1979

Birth Defects Caused by Parental Exposure to workplace Hazards: The Interface of Title VII with OSHA and Tort Law

Lynne Darcy
University of Michigan Law School

Follow this and additional works at: https://repository.law.umich.edu/mjlr

Part of the Civil Rights and Discrimination Commons, Labor and Employment Law Commons, Legislation Commons, and the Torts Commons

Recommended Citation
Available at: https://repository.law.umich.edu/mjlr/vol12/iss2/3

This Note is brought to you for free and open access by the University of Michigan Journal of Law Reform at University of Michigan Law School Scholarship Repository. It has been accepted for inclusion in University of Michigan Journal of Law Reform by an authorized editor of University of Michigan Law School Scholarship Repository. For more information, please contact mlaw.repository@umich.edu.
In recent years, Congress has enacted legislation reflecting a broad societal commitment to achieving two important goals in the American workplace: equal employment opportunity and a safe work environment for all workers. Although neither of these objectives has yet been fully attained, some gains have been won for workers subjected to the hardships of discrimination or an unsafe workplace. Ironically, a threat to the achievement of both these goals is presented by the sex-differential effects of certain toxic substances found in the workplace upon the reproductive functions of exposed workers. All too often, employers have responded to this concern not by cleaning up the workplace so as to protect both sexes to the maximum extent possible, but rather by excluding women entirely from the workplace. At the same time, employers have neglected to take steps to protect the health of the remaining male workforce.

This article will examine the problem of workers' exposure to toxic substances that affect human reproductive functions in light of the applicable legal framework provided by tort law, the Occupational Safety and Health Act of 1970 (OSHA), and Title VII of the Civil Rights Act of 1964. What employers may do to deal with this problem under existing law, and possible resolutions of some apparent conflicts between the underlying purposes of these laws, will also be delineated. It is the position of this article that the competing interests of employers, workers, and workers' offspring must be harmonized not by excluding all but the least physically affected workers from the workplace, but by providing a safe, healthy, nondiscriminatory work environment for each worker.


3 See, e.g., McGhee, Workplace Hazards: No Women Need Apply, 41 THE PROGRESSIVE 20 (1977). In addition, the Solicitor of Labor has noted that the Department of Labor is aware that many companies using vinyl chloride and lead are excluding all women of childbearing years — a classification comprising approximately 70% of the female workforce. Statement of Carin Clauss, Solicitor of Labor, Meeting of the National Advisory Committee on Occupational Safety and Health, in Washington D.C., (January 30, 1978).


Part I will discuss the effects of toxic hazards on reproductive functions and the scientific problems in ascertaining and evaluating those effects. Part II will examine the employer's duty to provide a safe workplace and to provide equal employment opportunity. Finally, Part III will apply the legal framework to the problem of work-related birth defects, analyzing the Title VII — OSHA interface and the Title VII — tort interface.

I. DEFINING THE PROBLEM:
TOXIC SUBSTANCES AFFECTING REPRODUCTIVE FUNCTIONS

Workers are exposed to a wide range of potentially hazardous materials in the course of their employment. Often, such exposure results in the worker contracting such life-threatening diseases as cancer or lung disorders. In other cases, the exposure is sufficient only to cause illness or functional impairment, including impairment of the worker's reproductive function.

Most chemical hazards encountered in the work environment appear to affect both men and women equally. In these cases, no questions of differential treatment or disparate working conditions, prohibited by Title VII, would arise. Some materials, however, may have a greater effect on one sex than the other, or may simply affect males and females differently. Many of these sex-differential effects involve injuries to the reproductive systems of exposed workers, the focus of concern in this article.

---

6 See generally J. STELLMAN & S. DAUM, WORK IS DANGEROUS TO YOUR HEALTH, xiv, 155 (1973); J. STELLMAN, WOMEN'S WORK, WOMEN'S HEALTH: MYTHS AND REALITIES (1977).
8 Cf. J. STELLMAN & S. DAUM, supra note 6, at 22-28 (description of process of lung disorder).
9 For example, low level lead poisoning can cause headaches, fatigue, stomach pains, nervousness, and functional impairment of the male reproductive system, including loss of libido. Feldman, Urban Land Mining: Lead Intoxication Among Deleaders, 298 NEW ENG. J. OF MED. 1143, 1144 (1978); Lancranjian, et al., Reproductive Ability of Workmen Occupationally Exposed to Lead, 30 ARCH. ENVR'L HEALTH 396, 398-99 (1975).
11 For example, exposure to estrogens may increase the risk of uterine cancer in women, while causing the development of female secondary sex characteristics in men.
12 In addition to the effects described in note 11, supra, diethylstilbestrol (DES) is a form of estrogen which is known to be a teratogen, seriously affecting both male and female offspring of an exposed mother. Gill, Transplacental Effects of Diethylstilbestrol on the Human Male Fetus: Abnormal Semen and Anatomical Lesions of the Male Genital Tract, WOMEN AND THE WORKPLACE, supra note 10, at 39; Welch, Transplacental Carcinogenesis: Prenatal Diethylstilbestrol (DES) Exposure, Clear Cell Carcinoma and Related Anomalies of the Genital Tract in Young Females, WOMEN AND THE WORKPLACE, supra note 10, at 47. See also 7 OSHR Current Report (BNA) 1388 (Feb. 16, 1978) (NIOSH Plans Industry-wide
Exposure to chemicals can affect the reproductive function during several distinct stages of the reproductive process. Certain substances may cause loss of libido or sterility in those exposed to them in the ordinary course of their employment. Loss of fertility appears to be a difficulty most often encountered by male workers, although this disparity may be due to the traditional exclusion of women from jobs where sterility-causing chemicals are present in the workplace. Obviously, loss of libido in men or sterility in either sex prevents conception entirely, thus foreclosing any questions as to employer liability for malformed fetuses or children born with birth defects.

Questions of employer liability for birth-related defects do arise with respect to a variety of other toxic materials which do not prevent conception but may result in spontaneous abortion, stillbirth, or differing forms of birth defects. Damage to offspring may occur even where the workers themselves do not exhibit any effects from the toxic substances. Although this area has been little explored in the past, and modern authorities present conflicting evidence as to the extent of the dangers involved, some specific hazards have been identified and their effects documented. Exposure of the worker so as to endanger the life or health of the fetus or child can occur before conception, during gestation, or after the birth of the child, depending upon the type of toxic material involved and the nature of the exposure. Mutagenic materials affect the germ cells of the exposed person prior to conception, causing changes which can be transmitted to future generations.


13 Barlow & Sullivan, id. at 5-7.
14 Id. at 9-18.
15 Id.
16 In the case of lead poisoning, for example, children and, presumably, fetuses, exhibit the effects of exposure to lead when the concentration in the blood reaches 30-40 micrograms/100 milliliter, whereas adults usually do not suffer the symptoms of lead poisoning at blood lead levels of less than 50-60 micrograms/100 milliliter. See generally Informal Public Hearing on the Proposed Standard for Exposure to Lead, United States Dept. of Labor, Occupational Safety and Health Administration, Docket No. H004 (March, 1977).
17 A. Hricko & M. Brunt, supra note 12, at CI-C40.
Such changes, known as mutagenesis, can be induced instantaneously or by repeated exposure to a hazard over an extended period. Because decades may pass before the mutagenic potential of a chemical becomes apparent, and because laboratory testing in this area is time consuming and costly, it is often difficult to determine whether a given chemical is a mutagen, and what mutagenic effect it will evidence. It is at least clear that both sexes may be affected by mutagenic agents, and that the resulting higher-than-average instances of fetal mortality, miscarriages, and birth defects are found not only among exposed women workers themselves, and their offspring, but also among the wives and offspring of exposed male workers.

A second type of materials, gameto-toxic agents, damage the sperm or ova itself prior to conception, leading to spontaneous abortion or fetal malformation. Sperm abnormalities have been reported following exposure to substances including lead and carbon disulfide. Notably, gameto-toxic effects might be additive where both parents are exposed to a hazard.

A third type of toxic materials are teratogens. Unlike mutagenic or gameto-toxic materials, which act on the worker prior to conception, teratogenic agents act on the embryo itself after conception and affect its development. As a result, it is generally only the offspring of women workers who are harmed by exposure to teratogens. The most serious teratogenic effects occur in the first trimester of pregnancy, and may occur even if the mother's exposure to the hazard is terminated before conception if insufficient time is allowed for her system to become free of the toxic material.

While most studies in this area have focussed on the effects of toxic materials on the reproductive systems of female workers, the

---

18 V. Hunt, supra note 12, at 43-44.
20 See, e.g., Barlow & Sullivan, supra note 12, at 18-20; Corbett, Cancer, Miscarriages and Birth Defects Associated with Operating Room Exposure, in Women and the Workplace, supra note 10, at 94; Funes-Cravioto, et al., Chromosome Aberrations in Workers Exposed to Vinyl Chloride, 1 The Lancet 459 (1975); Wagoner, Infante & Brown, Genetic Effects Associated with Industrial Chemicals, in Women and the Workplace, supra note 10, at 100.
21 See Barlow & Sullivan, supra note 12, at 7-9. In addition, exposure of pregnant women to mutagens can cause potential problems for female offspring because oogenesis occurs at the fetal stage.
22 Id.
23 Studies with rats indicate such an effect. See Stowe & Goyer, The Reproductive Ability and Progeny of F1 Lead-Toxic Rats, 22 Fertility and Sterility 755, 758-59 (1971).
24 The offspring of male workers might also be harmed by exposure to teratogens if the workers' wives were exposed to the teratogen by its being brought home on the workers' clothes.
25 V. Hunt, supra note 12, at 5.
brief summary above should make it clear that mutagenic and
gameto-toxic materials pose substantial hazards for male workers
and their offspring, as well as for women workers. But while a
number of employers have responded to the problems raised by the
effects of exposure to toxic substances on reproduction by exclud­ing
all women from the workplace, there is no evidence that any
employer similarly has excluded all men from jobs which pose
hazards for their reproductive systems. Simply stated, employers
are not adequately protecting male workers against such health
hazards where jobs have traditionally been performed by men.26
Further, women are not being excluded from traditionally female
jobs, even where there may be some risk to their ability to bear
healthy children.27

These forms of discriminatory treatment of workers are in strik­ing
conflict with the legal responsibilities of employers to provide a
safe and nondiscriminatory workplace for all workers. The ques­tion
to be addressed, then, is whether the special circumstances
surrounding the problems of injuries caused by exposure to toxic
substances justify a departure from that general responsibility.
More specifically, the question is whether an employer’s potential
liability for injuries to workers or their offspring is a sufficient de­
fense to charges that the employer has failed to provide a nondis­
criminatory workplace.

II. THE APPLICABLE LEGAL FRAMEWORK

A. The Employer’s Duty to Provide A Safe Workplace

While developments in scientific understanding of the effects of
certain chemical substances present new and challenging ques­tions, the more general problem posed — dangerous working con­ditions — is hardly a novel one.

Initially, the common law of tort was the sole recourse for a
worker injured because of unsafe working conditions.28 Under
common law, the employer has the duty to provide a safe work­place and equipment,29 to warn of any dangers of which a worker

26 See Post-Hearing Brief of United Steelworkers of America, AFL-CIO-CLC, on Stan­
28 See notes 29-35 and accompanying text infra. See generally W. PROSSER, THE LAW OF
29 See Rickett v. Jones, 495 F. 2d 185, 188 (5th Cir. 1974); Riggs v. Missouri-Kan.-Tex. Ry.
Co., 211 Kan. 795, 800, 508 P. 2d 850, 854 (1973); Farley v. M M Cattle Co., 529 S. W. 2d 751,
754 (Tex. 1975).
might reasonably be unaware,\textsuperscript{30} and to issue and enforce rules for employee conduct which make the workplace safe.\textsuperscript{31} The worker has the duty to exercise reasonable care for his or her own safety.\textsuperscript{32}

In theory, potential liability for negligence under the common law should induce employers to reduce the level of exposure to hazardous materials in the workplace, at least to the point that further improvement of workplace conditions is more economically burdensome for the employer than is the payment of damages for accidents or illness caused by exposure not easily curtailed. In evaluating his or her duty to clean up the workplace in such a pure negligence system, an employer would balance the gravity of the harm and the likelihood of its occurrence against the social utility of the action and the burden of taking adequate precautions.\textsuperscript{33}

Even though the risk of injury from some chemical substances might not be great in statistical terms, the resulting injuries might be sufficiently serious to induce the employer to reduce as far as possible the exposure for all employees.

Two factors, however, traditionally have undermined the ability of this common law theory of employer negligence to reduce levels of exposure to toxic substances. First, and most important, the employers have been able to invoke three significant defenses to damage actions: assumption of risk, contributory negligence and the fellow servant rule.\textsuperscript{34} To the extent that these defenses are permitted, a powerful bar is set up against successful claims, which might otherwise create adequate deterrence.\textsuperscript{35} Second, as in any tort action, the worker must show that the work hazard was the cause of the injury suffered in order for the employer to be held responsible for the damages involved. Because of the lack of scientific knowledge and the delayed impact of exposure to toxic substances, causation has been difficult for plaintiffs to prove.

\textsuperscript{30} See Wilson v. Gordon, 354 A. 2d 398, 400 (Me. 1976); Bauman v. Woodfield, 244 Md. 207, 216, 223 A. 2d 364, 368 (1966); Farley v. M M Cattle Co., 529 S. W. 2d 751, 754 (Tex. 1975).


\textsuperscript{33} See, e.g., United States v. Carrol Towing Co., 159 F. 2d 169, 173 (2d Cir. 1947). See generally W. PROSSER, supra note 28, at § 31.


\textsuperscript{35} See Blumrosen; supra note 34, at 703; A. SOMERS & H. SOMERS, WORKMEN'S COMPENSATION (1954).
Because these employer defenses left most workplace injuries uncompensated under the common law, the law of worker's compensation evolved as a form of absolute liability, allowing workers to be compensated regardless of fault. Workers' compensation does not eliminate all the difficulties with tort liability: the worker must still show that the injury suffered was work-related. Moreover, since compensation is set by statute, some occupational diseases may not be covered, and all of the costs of the accident or illness may not be reflected in the award. Finally, compensation is usually provided only for those injuries that interfere with the worker's ability to maintain his or her effectiveness on the job. However, workers' compensation does eliminate the critical defenses of contributory negligence, assumption of risk, and the fellow servant rule. Under a workers' compensation system, employers are strictly liable for all work-related injuries, and the costs of such injuries are allocated to the employer as a cost of production to be passed on to consumers instead of being borne by the worker.

Workers' compensation functions much more effectively than tort liability as a compensatory mechanism for workers who have suffered work-related injuries, but it has failed to serve as an adequate means of inducing employers to improve the safety of the workplace beyond a minimum level. The Occupational Safety

---

38 Compensation is usually based on a fraction of the disabled employee's lost wages, usually ranging from one half to two-thirds, and may only be payable up to a given number of weeks set by the statute of the state in which the injury took place. Certain disabilities, such as the loss of a leg, arm or eye, frequently are covered specifically by the statute, with a stated amount designated as compensation. See W. MALONE, M. PLANT & J. LITTLE, supra note 36, at 372.
39 See A. LARSON, WORKMEN'S COMPENSATION § 57 (Desk ed. 1976). Although some statutes provide for compensation for disfigurement, even though it does not interfere with the worker's wage earning capacity, injuries to the worker's reproductive systems generally have not been compensable under workers' compensation. Id. at § 65.20.
40 A. SOMERS & H. SOMERS, supra note 36. As part of the balancing of interests between the employer and the employee, workers' compensation is the exclusive remedy where it is available, and the employee does not have the additional option of suing the employer for a tort. Where workers' compensation does not cover the injury, however, an employee still has available a traditional common law negligence action against the employer. A. LARSON, supra note 39, at § 65.10. Where the injury is covered, even though it is non-compensable, a tort claim is barred. Williams v. State Compensation Ins. Fund, 50 Cal. App. 3d 116, 123 Cal. Rptr. 812 (1975); A. LARSON, supra note 39, at § 65.20.
and Health Act (OSHA) was passed by Congress in 1970 to provide a federal regulatory system designed 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." Section 6(b)(5) of OSHA directs the Secretary of Labor to promulgate standards dealing with exposure to toxic substances which "most adequately assure, 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." Where no specific standard has been promulgated, the employer is subject to the Act’s General Duty Clause, which requires him to provide 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."

Notwithstanding its promise, OSHA does not guarantee employees a safe workplace in absolute terms. First, administration of OSHA has been plagued by delays in the promulgation of standards for known toxic materials, distorted selection of priorities, and inadequate penalties for violation of the statute. Second, even apart from these administrative difficulties, the obligations imposed by OSHA on employers are not absolute: the employer is not required to provide a safer workplace than it is feasible to attain. Section 6(b)(5) specifically provides that feasibility of attainment is to be considered by the Secretary of Labor in promulgating regulations establishing permissible levels of exposure to hazardous substances. In evaluating feasibility, the Secretary may take into account both technological and economic factors. Although the possible effects on the industry covered are to be considered in determining economic feasibility, a standard which is financially burdensome and reduces profit margins, or even one which puts some marginal companies out of business, may still be economically feasible under the Act, depending upon the harm involved. As to technological feasibility, OSHA has been viewed

46 See note 43 and the accompanying text supra.
48 See Turner Co. v. Secretary of Labor, 561 F. 2d 82, 85 (7th Cir. 1977), 1976-77 Occupational Safety and Health Dec. (CCH) ¶ 22,105 (1977). The Occupational Safety and Health Review Commission has used the cost/benefit analysis approach extensively, although un-
as a technology-forcing mechanism, though the use of the Act in this way may be limited to cases in which the technology has reached a stage of development where it might be perfected within a reasonable time. Where there is complete technological infeasibility, the Secretary may be justified in banning totally an industrial activity which has little social utility and poses great hazards.

If no standard has been issued under section 6(b)(5), employer noncompliance with OSHA may be found under the General Duty Clause. While that clause, unlike section 6(b)(5), does not specifically provide that feasibility is to be taken into account, it is limited to "recognized" hazards, which have been interpreted to be those hazards which are preventable. Such an interpretation is consistent with Congress' intent not to impose strict liability on employers. Thus, the duty imposed by the Act's General Duty Clause, like the standards issued under section 6(b)(5), as a practical matter must be achievable.

B. The Employer's Duty to Provide Equal Employment Opportunity

Title VII of the Civil Rights Act of 1964, was passed by Congress to eliminate the pervasive problems of employment discrimination in our society. Section 703(a) makes it unlawful for an employer to discriminate against "any individual" on the basis of race, color, religion, sex or national origin. Section 701(k) was recently added to Title VII to define discrimination on the basis of sex to include

---

49 Compare Turner Co., id., with Turner Co., 1976-77 Occupational Safety and Health Dec. (CCH) ¶ 21,023 (1976). The Review Commission has granted employers' economic infeasibility arguments with respect to noise standards, but has been reluctant to do so with respect to life-threatening hazards. See Continental Can Co., 1976-77 Occupational Safety and Health Dec. (CCH) ¶ 21,009 (1976), appeal filed (9th Cir. 1976). In one case involving a fatal hazard, the Review Commission has scheduled a review of the finding of an administrative law judge that there was no violation of § 5(a)(1) of the Act because of economic infeasibility. Whirlpool Co., Occupational Safety and Health Dec. (CCH) ¶ 22,073 (1977).

50 See AFL-CIO v. Brennan, 530 F.2d 109, 121 (3d Cir. 1975); Society of the Plastics Indus., Inc. v. Occupational Safety and Health Review Comm'n, 509 F. 2d 1301, 1308-10 (2d Cir. 1975).

51 See note 44 and accompanying text supra.


discrimination on the basis of "pregnancy, childbirth, or related medical conditions."\(^{55}\)

Unlawful employment discrimination manifests itself in two basic forms: differential treatment and disparate effect of neutrally applied employment practices. The most obvious form of discrimination is the differential treatment of employees or potential employees on the basis of a classification prohibited under the statute.\(^{56}\) Differential treatment is almost always unlawful.\(^{57}\) A more subtle form of discrimination occurs, however, where an employer's seemingly neutral employment practices have a disparate effect on a class of people protected by the statute. Recognizing that many such neutral practices were not necessary to business operations, the Supreme Court in \textit{Griggs v. Duke Power Co.}\(^{58}\) held that the attainment of the Congressional purpose in passing Title VII required that neutral employment practices which disparately affect a protected class be considered a violation of the Act, unless a business necessity for the practices can be demonstrated.\(^{59}\) The absence of discriminatory intent is not important in this situation; the Court held that the thrust of Title VII is directed to the consequences of employment practice, not to their motivation.

An important aspect of Title VII is its proscription of discrimination on the basis of "pregnancy, childbirth, or related medical conditions."\(^{55}\)

Section 701 of the Civil Rights Act of 1964 is amended by adding at the end thereof the following new subsection:

\text{(k) The terms "because of sex" or "on the basis of sex" include, but are not limited to, because of or on the basis of pregnancy, childbirth or related medical conditions; and women affected by pregnancy, childbirth, or related medical conditions shall be treated the same for all employment-related purposes, including receipt of benefits under fringe benefit programs, as other persons not so affected but similar in their ability or inability to work, and nothing in section 703(h) of this title shall be interpreted to permit otherwise. This subsection shall not require an employer to pay for health insurance benefits for abortion, except where the life of the mother would be endangered if the fetus were carried to term, or except where medical complications have arisen from an abortion: Provided, That nothing herein shall preclude an employer from providing abortion benefits or otherwise affect bargaining agreements in regard to abortion.}\(^{55}\)

\(^{55}\) Act of Oct. 31, 1978, Pub. L. No. 95-555, 92 Stat. 2076. The complete text of the Pregnancy Disability Amendment is as follows:

\text{(k) The terms "because of sex" or "on the basis of sex" include, but are not limited to, because of or on the basis of pregnancy, childbirth or related medical conditions; and women affected by pregnancy, childbirth, or related medical conditions shall be treated the same for all employment-related purposes, including receipt of benefits under fringe benefit programs, as other persons not so affected but similar in their ability or inability to work, and nothing in section 703(h) of this title shall be interpreted to permit otherwise. This subsection shall not require an employer to pay for health insurance benefits for abortion, except where the life of the mother would be endangered if the fetus were carried to term, or except where medical complications have arisen from an abortion: Provided, That nothing herein shall preclude an employer from providing abortion benefits or otherwise affect bargaining agreements in regard to abortion.}\(^{55}\)

\(^{56}\) Two traditional forms of differential treatment, for example, are relegating blacks to menial jobs and paying women less than men for substantially similar work.

\(^{57}\) See, e.g., \textit{City of Los Angeles v. Manhart}, 98 S.Ct. 1370 (1978); \textit{Rosenfeld v. Southern Pac. Co.}, 444 F. 2d 1219 (9th Cir. 1971); \textit{Diaz v. Pan Am. World Airways, Inc.}, 442 F. 2d 385 (5th Cir.), \textit{cert. denied}, 404 U.S. 950 (1971). Some courts have indicated that disparate treatment on the basis of a mutable characteristic, such as male hair length, is not unlawful, whereas disparate treatment on the basis of an immutable characteristic, such as sex alone, is unlawful. See, e.g., \textit{Willingham v. Macon Tel. Publ. Co.}, 507 F. 2d 1084 (5th Cir. 1975)(en banc). A statutory defense to a claim of differential treatment, is discussed in the text accompanying notes 65-67 infra.

\(^{58}\) 401 U.S. 424 (1971).

\(^{59}\) The business necessity defense to a charge of discrimination based on disparate effect is discussed in the text accompanying notes 68-70 infra.
tion against any individual on a prohibited basis. Thus, employer actions based on generalizations about the characteristics of a protected class are unlawful. Although some generalizations may be rational in the sense that they are correct as generalizations, and also in the sense that resort to them is administratively less expensive for the employer than individualized decisionmaking, the individual must be judged on his or her own abilities and characteristics. Even where there is no available means of determining to which members of the class a valid generalization would apply, Title VII prohibits discrimination against the class as a whole.

There are, however, some exceptions to Title VII's seemingly strict ban against discrimination. Two traditional exceptions, bona fide occupational qualification (BFOQ) and business necessity, serve as defenses to charges of differential treatment and disparate effect respectively. Under section 703(e) of Title VII, an employer may exclude workers from employment on the basis of sex,
religion or national origin if any of those factors is a "bona fide occupational qualification reasonably necessary to the normal operation of that particular business or enterprise." The BFOQ exception has been construed very narrowly by the courts and has not been granted except in those very few instances where the sex of the worker was an intrinsic barrier to accomplishing the primary purpose of the business.

Unlike the statutory BFOQ defense, the business necessity defense is a court-created defense which is properly invoked when an employment practice which is neutral on its face has a disparate effect. In order to avoid a finding of discrimination under this rule, the employer is required to show that there was a business necessity for using the discriminatory practice in question.

Like the BFOQ defense, the business necessity defense has been interpreted very strictly by the courts, and employers have rarely prevailed under it.

### III. Applying the Legal Framework

Where hazardous substances affecting reproductive functions are involved, employers' reactions to their potential liability under tort law and to the obligations imposed by OSHA have not been to reduce the hazard in the workplace, but rather to exclude all women employees. To the extent that the hazard involved does not in fact have a substantially greater effect on women workers

---

66 See e.g., Dothard v. Rawlinson, 433 U.S. 321 (1977); Diaz v. Pan Am. World Airways, Inc., 442 F. 2d 385 (5th Cir.) cert. denied, 404 U.S. 950 (1971); Bowe v. Colgate-Palmolive Co., 416 F. 2d 711 (7th Cir. 1969); Weeks v. Southern Bell Tel. & Tel. Co., 408 F. 2d 228 (5th Cir. 1969).
69 The elements of the business necessity defense were set out clearly by the court in Robinson v. Lorillard Corp., 444 F. 2d 791, 798 (4th Cir. 1971):

The test is whether there exists an overriding legitimate business purpose such that the practice is necessary to the safe and efficient operation of the business. Thus, the business purpose must be sufficiently compelling to override any racial impact; the challenged practice must effectively carry out the business purpose it is alleged to serve; and there must be available no acceptable alternative policies or practices which would better accomplish the business purpose advanced, or accomplish it equally well with a lesser differential racial impact.

70 See, e.g., Griggs v. Duke Power Co., 401 U.S. 424 (1971); Robinson v. Lorillard Corp., 444 F. 2d 791 (4th Cir. 1971); United States v. Bethlehem Steel Corp., 446 F. 2d 652 (2d Cir. 1971); Local 189, United Papermakers & Paperworkers, AFL-CIO-CLC v. United States, 416 F. 2d 980 (5th Cir. 1969); Johnson v. Pike Corp., 332 F. Supp. 490 (C.D. Cal. 1971). But see Spurlock v. United Airlines, 475 F. 2d 216 (10th Cir. 1972) (black applicant without college degree was refused training for airline flight officer because requisite degree of skill in job was high and economic and human risks involved in hiring unqualified candidate were great).
71 See note 3 supra.
and their offspring than on men workers and their offspring, the exclusion of women from the workplace represents nothing more than the use of safety considerations as a pretext for discrimination, in obvious violation of Title VII.

The more difficult case occurs where there is a hazardous substance involved, such as a teratogenic agent, which poses a more substantial threat to women and their offspring than to men. In this case, the exclusion of pregnant women or of all women of child-bearing capacity may represent the employer's decision that this is the least expensive or the only way to comply with the obligations of OSHA and to avoid any liability in tort. In excluding such women from the workplace, however, the employer is clearly discriminating against them.

The narrow question posed by this problem is whether an employer's potential liability under OSHA or tort doctrine should ever provide a business necessity defense in a Title VII case and, if so, what the nature and limits of this defense are. More broadly, though, the problem presents an apparent conflict between the employer's commitments to a safe workplace and to equal employment opportunity. The challenge is to resolve this conflict and to accommodate the two national policies in a way that will yield the maximum furtherance of both schemes.

A. The Title VII - OSHA Interface

While OSHA provides that an employer must furnish a safe workplace,72 and Title VII mandates that he or she must do so in a

72 A threshold question in the consideration of the employer's duty under OSHA to eliminate workplace hazards affecting the reproductive systems of workers is whether any duty imposed by the Act extends beyond workers to their offspring. Arguably, the language of § 6(b)(5), 29 U.S.C. § 655(b)(5) which requires that standards set under OSHA assure that "no employee will suffer material impairment of . . . functional capacity . . ." covers impairment of the worker's capacity to take part in any normal life activity, not only to function in the workplace. If this were the case, OSHA would go beyond worker's compensation, and would require the elimination of hazards shown to have a deleterious effect on the worker's capacity to have healthy children. Some support might be found for this approach from the mention of "studies of the potential genetic effects of complex chemicals and other materials in the work environment" in the section of the Senate Report devoted to the formation of the National Institute of Occupational Health and Safety. S. REP. No. 91-1282, 91st Cong., 2d Sess. 20 (1970). Like workers' compensation, however, the concern under OSHA is with the worker/workplace nexus. Nothing in the language of the Act or in its legislative history indicates that Congress intended the zone of protection under OSHA to extend beyond the workers themselves. See generally H.R. REP. No. 91-1765, 91st Cong., 2d Sess. (1970)(Conference Report); H.R. REP. No. 91-1291, 91st Cong., 2d Sess. (1970); S. REP. No. 91-1282, 91st Cong., 2d Sess. (1970). Thus, a discussion of the interface between Title VII and OSHA need not consider the problem of safety in the workplace as it might affect the worker's offspring. Similarly, Title VII only addresses the relationship between the employer and the employee. Offspring of a discriminatee cannot bring an action under Title VII, even though the discrimination, for example, may have forced them to live in conditions of poverty.
nondiscriminatory fashion, neither of these commands is absolute. The exceptions which are available in each statutory framework, however, cannot be considered in isolation. Rather, recognizing the interdependence of equal employment opportunity and safe workplaces, criteria should be established for determining whether an exception is appropriate in a case involving both statutes. Thus, in evaluating the feasibility under OSHA of a standard or other requirement on the basis of a cost/benefit analysis, the Secretary should weigh into the equation the benefits of maintaining a discrimination-free workplace. Similarly, in determining whether a business necessity defense is appropriate where an employer cites the expense of providing a workplace equally safe from both sexes, the courts should consider the congressional goal of assuring a safe workplace for all workers. The weighing of these factors in determining whether to grant an exception under either statute should result in a more stringent standard for evaluating employer costs.

Where the workplace can reasonably be made safe for all workers, even if at greater expense than if the employer simply were to improve conditions solely for workers of the less vulnerable sex, considerations arising from OSHA and Title VII mandate that the employer do so. OSHA mandates a workplace free of recognized

73 For a discussion of the defenses under OSHA based on technological and economic feasibility, see notes 46-52 and the accompanying text supra. For a discussion of the defenses under Title VII based on bona fide occupational qualification and business necessity, see notes 64-70 and the accompanying text supra. As stated previously, the BFOQ exception has been granted only in a few instances where the sex of the worker was an intrinsic barrier to accomplishing the primary purpose of the business. See note 67 supra. The fact that workers of one sex may have a greater susceptibility to a hazard does not mean that they are thereby unable to perform the job, and courts have stated that it is up to the individual worker to decide whether "the incremental increase in renumeration for . . . dangerous . . . tasks is worth the candle." Weeks v. Southern Bell Tel. & Tel. Co., 408 F. 2d 228, 236 (5th Cir. 1969). Therefore, the BFOQ exception should not be raised in cases where the effect of the hazard on the worker's child-bearing capacity is at issue. Although under the new Pregnancy Disability Amendment to Title VII, see note 55 supra, a BFOQ defense presumably would be available in cases involving discrimination based on pregnancy, such a defense would be limited to those cases in which the pregnancy itself prevented the worker from performing the job. An appropriate solution to such a problem might be temporary transfer and rate retention until after the pregnancy.

74 The courts have not developed a firm standard for the degree to which economic factors should be considered in determining whether to grant a business necessity defense. In Robinson v. Lorillard Corp., 444 F. 2d 791, 799 (4th Cir. 1971), the court stated that "while considerations of economy and efficiency will often be relevant to determining the existence of business necessity, dollar cost alone is not determinative." Another court appeared to be weighing economic concerns in determining the employer's burden of showing the job-relatedness of employment criteria. Spurlock v. United Airlines Inc., 475 F. 2d 216 (10th Cir. 1972). On the other hand, one court has held that "the sole permissible reason for discriminating against actual or prospective employees involves the individual's capability to perform the job effectively. This approach leaves no room for arguments regarding inconvenience, annoyance or even expense to the employer." Johnson v. Pike Corp., 332 F. Supp. 490, 495 (C.D. Cal. 1971) (emphasis added).
and preventable hazards; where fulfillment of this goal is feasible, there is no question that it should be enforced. Further, because Title VII requires nondiscrimination, the employer cannot meet his or her safety goal by limiting the employees to whom any duty is owed under OSHA to members of one sex, and thus avoid what may be the more costly alternative of cleaning up for both sexes. Absent prohibitive expense, the unwillingness of an employer to incur additional outlay to insure nondiscrimination is unlikely to support a business necessity defense to a Title VII claim. Even if the employer, rather than exclude employees of the more vulnerable sex from the workplace, simply fails to provide working conditions as safe for them as for employees of the less vulnerable sex, he or she would be in violation of both Title VII and OSHA. The employer would violate OSHA because of the failure to provide a workplace for the more vulnerable employees free of recognized hazards; the employer would violate Title VII because conditions of employment would have a disparate impact on the basis of sex without any business necessity for doing so. In short, where a workplace can feasibly be made safe for employees of both sexes, even if doing so is more costly, there is absolutely no conflict or tension between OSHA and Title VII; both statutes require the employer to reduce the level of exposure to the hazard in the workplace so that neither sex is affected.

More difficult questions arise where the workplace simply cannot be made safe for members of one sex. In such cases, the issue is whether the General Duty Clause of OSHA requires or permits an employer to exclude employees of that sex from the workplace and, if it does, whether OSHA therefore provides a business necessity defense to the clear Title VII claim which would result. Indeed, OSHA does not provide such a defense: the seeming conflict between Title VII and OSHA in this situation is more imagined than real, for neither statute requires nor permits the exclusion of members of one sex in this circumstance. Because OSHA requires the employer to provide a workplace for each employee which is free only of "recognized" hazards, and because a hazard is not "recognized" if it is not preventable, the workplace can be considered free of recognized hazards for workers of each sex in situations where the hazards are not preventable for members of one sex, even though the hazard may have a differential effect on workers of that sex. In interpreting "recognized" hazards to mean those hazards which can be prevented, the courts have stressed

---

75 Thus, standards promulgated under § 6(b)(5), 28 U.S.C. § 655(b)(5) (1976), of OSHA should be set low enough to protect the more vulnerable workers.

76 See notes 69 and 74 supra.
that Congress in passing OSHA did not intend to throw workers out of work. Therefore, a hazard should only be considered "recognized" with respect to workers of the sex for whom it can be prevented. Such a reading eliminates conflict between the two federal statutes. As for the Title VII considerations, so long as the employer has done all that is feasible to protect workers of the more vulnerable sex, the remaining sex-based inequalities in the terms and conditions of employment should be justifiable as a business necessity. Certainly, under Title VII this result is preferable to the total exclusion of members of one sex from the workforce.

B. The Title VII-Tort Interface

OSHA provides no basis — and no business necessity justification — for the exclusion by the employer of workers of one sex from the workplace. If a business necessity defense under Title VII is to be found for such exclusion, it must be grounded on the potential tort liability of the employer for the hazards which might result from a nondiscriminatory workplace. There are two potential sources of such liability: injuries to the worker himself or herself, and injuries or birth defects suffered by the offspring of exposed workers.

1. Injury to the worker—Even though the employer who has truly minimized a workplace hazard would not be in violation of OSHA, the question of liability in tort for injury to the reproductive systems of workers remains. Where the worker has been fully and adequately warned of the nature and extent of the hazard, and the employer has done everything possible to eliminate or mitigate the danger, the worker could be held to have assumed the risks of employment in a toxic environment. In this case, the employer would not be liable to the worker for any injury resulting in loss of reproductive function, nor should the worker recover for having a child born with a birth defect.

Similarly, the employer in this situation, would not be in violation of Title VII. Implicit in the principle of equal employment op-

---

78 Because, in most cases, the degree of harm from exposure to a toxic hazard increases with its concentration in the environment, the employer should be required to maintain the lowest attainable concentration of the hazardous material in order to minimize the effect on those workers who cannot be protected completely.
79 See notes 68-70 and the accompanying text supra.
80 See notes 39-40 supra.
portunity is the opportunity to accept the risks of employment in a particular job, a consideration which has been recognized by courts in overturning state protective laws.\textsuperscript{82} This is not to say, however, that the employer is generally free to maintain a toxic hazard at a level safe for workers of one sex but not for the other: as outlined above, to do so would violate Title VII, except where it is not feasible for the employer to improve the safety conditions further.\textsuperscript{83}

2. Injury to the Worker's Offspring—The primary concern expressed by employers who maintain a toxic workplace — and their primary justification for excluding women from the workplace — is not injury to the workers themselves, but rather the possibility of substantial damage awards in tort suits brought by children born with birth defects or potential health problems as a result of their parents' exposure. Consistent with this concern, it is argued that employers should be permitted, at least on some occasions, to exclude women\textsuperscript{84} from the workforce on the basis of the business necessity of avoiding damage payments to offspring. Because an injured worker cannot waive the rights of or assume the risk for a child,\textsuperscript{85} the employer's business necessity argument based on tort liability to the child has greater initial appeal than the similar argument based on injuries to the worker himself or herself. Upon closer examination, however, it appears that the likelihood of substantial damage recoveries in this context seems sufficiently remote to wholly undermine the validity of this argument.

The birth defective child has three substantial barriers which must be surmounted before he or she can obtain a judgment against the employer. First, it may be impossible to maintain an action under state law for a preconception or prenatal injury.\textsuperscript{86} Second,

\textsuperscript{82} See Williams v. General Foods Corp., 492 F. 2d 399 (7th Cir. 1974); Kober v. Westinghouse Elec. Corp., 480 F. 2d 240 (3d Cir. 1973); Rosenfeld v. Southern Pacific Co., 444 F. 2d 1219 (9th Cir. 1971); Weeks v. Southern Bell Tel. & Tel. Co., 408 F. 2d 228 (5th Cir. 1969).

\textsuperscript{83} See notes 76-79 and accompanying text supra.

\textsuperscript{84} The focus on women in this context is intentional because no suggestion has been made that men should be excluded from jobs where their reproductive systems may be affected by a toxic hazard. See note 3 supra.

\textsuperscript{85} McGhee, supra note 3, at 22.

\textsuperscript{86} Although all states now permit a personal injury action for prenatal injury by children born alive, some states specifically or impliedly require that the fetus be viable at the time of the injury in order to recover. See Evans v. Olson, 550 P. 2d 924, 926 n.1 (Okla. 1976). Other states have rejected the viability requirement. See, e.g., Sylvia v. Gobeille, 101 R.I. 76, 220 A. 2d 222 (1966); Smith v. Brennan, 31 N.J. 353, 157 A. 2d 497 (1960). Because most prenatal injuries thought to be caused by toxic materials probably occur in the first trimester of pregnancy, see note 25 supra, during which the fetus is not viable, a jurisdiction requiring viability at the time of the injury could bar an action by a child born with a congenital malformation caused by the mother's exposure to the hazard during the previability period. See generally Annot., Liability for Prenatal Injuries, 40 A.L.R. 3d 1222 (1971).

The parent of a child who is stillborn as a result of a prenatal injury may also have an
even if such an action can in theory be brought, it is not at all clear what employer duty under tort law could be invoked to support a damage recovery.\textsuperscript{87} Virtually all cases in which relief has been sought for a preconception or prenatal injury have been based on the negligence of a third party to the mother.\textsuperscript{88} An employer, however, who has maintained the workplace in as safe a condition as possible, and has fully and adequately warned of any remaining dangers, is not negligent in meeting his or her duty to the worker.\textsuperscript{89} Once the employer has fulfilled that duty, it would seem that the worker, not the employer, is in the best position to evaluate the dangers involved and to protect against birth defects in his or her children.\textsuperscript{90} To impose such a duty on the non-negligent employer action for wrongful death in the majority of jurisdictions. However, a substantial minority of states deny the action. See, e.g., State ex rel. Hardin v. Sanders, 538 S.W.2d 336 (Mo. 1976); Evans v. Olson, 550 P.2d 924, 926 n.1 (Okla. 1976). See generally 70 Mich. L. Rev. 729 (1972). The key question in these cases is whether an unborn child is a "person" within the meaning of the state's wrongful death statute. Yow v. Nance, 224 S.E.2d 292 (N.C. Ct. App. 1976) (8½ month fetus was not a "person" under the Wrongful Death Act while still in the mother's womb). The question of viability at the time of injury is usually more heavily weighted when a child is stillborn than in cases where the child is born alive. See, e.g., Toth v. Goree, 65 Mich. App. 296, 237 N.W.2d 297 (1975) (infant must have been born alive or been viable at the time of injury to sustain an action for wrongful death). Few, if any, cases specifically permit recovery in the case of a non-viable fetus. Therefore, recovery may be difficult in the case of a stillborn child where the injury to the fetus from a toxic substance occurred within the first trimester.

There are very few cases granting a cause of action to a child who is injured as the result of an act committed against a parent before conception. All of these cases involve negligence toward the parent. See, e.g., Jorgensen v. Meade Johnson Labs., Inc., 483 F. 2d 237 (10th Cir. 1973); Renslow v. Mennonite Hosp., 67 Ill.2d 348 (1977); Park v. Chessin, 88 Misc.2d 222, 387 N.Y.S. 2d 204 (Sup. Ct. Queens County 1976). Although viability obviously is not at issue where a cause of action is granted in these cases, the question of whether the infant must be born alive may still arise. See generally Note, Torts Prior to Conception: A New Theory of Liability, 56 Neb. L. Rev. 706 (1977).

\textsuperscript{87} There appear to have been no cases brought as yet by children born with congenital malformations as a result of their parents' exposure to toxic hazards in the workplace.


\textsuperscript{89} See notes 28-32 and accompanying text supra.

\textsuperscript{90} Only 8% of women workers between the ages of 16 and 39 became pregnant in 1970. V. HUNT, supra note 12, at 20. It is reasonable to believe that the vast majority of these women would refuse jobs in a toxic work environment, would postpone having children, or would have abortions if they understood that there was a possibility of having a child with a congenital malformation caused by the mother's exposure to the toxic environment. Similarly, a man warned of the possibility of his fathering a defective child might well try to transfer into a less toxic job or postpone having children.

Even where the duty to insure so far as possible that the child is born without a birth defect rests with the parents, and the parents negligently breach that duty, the question of employer liability under a theory of respondeat superior might arise. Under the older, now minority, view that the child could not bring an action against the parent because of the parental immunity doctrine, the employer was not liable under respondeat superior for the negligent acts of an employee, committed within the scope of the employment, which resulted in injury to the employee's child. Sherby v. Weather Bros. Transfer Co., 421 F. 2d 1243 (4th Cir. 1970) (applying Maryland law); Premo v. Grigg, 237 Cal. App. 2d 192, 46 Cal. Rptr. 683 (1965). Under the modern, majority view, however, the child can recover from the employer under the theory that the liability of a master for injury to a third person, through the act of a servant, is primary, and is not protected by the personal immunity of the servant. See, e.g., Begley v. Kohl & Madden Printing Ink Co., 157 Conn. 445, 254 A. 2d 907 (1969); Radeliski v.
might well result in severe and unnecessary restrictions on the parent's work choices.  

Alternatively, the child might allege that the employer is strictly liable in tort because of the extrahazardous nature of the material to which the parent/worker was exposed. Strict liability in cases involving abnormally dangerous materials or activities places the cost of the harm done on the person causing it, regardless of fault, on the ground that such activities must pay their own way. The courts generally follow the rule of *Rylands v. Fletcher* that a person is strictly liable for damage caused by him or her in the course of an abnormally dangerous activity that is inappropriate to its location, regardless of its social utility. Although there might be a question of fact whether a toxic substance was abnormally dangerous, more serious difficulties might arise in establishing that the activity was inappropriate to a particular industrial facility, particularly where exposure to the hazard was limited to the premises. While courts might consider extending strict liability in this situa-

---

91 Travis, 39 N.J. Super. 263, 120 A. 2d 774 (1956). See generally Annot., Liability of Employer for Injury to Wife or Child of Employee Through Latter’s Negligence, 1 A.L.R. 3d 677 (1965). Obviously, a major problem would arise in establishing that the parent-employee acted within the scope of her or his employment. Arguably, coming to work while pregnant, becoming pregnant, or fathering children are not acts within the scope of normal employment.

92 The effect of permitting the exclusion of all fertile workers of one sex from jobs on the basis of possible harm to a potential fetus would be to condone substantial sex-segregation in the workforce, and to cause a serious reduction in job choices for a large segment of workers, including those who do not intend to have children, do not intend to have any more children, or intend to postpone having children. Although women will probably bear the brunt of this discrimination, partly because most research in this area has been done on women, and partly because the problems of teratogenesis do not ordinarily affect men, recent research indicates that men can also be affected by exposure to toxic materials. Male workers and their union representatives are beginning to show concern that industries which exclude women from the workplace in preference to making it safe for fetuses have given little attention to the effect of the hazards on the reproductive systems of male workers. See, e.g., McGhee, supra note 3, at 24; Post-Hearing Brief of the United Steelworkers of America, AFL-CIO-CLC, on Standard for Inorganic Lead, Docket No. H-004 (June 20, 1977).

93 Where the risk of a birth defect resulting from exposure to a toxic substance is very slight, or where the mother could not reasonably have known she was pregnant, the question of parental negligence may not arise. In this situation, the employer almost certainly would not be liable under a *respondeat superior* theory, because the employer cannot be vicariously negligent where the worker is not negligent. See Campbell v. Security Pac. Nat’l. Bank, 133 Cal. Rptr. 77 (1976); Tanari v. School Directors of District No. 502, 43 Ill. App. 3d 331, 356 N.E. 2d 1364 (1976), rev’d, 69 Ill. 3d 630, 373 N.E. 2d 5 (1977).

94 The exclusion of women or men workers from traditionally male or traditionally female jobs because of possible danger to potential fetuses is very unlikely. To date, no such exclusion has taken place. Where exclusion on these grounds is sought in industries which have a past history of discrimination, the strong possibility of a pretext for discrimination must weigh very heavily into the equation.
tion, following a theory parallel to the workers’ compensation or products liability cost-spreading approach,\textsuperscript{95} judicial action of this sort raises serious concerns because of the potential conflict of such judicial lawmaking with established anti-discrimination statutes.

The third difficulty a child would encounter in bringing an action for damages against an employer is establishing causation.\textsuperscript{96} Proof of causation of birth defects is especially difficult because of the technological problems involved.\textsuperscript{97} First, there is much disagreement in the literature as to the real effects of many suspected hazards.\textsuperscript{98} Second, not all those exposed are affected, and it may be impossible to identify specifically who has been injured.\textsuperscript{99} Legal scholars are divided on the appropriateness of using statistics in the fact-finding process,\textsuperscript{100} although a strong mathematical showing generally will be sufficient to get to a jury.\textsuperscript{101}

These severe restraints on a birth defective child’s ability to suc-

\footnote{\textsuperscript{95} Cost spreading under workers’ compensation was introduced by legislative enactment. Furthermore, under products liability, and to a lesser extent under workers’ compensation, the cost is spread to the consumer through the manufacturer. If strict liability were introduced into this situation, the ultimate cost of potentially limited employment opportunities would be spread only to the excluded worker.}

\footnote{\textsuperscript{96} In general, the parent’s exposure will be considered to be the cause of the birth defect if a showing can be made that it was a substantial factor and material element in creating the problem. \textit{Cf.} Anderson v. Minneapolis, St. Paul & Sault Ste. Marie Ry. Co., 126 Minn. 430, 179 N.W. 45 (1920) (sparks from a railroad proximate cause of damage to nearby home); Dunham v. Village of Canisteo, 303 N.Y. 498, 104 N.E.2d 872 (1952) (advance of illness proximately caused by failure of officer to adequately care for a person).}

\footnote{\textsuperscript{97} See notes 14-25 and accompanying text supra. Many birth defects similar to those caused by work-related hazards can also be caused by exposure to more general environmental hazards such as atmospheric lead, Scanlon, \textit{Human Fetal Hazards from Environmental Pollution with Certain Non-Essential Trace Elements}, 11 \textit{Clin. Pediatrics} 135, 137-138, 140 (1972); paint flaking into cooking pots, Rajegowda, Glass, & Evans, \textit{Lead Concentrations in the Newborn Infant}, 80 \textit{J. Pediatrics} 116, 117 (1972); certain non-viral diseases, V. Hunt, supra note 12, at 47; consumption of alcoholic beverages, Dept. of Treas., Warning Labels on Containers of Alcoholic Beverages, 43 Fed. Reg. 2186 (January 16, 1978) and Palmisano, Sneed, & Cassady, \textit{Untaxed Whiskey and Fetal Lead Exposure}, 75 \textit{J. Pediatrics} 869, 871 (1969); and cigarette smoking, Meyer, et al., \textit{Interrelationship of Maternal Smoking and Increased Perinatal Mortality with Other Risk Factors. Further Analysis of the Ontario Perinatal Mortality Study, 1960-61, 100 Am. J. Epidemiology} 443 (1975). The variety of possible sources of harmful substances, the possible additive effect of certain toxic substances, and the non-specific nature of many defects such as low birth weight, lowered intelligence, or central nervous system problems, may combine to make it extremely difficult to demonstrate the actual cause of defects occurring in workers’ children. These difficulties are magnified by the primitive state of current medical knowledge in the area of chemical mutagenesis as it affects both men and women. See Barlow & Sullivan, supra note 12, at 20; Claxton & Berry, supra note 20, at 1037-038.}

\footnote{\textsuperscript{98} See generally Barlow & Sullivan, supra note 12.}


\footnote{\textsuperscript{100} See, e.g., Liddle, \textit{Mathematical and Statistical Probability as a Test of Circumstantial Evidence}, 19 Case W. Res. L. Rev. 254 (1968); Tribe, \textit{Trial by Mathematics: Precision and Ritual in the Legal Process}, 84 Harv. L. Rev. 1329 (1971).}

\footnote{\textsuperscript{101} See, e.g., Fritchard v. Liggett & Myers Tobacco Co., 295 F.2d 292 (3d Cir. 1961).}
cessfully bring a damage action against his or her parent’s employer strongly weighs against recognizing a business necessity defense based upon potential tort liability, which would permit the employer to exclude all fertile women from the workplace. This conclusion is reinforced by the availability of insurance, which could serve to protect the employer against whatever minimal risk of liability he or she does face, and which is a less burdensome alternative than the total exclusion of fertile women.

Even if it is recognized that potential tort awards are insufficient to justify a business necessity defense, the argument is still made that the employer can — and indeed should — exclude fertile women where there is a danger of birth defects in their children, not because of potential liability, but because of the duty of an employer to operate his or her business to reflect society’s concern for the well-being of its progeny. This second theory of a business necessity defense is based on vague assertions of a paternalistic duty on the part of the employer to bear responsibility for the fetuses of employees. There is little authority to support such an approach, although some cases appear to recognize a general concern for the health of third parties even though a conflict with the rights of one of the parties exists. These cases are inapposite, however, either because they do not involve an employer/employee relationship at all, or because they involve the employee’s performance of work affecting the safety of passengers of a common carrier. To permit an employer to make the legislative decision to recognize a supposed duty to potential fetuses, be-

---

102 In the case of pregnant workers, a business necessity defense might be possible in a situation where a negligence action for prenatal injury is permitted under state law and the likelihood of a defect resulting is great. In these cases, however, transfer with rate retention would be a less burdensome alternative than total exclusion from the workplace.

103 See, e.g., EEOC Dec. No. 75-072 (Nov. 14, 1974). Although the EEOC has recognized the availability of a business necessity defense in cases involving embryos and fetuses (most recently in its testimony presented at the lead standard hearings, see Informal Public Hearings on the Proposed Lead Standard for Exposure to Lead, United States Dept. of Labor, Occupational Safety and Health Administration, Docket No. H004, 4097, 4103, 4112-113 (March 1977) (testimony of Constance Dupre)), the Solicitor of Labor has indicated that a broad exclusionary rule extending to all fertile workers will not withstand attack under Title VII and Executive Order 11246. Statement of Carin Clauss, Solicitor of Labor, Meeting of the National Advisory Committee on Occupational Safety and Health Meeting, in Washington, D.C. (January 30, 1978).


beyond the duty to refrain from negligence, in a situation where there is a direct conflict with a statute properly enacted by Congress is to set a dangerous precedent of allowing an employer to decide whether to comply with a law on the basis of that employer's assessment of the public interest. Granting such an option to an employer is particularly inappropriate where the danger of harm occurring to a fetus is attenuated compared to the immediacy of the injury to a large class of employees against whom the employer has a history of prior discrimination. Further, there are countervailing societal interests recognized by the courts, principally an individual's right to make child-bearing decisions without coercion by others.107 Women threatened with unemployment because of their fertility have sought sterilization, an irreversible procedure, rather than lose their jobs in workplaces with toxic hazards.108 The fact that more of such sterilizations are likely to take place if the government agencies or courts permit total exclusion of fertile workers of one sex militates against permitting a business necessity defense extending to all fertile women or all fertile men. Finally, as with a business necessity defense based on economic concerns, the employer would have difficulty establishing that there are no less-burdensome alternatives to the complete exclusion of all pregnant workers or all fertile workers of one sex. Thus, while a business necessity defense theoretically might be available to an employer who wishes to exclude pregnant women or fertile workers of one sex from a workplace possibly hazardous to their embryos, fetuses, or potential fetuses, it would almost certainly fail in all but the most clearly defined and dangerous situations.109

IV. CONCLUSION

The effects of toxic hazards in the workplace on the reproductive capacity of workers raise difficult scientific, legal, and moral issues. Although employers have reacted to what they perceive to be their conflicting liabilities under the present legal structure by excluding all women of child-bearing capacity from the work-

---

108 See McGhee, supra note 3, at 21. The Department of Health, Education and Welfare has recently acknowledged the fact that sterilizations which are not completely voluntary are against public policy and has issued regulations which would assure that government-funded sterilizations are performed only with informed consent given in the absence of coercion. 43 Fed. Reg. 52,146 (November 8, 1978).
109 As noted above, the defense would probably not be available at all in the case of a broad exclusionary policy directed to all fertile workers of either sex. See notes 103-104 supra.
place,\textsuperscript{110} such exclusion is neither desirable nor legally permissible. If both sexes are affected by toxic substances, the exclusion of women from the workplace is a clear violation of Title VII.\textsuperscript{111} Moreover, under OSHA, if it is not feasible for an employer to prevent a hazard for workers of one sex, the statute does not demand their exclusion. The danger of sex discrimination under Title VII based on the disparate effects of working conditions on the workers' functional capacity, however, makes a more stringent standard of feasibility appropriate in this situation. A Title VII business necessity justifying the exclusion of all women of child-bearing age cannot be based on obligations under OSHA, since OSHA does not require the exclusion of all members of the differentially affected sex. Nor can a business necessity defense ordinarily be predicated on the employer's liability in tort to any children born with birth defects as a result of their parents' exposure to workplace hazards. Finally, a business necessity defense is inappropriate where it is based on the employer's assertion of a general duty to society's progeny. Where such considerations conflict with established statutory prerogatives, they are best left to Congress to resolve.

The increased understanding of mutagenesis and teratogenesis has created circumstances not as yet addressed in the law, but certainly amenable to proper legislative action. Several possible solutions to the problems of genetic disease have been suggested.\textsuperscript{112} Any legislation drafted to reach an equitable resolution of this problem should take into account four basic premises: first, the goal of equal employment opportunity must be reached;\textsuperscript{113} second,\textsuperscript{110} See notes 3, 26-27 and the accompanying text supra.

\textsuperscript{111} Less obviously, the failure to determine whether the hazard has a deleterious effect on male workers and to offer them the same protection as women workers may also violate Title VII.

\textsuperscript{112} A new English law, The Congenital Disabilities (Civil Liability) Act, 1976, C. 28 provides that "a person responsible for an occurrence affecting the parent of a child, causing the child to be born disabled, will be liable to the child if he would have been liable in tort to the parent affected. However, there is no liability for a pre-conceptual occurrence if the parents knew of, and accepted, the particular risk . . . .[t]he child's right to damages may be excluded, limited or reduced by the consent or contributory negligence of the parent." Id. (general note). See generally Pace, Civil Liability for Pre-Natal Injuries, 40 Modern L. Rev. 141 (1977). For another proposal, see Estep, supra note 100, at 281, advocating the establishment of a fund paid into by all employers who maintain a given hazard of an amount for each worker exposed. Those affected by defects would collect from this fund. Under this system, causation would not have to be proved; only exposure to the hazard would need to be shown.

\textsuperscript{113} Legislation seeking to resolve these difficulties through the exclusion of either the differentially affected sex or pregnant women might run into severe constitutional problems. A detailed discussion of these problems is beyond the scope of this article. It is worth noting, however, some obvious difficulties. Although discrimination on the basis of pregnancy alone may still be permissible under the Constitution if a rational relationship to a legitimate state interest can be shown, Geduldig v. Aiello, 417 U.S. 484 (1974), privacy considerations dictate that the state has no interest at all in pregnancy during the first trimester, Roe v. Wade,
a child with a workplace-related birth defect should be compensated in some measure for the harm caused, through cost-spreading to the consumers of the product; third, an incentive should be provided to an employer who otherwise might be less than conscientious in cleaning up the workplace; finally, in the absence of negligence determined under the high standard of care necessary in these cases, the individual employer should not be liable for extraordinary damages where the parent has been fully warned of the danger. Such legislation, carefully drafted and properly applied, is imperative in order to provide an equitable solution to the dilemmas caused by workplace hazards.

—Lynne Darcy

410 U.S. 113 (1973), and between the end of the first trimester prior to viability, the state has interest only in the health of the mother, Roe v. Wade, id.; Planned Parenthood v. Danforth, 428 U.S. 52 (1976). Although the exclusion of pregnant women might be possible after the first trimester, any damage resulting from exposure would most likely have already occurred.

The legislative exclusion of all possibly fertile members of the differentially affected sex raises even more serious constitutional problems. Geduldig v. Aiello, id., is not applicable because both men and women are potentially fertile, and such legislation would result in sex discrimination, not pregnancy discrimination. Thus, not only are the same privacy considerations important, but to overcome sex discrimination the government must show that the discrimination has a fair and substantial relation to an important governmental objective. Craig v. Boren, 429 U.S. 190 (1976). Given the scientific flux in this area and the very low statistical likelihood that the problem will arise, it is improbable that the standard can be met. In addition, due process considerations may be offended by the over-inclusiveness of the class affected.

The threat of having a child born with a birth defect is sufficient to deter the vast majority of parents from procreation if they have been fully warned of the risk. Although the courts have shown a growing tendency to extend strict liability to various situations, to apply it in this case would result in the anomalous situation that a pregnant or potentially pregnant woman is responsible for decisions outside the work situation which might lead to congenital malformations in a fetus (such as excessive drinking or even mild use of certain drugs), but cannot be held responsible for deciding whether to engage in an occupation which may be hazardous to a fetus. Ultimately, absent negligence on the part of another, the health of any fetus must be determined by its parents and the decisions they make prior to its conception and birth.