra note 9, at 5 (implying that expert panel has discretion to allow infected HCWs to continue to perform exposure-prone procedures).

316. See Recommendations for Preventing Transmission, supra note 9, at 5 (stating that infected HCWs who follow precautions pose small risk of transmitting HBV and smaller risk of transmitting HIV). On this point, the CDC's recommendations include: (1) all HCWs should follow universal precautions, and (2) those HCWs who have skin conditions ("exudative lesions or weeping dermatitis") that may pose a risk of transmission should refrain from all direct patient care and from handling patient-care equipment that is used in performing invasive procedures. Id.

317. See supra notes 257-74 and accompanying text (discussing arguments relating to efficacy of UPs).

318. See Recommendations for Preventing Transmission, supra note 9, at 4 ("Performance of exposure-prone procedures presents a recognized risk of percutaneous injury to the HCW, and—if such an injury occurs—the HCW's blood is likely to contact the patient's body cavity, subcutaneous tissues, and/or mucous membranes.").

319. See supra notes 31-32, 55-62 (discussing debate on issue of acceptable level of risk).

320. Recommendations for Preventing Transmission, supra note 9, at 5. If an HIV-positive HCW were to be restricted from performing these procedures, the issue of informed consent could obviously be avoided.

321. See supra notes 186-99 and accompanying text (analyzing theory of informed consent where practicing HCW is HIV positive).

322. Recommendations for Preventing Transmission, supra note 9, at 5.
about his or her HCW's health status is material information integral to the giving of consent.\footnote{323}

The CDC, however, has been less clear when addressing postoperative notification of a patient when an infected HCW has performed an exposure-prone procedure. According to the guidelines, patient notification should only be considered after balancing an assessment of the "specific risks" and "confidentiality issues" with "available resources."\footnote{324} Implicitly then, the CDC leaves this decision to the discretion of the involved HCWs and the health care institution. This result is inconsistent with judicial interpretation of patient consent requirements.\footnote{325} A patient must receive information that is "material" to making a decision before undergoing a particular procedure.\footnote{326} The risk attendant to a seropositive HCW performing an invasive procedure qualifies as material information.\footnote{327} Surgical injuries are quite common, especially during the invasive procedures where the virus is most easily transmitted.\footnote{328} Doctors must give patients the opportunity to decide whether they want to be tested for the virus. The CDC's policy takes that decision out of the patient's hands and places it in the hands of the HCW. Given the certain outcome once HIV is contracted, this policy is unacceptable.

6. Questions left unanswered by guidelines

The CDC's guidelines leave decisions regarding HIV-positive HCWs, on the issues of voluntary testing, discretionary restrictions on practice, and postoperative notification, with individual HCWs and health care institutions.\footnote{329} Only one policy, informing patients of their physician's seropositive status where known before performing at-risk procedures, satisfies the requirements as outlined by the

\footnote{323. Cf. Recommendations for Preventing Transmission, supra note 9, at 5 (highlighting importance of patient notification of HCW's infection before exposure-prone procedures are performed).}
\footnote{324. Recommendations for Preventing Transmission, supra note 9, at 6 (stating that "[t]he public health benefit of notification of patients who have had exposure-prone procedures performed by HCWs infected with HIV . . . should be considered on a case-by-case basis," with careful consideration of related factors).}
\footnote{325. See supra notes 177-83 and accompanying text (describing medical and legal emphasis on patient-centered approach to medicine).}
\footnote{326. See supra notes 179-83 and accompanying text (noting different interpretations of "material" information as related to patient's decision).}
\footnote{327. Cf. supra notes 179-83, 186-91 and accompanying text (discussing "material information" concept of informed consent).}
\footnote{328. See supra notes 37-49 and accompanying text (outlining studies that indicate that percutaneous injuries are common during surgery).}
\footnote{329. See supra notes 304, 315, 324 and accompanying text (detailing CDC guidelines on issues of voluntary testing, restrictions on practice, and postoperative notification, respectively).}
court in Behringer. Moreover, the CDC’s position ignores and possibly encourages HCW conflict of interest.

Most hospitals and HCWs believe that their approach to medicine is patient centered. The law attempts to reflect this philosophy. The court in Estate of Behringer v. Medical Center expressly addressed HCW conflict of interest problems surrounding HIV. The CDC gives broad, perhaps overly broad, discretion to the medical community. Decisions to restrict an HCW’s practice could threaten his or her career or livelihood, so expecting HCWs to make these decisions with objectivity is naive.

In Behringer, the court upheld the hospital’s imposition of practice restrictions but found the hospital liable because it failed to protect the infected HCW’s ability to practice by negligently revealing his condition. The court, however, found that career concerns cannot come before patient protection. Courts must guard against this potential conflict and thus in Behringer the court stood by New Jersey’s strong commitment to the concept of a fully informed patient. The plaintiff in Behringer argued that requiring the hospital to inform the patient regarding the surgeon’s positive HIV status would result in a complete destruction of his surgical practice. The court recognized this concern, but nevertheless acted to eliminate the “self-interest or self-protection” pressures that could inhibit an HCW’s ability to make a sound judgment about

330. See supra note 188 (discussing holding in Behringer that HCW’s HIV-positive status must be disclosed before at-risk procedures are performed because it is material element of informed consent).
332. See supra notes 26-35 and accompanying text (discussing court’s attempt in Behringer to eliminate all risk of transmission where HCW performs invasive procedures).
334. See Estate of Behringer v. Medical Ctr., 592 A.2d 1251, 1278 (N.J. Super. Ct. Law Div. 1991) (discussing HIV-infected HCW’s possible difficulties in making business decisions regarding his or her practice and medical judgments regarding his or her patients).
335. See supra notes 311-15 and accompanying text (discussing provision of CDC guidelines granting review power to expert panel and examining broad scope of discretion exercised by this group).
336. See Behringer, 592 A.2d at 1277-78 (discussing difficulties in decisionmaking experienced by medical centers and HCWs faced with HIV infection).
337. Id. at 1273-74 (predicating liability on medical center’s breach of duty and obligation to keep infected HCW’s records confidential).
338. Id. at 1283.
339. Id. at 1280.
340. Id. (“Plaintiff argues that the use of the informed consent form is tantamount to a de facto termination of surgical privileges.”). Plaintiff also raised confidentiality concerns, upon which the hospital was held liable. Id. at 1273-74.
341. Id. at 1274.
342. Id. at 1277-78 (quoting In re Quinlan, 355 A.2d 647, 668 (N.J. 1976)).
whether to release the information about his or her HIV infection. Because the risk of transmission could not be eliminated, the HCW was required to inform the patient before performing any at-risk procedures.

The CDC guidelines invite similar risks, as too much discretion is given to individual HCWs and their institutions. This discretion improperly puts patients at risk by subordinating their interests to those of the individual HCW. Voluntary testing, open-ended practice restrictions, and lack of patient notification serve the private interests of the medical community, not their patients. As the national institution that guides medical policy, the CDC must work to maintain the patient-centered philosophy that ethics and the law require. These guidelines fail to do so.

7. State responses

The ambiguity of the CDC guidelines is manifest in state responses to the congressional mandate that states enact either the CDC or similar guidelines. For example, many states have passed legislation calling for mandatory HIV testing of all HCWs. Given constitutional concerns, it is questionable whether these laws will withstand judicial scrutiny. In addition, a number of states have
enacted the CDC guidelines without modification,\textsuperscript{347} and thus, which procedures are to be regulated remains an open question.\textsuperscript{348}

IV. RECOMMENDATIONS FOR A TESTING PLAN

A. CDC Guidelines Fail to Anticipate Liabilities

By requiring that states enact the CDC guidelines or similar ones,

\textsuperscript{347} See, e.g., \textit{Cal. Health \\& Safety Code} \S 1250.11 (West 1992) (requiring California Department of Health to develop guidelines to minimize transmissions of bloodborne infectious diseases and, in doing so, consider CDC's recommendations, existing state regulations, and input from associations that represent HCWs); \textit{Cal. Bus. \\& Prof. Code} \S 2221.1 (West 1992) (protecting Californians from infected HCWs by allowing Medical Board of California to take disciplinary action against HCWs who do not follow UPs as recommended by CDC guidelines); \textit{Mo. Rev. Stat.} \S 191.694 (1992) (following CDC guidelines on adherence to UPs, expert review panel, practice restrictions, patient consent, and voluntary HCW testing); \textit{Tex. Health \\& Safety Code Ann.} \S\S 85.201-206 (West 1992) (reviewing findings of CDC; defining relevant terms; requiring HCWs to adhere to UPs, to refrain from performing exposure-prone procedures unless given permission from expert review panel and, then, to obtain patient consent; imposing disciplinary action on failures to comply; and explicitly rejecting mandatory testing of HCWs); Ariz. H.B. 2024, 406th Leg., Reg. Sess. (1992) (assigning responsibility to director of Arizona Department of Health Services to create standards that conform with CDC guidelines); Ill. H.B. 3048, 87th Gen. Assembly, Reg. Sess. (1991-1992) (requiring HCWs who have HIV to inform patients of that fact prior to invasive procedures and also requiring patients who know that they are HIV positive to inform HCWs before receiving services); Md. H.B. 388, 398th Leg. Sess., Reg. Sess., 1992 Md. Laws 154 (to be codified at \textit{Md. Code Ann.}, \textit{Health-Gen.} \S 19-319(h)) (requiring hospitals and other health care facilities to comply with CDC's guidelines on UPs); Mich. H.B. 5291, 86th Leg., Reg. Sess. (1992) (adopting UPs and regulating practices and activities of HIV-positive HCWs); N.H. S.B. 410, 152d Leg. Sess., Reg. Sess. (1991-1992) (requiring HCWs to follow UPs established by federal and state government); N.Y. S.B. 4732, 214th Gen. Assembly, 2d Reg. Sess. (1992) (following guidelines in creating duty in HCWs to disclose positive HIV status prior to performing invasive procedures); Ohio H.B. 419, 119th Gen. Assembly, Reg. Sess. (1991-1992) (mandating that HIV-positive HCWs inform health care facility employer and certain patients of infection).


Other states have considered similar bills but have rejected or withdrawn them. See N.H. S.B. 312, 152d Leg., Reg. Sess. (1991-1992) (failing to pass Senate); S.C. H.B. 4151, State-wide Sess. (1992) (withdrawn from committee in which it was introduced).

\textsuperscript{348} See supra notes 275-82 and accompanying text (discussing disagreement between state and federal health care groups over responsibility of developing list of at-risk procedures).
Congress created a national regulatory standard. As a result, the CDC guidelines now supersede the common law. The guidelines fail, however, to account for standard of care requirements that courts have enforced. This discrepancy will open HCWs and their affiliated hospitals to liabilities that would otherwise be contained.

The courts have created four sets of duties for HCWs and hospitals faced with an HIV-infected HCW. First, a hospital has an affirmative duty to provide a safe and healthy environment for its employees and its patients. When an HCW who performs at-risk procedures is suspected of carrying the virus, the hospital has an obligation to have the HCW tested as required by section 504's "individualized inquiry."

Second, when an HCW is found to be HIV positive, practice restrictions must be imposed forbidding the infected HCW from performing additional at-risk procedures. Third, if an infected HCW is to perform an at-risk procedure, the fact that the HCW is infected is material and thus requires disclosure to the patient. Fourth, the common law places an affirmative duty on hospitals and infected HCWs as parties in a "special relationship" to warn identifiable third parties of potential harm from their patients. Under the common law, in sum, HCWs and hospitals know precisely what action is required to minimize risk on a proactive basis.

The CDC guidelines, on the other hand, delegate key decisions to discretionary interpretation, thereby leaving both HCWs and hospitals open to unnecessary liabilities. First, the CDC recommends that HCWs undergo testing on a voluntary basis. Second, the guidelines permit an infected HCW to continue to perform at-risk procedures if sanctioned by an expert medical panel. Fundamentally,
the guidelines fail to provide hospitals and HCWs with the mechanisms needed to acquire knowledge about potential infection and transmission risks.\textsuperscript{357} The CDC guidelines do not reflect the affirmative duty on hospitals to provide a safe environment for employees and patients because they fail to acknowledge the individualized inquiry requirements of section 504.\textsuperscript{358} Moreover, once knowledge of HCW infection is acquired, there are no provisions in the guidelines to instruct hospitals and HCWs as to the next step of action. For example, failure to act to prevent foreseeable harm opens hospitals and HCWs to personal injury liability to plaintiffs who could be either patients of suspected HIV-positive HCWs or identifiable third parties put at risk by infected HCWs. Already, doctors are advertising to the public that they are HIV negative.\textsuperscript{359} Therefore, to protect both the medical community and patients, guidelines more closely aligned with the common law need to be enacted.

B. Elements of a Workable Testing Plan

The common law interpretations enunciated in \textit{Leckelt v. Board of Commissioners}\textsuperscript{360} and \textit{Estate of Behringer v. Medical Center}\textsuperscript{361} best articulate the actions appropriate to the HIV-infected HCW. The court in \textit{Behringer}, for example, based its holding on the analysis provided by section 293 of the \textit{Restatement (Second) of Torts} and noted that the interests being threatened, patient health and the rights of HCWs, are given great deference in our society.\textsuperscript{362} Therefore, the acceptable magnitude of risk must be justifiably small, or, if possible, eliminated. Hence, the court in \textit{Behringer} upheld the practice restrictions implemented by the hospital in that case. Clause (b) of section 293 of the \textit{Restatement}, dealing with probability of occurrence, addresses the risk of transmission.\textsuperscript{363} Where an HIV-infected HCW performs

\textsuperscript{357} See supra notes 277-79, 315, 324 and accompanying text (discussing ambiguities in CDC guidelines).

\textsuperscript{358} See supra notes 137-72 (discussing individualized inquiry under § 504 and court interpretations of requirement).

\textsuperscript{359} See Betsy A. Lehman, \textit{AIDS Tests for Health Caregivers?}, \textit{BOSTON GLOBE}, Aug. 10, 1992, at 27 (describing telephone listing service for HCWs to advertise that they are HIV negative). The service, called "AIDS Negative Healthcare Professionals, Inc.," charges HCWs $99 a year to be listed as HIV negative. \textit{Id}. The HCWs send in their test results, receive certificates to hang in their offices, and are put on a list available to the public to call by a toll-free number to see if an HCW is listed. \textit{Id}.

\textsuperscript{360} 714 F. Supp. 1377 (E.D. La. 1989), aff'd, 909 F.2d 820 (5th Cir. 1990).


\textsuperscript{362} Estate of Behringer v. Medical Ctr., 592 A.2d 1251, 1281 (N.J. Super. Ct. Law Div. 1991) (noting that social value that law attaches to threatened interest is important criterion to consider in determining magnitude of risk to patient); see \textit{RESTATEMENT (SECOND) OF TORTS} § 293 cmt. a (1981) (stating that "as the social value of the interest imperiled increases, the magnitude of the risk which is justified diminishes").

\textsuperscript{363} See \textit{RESTATEMENT (SECOND) OF TORTS} § 293 cl. b (1981) (stating that one factor to be
one at-risk procedure, the risk of transmission is small. But the likelihood that an individual HCW will infect a patient becomes greater as the infected HCW performs more and more operations. In addition, the number of infected HCWs will rise as the AIDS population in general increases.\textsuperscript{364} In other words, the chance of a particular transmission is small, but the likelihood of that transmission occurring is growing greater over time. Clause (c) of the Restatement, the extent of the harm likely to occur, becomes superfluous in this situation because the result of transmission is certain death.\textsuperscript{365} The only question that remains is how long death will take. Under this clause a risk of transmission, however small, can never be justified because the result of infection is death. Clause (d) of section 293, addressing the fact that a higher proportional duty results as more people may potentially be affected,\textsuperscript{366} is especially relevant in this situation because a surgeon may perform numerous operations.\textsuperscript{367} Based on this analysis, the court in Behringer reasoned that certain bright lines needed to be drawn.\textsuperscript{368}

Some commentators advocate mandatory HIV testing for all HCWs who perform invasive procedures\textsuperscript{369} and argue that those who refuse to be tested should be denied licenses to perform at-risk procedures.\textsuperscript{370} A more reasonable plan, however, one based on programs already in place, is achievable. The courts in Leckelt and

considered in determining magnitude of risk is "the extent of the chance that the actor's conduct will cause an invasion of any interest of the other or one of a class of which the other is a member"). The comment on clause (b) suggests that the utility needed to justify risk increases as the probability increases. \textit{Id.} § 293 cmt. b. Therefore, this clause begs the question presented in Behringer that in most instances a noninfected HCW can be substituted, reducing the utility of having a surgeon who is HIV positive perform that procedure. Behringer, 592 A.2d at 1282 (quoting Keyes, \textit{supra} note 20, at 603-04, that noninfected HCWs can adequately be substituted to perform invasive procedures without risk of transmission).\textsuperscript{364}

\textit{See Lehman, supra} note 359, at 27 (citing CDC estimation that of approximately 4.5 million HCWs in United States, 360 surgeons, 1200 dentists, 5000 physicians, and 35,000 other HCWs are HIV infected).\textsuperscript{365}

\textit{Cf. RESTATEMENT (SECOND) OF TORTS} § 293(c) (1981) (stating proposition that costs to prevent harm may increase as severity of harm and its likelihood increases).\textsuperscript{366} \textit{Id.} § 293(d) (considering number of individuals whose "interests are likely to be invaded if the risk takes effect in harm").\textsuperscript{367}

\textit{See Mishu et al., supra} note 37, at 467 (reporting results of study to assess risk of transmission from surgeon with "busy practice" of approximately 300 surgical procedures per year).\textsuperscript{368}

\textit{See Estate of Behringer v. Medical Ctr.,} 592 A.2d 1251, 1283 (N.J. Super. Ct. Law Div. 1991) (adopting clear policy that precludes infected HCWs from performing any invasive procedures when there is any risk of transmission).\textsuperscript{369} \textit{E.g., Closen, supra} note 346, at 422.\textsuperscript{370}

\textit{See Closen, supra} note 346, at 434-36 (arguing that all HCWs who perform invasive procedures, including dentists, doctors, nurses, and emergency medical technicians, should be tested and retested on regular basis as requirement for licensing). The author also contends that the onus should be on the HCW to arrange and pay for the test and provide the results to the licensing authority. \textit{Id.} at 435. Failure to provide evidence of a negative result would bar that professional from certain practices. \textit{Id.} at 436.
Behringer found that hospitals have an affirmative duty to provide a safe environment for patients and employees. For instance, both courts found that hospitals have a duty to conduct an inquiry into the employee’s health and also to examine the degree of risk that an infected HCW will transmit a contagious disease to another person. To carry out these responsibilities, health care institutions must know their employees’ HIV status. Therefore, as these courts held, blanket mandatory testing is not necessary, but HIV testing is compelled where the medical institution has a reasonable suspicion that an employee may be putting him or herself, other employees, or patients at risk.

Where the hospital has a reasonable basis to suspect that an employee performing invasive procedures may be infected, either because the HCW is a member of an at-risk group or operates on known or suspected HIV-positive patients, that HCW should be tested and retested based on the evolution of the disease. If the HCW tests positive for the virus, the hospital should prohibit any further invasive procedures by that HCW, as the medical center did in Behringer. This is a blanket prohibition, regardless of the physical and mental capability of the HCW to perform the procedure. At this point, the health care institution must work with the infected professional to make a noninvasive procedural practice available to

371. See Leckelt v. Board of Comm’rs, 714 F. Supp. 1377, 1379 (E.D. La. 1989) (holding hospital’s obligations to provide safety and infection control to patients and employees allow it to require HIV testing of hospital staff), aff’d, 909 F.2d 820 (5th Cir. 1990); Estate of Behringer v. Medical Ctr., 592 A.2d 1251, 1276, 1283 (N.J. Super. Ct. Law Div. 1991) (concluding that medical center acted reasonably and indeed as it was obligated to do when it decided not to allow HIV-positive plaintiff to perform invasive procedures, based on safety of patients and other hospital personnel).

372. See supra notes 148-71 and accompanying text (discussing determinations of courts in Leckelt and Behringer that in order for hospitals to comply with duty to provide safe environment, hospitals have duty to investigate employees’ health status).

373. It is estimated that roughly 40,000 to 80,000 people become infected with HIV each year. Erik Eckholm, A Casualty Report; AIDS, Fatally Steady in the U.S., Accelerates Worldwide, N.Y. TIMES, June 28, 1992, § 4 (Week in Review), at 5. Approximately one third are drug abusers, another third are gay men, and most of the remaining third, who contracted the disease through heterosexual contact, are black and hispanic women. Id. Minority women account for the fastest-growing segment of the HIV-infected population. Maria Navarro, AIDS in Women Rising, but Many Ignore the Threat, N.Y. TIMES, Dec. 28, 1990, at B1, B2 (reporting that from 1988 to 1989, CDC officials say, number of AIDS cases in American women increased 29%, compared with 18% in men). Many of these women are poor minorities. Id.; see also Laura Blumenfeld, The New Sexual ‘Reality’; Now, a Condom for Women, WASH. POST, Mar. 9, 1992, at B5 (quoting Surgeon General Antonia Novello as saying most women infected with AIDS are minorities). AIDS cases in 1991 rose 17% among women, compared with 4% among men. Blumenfeld, supra, at B5. In addition, the prevalence of AIDS among teenagers is believed to be on the rise. See Amy Goldstein, D.C. Unveils Anti-AIDS Campaign, WASH. POST, May 13, 1992, at A1 (noting that percentage of D.C. teenagers infected with HIV has increased five-fold since 1987, doubling in last year alone). In May 1992, the District of Columbia joined 11 other cities in distributing condoms in schools in response to the teen AIDS problem. Id. at A4.
him or her, thereby eliminating the risk of transmission in a reason-
able and effective manner.

Commentators argue that this approach invites discrimination
against suspected at-risk HCWs or, at worst, encourages institu-
tional "witch hunts" against segments of the population. While
this is a valid concern, as the courts in Leckelt and Behringer pointed
out, hospitals have a proactive duty to provide a safe environment
for HCWs, patients, and foreseeable third parties. These com-
mentators seem to suggest that hospitals should refrain from acting
until they are confronted by an incident of actual transmission or
similar occurrence.

Regarding informed consent, a bright-line rule compelling disclo-
sure where HIV-positive doctors are performing invasive proce-
dures is another possible solution. On the other hand, HIV-positive
HCWs could be required to disclose their conditions to their pa-
tients regardless of the procedures they intend to perform. This
second approach, however, has been rejected as overbroad, with
commentators arguing that disclosure should only be required on a
case-by-case basis because a bright-line rule is too all-encompass-
ing. Others contend that information regarding an HCW's infec-
tion is never material with respect to consent; therefore, patients
need not know that their doctors are HIV positive.

374. See Barnes et al., supra note 58, at 321 (criticizing Leckelt holding as creating institu-
tional paranoia based on "suspicions of sexual history and drug use or on race and ethnicity"); Gostin, supra note 57, at 308 (contending that court in Leckelt, by defining "invasive"
procedures broadly, invites categorized, overbroad determinations of procedures in question
such that noninfected HCWs may be forced to be tested because of their practice areas).
Also, Barnes argues that such a program would be inherently underinclusive because HCWs
under these conditions would be less likely to come forward for voluntary testing and to re-
veal their condition to their employer medical institution. Barnes et al., supra note 58, at 321-
22.

375. See supra notes 148-71 and accompanying text (discussing affirmative duty on hospi-
tals to protect its workers and patients).

376. Cf. Barnes et al., supra note 58, at 319-20 (suggesting that there is no reason why HIV
policy should differ from HBV policy where hospitals wait until transmission has occurred
before acting). But see Gostin, supra note 57, at 306 (arguing that CDC cannot allow possible
transmission of HIV before acting because HIV is always lethal, whereas HBV is not).

377. See Gostin, supra note 57, at 304-05 (arguing that HCWs should not be required to
disclose their infection status to patients). Gostin does believe, however, that infected HCWs
should be restricted in their practices of "seriously invasive procedures." Id. at 306. ("Wait-
ing for cases of transmission of a lethal infection like HIV before taking any action [as we do
with HBV] would undermine trust in the health care system. The CDC simply could not take
possible transmission of HIV through a mode which is well documented.").

378. See Orentlicher, supra note 31, at 1136 (advocating that HCWs follow CDC guidelines
of determining in each instance whether patient should be informed of HCW's HIV status).
But see Keyes, supra note 20, at 610 (arguing that HIV-infected HCW has duty to disclose that
fact to patient where invasive procedures are to be performed).

379. See Daniels, supra note 278, at 1370-71 (contending that actual risk is too small to be
material and therefore require patient consent, but subjective belief by public that HIV status
is material implicates, if patients' rights predominate, that patient will switch from infected
If HIV-positive HCWs are prohibited from performing invasive procedures, the question of informed consent is moot as there is no proven risk of transmission from casual contact. It follows, therefore, that where HIV-positive HCWs do not perform at-risk procedures, there is no need to release the fact of infection to their patients. Moreover, courts have levied on institutions a duty to protect the privacy of an infected HCW by not disseminating such information to the general community. Releasing that information to a patient where no proven risk of transmission exists would violate the institution’s duty.

In the rare instance in which an HIV-positive HCW is the only one capable of performing a needed procedure, there is a clear requirement to inform the patient of the HCW’s condition. In Behringer, the hospital board eventually adopted a policy permitting an HIV-positive HCW to perform invasive procedures, as long as the hospital still required the patient’s consent to the procedure after being informed of the surgeon’s HIV-positive status. The court’s decision was predicated on concern for the emotional trauma that potential postoperative testing procedures might cause in a patient, even if the patient did not become seropositive for HIV. The risk of transmission in combination with this trauma was too much. The court wrote that “it is untenable to argue against informed consent combined with a restriction on procedures which present ‘any risk’ to the patient.” Where HIV-positive HCWs perform invasive procedures, their patients must be informed as part of the consent procedure. Law and ethics require no less.

**CONCLUSION**

The prevalence of AIDS in society is a concern that grows every day. Homosexuals and intravenous drug users are no longer the only groups being affected by the disease. Of all identifiable demographic groups, the fastest growing group of infected individuals is

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HCW to uninfected HCW, which would irrationally discriminate against infected HCWs who actually pose no risk of harm).

380. See Estate of Behringer v. Medical Ctr., 592 A.2d 1251, 1273-74 (N.J. Super. Ct. Law Div. 1991) (holding that hospital violated plaintiff’s right to confidentiality by allowing public access to plaintiff’s medical records, resulting in effective end to plaintiff’s practice).

381. See id. at 1258-59 (explaining final policy by hospital to continue to treat AIDS patients without discrimination and to allow HIV-positive HCW to treat patients as long as no risk of transmission is presented, but also to require that patient be informed of any risk and physician obtain written informed consent before surgical procedure is performed).

382. See id. at 1266 (discussing expert testimony presented at trial explaining that informed consent is necessary to avoid emotional anxiety that would occur if patient is informed of possible transmission only after at-risk procedure or surgical accident).

383. Id. at 1283.
heterosexuals. In comparison, the risk of transmission from HCWs to patients may seem insignificant, notwithstanding the publicity and the politics surrounding Kimberly Bergalis’ case. Addressing the issue of the HIV-infected HCW should nonetheless be part of a national, concerted effort to control the spread of the disease. While the CDC guidelines attempt to fulfill this role, they will be ultimately unsuccessful.

Common law response to the HIV-infected HCW provides a more efficacious framework for hospitals and HCWs to use in resolving these problems. The common law, within the tort theory of the “special relationship” among HCWs, medical institutions, and patients, articulates the duties triggered in this situation, delineates the proper actions, and effectively minimizes liabilities. The CDC guidelines, on the other hand, fail both to articulate specific duties and to delineate alternatives. Guidelines setting national standards are necessary and should be binding as regulations. The CDC guidelines, however, should be amended to reflect more accurately the state of the common law, which assumes a greater duty on the part of the hospital in confronting the HIV-infected HCW.