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A REGULATORY MODEL FOR GENETIC TESTING IN EMPLOYMENT

JACK F. WILLIAMS*

[W]hile the individual man is an insoluble puzzle, in the aggregate he becomes a mathematical certainty. You can, for example, never foretell what any one man will do, but you can say with precision what an average number will be up to. Individuals vary, but percentages remain constant. So says the statistician.¹

Discrimination in employment based on a person's race or sex is generally unlawful. However, if an individual's genotype indicates that he is hypersusceptible to an occupational illness in a given job, will that justify a refusal to hire him solely on the basis of his immutable genetic constitution? Will the hypersusceptible employee have the right to decide to continue his employment even though such conduct would increase the risk of occupational illness? If so, will the worker's employer be shielded from potential liability? To further cloud the issue, will it matter that many genetic "deficiencies" tend to fall along racial and ethnic lines? These are but a smattering of the many complex ethical and legal questions that are associated with the emerging technology of genetic testing in the workplace.

Advocates of genetic testing argue that the new technology will prove useful in reducing occupational illness.² Through the use of such tests, certain job applicants or employees predisposed to specific types of occupa-

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1. A. CONAN DOYLE, *The Sign of Four*, in *THE ANNOTATED SHERLOCK HOLMES* 610, 666 (W.S. Baring-Gould ed. 1967) (statement by Sherlock Holmes to Dr. Watson, of course).

2. *See, e.g.*, OFFICE OF TECH. ASSESSMENT, U.S. CONG., *THE ROLE OF GENETIC TESTING IN THE PREVENTION OF OCCUPATIONAL DISEASE 5* (1983) [hereinafter *OTA REPORT*].

tional illness can be identified. Preventive measures can then be directed at those individuals to reduce the risk of occupational illness. Not only could job-related health risks be reduced for individual workers but costs might be cut for medical care, insurance premiums, and time lost from work.³ This is the promise of genetic testing. The concern, however, is that genetic tests could be used to unfairly exclude applicants or employees from employment.

To the employer genetic testing manifests itself as a two-edged sword. Employers fear, on the one hand, that any use of genetic tests may leave them vulnerable to state and federal discrimination suits. On the other hand, employers fear that they will be found negligent if they ignore genetic testing results and assign a hypersusceptible employee to a high-risk job, or fail to conduct the tests at all.⁴

Critics of genetic testing in the workplace fear the tests will be used to unfairly exclude applicants and employees. They argue that the use of genetic tests will result in invidious discrimination creating a new class of undesirable workers.⁵ Nevertheless, scientists view genetic testing as an exciting technology still in its infancy. To them, the vast potential of genetic testing appears boundless. The experts are careful to assert, however, that at this time many of the tests do not meet established scientific criteria for routine use in employment.⁶

Genetic Testing

Genetic testing in the workplace encompasses two types of procedures—genetic monitoring and genetic screening. Genetic monitoring involves periodic examinations of an employee to assess any change in his genetic material.⁷ Through the use of genetic monitoring, an employer can learn of the need to lower exposure levels of certain toxins found in the

3. Each year approximately 390,000 workers contract occupational illnesses. See Dentzer, et al., *Can You Pass the Job Test?*, NEWSWEEK, May 5, 1986, at 53. Occupational illnesses cost the U.S. economy more than 850,000 work days in 1981. OTA REPORT, *supra* note 2, at 5. See also Goodrich, *Are Your Genes Right For Your Job*, 3 CALIF. LAW., May 1983, at 24, 25-26; English, *Genetic Tests for Jobs Stir Hopes and Fears*, U.S. NEWS & WORLD REP., Apr. 11, 1983, at 72; Appelson, *Genes and Jobs*, 68 A.B.A. J. 1061 (1982).

4. Field, *Biological Monitoring and Genetic Screening in the Industrial Workplace: A Synopsis and Analysis*, 11 L. MED. & HEALTH CARE, June 1983, at 125, 125-26.

5. *Id.*

6. See OTA REPORT, *supra* note 2, at 9-10. Chairman Albert Gore has concluded that genetic testing is "tentative and premature." *Genetic Screening of Workers: Hearing before the Subcomm. on Science & Technology*, 97th Cong., 2d Sess. 44 (June 1982) (statement of Albert Gore, Chairman of the Subcomm. on Investigations and Oversight) [hereinafter *June 1982 Hearing*]. See generally Research Group on Ethical, Social & Legal Issues on Genetic Counseling & Genetic Eng'g of the Inst. of Society, Ethics & the Life Sciences, *Ethical and Social Issues in Screening for Genetic Disease*, 286 NEW ENG. J. MED. 1129, 1130 (1972) (before screening programs are implemented the test must be valid, reliable, and predictive).

7. See M. ROTHSTEIN, *MEDICAL SCREENING OF WORKERS* 52 (1984); *June 1982 Hearing*, *supra* note 6, at 3-8 (statement of Gretchen Kolsrud). See generally OTA REPORT, *supra* note 2, at 67-80. Professor Rothstein's work is a valuable source for those interested in this topic.

workplace and can identify substances that may increase the risk of contracting occupational illnesses for the entire work force.⁸

Genetic screening, however, is a one-time test to determine an employee's susceptibility to a given illness.⁹ This determination is based on the presence or absence of certain genetic traits in an individual's genotype, regardless of whether the individual has been exposed to a hazardous substance. The telling genetic traits can usually be identified through laboratory tests on blood or a variety of other body fluids.¹⁰ The traits identified by genetic screening, while normally not harmful, theoretically may make an individual more susceptible to an occupational illness.¹¹ However, a cautionary note must be sounded: Genetic screening measures potential susceptibility but does not predict future illness. Therefore, it is possible to possess a genetic predisposition to a specific illness yet never contract the illness.

Genetic screening has the potential to determine an individual's sensitivity to certain hazardous agents in the workplace. However, before genetic screening can be justified in employment, the tests must be scientifically acceptable. It is axiomatic that legal acceptability must necessarily be predicated upon scientific acceptability. Any use of the tests in employment is unjustified if the tests are not scientifically acceptable.

There is vigorous debate among the experts as to the validity and reliability of genetic testing as a means of discerning applicants and employees possessing genetic hypersusceptibility to certain occupational diseases. Experts agree that as a means of testing the work force generally, existing genetic tests are not proven predictors of occupational illness.¹² Nevertheless, genetic tests appear to be valid and reliable predictors of future occupational illness when applied to subgroups of the work force already suspected of having the trait at a relatively high rate.¹³ A thorough exploration of the scientific acceptability of the various genetic tests is beyond the focus of this article. Presently, there is no legal mechanism by which to judge the validity and reliability of genetic tests.¹⁴

8. Sweltz, *Genetic Testing in the Workplace: An Analysis of the Legal Implications*, 19 FORUM 323, 324 (1984).

9. M. ROTHSTEIN, *supra* note 7, at 52; OTA REPORT, *supra* note 2, at 89-101.

10. OTA REPORT, *supra* note 2, at 53. Several sources of body fluids are available, but usually blood, urine, and feces have been used in genetic tests. Only blood serves as an easily obtainable source of body fluid for genetic tests. *Id.* at 54. Genetic tests can be made on blood obtained from a preemployment examination without the individual's knowledge of the tests. Moreover, an individual generally cannot refuse medical tests without the possibility of being fired. *See, e.g.*, Gargiul v. Tompkins, 525 F. Supp. 795, 798 (N.D.N.Y. 1981) (there is no constitutional or common law right to refuse a medical exam), *rev'd on other grounds*, 704 F.2d 661, 668-69 (2d Cir. 1983). *See also* M. ROTHSTEIN, *supra* note 7, at 88-89.

11. *See* Diamond, *Genetic Testing in Employment Situations*, 4 J. LEGAL MED. 231, 242 (1983).

12. *See* OTA REPORT, *supra* note 2, at 11.

13. *Id.*

14. This statement is qualified. Courts, when confronted with novel scientific issues, generally turn to what is called the *Frye* doctrine, named for the case where the doctrine was first ex-

Scientists have developed several types of genetic tests for detecting hypersusceptible individuals. Three of the biogenetic tests illustrate the novel legal issues of genetic screening. One test screens for the glucose-6-phosphate dehydrogenase (G-6-PD) deficiency. The G-6-PD deficiency is a biochemical genetic condition involving the red blood cells.¹⁵ G-6-PD is the initial enzyme in the energy-generating process where glucose is oxidized. The deficiency in the enzyme interferes with the energy-generating process.¹⁶ Exposure to several chemicals theoretically may cause clinically significant hemolytic anemia. These chemicals include ozone, copper, sodium nitrite, aromatic nitro and amino compounds, and lead and its compounds.¹⁷ The G-6-PD deficiency is a trait found in approximately 16 percent of American black males, 13 percent of Filipinos, and 11 percent of Mediterranean Jews.¹⁸ In contrast, the G-6-PD deficiency is found in only one of every one thousand American whites.¹⁹

Another genetic deficiency detectable by screening is the sickle-cell trait. The sickle-cell trait is the presence of an abnormal protein found in approximately 8 percent of American blacks.²⁰ While those with sickle-cell anemia are known to have a reduced life span, the health hazards of possessing the sickle-cell trait are considered minimal by some scientists.²¹ Nevertheless, other scientists have suggested that an individual should be tested for the sickle-cell trait where taxing work is required in high altitudes or other areas of limited oxygen.²² An employer may decide to bar those classes of applicants or workers with the sickle-cell trait from employment that involves the handling of benzene, lead, or nitro and amino compounds so as to protect those individuals from chemically induced anemia or some other illness.²³

plicated, *Frye v. United States*, 293 F. 1013, 1014 (D.C. Cir. 1923). For several proposals to modify or abolish the *Frye* doctrine, see generally 26 JURIMETRICS 236-65 (1986).

15. M. ROTHSTEIN, *supra* note 7, at 55.

16. *Id.*

17. *Id.* at 56. See also Reinhardt, *Chemical Hypersusceptibility*, 20 J. OCC. MED. 319, 320-21 (1978) (an employer should not permit individuals with G-6-PD deficiency to work with nitro and amino compounds).

18. OTA REPORT, *supra* note 2, at 90. The first suggestions that G-6-PD deficiency may be involved in worker susceptibility to chemically induced anemia occurred in the 1960s. *Id.*

19. *Id.*

20. *Id.* at 91. For a helpful article on how blood is genetically tested for the sickle-cell trait, see Clark, Gosnell, Shapiro & Hager, *Medicine: A Brave New World*, NEWSWEEK, Mar. 5, 1984, at 64, 65.

21. OTA REPORT, *supra* note 2, at 91.

22. M. ROTHSTEIN, *supra* note 7, at 54-55. The sickle-cell trait was blamed for four deaths in Army recruits in basic training at high altitudes. Jones, et al., *Sudden Death in Sickle-Cell Trait*, 282 NEW ENG. J. MED. 323, 323-25 (1970). In the past, the Air Force excluded blacks with the sickle-cell trait from the Air Force Academy and flight training. 17 U.S. MED. 24, 24-25 (1981).

23. See Stokinger & Scheel, *Hypersusceptibility and Genetic Problems in Occupational Medicine—A Consensus Report*, 15 J. OCC. MED. 564, 572 (1973) (individuals with the sickle-cell trait face increased high risks when exposed to benzene, lead, amino, and nitro compounds).

Finally, an individual identified with heterozygous serum alpha₁ antitrypsin (SAT) deficiency is more susceptible to pulmonary ailments such as emphysema and chronic obstructive pulmonary disease and, thus, should avoid exposure to respiratory irritants.²⁴ The SAT deficiency is found most frequently in Northern and Central Europeans.

Controversy has arisen over the use of genetic screening in employment. According to a 1982 Office of Technology Assessment survey on the possible use of genetic screening by the nation's largest industries, public utilities, and unions, fifty-nine corporations reported they would begin some form of genetic screening within the next five years; seventeen reported they had previously used genetic screening; and six reported they used it currently.²⁵ There is a good possibility that the survey may have underreported the use of genetic screening in the United States.²⁶ The biogenetic test that appeared to have been the most often used by employers in the past has been the test for the sickle-cell trait.²⁷ The extent and possible future use of genetic screening has caught the scientific and legal communities by surprise.

Existing Legal Framework

Genetic screening generates novel legal issues related to employer duties, employee rights, and safety in the workplace. Presently, there are no federal statutes addressing the use of genetic screening in employment. Moreover, there are no cases that have decided genetic screening issues. However, there is an existing legal framework that may be applicable to the issues raised by the use of genetic screening in employment.

This article examines the applicability of the collective bargaining process and several federal statutes to the emerging genetic testing technology.²⁸ The

24. See OTA REPORT, *supra* note 2, at 93; Reinhardt, *supra* note 17, at 321.

25. OTA REPORT, *supra* note 2, at 33-40. See also June 1982 Hearing, *supra* note 6, at 2-43. The "59 corporations" number should be elaborated on. The number represents those companies who may possibly consider the use of genetic testing in the future. *Genetic Screening in the Workplace: Hearing before the Subcomm. on Investigations & Oversight of the House Comm. on Science & Technology*, 97th Cong., 2d Sess. 35 (Oct. 1982) (statement of Geoffrey Karny, Project Director, Biological Applications Program, OTA) [hereinafter *Oct. 1982 Hearing*].

26. The use of genetic testing in the employment process is controversial and many employers may not have been candid with the survey. One industry trade group reportedly tried to raise suspicions among its members by falsely stating that the OTA survey was not anonymous. *June 1982 Hearing*, *supra* note 6, at 40.

27. Goodrich, *supra* note 3, at 27. The test for the sickle-cell trait has been performed on black employees at DuPont. See Severo, *Screening of Blacks by DuPont Sharpens Debate on Gene Tests*, N.Y. Times, Feb. 4, 1980, at 21, col. 5.

28. The use of the collective bargaining process and the several federal statutes is illustrative of the problems associated with using traditional precedent to address the novel issues generated by genetic screening. By no means should the examples be construed as exhaustive. For example, Professor Rothstein explores the application of common law rules, the worker's compensation laws, and tort laws to the genetic testing area. See M. ROTHSTEIN, *supra* note 7, at 81-93, 168-90. Moreover, a section 1983 civil rights suit may also be a remedy for discrimination on account of an individual's genotype. See 42 U.S.C. § 1983 (1982).

article presents an overview of the complexity of the issues and the need for reasoned legislative action. Some of the more important issues associated with genetic screening will be raised along with several proposals to deal with those issues. The article concludes that the existing legal framework is not capable of satisfactorily resolving the novel issues generated by the use of genetic screening in employment. The existing legal framework, therefore, must be amended to specifically address the issues presented by this emerging technology.

The Collective Bargaining Process

The National Labor Relations Act (NLRA) creates a complex structure of duties within which labor and management must fit themselves.²⁹ The NLRA grants employees the right to organize into unions and to bargain with their employers over wages, hours, and conditions of employment.³⁰

A union can insist on bargaining only over mandatory conditions of employment.³¹ Whether a condition of employment is mandatory depends on its practical effect and not merely its form.³² Moreover, whether a subject should be included within the scope of mandatory bargaining is generally determined in light of national labor policy.³³

A subject is mandatory only if it settles an aspect of the relationship between the employer and his employees.³⁴ Such subject must also possess a substantial impact on the collective bargaining relationship. The determination that genetic testing is a mandatory condition of employment is necessary before a union can insist on collective bargaining. If the use of genetic testing is viewed as a mandatory condition of employment, then the employer may not unilaterally change the terms and conditions of genetic testing without first granting the union an opportunity to bargain.³⁵ However, if the use of genetic testing is viewed as a nonmandatory subject of collective bargaining, then an employer is free to bargain or not with the union.³⁶

Health and safety matters are considered mandatory conditions of employment within the scope of the collective bargaining process.³⁷ Thus, an employer's unilateral changes in a health care plan have been held to violate

29. 29 U.S.C. §§ 151-169 (1982).

30. *See id.* § 158(d).

31. *See* NLRB v. Katz, 369 U.S. 736, 743 (1962). *See also* Brockway Motor Trucks v. NLRB, 582 F.2d 720, 725 (3d Cir. 1978).

32. *See* Technicolor Gov't Serv., Inc. v. NLRB, 739 F.2d 323, 327 (8th Cir. 1984).

33. *See* Fibreboard Paper Prod. Corp. v. NLRB, 379 U.S. 203, 210-11 (1964). *See also* NLRB v. Sheet Metal Workers Int'l Ass'n, Local No. 38, 575 F.2d 394, 398 (2d Cir. 1978).

34. *Sheet Metal Workers Int'l Ass'n*, 575 F.2d at 397.

35. *See* Katz, 369 U.S. at 743. *See also* NLRB v. Henry Vogt Mach. Co., 718 F.2d 802, 806 (6th Cir. 1983); Capitol-Husting Co. v. NLRB, 671 F.2d 237, 246 (7th Cir. 1982).

36. *See* *Sheet Metal Workers Int'l Ass'n*, 575 F.2d at 398.

37. NLRB v. Holyoke Water Power Co., 778 F.2d 49, 51 (1st Cir. 1985), *cert. denied*, 106 S. Ct. 3274 (1986); NLRB v. Gulf Power Co., 384 F.2d 822 (5th Cir. 1967). *Accord* M. ROTHSTEIN, *supra* note 7, at 150.

the NLRA.³⁸ Genetic testing is essentially a matter of employee health and safety. Genetic testing must then be viewed as a mandatory subject of collective bargaining. Such a conclusion promotes the basic purpose of the NLRA, which is to encourage the peaceful settlement of industrial disputes.³⁹

Employers and unions could negotiate solutions to the problems generated by genetic screening and incorporate those solutions in a collective bargaining agreement. A sampling of the problems the employer and the union may address are how to judge the accuracy of the tests, how the tests are to be used, which employees are to be tested, and whether an employee may refuse to take the tests. The agreement may also address such problems as who is to pay for the tests, who will have access to the test results, and to what extent the results will remain confidential.

There are several virtues in resorting to the collective bargaining process in addressing the issues raised by genetic screening. Implementing this proposal is not difficult. The collective bargaining process is already well structured, and a significant body of case law has delineated many of the rights and obligations of the parties. Moreover, the use of the collective bargaining process to address the problems raised by genetic screening does not involve direct action by the government. The answers to the problems raised by the use of the tests are left to the bargaining process. Thus, experience and the marketplace direct the path of the genetic testing technology. With time and experience, unions may discover whether genetic screening is an important issue to its members and can react accordingly. Experience, not government, will mold the path of genetic screening.

The pitfalls of resorting to the collective bargaining process to address the questions posed by genetic screening are many. First, unions' ability to effectively deal with noneconomic issues is limited. The collective bargaining process, as a practical matter, tends to focus on wages, hours, benefits, and job security.⁴⁰ Safety and health concerns traditionally have not been of great import to either the employer or the rank-and-file employees.⁴¹

Second, genetic testing has been a secretive technology.⁴² To adequately represent its members, unions must be informed of the advances of genetic testing. Unions do have a recognized interest in knowing what risks its members face so that informed collective bargaining can occur.⁴³ Moreover, the Supreme Court has stated that employers must "provide information that

38. See *Clear Pine Mouldings, Inc. v. NLRB*, 632 F.2d 721, 729 (9th Cir. 1980), *cert. denied*, 451 U.S. 984 (1981).

39. See *Brockway Motor Trucks*, 582 F.2d at 727.

40. See M. ROTHSTEIN, *supra* note 7, at 154-56; OTA REPORT, *supra* note 2, at 131; *Genetic Screening and Handling of High-Risk Groups in the Workplace: Hearing before the Subcomm. on Investigation & Oversight of the House Comm. on Science & Technology*, 97th Cong., 1st Sess. 36 (Oct. 1981) [hereinafter *Oct. 1981 Hearing*].

41. See M. ROTHSTEIN, *supra* note 7, at 154-55; OTA REPORT, *supra* note 2, at 131.

42. Goodrich, *supra* note 3, at 59.

43. See *Oil, Chem. & Atomic Workers Local No. 6-418 v. NLRB*, 711 F.2d 348, 358-59 (D.C. Cir. 1983). See also M. ROTHSTEIN, *supra* note 7, at 89-94.

is needed by the bargaining representative for the proper performance of its duties."⁴⁴ The employer's duty is predicated on the union's need for information, which enables the union to intelligently and knowingly represent its employees.⁴⁵ The goals of occupational health and safety are adequately promoted if employers fully share with unions any available information on working conditions and employee medical histories.⁴⁶ However, whether unions have the political clout or resources substantial enough to pierce the veil of secrecy cloaking the use of genetic testing by employers in the past is as yet unknown.

Third, although unions may bargain over the use of genetic tests, they have no legal duty to do so.⁴⁷ A union may waive its right to bargain over a mandatory subject, but such waiver must be clear.⁴⁸ Any union decision of whether to protect hypersusceptible employees would be based on many factors, including the number of employees involved, the nature of the risk, the state of the economy, and the relative strength of the union's bargaining power.⁴⁹

Fourth, although a collective bargaining agreement may address company medical practices, it generally does not address preemployment examinations or the employer's hiring process.⁵⁰ Traditionally, these procedures have been within the employer's prerogative. Thus, one possible abuse of genetic screening—its use to screen out job applicants—is not addressed by the collective bargaining process. There is also a problem with those workers who are not members of any union. A union cannot compel an employer to bargain over the terms of employment for employees it does not represent.⁵¹ Presently, only 20 percent of all workers are unionized.⁵²

Finally, the collective bargaining agreement by nature is an agreement between the employer and the union. Genetic screening, however, is a

44. *NLRB v. Acme Indus. Co.*, 385 U.S. 432, 435-36 (1967). See also *Holyoke Water Power Co.*, 778 F.2d at 51.

45. See *Oil, Chem. & Atomic Workers*, 711 F.2d at 358-59. Moreover, the union's right of access to information "is not dependent upon the existence of some particular controversy or the need to dispose of some recognized problem." *Id.* at 361. See also *Holyoke Water Power Co.*, 778 F.2d at 51.

46. An employer does have a substantial interest in protecting the confidentiality of employees' records, and the employee has a right to privacy in his medical records. *Oil, Chem. & Atomic Workers*, 711 F.2d at 363. These interests, however, cannot become a barrier to cloak relevant information from the union. Rather, the employer must generally permit union access to relevant information but should delete any information that could reasonably be used to identify specific employees. *Id.*

47. OTA REPORT, *supra* note 2, at 131.

48. *Universal Sec. Instruments, Inc. v. NLRB*, 649 F.2d 247, 256 (4th Cir.), *cert. denied*, 454 U.S. 965 (1981). A union can waive its right to bargain over a mandatory subject if it has notice of the issue and fails to protest or demand bargaining on the issue. *Henry Vogt Mach. Co.*, 718 F.2d at 806. Waiver will generally not be presumed. *Technicolor Gov't Serv.*, 739 F.2d at 328.

49. OTA REPORT, *supra* note 2, at 131.

50. See M. ROTHSTEIN, *supra* note 7, at 159; *June 1982 Hearing*, *supra* note 6, at 104.

51. *United Food & Comm'l Workers Union v. Alpha Beta Co.*, 736 F.2d 1371, 1377 (9th Cir. 1984).

52. OTA REPORT, *supra* note 2, at 132.

technology that transcends the parties to the collective bargaining agreement. The public has an interest in how this technology is performed and interpreted.⁵³ Moreover, resorting to collective bargaining would lead to nonuniform results in handling genetic screening. Thus, collective bargaining alone is inadequate to deal with the many complex issues presented by the use of genetic screening in the workplace.

The Occupational Safety and Health Act

The Occupational Safety and Health (OSH) Act was enacted by Congress in 1970 to ensure that every working person in the United States is employed in a safe workplace.⁵⁴ "It is the only comprehensive statute addressed to hazards in the workplace and therefore is the primary vehicle for hazard elimination."⁵⁵ The Act in its "statement of findings and declarations of purpose and policy" declares that its purpose is "to assure so far as possible every working man and woman in the Nation safe and healthful working conditions and to preserve our human resources."⁵⁶ This statement of purpose and policy must be considered in construing other provisions of the OSH Act. Any violation of the OSH Act by an employer can result in assessment of both civil and criminal penalties against the employer.⁵⁷

The OSH Act is silent on the use of genetic testing. The Occupational Safety and Health Administration (OSHA) has officially opposed the use of genetic testing in the workplace, stating that the workplace must be safe for all workers.⁵⁸ Opponents of genetic testing argue that the use of the tests would shift the burden of maintaining a safe workplace from employers to employees by keeping hypersusceptible workers from jobs that they are otherwise qualified to perform.⁵⁹ There is the fear that instead of eliminating hazards to make working conditions safe for all, many employers will simply exclude hypersusceptible workers.

The OSH Act imposes two separate duties on employers. Each employer is charged with the general duty to furnish employment and places of employment "free from recognized hazards that are likely to cause death or serious physical harm."⁶⁰ Furthermore, each employer must comply with specific oc-

53. The use of genetic screening in employment has societal ramifications. *Cf. Gildiner v. Thomas Jefferson Univ. Hosp.*, 451 F. Supp. 692, 696 (E.D. Pa. 1978) (society has an interest in ensuring that genetic testing, e.g., amniocentesis, is properly performed and interpreted). This is especially true where the tests are used to unfairly exclude individuals from employment. Society has an interest in protecting its members from such abuses.

54. 29 U.S.C. §§ 651-678 (1982).

55. M. ROTHSTEIN, *supra* note 7, at 95.

56. 29 U.S.C. § 651(b) (1982).

57. *Id.* § 666.

58. See Note, *Genetic Testing in Employment: Employee Protection or Threat?*, 15 SUFFOLK U.L. REV. 1187, 1209-10 (1981). *Cf. M. ROTHSTEIN, supra* note 7, at 98 (OSHA has stated that carcinogen standard does not require genetic testing; however, genetic testing is not prohibited).

59. See, e.g., Field, *supra* note 4, at 126.

60. 29 U.S.C. § 654(a)(1) (1982). Section 654(a)(1) has been held not to be unconstitutionally vague. See, e.g., *Ensign-Bickford Co. v. OSHRC*, 717 F.2d 1419, 1421 (D.C. Cir. 1983), *cert. denied*, 466 U.S. 937 (1984).

cupational safety and health standards promulgated under the OSH Act.⁶¹

The OSH Act's general duty clause provides: "(a) Each employer—(1) shall furnish to each of his employees employment and a place of employment which are free from *recognized hazards* that are causing or are likely to cause death or serious physical harm to his employees."⁶² The general duty clause was intended as a pragmatic provision to cover dangerous conditions of employment not specifically covered by existing health and safety standards promulgated by the Secretary of Labor under the OSH Act.⁶³ In determining what constitutes a recognized hazard, the federal courts and the Occupational Safety and Health Review Commission (OSHRC) have employed various tests.⁶⁴

A recognized hazard has been defined generally as one that is known to the employer or generally recognized as a hazard in the particular industry.⁶⁵ What constitutes a recognized hazard rests on an objective determination. Thus, an employer need not actually be aware of the hazard.⁶⁶ A recognized hazard can be proved by demonstrating an employer's actual or constructive knowledge of the specific hazard or by resorting to general industry practice.⁶⁷ Whether an employer had actual or constructive knowledge of a hazard is a question of fact; thus, the reviewing court will not disturb the OSHRC's finding if "supported by substantial evidence on the record as a whole."⁶⁸

The courts will often look to an employer's safety program in determining whether he had actual knowledge of a hazard. In *Puffer's Hardware, Inc. v. Donovan*,⁶⁹ the First Circuit held that it was reasonable to infer from the presence of an employer's safety program that he was aware of the hazard.⁷⁰ An employer's constructive knowledge can generally be demonstrated by showing his familiarity and experience with dangerous conditions, requirements of state and local law, and the implementation of a safety pro-

61. See 29 U.S.C. § 654(a)(2) (1982). The Secretary of Labor is authorized to set "occupational safety and health standards," defined as standards requiring "conditions, or the adoption or use of one or more practices, means, methods, operations, or processes, reasonably necessary or appropriate to provide safe or healthful employment and places of employment." *Id.* § 652(8).

62. *Id.* § 554(a)(1) (emphasis added).

63. See *Pratt & Whitney Aircraft v. Secretary of Labor*, 649 F.2d 96, 98 (2d Cir. 1981). See also Morey, *The General Duty Clause of the Occupational Safety and Health Act of 1970*, 86 HARV. L. REV. 988, 990 (1973).

64. For a collection of cases showing the various tests employed by the courts and OSHRC, see Annotation, *What Is "Recognized Hazard" Within Meaning of General Duty Clause of Occupational Safety and Health Act (29 U.S.C.S. § 654(a)(1))*, 50 A.L.R. Fed. 742, 745-46 (1980).

65. *Id.* at 745.

66. See *Donovan v. Royal Logging Co.*, 645 F.2d 822, 829 (9th Cir. 1981).

67. See, e.g., *Magma Copper Co. v. Marshall*, 608 F.2d 373, 376 (9th Cir. 1979).

68. *Donovan v. General Motors Corp.*, 764 F.2d 32, 35 (1st Cir. 1985) (quoting 29 U.S.C. § 660(a) (1982)).

69. 742 F.2d 12 (1st Cir. 1984).

70. *Id.* at 18. See also *General Motors Corp.*, 764 F.2d at 36; Annotation, *supra* note 64, at 744.

gram.⁷¹ If actual or constructive knowledge is sufficiently shown, there is generally no need to resort to industry practice.⁷²

A recognized hazard can also be shown to exist by reference to actual industry practice.⁷³ However, merely because an industry has not recognized and addressed a particular hazard does not foreclose a court's inquiry. Actual industry practice does not necessarily set the standard of care required by the OSH Act.⁷⁴

In complying with the general duty clause, an employer is not required to provide an absolutely safe working environment. The clause is tempered by the statement of purpose and policy in section 651(b) "to assure so far as possible every working man and woman in the Nation safe and healthful working conditions."⁷⁵

One is hard pressed to argue that an employer has a general duty to implement the use of genetic testing in employment. The first obstacle is OSHA's official stance opposing the use of genetic tests. The second obstacle is inherent in the tests themselves. Since the reliability of the tests is not scientifically acceptable, an employer's failure to use them will not be viewed as a recognized hazard.⁷⁶ Moreover, contemporary industry practice does not include a genetic testing policy.

A separate question is whether the general duty clause prohibits the use of genetic screening. As Professor Rothstein cogently notes, "The second possible use of [the general duty clause], to prohibit certain medical practices, has already been attempted,"⁷⁷ and the attempt has failed. In *Oil, Chemical & Atomic Workers International Union v. American Cyanamid Co.*,⁷⁸ the District of Columbia Circuit was faced with the question of whether an employer's policy, which "provided that women employees of childbearing age could not hold jobs that exposed them to toxic substances at levels considered unsafe for fetuses" including the exception "made for women who could show that they had been surgically sterilized,"⁷⁹ constituted a hazard under the general duty clause. The D.C. Circuit held that the employer's policy was not a hazard, finding "that the general duty clause does not apply to a policy as contrasted with a physical condition in the workplace."⁸⁰

The general duty clause notwithstanding, the essence of the OSH Act statutory scheme is that employees are required to comply with all duly pro-

71. See Annotation, *supra* note 64, at 752-55, for a collection of cases on this subject.

72. See *Brennan v. OSHRC*, 494 F.2d 460, 463-64 (8th Cir. 1974).

73. See *Pratt & Whitney Aircraft*, 649 F.2d at 101.

74. See *Donovan v. Missouri Farmers Ass'n*, 674 F.2d 690, 692 (8th Cir. 1982); *National Realty & Constr. Co. v. OSHRC*, 489 F.2d 1257, 1266 n.37 (D.C. Cir. 1973).

75. 29 U.S.C. § 651(b) (1982) (emphasis added). See also *Oil, Chem. & Atomic Workers Int'l v. American Cyanamid Co.*, 741 F.2d 444, 447 (D.C. Cir. 1984).

76. Accord M. ROTHSTEIN, *supra* note 7, at 108.

77. *Id.* at 108 (emphasis in original).

78. 741 F.2d 444 (D.C. Cir. 1984).

79. *Id.* at 445.

80. *Id.* at 448.

mulgated standards.⁸¹ Section 654(b) provides: "(b) Each employee shall comply with occupational safety and health standards and all rules, regulations, and orders issued pursuant to this chapter which are applicable to his own actions and conduct."⁸² The OSH Act requires the Secretary of Labor to adopt any national consensus standard⁸³ and any established federal standard⁸⁴ as an occupational safety or health standard.⁸⁵ The OSH Act also empowers the Secretary to promulgate, modify, or revoke standards.⁸⁶ The OSH Act further provides that in promulgating standards on toxic materials or harmful physical agents, the Secretary

shall set the standard which most adequately assures, *to the extent feasible*, on the basis of the best available evidence, that no employee will suffer material impairment of health or functional capacity even if such employee has regular exposure to the hazard dealt with by such standard for the period of his working life.⁸⁷

Pursuant to the OSH Act, the Secretary could require the use of genetic testing in the workplace when the procedures are proved accurate. However, any genetic testing standard must be tempered with a requirement that the standard be feasible. The feasibility requirement has been construed to embody the concept that the OSH Act was not designed to provide an absolutely safe workplace but was designed to eliminate significant harm.⁸⁸

The feasibility requirement under the OSH Act is two-dimensional. It requires the Secretary to assess the technological and economic feasibility of a proposed standard. A large body of case law has been generated by the feasibility requirement.

81. See M. ROTHSTEIN, *supra* note 7, at 103.

82. 29 U.S.C. § 654(b) (1982).

83. A "national consensus standard" is defined in 29 U.S.C. § 652(10) (1982) as any occupational safety and health standard or modification thereof which (1) has been adopted and promulgated by a nationally recognized standards-producing organization under procedures whereby it can be determined by the Secretary that persons interested and affected by the scope or provisions of the standard have reached substantial agreement on its adoption, (2) was formulated in a manner which afforded an opportunity for diverse views to be considered and (3) has been designated as such a standard by the Secretary, after consultation with other appropriate Federal agencies.

84. An "established Federal standard" is defined as "any operative occupational safety and health standard established by any agency or the United States and presently in effect, or contained in any Act of Congress in force on December 29, 1970 [the date of enactment of the OSH Act]." 29 U.S.C. § 652(10) (1982).

85. Where a conflict exists between a national consensus standard and an established federal standard, the Secretary of Labor must employ the standard that assures employees the greatest protection. See *id.* § 655(10).

86. *Id.* § 655(b). The procedures require that the Secretary of Labor make his determination on the basis of written information submitted to him by employers, employees, NIOSH, or an advisory committee appointed by the Secretary. See *id.* § 655(b)(1).

87. *Id.* § 655(b)(5) (emphasis added).

88. See *Industrial Union Dep't, AFL-CIO v. American Pet. Inst.*, 448 U.S. 607, 646 (1980) (the *Benzene* case).

Technological feasibility means something more than a perusal of the technological status quo. Technological feasibility under the OSH Act can be "technology-forcing."⁸⁹ As a practical matter, OSHA can require an industry to conduct research and development to acquire technology presently on the scientific horizon.⁹⁰ Moreover, OSHA can impose a standard that only the most technologically advanced plants in an industry can achieve.⁹¹

To prove a proposed standard is technologically feasible, OSHA must show that modern technology has at least conceived some industrial strategies or devices that are likely to be capable of meeting the standard and which are generally capable of adoption by the industry.⁹² Presently, genetic testing has not been proved to be a scientifically acceptable device. Before the tests are technologically feasible, they must be proved accurate and reliable. Thus, OSHA would probably fail in any attempt to prove that the tests are technologically feasible at this stage of technology development.

The second dimension of the feasibility requirement under the OSH Act is economic feasibility. Economic feasibility means something more than whether a proposed standard is financially burdensome. A standard can threaten the survival of some companies within an industry but cannot imperil the existence of the entire industry.⁹³ The OSH Act, however, does not require OSHA to engage in a cost-benefit analysis before promulgating a standard.⁹⁴ "Congress viewed the costs of health and safety as a cost of doing business."⁹⁵

To prove that a proposed standard is economically feasible, OSHA must provide a reasonable assessment of the likely range of costs of its standard, and the likely effects of those costs on the industry.⁹⁶ By granting an industry a reasonable time to comply with a standard, OSHA can enhance the economic feasibility of a standard.⁹⁷ Genetic testing should not entail costs that would be economically infeasible. Most tests are conducted on blood samples that can be obtained relatively inexpensively. The tests can be performed by outside laboratories on contract. Interpretation of the tests can be performed through the existing occupational health structure.

The OSH Act provides an existing statutory scheme to evaluate the accuracy of genetic tests and to implement specific genetic testing programs. Congress has authorized the National Institute of Occupational Safety and

89. See *United Steelworkers of Am. v. Marshall*, 647 F.2d 1189, 1264 (D.C. Cir.), cert. denied, 453 U.S. 913 (1981).

90. *Id.*; *Society of Plastic Indus., Inc. v. OSHA*, 509 F.2d 1301, 1309 (2d Cir. 1975), cert. denied, 421 U.S. 992 (1975) (OSHA can force industry to develop and diffuse new technology).

91. See *United Steelworkers of Am.*, 647 F.2d at 1274.

92. *Id.* at 1266.

93. *Id.* at 1265.

94. See *American Textile Mfrs. Inst., Inc. v. Donovan*, 452 U.S. 490, 509 (1981) ("cost-benefit analysis is not required by the statute because feasibility is").

95. *Id.* at 520.

96. See *United Steelworkers of Am.*, 647 F.2d at 1266.

97. *Id.* at 1265.

Health (NIOSH) to identify specific occupational safety and health standards and to recommend safe exposure levels for particular harmful agents.⁹⁸ NIOSH also has the power to formulate criteria for determining the acceptability of occupational medical tests.⁹⁹ Moreover, data on the use of genetic tests can be compiled pursuant to NIOSH's authority under section 673 of the OSH Act.¹⁰⁰

Under the OSH Act and its interpretation by the courts, if a genetic test could determine that an employee would suffer an increased risk of illness due to working conditions, an employer may be liable for placing the worker in a high-risk job. An employer's liability may stem from either the general duty clause or a specific genetic-testing standard. Furthermore, if the tests were reasonable an employer may be able to use the tests under the Act if he could show there was no other technology available to ensure a safe and healthy workplace for certain hypersusceptible employees.¹⁰¹

Nevertheless, the Act is deficient in several major aspects. The Act will not apply to the use of genetic screening of job applicants—a requirement for any regulatory scheme addressing the issues of genetic screening. The use of genetic screening as a means of unfairly excluding job applicants must be guarded against. Moreover, the Act will not redress employer discrimination of hypersusceptible workers.¹⁰² Finally, the focus of the Act is on minimum standards of safety and prevention of harm rather than compensating injured employees.¹⁰³ Although the OSH Act was enacted to the benefit of employees, it does not create a private right of action on behalf of the

98. 29 U.S.C. §§ 671(c), (d) (1982). NIOSH also has the statutory authority to publish a list of all known toxic substances. See 29 U.S.C. §§ 669(a), (b), 671(a) (1982).

99. See Field, *supra* note 4, at 126.

100. 29 U.S.C. § 673(9) (1982) provides:

In order to further the purposes of the chapter, the Secretary, in consultation with the Secretary of Health and Human Services, shall develop and maintain an effective program of collection, compilation, and analysis of occupational safety and health statistics. Such program may cover all employments whether or not subject to any other provisions of this chapter but shall not cover employments excluded by section 653 of this title. The Secretary shall compile accurate statistics on work injuries and illnesses which shall include all disabling, serious, or significant injuries and illnesses, whether or not involving loss of time from work, other than minor injuries requiring only first aid treatment and which do not involve medical treatment, loss of consciousness, restriction of work or motion, or transfer to another job.

101. See Note, *supra* note 58, at 1211.

102. *June 1982 Hearing*, *supra* note 6, at 104-05 (prepared statement by Mark Rothstein, Professor of Law, West Virginia University). An employee does receive protection if he is discharged or discriminated against for exercising his rights under the OSH Act. See 29 U.S.C. § 660(c)(1) (1982); Annotation, *Prohibition of Discrimination Against, or Discharge of, Employee Because of Exercise of Right Afforded By Occupational Safety and Health Act, Under § 11(c)(1) of the Act (29 U.S.C.S. § 660(c)(1))*, 66 A.L.R. Fed. 650 (1984). Generally, an employer discriminates against an employee within the meaning of section 660(c)(1) when the employer treats that employee less favorably than he treats others similarly situated. See Annotation, *supra*, at 655-57; M. ROTHSTEIN, *supra* note 7, at 98-99.

103. See generally *June 1982 Hearing*, *supra* note 6, at 90-97.

employee who has been harmed.¹⁰⁴ An employee's only recourse is to petition the Secretary of Labor to enforce the OSH Act's requirements. Therefore, a private enforcement mechanism in the statutory scheme is lacking.

Title VII

Title VII of the Civil Rights of 1964, as amended by the Equal Employment Opportunity Act of 1972,¹⁰⁵ proscribes discrimination in employment based on sex, color, race, religion, and national origin. The promise of Title VII is to provide equal employment opportunities for all individuals regardless of their immutable characteristics. "The statute's focus on the individual is unambiguous. It precludes treatment of individuals as simply components of a racial, religious, sexual, or national class. . . . Individual risks, like individual performance, may not be predicted by resort to classifications, proscribed by Title VII."¹⁰⁶ This is true even where the generalization about the class is accurate, but the generalization is not applicable to a specific individual.

Title VII of the Civil Rights Act as originally enacted in 1964 afforded a remedy for employment discrimination only to private sector employees. The Equal Employment Opportunity Act of 1972 amended Title VII to include federal, state, and local government employees.¹⁰⁷

Several different categories of employers are amenable to suit under Title VII. The Act defines an employer as "a person engaged in an industry affecting commerce who has fifteen or more employees for each working day in each of twenty or more calendar weeks in the current or preceding calendar year."¹⁰⁸ The requisite number of employees is a mandatory jurisdictional requirement.¹⁰⁹

An employee may bring a Title VII action against a nonfederal governmental entity such as a state or local government; however, such suit must be brought against the defendant in his official capacity. A federal employee may also bring suit against his employer but must name the head of the department as the defendant.¹¹⁰ Unions and employment agencies may also be sued under Title VII.¹¹¹ Moreover, the Supreme Court has held that the rights of an employee to a de novo trial are not foreclosed by the prior submission of his claim to arbitration under a nondiscrimination clause of a collective bargaining agreement.¹¹²

104. *Id.* at 89. See also *United Steel Workers of Am.*, 647 F.2d at 1235.

105. 42 U.S.C. § 2000e (1982).

106. *Los Angeles Dep't of Water & Power v. Manhart*, 435 U.S. 702, 708-10 (1978).

107. Title VII also provides protection from discrimination by employment agencies and labor unions. See 42 U.S.C. § 2000e-2(b), (c) (1982).

108. *Id.* § 2000e(b).

109. See, e.g., *Bonomo v. National Duckpin Bowling Cong., Inc.*, 469 F. Supp. 467, 470 (D. Md. 1979).

110. See 42 U.S.C. § 2000e-16(c) (1982).

111. See *id.* § 2000e-2(b), (c). See generally *Northwest Airlines v. Transport Workers Union of Am.*, AFL-CIO, 606 F.2d 1350 (D.C. Cir. 1979), *aff'd in part*, 451 U.S. 77, 88 (1981).

112. See *Alexander v. Gardner-Denver Co.*, 415 U.S. 36, 59-60 (1974).

An interesting problem arises when a predecessor employer is accused of discrimination. The courts have generally addressed this problem by embracing a balancing test that weighs the interest of the employee and the national policy against discrimination against the current operator who theoretically has not engaged in discrimination.¹¹³ Courts generally hold predecessor employers liable for Title VII violations when there is a continuity of operations.¹¹⁴

There are several categories of employees who can bring a suit under Title VII. After complying with the prelitigation administrative requirements,¹¹⁵ an individual nonfederal employee may bring suit on his own behalf or as a class representative pursuant to Federal Rule of Civil Procedure 23(a), unless the initial administrative charge was filed by a member of the Equal Employment Opportunity Commission (EEOC).¹¹⁶ The EEOC may bring suit, but not against a government, a governmental agency, or a political subdivision.¹¹⁷ However, the Attorney General may bring suit against a government, a governmental agency, or a political subdivision.¹¹⁸ A federal employee may also bring suit, but only on his own behalf or as a class representative pursuant to Federal Rule of Civil Procedure 23(a). A federal employee, however, cannot turn to either the EEOC or the Attorney General for aid in the prosecution of the suit.

There are two general types of Title VII cases—disparate treatment and disparate impact. In a disparate treatment suit, the employee alleges that he has been treated less favorably than his peers because of race, sex, or some other statutorily expressed immutable characteristic. The plaintiff is required to prove discriminatory animus.¹¹⁹ In a disparate impact case, the plaintiff alleges that a facially neutral test or employment criterion disproportionately disqualifies a protected class from employment, promotion, etc. Proof of discriminatory motive is not required.¹²⁰

An example of the possible application of Title VII to the use of tests for genetic screening is where a black job applicant is denied employment

113. See, e.g., *Brown v. Evening News Ass'n*, 473 F. Supp. 1242, 1245 (E.D. Mich. 1979).

114. See, e.g., *Trujillo v. Longhorn Mfg. Co.*, 694 F.2d 221, 224-25 (10th Cir. 1982).

115. For a helpful discussion and outline of prelitigation procedures for federal and nonfederal employees, see C. RICHEY, *MANUAL ON EMPLOYMENT DISCRIMINATION LAW AND CIVIL RIGHTS ACTIONS IN THE FEDERAL COURTS*, A-15 through A-19 (rev. ed. 1984).

116. See 42 U.S.C. § 2000e-5(f)(1) (1982).

117. See *id.* § 2000e-5(f). See, e.g., *EEOC v. General Tel. Co.*, 599 F.2d 322, 326 (9th Cir. 1979), *aff'd on other grounds*, 446 U.S. 318 (1980).

118. See 42 U.S.C. § 2000e-6 (1982). The circuits have split on the question of whether the Attorney General has the independent authority to institute a pattern or practice suit against a public employer without the case being referred by the EEOC. Compare *United States v. Board of Educ., Garfield Heights*, 581 F.2d 791, 791-92 (6th Cir. 1978), *cert. denied*, 444 U.S. 832 (1979) (no independent authority) with *United States v. Fresno Unified School Dist.*, 592 F.2d 1088, 1094-95 (9th Cir.), *cert. denied*, 444 U.S. 832 (1979) (independent authority).

119. See *Texas Dep't of Community Affairs v. Burdine*, 450 U.S. 248, 256 (1981).

120. *Griggs v. Duke Power Co.*, 401 U.S. 424, 432 (1971). See also *Dothard v. Rawlinson*, 433 U.S. 321, 328 (1977).

because he possesses the sickle-cell trait and the job is in a recognized high-risk area. The hypothetical applicant should be able to establish a prima facie case of discrimination against the employer because the tests have a disparate impact on his race.

After the applicant in this hypothetical case establishes discrimination based on disparate impact, the employer shoulders the burden of justifying the screening process by demonstrating its relation to legitimate job requirements or business necessity.¹²¹ Such defenses embody the fundamental principle that Title VII does not proscribe all types of discrimination. There are unavoidable standards for employment in certain jobs. For example, truck drivers need good eyesight. These standards are called bona fide occupational qualifications (BFOQs) and have a relation to legitimate job requirements.

The BFOQs defense was intended as a narrow exception to the general rule against discrimination. The criteria for judging a BFOQs defense were explicated in *Arritt v. Grissell*¹²²:

[T]he burden is on the employer to show (1) that the bfoq which it invokes is reasonably necessary to the essence of its business . . . and (2) that the employer has reasonable cause, i.e., a factual basis for believing that all or substantially all persons within the class . . . would be unable to perform safely and efficiently the duties of the job involved, or that it is impossible or impractical to deal with persons . . . on an individual basis.¹²³

The employer in the hypothetical case must base a BFOQs defense on sufficient facts establishing that substantially all hypersusceptible employees or applicants are unable to safely and effectively perform the functions required by the job and, thus, pose a substantial risk to the employer's business.¹²⁴ The courts generally have not recognized a BFOQs defense when based on potential harm to the applicant or employee; rather, the courts have required the employer to show a substantial safety risk to the public or co-employees.¹²⁵ Genetic screening does not protect the public or co-employees from harm. Moreover, the genetic tests identify only those who possess the hypersusceptible trait; the tests do not identify those who will actually contract the occupational disease. Therefore, a BFOQs defense should fail to justify the use of genetic screening in the hypothetical case of the black applicant with the sickle-cell trait.

121. *Griggs*, 401 U.S. at 431. See generally Note, *supra* note 58, at 1203-07.

122. 567 F.2d 1267 (4th Cir. 1977).

123. *Id.* at 1271.

124. See Note, *Exclusionary Employment Practices in Hazardous Industries: Protection or Discrimination?*, 5 COLUM. J. ENVTL. L. 97, 146-47 (1978) (employer must prove that plan is necessary to preserve essence of business operation).

125. See OTA REPORT, *supra* note 2, at 124-25; Note, *supra* note 58, at 1207; Crowell & Copus, *Safety and Equity at Odds: OSHA and Title VII Clash over Health Hazards in the Workplace*, 2 INDUS. & LAB. REL. REV. 567, 583 (1978).

A few states prohibit the use of tests to determine whether an individual has the sickle-cell trait.¹²⁶ One state, New Jersey, prohibits discrimination because of an individual's "atypical hereditary cellular blood trait."¹²⁷ This latter statute purports to proscribe the use of many types of biogenetic screening in the employment context.

There are several disadvantages to the use of Title VII to address the many issues generated by genetic testing. For example, Title VII does not give the EEOC rule-making authority; thus, the determination of whether a genetic test is accurate and predictive would be left to the adversarial process.¹²⁸ Moreover, a finding that discrimination on the basis of a person's atypical genetic makeup violates Title VII will, in all likelihood, snuff out the technology. Such a result may not be beneficial when these tests are developed. Finally, because the determination of whether Title VII is applicable to genetic screening is left for the courts to grapple with, one cannot help but be reminded of the old adage that such grappling is akin to fitting a square peg into a round hole.

The Rehabilitation Act of 1973

The Rehabilitation Act of 1973 prohibits discrimination against handicapped individuals by employers who receive federal assistance or who are government contractors.¹²⁹ Its expressed purpose is "to develop and implement, through research, training, services, and the guarantee of equal opportunity, comprehensive and coordinated programs of vocational rehabilitation and independent living."¹³⁰ Section 501 of the Rehabilitation Act applies to federal departments, agencies, and instrumentalities, including the Postal Service and the Postal Rate Commission.¹³¹ Section 503 applies to employers with federal contracts in excess of \$2,500.¹³² Section 504 applies to recipients of federal financial assistance such as state and local governments.¹³³ Section 504 contains no requisite monetary amount of financial assistance, unlike section 503.

For the Rehabilitation Act to apply to genetic testing, the courts would first have to determine whether a predisposition to an occupational illness is a handicap. A "handicapped individual" is defined broadly to include "any person who (i) has a physical or mental impairment which substantially limits one or more of such person's major life activities, (ii) has a record of such impairment, or (iii) is regarded as having such an impairment."¹³⁴

126. OTA REPORT, *supra* note 2, at 128. Florida, North Carolina, and Louisiana prohibit discrimination in employment based on sickle-cell trait. *See also* M. ROTHSTEIN, *supra* note 7, at 118.

127. N.J. REV. STAT. § 10:5-12(a) (Supp. 1986). *See also* M. ROTHSTEIN, *supra* note 7, at 118.

128. *See June 1982 Hearing, supra* note 6, at 127 (remarks by Mark Rothstein).

129. 29 U.S.C. §§ 701-796 (1982 and Supp. II 1984).

130. M. ROTHSTEIN, *supra* note 7, at 114.

131. 29 U.S.C. § 791 (1982).

132. *Id.* § 793.

133. *Id.* § 794.

134. *Id.* § 706(7)(B); 41 C.F.R. § 60-741 (1986). *See also June 1982 Hearing, supra* note 6, at 114 (report by General Accounting Office).

The Supreme Court recently construed the definition of "handicapped" under the Rehabilitation Act in *School Board of Nassau County, Florida v. Arline*.¹³⁵ There the Court grappled with the question of whether a person afflicted with the contagious disease of tuberculosis may be considered a "handicapped individual." The Court observed that the basic purpose of section 504 is to ensure that handicapped individuals are not denied jobs or other benefits because of the ignorance or prejudiced attitudes of others.¹³⁶ Moreover, the Court stated:

By amending the definition of "handicapped individual" to include not only those who are actually physically impaired, but also those who are regarded as impaired and who, as a result, are substantially limited in a major life activity, Congress acknowledged that society's accumulated myths and fears about disability and disease are as handicapping as are the physical limitations that flow from actual impairment.¹³⁷

The Court then held "that a person suffering from the contagious disease of tuberculosis can be a handicapped person within the meaning of § 504 of the Rehabilitation Act of 1973."¹³⁸

The courts may conclude, in light of the Court's opinion in *Arline*, that hypersusceptibility because of a genetic deficiency is a handicap under the Act. Although the hypersusceptible individual may never acquire the disease, his employer may nevertheless regard him as having the disease. "High-risk or susceptible individuals are not presently impaired, but they are likely to become impaired, or, at least, are believed to be more likely to become impaired in the future."¹³⁹

After determining that hypersusceptibility due to a genetic deficiency is a handicap as defined by the Act, the court must still determine whether an individual with the present ability to do the work required but with a future risk of illness is "otherwise qualified."¹⁴⁰ An otherwise qualified person is one who is able to perform the "essential functions" of the job in question.¹⁴¹ Generally, a determination whether a person is otherwise qualified requires an individualized inquiry based on reasonable medical judgments given the state of medical knowledge.¹⁴²

Finally, it is not clear when an employer would be justified in using genetic screening procedures in the employment process or whether reasonable ac-

135. 107 S. Ct. 1123 (1987).

136. *Id.* at 1128.

137. *Id.* at 1129 (footnote omitted).

138. *Id.* at 1132.

139. M. ROTHSTEIN, *supra* note 7, at 118. See also OTA REPORT, *supra* note 2, at 128-29. Although no complaints have been filed under the Act, Justice Department officials have indicated hypersusceptible individuals are protected by the Act, especially if the employer perceives the genetic trait as a handicap. M. ROTHSTEIN, *supra* note 7, at 117.

140. An individual who is "otherwise qualified" is "one who is able to meet all of a program's requirements in spite of his handicap." *Southeastern Community College v. Davis*, 442 U.S. 397, 406 (1979).

141. *Arline*, 107 S. Ct. at 1131 n.17. See also 45 C.F.R. § 84.3(k) (1986).

142. See *Arline*, 107 S. Ct. at 1131.

commodation of the individual may be possible. Even if an employer could prove that genetic screening is predictive and job related, the employer may not be permitted to exclude a hypersusceptible individual if reasonable accommodation is possible, such as job restructuring or modifying work schedules.¹⁴³

Employers have an affirmative obligation to make a reasonable accommodation for a handicapped employee. Although they are not required to find another job for an employee who is not qualified for the job he or she was doing, they cannot deny an employee alternative employment opportunities reasonably available under the employer's existing policies.¹⁴⁴

There are several shortcomings in applying the Rehabilitation Act to the use of genetic screening in employment. The Act provides no private right of action under section 503 for an aggrieved individual. The remedy provided for under section 503 is the filing of a complaint with the Office of Federal Contract Compliance Programs in the Department of Labor, which must then investigate the allegation.¹⁴⁵ Potential plaintiffs could not sue their employers directly. Furthermore, a major shortcoming with the Rehabilitation Act is that for the Act to apply to the use of genetic screening in employment, the courts must first determine that a genetic predisposition to a possible future occupational illness is a handicap, and, second, that the "handicapped" individual is "otherwise qualified" for the job. These determinations are not appropriate for the courts to make; rather, these determinations should be made by Congress and its state counterparts.

In deciding whether hypersusceptibility is a handicap, one must address general policy questions and should amass numerous facts. This process is one best reserved for a legislature. The ad hoc and retrospective process, which is the essence of the American judicial system, is improper to resolve the issues of an emerging technology. Courts are ill-equipped to deal with emerging technologies. This shortcoming is not due to incompetence but to the nature of the American judicial system. Courts exercise the power of reasoned elaboration. They, unlike the legislature, must exert their power on a case-by-case basis. Therefore, although the courts may be headed in the right direction, it necessarily takes them longer to reach a policy objective than it would the legislature. Unfortunately, society may not have the luxury of time when confronted with the hazards of an emerging technology.

An ad hoc and retrospective approach to the issues presented by genetic screening will be burdensome on the courts and unfair to those employers,

143. See OTA REPORT, *supra* note 2, at 130. An accommodation is not reasonable if it imposes undue financial or administrative hardship on the employer. See *Arline*, 107 S. Ct. at 1131 n.17. Generally, state fair employment practice laws do not require reasonable accommodation. OTA REPORT, *supra* note 2, at 130. See also *June 1982 Hearing*, *supra* note 6, at 24.

144. *Arline*, 107 S. Ct. at 1131 n.19 (citations omitted).

145. See 29 U.S.C. § 793(b) (1982); 41 C.F.R. § 60-741.26 (1986). See also OTA REPORT, *supra* note 2, at 126.

employees, and job applicants who were not parties to the particular case before the court. Courts will have to wrestle with many complex issues, such as when does a test become scientifically acceptable and what will be the societal ramifications when a decision is handed down. Courts must by their very nature decide the cases before them and do not have the luxuries afforded the legislature, such as endless hours of expert testimony or the discretion to avoid the issues entirely. Decisions by the courts on the issues presented by genetic screening will be unfair to those parties who are not before the court at that particular time. Of course, the courts could try to alleviate the problem of unfairness by permitting the filing of *amicus curiae* briefs, but this procedure is not comparable to the notice and comment procedures in the administrative process. *Amicus* briefs are not the proper procedure by which to amass the information necessary to resolve the novel issues generated by the genetic technologies.

Furthermore, an *ad hoc* and retrospective approach to the problems associated with an emerging technology will not allow the various actors the opportunity to privately order their policies.¹⁴⁶ Employers and employees will not be aware of their rights and duties until a decision is handed down. Moreover, employers will not invest in a technology that may be discontinued the next day. Finally, the judicial system must react to the harms caused by a technology. It is axiomatic that federal courts cannot render advisory opinions. They must wait until an individual fears harm and seeks an injunction or is actually harmed and brings a suit for damages. Action by Congress would be the proper procedure for dealing with an emerging technology and would provide uniformity in the handling of the issues presented by the use of genetic screening in employment.

A Regulatory Proposal

This article demonstrates that the existing legal framework is inadequate in meeting the challenges of genetic screening. Leaving these complex policy questions to the adversarial process is improper in these circumstances. The courts presently have no well-defined administrative agency to defer to on such issues as when a genetic test is valid and reliable or when such a test should be required.¹⁴⁷ Thus, the courts would eventually have to confront the merits of questions like this through the use of "[t]he instrumentality nominally charged with bringing science into the court—the expert witness—[who] performs that task highly imperfectly in the adversary setting."¹⁴⁸ However, a more fundamental problem exists if the courts are per-

146. See generally H. HART & A. SACKS, *THE LEGAL PROCESS: BASIC PROBLEMS IN THE MAKING AND APPLICATION OF LAW* 124-80 (tent. ed. 1958).

147. See Abraham & Merrill, *Scientific Uncertainty in the Courts*, 2 *ISSUES* 93, 94-95 (1986). Abraham and Merrill discuss the three judicial stances toward uncertainty—confrontation, avoidance, and deference. They observe that the dominant method of dealing with uncertainty in the regulatory context is deference to an administrative judgment. *Id.* at 95.

148. Burger, *Scientific Fact and Legal Decisions*, in *THE LEGAL SYSTEM ASSAULT ON THE ECONOMY* 39, 46 (Mink ed. 1986) (citation omitted).

mitted to resolve the issues generated by the use of genetic testing in the first instance. Courts are not, nor ever have been, repositories of "the truth." Courts have never claimed as much. This is not to say that truth is unimportant. "Truth is, of course, a goal of the judicial system, but it is only one goal, and rarely the main one."¹⁴⁹ Truth is as important to achieve as certain other societal goals, such as the protection of constitutional values (e.g., the fourth and fifth amendment exclusionary rules), the attorney-client privilege, fairness, and equity.¹⁵⁰

"Scientific material fits poorly in adversary proceedings without special handling. There is a substantial and important distinction between 'winning'—the goal of adversary parties—and 'finding the truth'—the traditional goal of those who do science."¹⁵¹ Moreover, as an adversarial proceeding, "the system relies almost entirely on the parties to present the evidence and contentions in support of their respective positions, with little if any outside assistance."¹⁵² By necessity this leads to what is commonly called the "battle of experts" testifying before a court dubbed by one commentator a "national disgrace."¹⁵³ Yet, by the very nature of the American legal system, a paradox arises. The courts are ill-equipped in resolving many of the scientific issues they face; however, they must decide those issues when the proper cases are before them. Courts are not permitted unbridled discretion in avoidance of issues. Thus, the courts, without congressional action, must eventually address the issues generated by genetic screening even if they are ill-equipped to do so.¹⁵⁴

Congress is the appropriate branch of government to explore the issues associated with the genetic-testing technologies. Congress must be prepared to take thoughtful action, either by enacting new legislation or by amending existing legislation. Any action by Congress should consider the various objectives of the regulatory model proposed in this article.

Active Involvement in Development of Technology

Congress should take an active role in the development of the technology not only by directly regulating genetic testing but also by funding research to develop tests with high reliability and validity. The federal government "has an interest in seeing the biotechnology industry prosper, not only because of the specific products that will emerge from the industry but because of the

149. Wessel, *Alternative Dispute Resolution for the Socioscientific Dispute*, 1 J.L. & TECH. 1, 5 (1986).

150. *Id.* Cf. Eurger, *supra* note 148, at 47.

151. Burger, *supra* note 148, at 39.

152. Wessel, *supra* note 149, at 13.

153. *Id.* at 5.

154. This observation is far from novel. To compensate for this judicial inadequacy, there have been several proposals to create alternate tribunals for adjudication of scientific issues. For a thoughtful and interesting proposal for a "socioscientific dispute resolution" procedure, see Wessel, *supra* note 149, at 13. For a criticism of such proposals, see Abraham & Merrill, *supra* note 147, at 106.

broad economic benefits to be expected of a vibrant and expanding industrial sector.¹⁵⁵ Strong government involvement can also help to build the public trust essential for industries perceived as potentially hazardous.¹⁵⁶ Such a role is symbolic but no less real or important. Congress, possibly through NIOSH, should also fund epidemiological studies in occupational settings to study the correlation between genetic traits and an increased risk for contracting certain diseases.

History teaches that when the government backs the development of a new technology, the technology explodes on the scene and its acceptance by the public is generally forthcoming. Some examples are radar, radio, fluoridated water, and computers. Thus, federal funding should rapidly aid in the development of this technology with its many potential benefits.

Monitor and Evaluate

Congress should provide for a system of monitoring the genetic screening technology so as to gather methodology on the use of the tests. This monitoring process will help to pierce the veil of secrecy that has surrounded the use of genetic screening in employment. In this manner, Congress would promote the technology indirectly.

Congress should also delegate to an agency the authority to establish criteria on how specific tests are to be evaluated for accuracy and reliability. Moreover, guidelines should be established on the proper procedures in giving the tests and evaluating the results, as well as when to require screening.

Congress could delegate the authority to monitor and evaluate genetic tests to NIOSH,¹⁵⁷ but such delegation creates a paradox when coupled with NIOSH's proposed role in promoting the technology. The regulatory model saddles NIOSH with conflicting regulatory roles. NIOSH is required, on the one hand, to foster and promote genetic testing while, on the other, to guard individual rights against unscientific testing. This tension, of course, is not new in the regulatory context. The Atomic Energy Commission was both the promoter and the guardian of the public with regard to nuclear power. It would be more desirable, however, to delegate the authority to promote genetic technologies to an agency different from the agency charged with its regulation. Thus, any actual or perceived conflict in the proposed roles is eliminated. Congress may want to create a new agency for the funding of all genetic technologies (including genetic testing) while delegating the monitoring function to NIOSH.

Regulation of Test Use

The third objective of any legislation should be to directly regulate the use of those specific tests that have been found to be accurate and reliable. This objective envisions a two-pronged approach. First, the regulation should be

155. S. OLSON, *BIOTECHNOLOGY: AN INDUSTRY COMES OF AGE* 67 (1986).

156. *Id.* at 68.

157. *Accord* M. ROTHSTEIN, *supra* note 7, at 205.

structured so as to provide information on the dangers of the workplace primarily to the employee and job applicant. An educational program funded by the employer, any union, and the government to inform employees and applicants of the risks associated with a particular occupation when such an individual has been diagnosed as hypersusceptible would be consistent with this requirement. Test results would be interpreted and the ramifications discussed.¹⁵⁸ Necessarily, a new but analogous duty is conferred on "the physician to explain fully and in terms comprehensible to the person what having that genetic condition does and does not mean for that individual."¹⁵⁹ Therefore, the test results would be used by the employees and applicants to make informed decisions as to whether they will accept the risks of possible future illness. If the employees choose to accept the risk, they should be given every reasonable protection.¹⁶⁰

The second prong of this objective is the implementation of the policy that the employee or applicant has the final say on whether to accept the risks associated with employment.¹⁶¹ There are no ethical problems with allowing individuals to voluntarily assume the risks of future illness if the individuals are adequately informed of the genetic test results.¹⁶² Society often permits the voluntary assumption of risk in the safety and health context. Individuals are permitted to choose to smoke, dip snuff, drink alcohol, and operate coke ovens, and the list goes on. Inherent in all these actions is the voluntary assumption of a known risk.

Another justification for permitting the individual to assess the benefits and risks demonstrated by genetic tests is inherent in the nature of the tests. Genetic screening cannot determine whether an individual is in fact going to contract the illness. Genetic screening, instead, identifies an individual who is

158. *Id.* at 198.

159. *Oct. 1982 Hearing, supra* note 25, at 91.

160. *Accord* M. ROTHSTEIN, *supra* note 7, at 198. Professor Rothstein does state that if the employees choose to accept the risk, "they should be given *every possible* protection." *Id.* (emphasis added). Read in its appropriate context, the phrase means an employee should receive every reasonable protection possible. To the extent that Professor Rothstein meant that such employees receive every possible protection without temperance by reason or feasibility, this author disagrees.

161. The term "risk" in this context has several implications. By employing the term "risks," one necessarily implies that it can be weighed objectively against the "benefits" of a proposed plan of action.

A willingness to balance relative costs and benefits is present in the very adoption of the concept of risk to describe one's situation. In contrast, this disposition to weigh and compare is not announced by the concepts of danger, peril, hazard, and threat. Such terms do not presuppose that the source of possible injury is also a source of benefits. What does one do with a risk? Sometimes one decides to take it. What, by comparison, does one do with a hazard? Usually, one seeks to avoid it or eliminate it.

Winner, *The Risk of Talking About Risk*, 6 PHIL. & PUB. POL. 12 (1986).

162. For a helpful article on voluntary vis a vis involuntary assumption of risk, see Starr, *Social Benefit vs. Technological Risk*, 16 SCI. 1232, 1232-38 (1969). Starr explores the different expectations and reactions people have toward voluntary and involuntary assumption of risk. *Id.*

a member of a class of persons who may be more susceptible to a given illness. Even as a member of a hypersusceptible class, an individual may never contract the illness. Of course, it would be unfair to exclude such an individual from employment. Nevertheless, this would be the result if Congress embraces a general policy of allowing the exclusion of hypersusceptible workers so as to protect them.

The experts should not decide what is in the best interests of an individual in these circumstances. Genetic expertise does not give an expert any special qualifications to determine the rules of society.¹⁶³ Science cannot be permitted to dominate the law.¹⁶⁴ The individual is in the best position to weigh the benefits of employment against the risks of possible future illness in deciding whether to accept or to continue employment.

Scientists and engineers have an important role to play in the making of safety determinations. Representatives of these disciplines are obviously better equipped than others to identify and quantify potential risks and to identify potential benefits. It is questionable, however, whether they have any special competence to qualify benefits in a manner that can be regarded as authoritative in the formulation of public policy. No elite group of experts, no matter how broadly constituted, has the ability to make an objective and valid determination with respect to what benefits people want and what risks people are willing to assume in order to have those benefits.¹⁶⁵

The use of genetic screening to transfer or exclude individuals without their consent can be a dispassionate process. The use of genetic screening in this manner will have adverse effects on rights such as individual freedom and self-determination. This adverse effect on well-recognized rights is generally considered by the experts in a risk-benefit assessment. However, loss of freedom is difficult to quantify and, at this early stage in the development of the genetic technology, would probably be underweighed relative to the perceived benefits of employee safety and health.¹⁶⁶ Moreover, such a calculus can "obscure the fact that most risk decisions involve gambling with people's health, safety, and economic well-being in an arena with diverse actors and shifting alliances."¹⁶⁷ Therefore, it must fall to the individuals in-

163. See Wessell, *supra* note 149, at 8.

164. See generally Rhoden, *Trimesters and Technology: Revamping Roe v. Wade*, 95 YALE L.J. 639, 691-97 (1986).

165. Green, *The Risk-Benefit Calculus in Safety Determination*, 43 GEO. WASH. L. REV. 791, 792 (1975).

166. "[T]echnology assessment, especially in the early stages of a technology, likely will overweigh benefits and underweigh risks." Green, *Should Technology Assessment Guide Public Policy?*, 69 A.B.A. J. 930, 932 (1983). Dean Green observes that "the identification of potential risk is largely in the realm of speculation, and the degree of foreseeable potential harm that will result if the risks turn out to be real is almost always in the realm of uncertainty." *Id.* at 931.

167. Fischhoff, *Managing Risk Perceptions*, 2 ISSUES 83, 86 (1985).

volved to weigh the benefits against the risks.¹⁶⁸ There is no justification for experts or employers to make a risk assessment decision for an individual when that individual is in the best position to make it.¹⁶⁹

A troubling problem arises if society permits the individual to assume the enhanced risk of contracting an occupational illness. When an individual exercises his prerogative and accepts employment, should his employer be shielded from a worker's compensation claim if the individual contracts the occupational illness? The better answer is no. "The employer takes the employee as he finds him."¹⁷⁰ An employee should retain his right to file worker's compensation claims for an occupational illness that arose out of his employment.¹⁷¹

Confidentiality

A further objective of any legislation should be to protect the confidentiality and privacy of job applicants and employees by restricting access to any genetic information obtained from the results of genetic screening. One proposal concludes that any results from genetic screening should not be given to unrelated third parties, such as insurers or employers, without the explicit consent of the individual screened.¹⁷² This proposal may go too far. Unions have an interest in knowing the number of hypersusceptible employees they represent. Union access to such records can be accomplished easily and may even be mandated under certain labor laws. Moreover, employers have an important interest in knowing whether their employees are hypersusceptible so as to provide for reasonable accommodation if possible. Furthermore, employer access to genetic results allows an employer to take greater preventive measures in certain areas. The fear of employer access, of course, is real. Theoretically, an employer could use the genetic screening results to exclude applicants and employees from employment.

168. This proposition can be analogized to the common law right of self-autonomy, the bedrock of the informed consent law in medical jurisprudence. *See generally* T. BEAUCHAMP & J. CHILDRESS, *PRINCIPLES OF BIOMEDICAL ETHICS* 62-82 (1979). For an interesting discussion of the potential conflict between worker autonomy and the policies embodied in the OSHA Act, see M. ROTHSTEIN, *supra* note 7, at 200-01.

169. An individual's risk assessment need not be an all or nothing proposition. An individual need not decide whether to accept or reject employment; a regulatory model could also provide a requirement that if an individual rejects a particular position, he be reasonably accommodated by his prospective employer. Such a result is, of course, the best case scenario. However, such a result may be more theoretical than practical.

170. M. ROTHSTEIN, *supra* note 7, at 171 (quoting I. A. LARSON, *WORKMEN'S COMPENSATION LAW* § 12.20, at 3-25 (1980 & Supp. 1982)).

171. In employing this analysis, an implicit assumption is made that even this author must take issue with; that is that worker's compensation awards are adequate in handling the expenses necessitated by the occupational illness. In their present state of decline, worker's compensation laws cannot perform this task. The laws, in general, are inadequate and inequitable. *See id.* at 169-70.

172. *See June 1982 Hearing, supra* note 6, at 114 (statement of Alexander M. Capron, Executive Director of the President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research on Genetic Screening in the Workplace). This objective has been suggested by the President's Commission. *Id.*

Even more disturbing than the intracompany disclosure of medical records is the considerable risk that these same medical records will be widely available to various third parties through one of the vast computerized networks dealing with private medical records. Some employers already have established procedures for exchanging medical surveillance records of workers known to have had prior exposures to hazardous substances. There are even reports that some companies compile lists of workers who have filed work injury lawsuits, which are made available to employers for use in screening employment applications.¹⁷³

However, such action should be unlawful. After all, an employer is aware of the race of an applicant. If the employer refuses to hire the applicant based on race, the employer is subject to suit under Title VII. Moreover, any fear of employer abuse may be tempered with guidelines as to what information can be obtained and from whom it can be obtained. Furthermore, an individual who has been tested should also have a right of access to the test results and any explanations accompanying them.¹⁷⁴

Explicit Private Right of Action

The final objective of any legislation should be to expressly provide for a private right of action by an aggrieved individual against an employer or union who has used any genetic test results to exclude an individual from employment or membership in a union, or against any person who has breached the individual's right of confidentiality and privacy. Private enforcement is a desirable mechanism to ensure that the provisions of the legislation are adequately enforced.¹⁷⁵ Moreover, a private right of action would make enforcement of any rights independent of the political process. A helpful procedural model would be that provided for under Title VII.¹⁷⁶

173. M. ROTHSTEIN, *supra* note 7, at 92 (footnotes omitted).

174. Employees (but not applicants) do have access to exposure and medical records under OSHA standards; however, OSHA does not place on the employer an affirmative duty to disclose the records. *Id.* at 89, 91. Moreover, most employers deny access to employees outright. *Id.*

Whether genetic test results could or should be obtained by relatives of an individual tested is beyond the scope of this article. See generally *June 1982 Hearing, supra* note 6, at 114. Cf. Francis, *Recent Development in Genetic Diagnosis: Some Ethical and Legal Implications*, 1986 UTAH L. REV. 483, 487-89 (discussing the ethical problems that arise if the genetic information has implications for other individuals).

175. For a thorough discussion of the private enforcement of law through class actions, see Coffee, *Understanding the Plaintiff's Attorney: The Implications of Economic Theory for Private Enforcement of Law Through Class and Derivative Actions*, 86 COLUM. L. REV. 669 (1984). Professor Coffee suggests that the present system "creates the potential for both oppression and overenforcement." *Id.* at 679 (footnote omitted).

176. Accord M. ROTHSTEIN, *supra* note 7, at 206.

Conclusion

The foregoing examination of the relevant statutory authority demonstrates that although there are principles applicable to the novel issues generated by the use of genetic screening in employment, the current legal framework is inadequate to deal with those issues satisfactorily. Each statutory scheme holds promise; however, alone, each system is fundamentally deficient.

Presently, there is no congressional policy directed at the use of genetic testing in the workplace. The need for a congressional policy is compelling. Genetic-testing programs are a present reality, not a distant prospect that is sufficiently far away to allow years for exploring their scientific, legal, and ethical implications. There is no pressing emergency, yet no time to delay. It is important that Congress protect individuals from the abuses of genetic screening, but it must also foster and promote the technology.

This decade has catapulted the legal and political systems into a confrontation with many emerging technologies. It is now time for a candid discussion about the legal and ethical issues spawned by genetic testing. The new genetic-screening capabilities present great scientific promise as well as possible hazards. Genetic testing has the potential to identify hypersusceptible individuals and allow them to assess the risks and benefits of employment. Nevertheless, the use of genetic screening may also be abused by excluding individuals from employment, thus creating a class of unemployables. Genetic testing is a technology too promising to discontinue, yet it is too potentially harmful for unchecked development.