

Chapter 10

**Tort Liability for
Reproductive Harm**

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Tort Liability for Reproductive Harm

INTRODUCTION TO THE COMMON LAW OF TORTS

The common law, as distinct from statutory law, comprises the body of rules and principles used by courts in the absence of applicable legislation. It derives its authority solely from the judgments and decrees of courts applicable to persons, property, and government. Legislation may either modify or codify the common law.

A tort is a civil wrong, other than breach of contract, for which the common law provides a remedy. Although the common law in most States has common roots and has usually developed along similar lines, there is more diversity among States in the law of torts than in most other areas of the law. Perhaps more than any other branch of the law, tort law is a battleground of social theory. Its primary purpose is to make a fair adjustment of the conflicting claims of the litigating parties. But the 20th century has brought increasing realization of the fact that the interests of society in general may be involved in private disputes.¹

Workers' compensation statutes represent one form of legislatively mandated modification to State common law. However, as discussed in chapter 9, workers' compensation laws as they currently exist frequently offer little or no compensation for job-induced reproductive failure or harm. As a result, workers and their families may resort to tort litigation in increasing numbers, to

¹See W. Prosser, *The Law of Torts* (4th ed. 1971).

the extent that this is not barred by the exclusivity of remedy doctrine (discussed in chapter 9).

Employees and their families presently have narrow opportunities to bring common law actions for personal injuries against employers, and the employer's hired physicians and other health professionals. But these opportunities vary from State to State, and do not yet amount in any State to a comprehensive and consistent social policy for imposing or refusing to impose liability for reproductive injuries to employees and their families, beyond that available under workers' compensation statutes. Employees have therefore sought easier pathways for securing compensation and punitive damages. The primary pathway involves litigation against a third party: generally, another firm that furnished to the employer "defectively dangerous" products or negligently performed services. **Product liability theory, at present, affords employees and their families their best opportunity to obtain substantial damage verdicts.**

This chapter explores the opportunities for and barriers to securing common law tort remedies.²

²It should be noted that many of the decisions discussed in this chapter are lower court decisions. Lower court decisions are generally limited in application and authority, and may be reversed on appeal.

TYPES OF INJURIES AND POTENTIAL PLAINTIFFS

Various types of injuries to reproductive health can arise from a worker's exposure to occupational hazards. These injuries can be classified in many ways. For example, they can occur at three different times: before conception, during pregnancy, or after birth.

³For purposes of this report, the word "injury" is defined as any damage to health caused by impact, exposure, disease, or other means.

Injuries that occur *prior to conception* may harm the reproductive health of the male or female worker, the worker's spouse, or both. Some of these impairments may be identifiable before conception (e.g., sterility, impotency, sperm and ova abnormalities, sexual dysfunction) and may prevent or diminish the possibility of conception, impair maternal adaptation to pregnancy, or lead to a conception that later results in an adverse

outcome. However, **some** preconception injuries, such as chromosomal mutations in the ovum or sperm, may not be identified until manifested in adverse outcomes such as fetal loss, birth defects, chromosomal abnormalities in offspring, or genetically caused disabilities and susceptibilities. Preconception injury may also lead to other problems, including emotional distress for the worker, spouse, and offspring, loss of sexual and emotional companionship (consortium) for the worker and spouse, and even loss of parental companionship and resources for other children. Pre-conception injury may possibly result in adverse effects in future generations.

Reproductive injuries that occur during pregnancy may endanger the health of the fetus or complicate the pregnancy and endanger the health of the pregnant woman. These injuries may affect the fetus either before or after it is able to live outside the uterus, and may or may not result in fetal loss. Like pre-conception injuries, these injuries may also result in emotional distress and

loss of sexual and parental companionship, thereby resulting in harm to the pregnant worker's husband and any other children she may have,

Postnatal injuries within the context of the reproductive cycle are those which may harm the infant through exposure to an exposed parent, as where a parent brings home hazardous fibers on his or her clothing, or the mother's breast milk is contaminated by her exposure to a hazardous chemical. In addition to any physical injuries, such exposure may also result in emotional distress for both parents and child.

The parties who may suffer these reproductive harms include the:

- male or female worker;
- worker's SpOUse and children in being;
- embryo, fetus, or infant (depending on when the injury occurred and whether the conceptus survived); and
- the descendants.

THEORIES OF LIABILITY

Negligence

Negligence is the failure to Use such care as a reasonably prudent and careful person would use in similar circumstances. **However, liability for negligence requires more than mere conduct. The traditional formula for the elements necessary to prevail in a negligence suit may be stated as follows:**'

- **A duty**, or obligation, recognized by the law, requiring the actor to conform to a certain standard of conduct for the protection of others against unreasonable risks.
- **A breach of duty**, or failure to conform to the standard required. The failure to conform may result either from inaction when action is legally required, or action which fails to conform to the legal standard.
- A reasonably close **causal connection** between the conduct and the resulting injury.

¹⁴ IV Presser, *supra* note 1, § 30 at 143; Restatement (Second) of Torts § 281 (1965)

This is commonly known as '(legal cause" or "proximate cause. "

- **Actual loss, injuruv, or damage** to the interests of another. Nominal damages to vindicate a technical right cannot be recovered in a negligence action where no actual loss has occurred. The threat of future harm, not yet realized, is not generally considered to be an actual loss for which recovery may be granted. Some recent cases have, however, found an actual injury to exist when a plaintiff fears for his or her future health due to the defendant's negligent act. The actual damage is not the possible future harm itself, but the emotional anguish created by the plaintiff's knowledge of exposure and likely future effects.⁵

Duty and Breach of Duty: The Reasonable Person Standard

The theory of negligence presupposes a uniform standard of behavior to which one has a

⁵Nat'l L.J., May 28, 1984, at 1, col. 1

duty to conform. Yet the infinite variety of situations that may arise makes it impossible to fix definite rules in advance for all possible human conduct. The most that can be done is to devise a formula that can be applied by courts and juries.⁶

The courts have dealt with the difficult problem of creating a standard that can apply to all people in all situations by “creating a fictitious person . . . the ‘reasonable man of ordinary prudence.’”⁷

The reasonable person standard of conduct is a personification of a community ideal of reasonable behavior. Members of the community—including workers and employers—are required to act with *due care*, that is, as the hypothetical reasonable person would act in identical circumstances. Failure to conform to the reasonable person standard of conduct imposed by negligence law may result in liability if the causation and loss requirements are met.⁸

Negligence is conduct that falls below this standard for the protection of others against unreasonable risk of harm. The legal concept of risk necessarily involves a recognizable danger, based on some knowledge of existing facts, and some reasonable belief that harm may follow. In its legal use, a risk is a danger which is, or should be, apparent to the reasonable person. (The legal definition of “risk” is essentially an amalgam of the scientific definitions of “risk and “hazard,” as discussed in chapter 2.) In light of the recognizable risk, one must act reasonably, and the defendant’s honest blunder or mistaken belief that no harm will result will not legally excuse his or her conduct (though it may morally excuse it) if a reasonable person exercising due care would not have so acted. Nearly all human acts carry some recognizable but remote possibility of harm to another, but these are not unreasonable risks. Conversely, if the risk is an appreciable one, and the possible consequences are serious, the question is not one of mathematical probability alone:

The odds may be a thousand to one that no train will arrive at the very moment that an automobile is crossing a railway track, but the risk

⁶W. Prosser, *supra* note 1, § 32 at 149-50.

⁷*Id.*

⁸For a comprehensive discussion of the law of negligence, see W. Prosser, *supra* note 1.

of death is nevertheless sufficiently serious to require the driver to look for the train.⁹

Generally, as the gravity of the possible harm increases, the apparent likelihood of its occurrence need be correspondingly less for a legal duty to attach. This is so because a reasonable person would consider these circumstances in deciding on a course of action.

Negligence is a fault-based standard since liability is imposed only on a party whose fault (i.e., failure to act as a “reasonable person”) led to the injury. The concept of imposing liability for harms on those who were at fault in causing those harms has considerable appeal. In practice, however, it is not always a simple matter to demonstrate that specific conduct gave rise to exposure to a reproductive health hazard.¹⁰ Moreover, it has been observed that plaintiffs in negligence suits involving toxic exposures may have difficulty in establishing that the defendant was at fault in causing their exposure.¹¹ Often no regulatory, industry custom, or common sense exposure standards apply to the substance in question. In the absence of such standards, plaintiffs are forced to produce evidence on the risks known or theoretically knowable at the time of exposure (and the costs of discovering unknown but knowable risks), as well as on the means of controlling those risks, in order to establish what standard of conduct should have been followed in the circumstances.

Thus, negligence may occur in a multitude of contexts in which reproductive risks are generated, including the:

- design, operation, maintenance, or monitoring of workplaces where reproductive health hazards are present;
- design, testing, construction, inspection, quality control, or labeling of products posing reproductive risks, or the provision of warnings or instructions for their safe use;
- provision of medical or other expert services to persons encountering reproductive health hazards;

⁹W. Prosser, *supra* note 1, § 31 at 147.

¹⁰See generally Ginsberg & Weiss, *Common Law Liability for Toxic Torts: A Phantom Remedy*, 9 Hofstra L. Rev. 859, 887 (1981).

¹¹See, e.g., Trauberman, *Statutory Reform of “Toxic Torts”: Relieving Legal, Scientific and Economic Burdens on the Chemical Victim*, 7 Harv. Envtl. L. Rev. 177, 192-97 (1983).

- conduct of independent or regulatory inspections of sites where reproductive health hazards are present; and the
- legal or collective bargaining representation of the interest of persons exposed to reproductive health hazards.

Strict Liability

The legal doctrine of strict liability for abnormally dangerous activities imposes liability for harm caused as the result of certain unusually risk-laden activities, regardless of whether the defendant was negligent in failing to avoid the injuries.¹² The basis for creating liability in the absence of fault was first enunciated over a hundred years ago in a landmark British **case**:

We think that the true rule of law is that the person who for his own purposes brings on his land and collects and keeps there anything likely to do mischief if it escapes, must keep it at his peril, and . . . is . . . answerable for all the damage which is the natural consequence of its escape.¹³

In this country, the activities to which the strict liability rule has been applied include storage of explosives or flammable liquids, blasting, pile-driving, crop-dusting, and fumigation of a part of a building with cyanide gas.¹⁴ The American Law Institute's ***Restatement (Second) of Torts*** provides the following guidelines for determining what activities might be abnormally dangerous within the meaning of this rule:

- a. existence of a **h@ degree of risk** of some harm to the person, land, or chattels of others;
- b. likelihood that the **harm** that results from it will be great;
- c. **inability to eliminate the risk** by the exercise of reasonable care;
- d. extent to which the activity is **not** a matter of **common usage**;
- e. **inappropriateness** of the activity to the place where it is carried on; and
- f. extent to which the activity's **value to the**

community is outweighed by its dangerous attributes.¹⁵

No reported judicial decision has yet considered whether an activity should be deemed abnormally dangerous because it creates a reproductive health risk. Indeed, nothing in the rule of strict liability necessarily compels the conclusion that either the generation, storage, transportation, handling, or use of materials posing reproductive health hazards is necessarily abnormally dangerous for the purposes of imposing liability without fault. In most jurisdictions, the determination of whether an activity is abnormally dangerous is made on a case-by-case basis. Application of the doctrine of strict liability is not automatic, even for a class of activities with similar risks, and will depend on a factual finding that the particular activity at issue is abnormally dangerous.*

The doctrine of strict liability offers an opportunity for those who experience reproductive harms to recover from those engaged in activities causing those harms even in the absence of negligence. The availability of strict liability, however, is substantially restricted by the **requirement that the activity in question be abnormally dangerous. As is the case with negligence, the proof required on this issue can be quite complex and technical. Moreover, the factors enumerated in the Restatement** could well result in a finding that the activity at issue was not abnormally dangerous. In such a case, ordinary care would be used as the basis for imposing liability.

Product Liability

Product liability law is composed of the set of principles that govern a product seller's responsibility for harms caused by its products. The law allows persons who are injured because of exposure to a "defective" and "dangerous" product to seek compensation for their injuries from anyone who participated in placing the product into the stream of commerce, including the manufacturer, wholesalers, and retailers. In most States, such parties will be liable, regardless of fault or

¹²Restatement (Second) of Torts § 519 (1965).

¹³Fletcher v Rylands, 3 H.L. & C. 774, 159 Eng. Rep. 737 (1865).

¹⁴(v'd. H. K. Ex. 2651866, aff'd., 3 L.R.H.L. 330 (1868)).

¹⁵See W. Prosser, supra note 1, § 78 at 509-10.

¹⁵Restatement (Second) of Torts § 520 comment g (1965)

¹⁶But see New Jersey Dept. of Environ. protect 1st. Ventron, 94 N. J. 254, 463 A.2d 893 (1983) (disposal of toxic wastes ruled to be abnormally dangerous under all circumstances)

negligence, if their product is found to be in a “defective condition” that makes the product “unreasonably dangerous” to the user or consumer.¹⁷

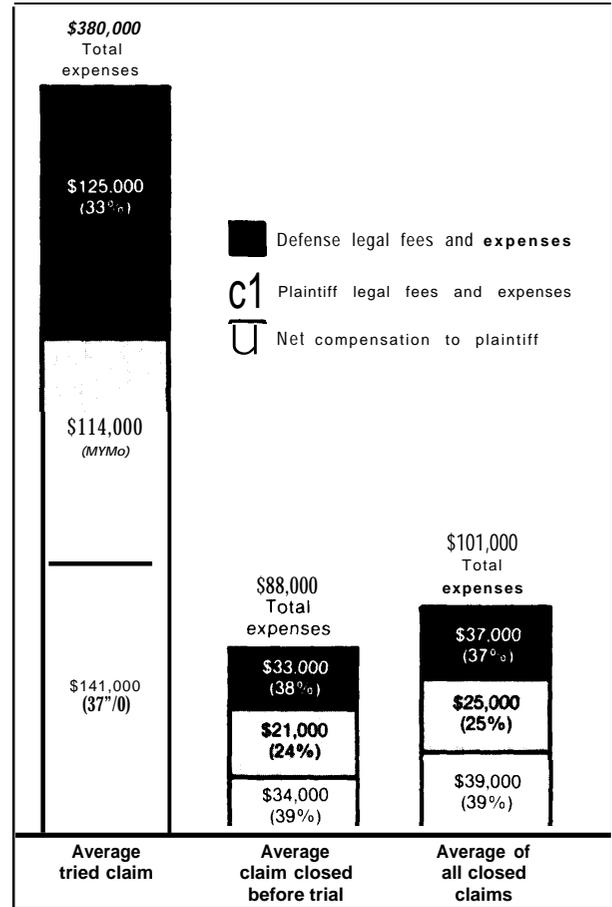
This liability extends not only to injured purchasers and users, but to bystanders (co-workers) and other third parties as well.¹⁸ A defect may be in either the design or manufacture of the product, or in the failure to adequately communicate product hazards or safe use instructions.

The last two decades have seen a sharp increase in product liability lawsuits involving toxic substances. The plaintiffs in these suits allege that they were exposed to products containing toxic substances; that these products were defective in design, manufacture, or labeling; and that these defects caused a disease.

While no data have been collected concerning the costs of product liability litigation for diseases caused by reproductive health hazards, data concerning product liability claims for diseases caused by asbestos exposure are instructive. (See figure 10-1.) According to a study by the Rand Corp., in the average asbestos lawsuit that actually went to trial, the plaintiff’s net award was \$141,000. In addition, plaintiff and defendant spent a total of \$239,000 on legal fees and the various expenses associated with a trial (e.g., witness fees, investigator’s report, consultations with experts). In the average asbestos lawsuit that was settled before trial, the plaintiff’s net compensation was \$34,000, while the parties’ legal expenses were \$54,000. Since the vast majority of personal injury lawsuits are settled prior to trial, it is not surprising that the average asbestos claim approached the nontrial figures: plaintiff’s net compensation totaled \$39,000 and legal expenses totaled \$62,000 for both sides. These figures do not include the costs borne by Federal and State governments for court administration.¹⁹

A National Council on Compensation Insurance (NCCI) report provides some information about

Figure 10.1.—Average Expenditures per Asbestos Product Liability Claim, Jan. 1, 1980 -Aug. 26, 1982



SOURCE Rand Corp adapted by ABA Journal/ (1984)

workers’ compensation claims for asbestosis.²⁰ NCCI found that the average asbestosis claimant in the workers’ compensation system received \$25,800. **From** the data, it appears that this sometimes includes plaintiff’s legal fees.

Although not directly comparable with the Rand Corp.’s data for various reasons,²¹ the NCCI data provide a basis for cautious comparison of the tort and workers’ compensation systems. A

¹⁷Restatement (Second) of Torts § 402A (1965).

¹⁸Sills v. Massey-Ferguson, Inc., 296 F. Supp. 776 (D. Ind. 1969); Elmore v. American Motors Corp., 70 Cal. 2d 578, 451 P.2d 84, 75 Cal. Rptr. 652 (1969).

¹⁹Hearings on the Occupational Disease Compensation Act of 1983: Hearings on H.R. 3175 Before the Subcommittee on Labor Standards of the House Committee on Education and Labor, 98th Cong., 1st sess. 310 (1983) (Report on the Costs of Asbestos Litigation by the Rand Corp.).

²⁰National Council on Compensation Insurance, Workers’ Compensation **Claim Characteristics** 1984.

²¹For example, the NCCI information reported here concerns only the most prevalent asbestos-produced disease, asbestosis, while the Rand information reflects all asbestos-related diseases. In addition, the NCCI surveyed workers’ compensation insurers alone, and not companies that self-insure. While it is not clear that these distinctions are relevant, the data should nevertheless be interpreted with caution.

cautious comparison of compensation for asbestos-related diseases tends to support the preference of plaintiff's lawyers for filing tort suits rather than workers' compensation claims when the legal criteria for product liability is met.

It is interesting to note that, notwithstanding the workers' compensation system's goal of providing swift compensation, NCCI found that as of 18 months after workers reported having the disease, 51 percent of the asbestosis claims were still open and unresolved.²²

A person who suffers a reproductive injury cannot bring a product liability suit merely by showing that his or her harm arose out of the use of a product. Rather, it is necessary to demonstrate that the product contained some character that is both a defective condition and unreasonably dangerous.²³ The prevailing interpretation of "defective" is that the product does not meet the reasonable expectations of the ordinary consumer as to its safety. It has been said that this amounts to saying that if the seller knew of the product's condition, he or she would be negligent in marketing the product.²⁴

A "defect" may take several forms. The conceptually simplest is the **manufacturing defect**. Such a defect results from a mistake in the manufacturing process, in quality control, or in the handling of the product prior to its sale. The basic allegation of a manufacturing defect case is that "something went wrong" during the manufacturing or handling process that caused the product to fall below the standard for the product line. A typical manufacturing defect action alleges that the product failed to conform to the manufacturer's own specifications. For example, a chemical that has been contaminated with a foreign substance would be defective (though not necessarily unreasonably dangerous). Typically, a manufacturing defect will appear in only a small number of units of a product and is identifiable by its differences either from otherwise identical units of the same product or from the manufacturer's specifications, warranties, or performance standards. In such cases, it is not necessary to produce

²²Id. at 21.
²³1- (?stiltO1llt?llt ISw(iki j d' 'rwis j 402A mfnwnw[i (196.51.
²⁴ts' Pross[-l>, -ljP1.:1 Iloft?], § :- it 65 ~60).

any evidence as to how the defect arose, how it went undiscovered, or even whether the manufacturer could have discovered the defect. The defendant's fault or negligence is not an issue.

In contrast, a design **defect** is much more difficult to define in product liability cases. In design defect cases, the products do meet the manufacturer's specifications and standards, and the alleged defect arises from a mistake in the formulation or conceptualization of the product. The allegation in a design defect case is either that the manufacturer should have formulated the product differently or that the product never should have been marketed at all,

The relevant factors to consider in evaluating whether a product is defective in design include:

- any warnings or instructions provided with the product;
- the technological and practical feasibility of a product designed and manufactured so as to have prevented harm while substantially serving the likely user's expected needs;
- the effect of any proposed alternative design on the usefulness of the product;
- the comparative costs of producing, distributing, selling, using, and maintaining the product as designed and as alternatively designed; and
- the new or additional harms that might have resulted if the product had been so alternatively designed.

The final type of product defect is the **failure to provide** warnings of product risks or to provide adequate instructions for the product's safe use. The difference between a warning and an instruction for safe product use is that a warning merely discloses the hazards of using a product. In some circumstances, the risk of these hazards cannot be decreased or avoided, and the product seller's obligation is fulfilled once he or she has identified them and given the user the option of accepting the risk or avoiding the product. In other circumstances, however, the risks can be reduced or eliminated by safe use. In such circumstances, the seller's responsibility extends to providing instructions that will guide the user in managing the product's hazards.

In assessing the adequacy of the warnings and instructions provided with the product, a jury will typically be asked to consider a number of factors. The most important of these is the seriousness of the harm that may potentially result from product use or exposure. When that potential harm is great, a precise warning is generally required, even if the probability of harm is remote.

A second factor is the utility of the warning. If a significant proportion of potential users will benefit from a warning or instruction styled in a particular way, such as by using international symbols or Spanish language, the duty to utilize that style is more likely to be imposed.²⁵ Finally, when a manufacturer or seller has made representations concerning the safety of his or her product or aggressively promoted its use, the duty to warn of product dangers will be met only if the warnings and instructions adequately balance the effects of such representations or promotion.

The adequacy of warnings and instructions in a particular circumstance will depend, in part, on the expertise and sophistication of the product's users. In one case, for example, a worker was burned when she inadvertently brushed her face with a hand that had been contaminated by a caustic chemical resin. A Federal appeals court ruled that the adequacy of the warning must be judged from the point of view of the worker, who had limited work experience and was unaware of the specific characteristics and constituents of caustic chemicals.²⁶ By contrast, a different Federal appeals court in another case ruled that, because the chemical at issue was distributed only to industrial users, the manufacturer was entitled to rely on the professional knowledge and expertise of expected users in formulating warnings and instructions. The court held that the manufacturer need not warn of product dangers commonly known in the trade of which the plaintiff was a member.²⁷

While the duty to warn normally arises at the time of manufacture or sale, there is a small body of case law that imposes an additional duty there-

after.²⁸ In these cases, courts have required sellers to make reasonable efforts to learn of product hazards and to inform product users of these risks. These decisions are likely to be especially important to persons who are exposed to chemical substances in the workplace, in light of the rapidly expanding evidence of reproductive health hazards or other toxicity associated with some of these substances. Even when a product has unavoidable hazards that are discoverable only after its sale, the product seller may have an obligation to warn about those dangers when they are discovered.

State-of-the-Art Defense

In cases where liability is alleged to be based on a product's defectiveness, the plaintiff may base his or her claim on either the negligence or product liability theories, or both. In either case, the defendant may attempt to answer the plaintiff's claim by asserting the "state-of-the-art" defense.

This defense is based on the rationale that a defendant should not be held responsible for a product-related injury when the defendant acted in compliance with the industrial state-of-the-art at the time of the plaintiff exposure and had no legal duty to exceed the state-of-the-art. The definition of state-of-the-art is therefore critical, but the law is confused on this point, as various State courts have defined the term differently. Among the various definitions in use, are:

- industry custom and practice,
- industry voluntary standards,
- government standards,
- what is practical or feasible for industry,
- the highest or most advanced form of industrial practice, and
- technical knowledge available at the time,

²⁵See *Hubbard-Hall Chemical Co. v. Silverman*, 340 F.2d 401 (1st Cir. 1965).

²⁶*Billian v. Minnesota Mining & Manufacturing Co.*, 623 F.2d 240 (2d Cir. 1980).

²⁷*Martinez v. Dixie Carriers, Inc.*, 529 F.2d 62 (1st Cir. 1981).

²⁸See, e.g., *Wooderson v. Ortho Pharmaceutical Corp.*, 235 Kan. 387, 681 P.2d 1038 (1984) (manufacturer of oral contraceptive held to have a continuing duty to warn medical profession of dangerous side effects of which it knows or should know based on its expertise in the field, research, case reports, and scientific developments and publications).

²⁹Practicing Law Institute, *Occupational Disease Litigation* (1983); Practicing Law Institute, *Toxic Substances Litigation* (1982). See also Spradley, *Defensive Use of State-of-the-Art Evidence in Strict Products Liability*, 67 Minn. L. Rev. 343, 344-47 (1982).

The courts of most States hold that **the** industry custom is “relevant but not controlling” in a tort case, because courts have generally been skeptical about using prevailing practices in industry as a measure of responsibility.³⁰ For example, if the prevailing practice in a particular industry is to permit unrestricted access to hazardous materials, or to fail to provide personal protective equipment to workers at risk of hazardous exposures, most courts would refuse to rule that compliance with such casual industry standards is sufficient to avoid liability, although evidence of the industry’s practices could be considered by the jury.

Most States recognize a state-of-the-art defense based on the limits of technical or economic feasibility or practice, even in product liability cases, because of their reluctance to impose liability on a defendant who carefully designed, manufactured, and labeled a product only to discover a previously unknowable product defect after the plaintiffs have been injured.³¹ Some States, however, do not allow the state-of-the-art defense to be asserted in product cases because the defendant’s fault or negligence is not considered a relevant issue. In a landmark decision, the New Jersey Supreme Court applied this approach to toxic tort failure-to-warn suits, saying,

Essentially, state-of-the-art is a negligence defense. It seeks to explain why defendants are not culpable for failing to provide a warning . . . But in strict [products] liability cases, culpability is irrelevant. The product was unsafe. That it was unsafe because of the state of the technology does not change the fact that it was unsafe. Strict liability focuses on the product, not on the fault of the manufacturer.³²

³⁰See, e.g., *Texas & Pacific Ry. v. Behymer*, 189 U.S. 468, 470 (1903) (“What usually is done may be evidence of what ought to be done, but what ought to be done is fixed by a standard of reasonable prudence, . . .”); *Estate of Spinosa v. International Harvester Co.*, 621 F.2d 1154 (1st Cir. 1980) (compliance with custom does not relieve manufacturer of liability as a matter of law in a negligence case); *Virginia Electric & Power Co. v. Carolina Peanut Co.*, 186 F.2d 816 (4th Cir. 1951) (custom pertinent on jury issue of due care); *George v. Morgan Construction Co.*, 389 F. Supp. 253 (E.D. Pa. 1975) (custom should never be conclusive); *Pan American Petroleum Corp. v. Like*, 381 P.2d 70 (Wyo. 1963) (conformity to custom is not in itself the exercise of due care).

³¹*Poland v. Beard-Poulan*, 483 F. Supp. 1256 (W.D. La. 1980).

³²*Beshada v. Johns-Manville Products Corp.*, 90 N.J. 191, 447 A.2d 539 (1982).

The court justified its holding by rationales of cost-spreading and accident avoidance.³³ Cost-spreading would theoretically occur if the company was held liable, since the company could adjust the prices of its products to cover the costs of liability, thereby spreading the costs of dangerous products among all users. By contrast, if the company was not liable, the innocent victim would be unfairly forced to bear all of the economic burden of the injury from a dangerous product. **Accident avoidance** could be enhanced if imposition on industry of the costs of failure to discover hazards provides an incentive for greater safety research. It is possible, however, that the opposite result could ensue. Industry could reason that even if it were to push research and enhance the state-of-the-art, it would still be held to the standard of the state-of-the-art at the time of trial rather than the time of manufacture, so that rapid changes in the state-of-the-art would be of no benefit and consequently would provide no incentive to try to improve safety.³⁴

Since this decision, the New Jersey court has retreated somewhat from the absolute liability approach. The defendant may be permitted to prove that the product’s dangers were unknown and unknowable given the state-of-the-art at the time of manufacture.³⁵

Fraud

A leading commentator on the law of torts has decried “the indiscriminate use of the word ‘fraud,’ a term so vague that it requires definition in nearly every case. The accepted legal term for intentional tortious misrepresentation is “deceit” and has five principal elements:

1. a **false representation of fact**, made by the defendant;
2. **knowledge or belief** on the part of the defendant that the representation is false;

³³90 N.J. at 207, 447 A.2d at 548.

³⁴K. Trousdale, *Industry Custom and Usage as a Defense in Toxic Tort Cases*, Boston Univ. Law School (Apr. 1, 1983) (unpublished paper).

³⁵*O’Brien v. Muskin Corp.*, 94 N.J. 169, 463 A.2d 539 (1982); *Feldman v. Lederle Laboratories*, 97 N.J. 429, 479 A.2d 374 (1984). For a discussion of these cases, see Birnbaum and Wrubel, *The N.J. Supreme Court Breathes New Life Into State-of-the-Art Defense*, Nat’l. L.J., Sept. 17, 1984, at 22-23.

³⁶W. Prosser, *supra* note 1, at 684.

3. an *intention* to induce the plaintiff to rely on the misrepresentation in taking action or refraining from taking action;
4. *justifiable reliance* on the representation on the part of the plaintiff, in taking or refraining from taking action; and
5. *damage* to the plaintiff, resulting from such reliance.³⁷

Workers have sometimes successfully circumvented the exclusivity provisions of workers' compensation laws by claiming that their employers intentionally misrepresented the hazards of their workplace or concealed the true nature of these hazards. Faced with such allegations, courts have occasionally been willing to allow a tort action to proceed, under the intentional conduct exception to the exclusivity rule.³⁸

Actionable deceit in a toxic exposure case may be more readily alleged than proven, however. As the list of elements indicates, an action for deceit must be based on a false representation—either express or implied from silence—concerning the hazard at issue, as well as the employer's (or other party's) knowledge that the representation is false. For example, in one Pennsylvania case, the plaintiff proved that, following an illness diagnosed as being related to her workplace use of carbon tetrachloride, she asked her employer to provide her with an alternative cleaning solvent for her use on the job. The employer falsely represented that this had been done, and the worker suffered additional illnesses as a result of her continuing exposure. The court awarded damages on the basis of these facts.³⁹

In most cases, however, workers will be unable to allege that their employer misrepresented the identity of the substances to which they were exposed. Rather, the more usual allegation will be that the employer falsely represented the workplace to be safe, or that the employer intentionally concealed the nature of the worker's illness.⁴⁰ Clearly, in a case involving reproductive health

hazards, where the level of technical uncertainty is often substantial, proof that the employer knew a product or exposure to be unsafe will be difficult to muster. Nevertheless, the worker may be able to prevail if the conduct, though not actually fraudulent, has all of the actual consequences and legal effects of actual fraud. This theory is known as *constructive fraud*.

Breach of Warranty

A lawsuit may be based on the defendant's breach of a contractual promise (warranty) to the plaintiff. For example, a plaintiff-employee might claim that the defendant manufacturer explicitly or impliedly represented a product to be safe for normal use and that this was part of the inducement for plaintiff to purchase and use the product. If the defendant made such a representation knowing it to be false, the plaintiff might, as has been noted, have grounds to sue for fraud. If, however, there is no evidence of either the defendant's knowledge of the danger or intention to induce the plaintiff's reliance on representations of safety (see elements 2 and 3 in the preceding discussion of fraud), the plaintiff may nevertheless claim that the defendant's actions resulted in a breach of the defendant's contractual promise to the plaintiff. Actions for breach of warranty are increasingly rare because product liability theory is almost always more favorable to plaintiffs. Product liability theory does not require a plaintiff to prove the existence of a contractual relationship or the terms of the agreement. In addition, many courts only permit breach of warranty plaintiffs to prevail if they prove the reasonable foreseeability of the injury at the time of contract, whereas such evidence is not required in product liability cases.

Prenatal Torts

The rights of the fetus in the area of tort recovery have changed dramatically over the last 40 years. Where once there was complete denial of any rights, the courts now grant recovery in almost every situation involving an injury to a viable fetus. The extent of these legal rights varies greatly among jurisdictions, however, as courts struggle with the unique problems posed by the

³⁷Id. at 685-86.

³⁸M. Baram, *Reproductive Hazards in the Workplace: Tort Liability Law* (May 1984) (unpublished report).

³⁹*Sumski v. Sanquoit Silk Co.*, 66 Lack. Jur. 118 (Pa. Comm. Pl. 1965).

⁴⁰See, e.g., *Johns-Manville Products Corp. v. Contra Costa Superior Court*, 27 Cal. 3d 465, 612 P.2d 948, 165 Cal. Rptr. 858 (1980).

unresolved legal status of the fetus. Although all States now recognize a right to bring an action for prenatal injuries, many jurisdictions will deny recovery unless the fetus has reached the stage of viability when it is injured.⁴¹ In these jurisdictions, lawsuits for many injuries caused by reproductive health hazards, such as birth defects resulting from chromosomal aberrations or embryotoxicity, would not be permitted because the injury occurred prior to the viability stage.

Until recently, courts refused to recognize a cause of action on behalf of a fetus for prenatal torts, on grounds that a fetus was not an independent biological entity to whom a duty was owed.⁴² Fetal damage was regarded as an injury to the mother only, and she alone was allowed to recover for such damage. Today, all States permit at least some actions for prenatal injury, and recognize the right of a surviving infant to sue in tort for injuries sustained in utero.⁴³

Viability

With the discovery of the fetus' ability to survive outside the uterus at some point prior to the end of the normal 9-month gestation period, courts began to use the concept of viability to determine the point at which a fetus is owed an independent duty of care.⁴⁴ The justification for using viability as the tort liability determining point was that a fetus who could sustain life independent from the mother should not be treated like a part of its mother. Most courts, while not actually considering recovery for a nonviable fetus, have stated that only the viable fetus may recover. However, many of these courts, when actually faced with this problem, have allowed recovery for the fetus even though the injury occurred before the fetus was viable.⁴⁵

The viability distinction has proven difficult to apply, however, in part because of medical un-

certainty of the viability concept. (See Roe sidebar, below.) Moreover, the earliest stages of gestation may be a time of significant potential harm to a developing embryo/fetus and the period during which catastrophic prenatal injuries could occur. This suggests that the existence of liability for torts only after the fetus has become viable is based on an essentially arbitrary distinction in the case of developmental health hazards. Finally a child who is born with a birth defect is equally injured whether the injury occurred before or after viability. From both a scientific and legal standpoint, therefore, reliance on the viability distinction appears to be increasingly untenable and the trend appears to be away from using viability as a criterion for recovery.⁴⁶

Because the right to recover damages for fetal injury belongs to the child and not to the parent, liability to the fetus for prenatal harm is generally conditioned on the fetus' subsequent live birth. If the fetus is lost, the mother can collect for her own physical injuries, including the fetal loss. In addition, while a majority of jurisdictions allow recovery for prenatal injuries sustained at any point after conception,⁴⁸ some States still limit the cause of action to injuries sustained after viability.⁴⁹

Although the right of a fetus to sue for prenatal injury is generally conditioned on its live birth and survival, where the fetus dies before or after birth as a result of injuries sustained in utero, a wrongful death action may also be brought by the parents in most States.⁵⁰

The right to bring an action for wrongful death is a statutory right not recognized at common law. The view of the majority of States is that the wrongful death statutes create a new cause of action and do not provide merely for the survival of the cause of action previously possessed by the deceased. A number of States have the latter type

⁴¹Note, Tort Recovery for the Unborn Child, 15 J. Fam.L. 276 (1977).

⁴²Dietrich v. Inhabitants of Northampton, 138 Mass. 14 (1884).
⁴³See Huskey v. Smith, 289 Ala. 52, 265 So. 2d 596 (1972) (Alabama becoming the last State to allow a cause of action for prenatal injuries); Annot., 40 A.L.R. 3d 1222, 1230 (1971 & Supp. 1983).

⁴⁴Viability generally connotes a fetus that has reached 1,000 grams in weight and 28 gestational weeks.

⁴⁵Bonbrest v. Kotz, 65 F. Supp. 138 (D.D.C. 1946).

⁴⁶Note, Tort Recovery for the Unborn Child, supra note 41.

⁴⁷See generally Note, Tort Recovery for the Unborn Child, supra note 41; Note, Pre-conception Negligence: Reconciling an Emerging Tort, 67 Geo. L.J. 1239, 1246-50 (1979).

⁴⁸See W. Prosser, supra note 1, § 55 at 334.

⁴⁹See Panagopolous v. Martin, 295 F. Supp. 220 (S.D. W. Va. 1969); Wendt v. Lillo, 182 F. Supp. 56 (N.D. Iowa 1960).

⁵⁰See Note, Wrongful Death and the Stillborn Fetus: A Common Law Solution to a Statutory Dilemma, 43 U. Pitt. L. Rev. 819, 821 n. 15 (1982); Note, Tort Recovery for the Unborn Child, supra note 41; 84 A.L.R. 3d 411 (1978 & Supp. 1983).

of statute, known as a survival statute, and some jurisdictions have both wrongful death and survival statutes.⁵¹ One court explained the difference between wrongful death and survival statutes as follows:

An action under the survival statute is one for injury to the person of the deceased, and is in behalf of his estate; whereas an action under the wrongful death statute is for pecuniary loss sustained by the surviving spouse and children (or next of kin) of the deceased and is solely for their benefit.⁵²

The reasoning used by the various State courts in considering whether the fetus is a person within these statutes varies because of the difference in interpretation of their wrongful death and survival statutes. In applying the statutes, the courts have been presented with four basic factual situations involving the injury and death of a fetus: 1) a viable fetus is injured, born alive, and dies; 2) a nonviable fetus is injured, born alive, and dies; 3) a viable fetus is injured and stillborn; and 4) a nonviable fetus is injured and stillborn. The courts treat these situations differently:

1. If a viable fetus is injured, born alive, and dies, the courts generally allow recovery under wrongful death statutes. This is the typical application of the viability standard.
2. In at least two cases where a nonviable fetus was injured, born alive, and died, the courts allowed recovery.⁵⁴
3. The most controversial of the wrongful death situations occurs when a viable fetus is injured and stillborn. Most jurisdictions allow a wrongful death action on behalf of a stillborn fetus if the injuries causing fetal death were sustained after viability.⁵⁵ The majority of jurisdictions considering this situation have held that a fetus is a "person," "child," or "minor child" under the jurisdictions' various statutes. A significant minority do not allow wrongful death actions on behalf of stillborn fetuses at all, regardless of the stage of de-

velopment at which the prenatal injury occurred.⁵⁶ In these cases, however, the parents retain the right to sue for their own injuries, including the loss of the fetus.

4. There is only one reported decision granting recovery where a nonviable fetus was injured and stillborn: a 1955 Georgia case,⁵⁷ in which the court held that an action for death was permissible if the fetus was "quick," that is, able to move in its mother's womb. Another court, faced with the issue, declared, "If Michigan is to become the first jurisdiction to allow recovery under the wrongful death act on behalf of an unborn 3-month-old nonviable fetus, it is a determination for the Legislature."⁵⁸ A Rhode Island court, in a decision allowing recovery to a stillborn fetus that was injured while viable, stated *in dicta* that the issue of viability was irrelevant.⁵⁹

Many reasons have been cited for denying recovery for the wrongful death of a stillborn fetus. Some courts have cited the specter of fraudulent suits because of the difficulty of proving causation in wrongful fetal death cases.⁶⁰ In addition, judicial interpretation of the term "person," as used in wrongful death statutes, has sometimes precluded fetuses from coverage.⁶¹ The U.S. Supreme Court's 1973 abortion ruling that the word "person," as used in the Constitution, does not include a fetus seems to support this rationale.⁶² (See sidebar.) However, the Court's interpretation of the Constitution is not dispositive of the issue of the term's proper meaning in State wrongful death statutes.

Perhaps the strongest argument in favor of allowing a wrongful death action on behalf of a stillborn fetus is that the failure to allow the lawsuit would reward the person or company that caused the death of a fetus by allowing him to avoid the liability that would be imposed if mere injury (rather than stillbirth) had ensued.

⁵⁶See, e.g., *Drabbels v. Skelly Oil Co.*, 155 Neb. 47, 50 N.W.2d 229 (1951); *Graf v. Taggart*, 4 N.J. 303, 204 A.2d 1140 (1964). See also 84 A.L.R.3d 411, 446-53 (1978 & Supp. 1984).

⁵⁷*Porter v. Lassiter*, 91 Mich. App. 712, 87 S.E.2d 100 (1955).

⁵⁸*Toth v. Goetz*, 65 Mich. App. 296, 302, 237 S.W.2d 1297, 302 (1975).

⁵⁹*Presley v. Newport Hospital*, 117 K.L. 177, 365 N.E.2d 1748 (1976).

⁶⁰See *Speiser*, supra note 55, at 557 n. 10.

⁶¹See *Kilmer v. Hicks*, 22 Ariz. App. 552, 529 P.2d 1706 (1974).

⁶²See *Roe v. Wade*, 410 U.S. 113, 157 (1973).

⁵¹Note "Tort Recovery for the Unborn Child," supra note 41.

⁵²*Hale v. Hale*, 426 P.2d 681, 683 (Okla. 1967).

⁵³Note, "Tort Recovery for the Unborn Child," supra note 41.

⁵⁴*Wolfe v. Isbell*, 291 Ala. 327, 280 So.2d 758 (1973); *Orlgin v. Watertown News Co.*, 52 Mass. 446, 225 N.E.2d 926 (1967).

⁵⁵See 84 A.L.R.3d 411, 432-46 (1978 & Supp. 1984); *Speiser*, "Recovery for Wrongful Death," § 436 at 152-56 (2d ed. (1975)).

Pre-conception Torts

Few States have recognized the right of a fetus to sue for injuries sustained as the result of a **pre-conception** tort committed against its mother.⁶³ In early cases, statutes of limitations were invoked to deny a child a right to recover for injuries sustained as the result of a tortious act committed against its mother many years earlier. Today, however, the statutory time bar can be avoided in all States by invoking the limitations statute's tolling provisions for minor plaintiffs (which temporarily suspend statutes of limitations until the plaintiff is of age and presumably old enough to realize he or she has a cause of action).

A more difficult obstacle to a fetus' right to sue for pre-conception injuries is the traditional legal principle that an act of negligence committed against one person, which results in injury to another person, is not actionable by the latter.⁶⁴ While this rule has been used to deny the right to bring suit, the court decisions in which a cause of action has been allowed have stressed the countervailing legal principle that for every wrong there is a remedy.⁶⁵ It has also been suggested that a child's legal right to sue for pre-conception injury derives from an independent "right" of the child to be born free of injury.⁶⁶

The only reported cases in which a cause of action for pre-conception injury has apparently been recognized have been brought against a physician,⁶⁷ a hospital,⁶⁸ and a pharmaceutical Company.⁶⁹ It has been argued that the types of defendants on whom a duty of care toward a foreseeable fetal plaintiff should be imposed must be

⁶³ see 9 A.L.R. 3d 316 (1979 & Supp. 1983). (Three States allow such a cause of action: Missouri (Bergstresser v. Mitchell, 579 F.2d 22 (8th Cir. 1978)); Oklahoma (Jorgensen v. Meade-Johnson Laboratories, Inc., 483 F.2d 239 (10th Cir. 1973)); and Illinois (Renslow v. Mennonite Hospital, 67 Ill. 2d 348, 367 N.E.2d 348 (1977)).

⁶⁴ Nevertheless, under the legal doctrine of transferred intent, intentional torts such as deceit (fraud) which are committed against one person and result in injury to another are actionable by the injured third party.

⁶⁵ See Note, Torts Prior to Conception: A New Theory of Liability, 56 Neb. L. Rev. 706 (1977).

⁶⁶ See 40 A.L.R. 3d at 1257 (1971).

⁶⁷ Bergstresser v. Mitchell, 577 F.2d 22 (8th Cir. 1978).

⁶⁸ Renslow v. Mennonite Hospital, 67 Ill. 2d 348, 367 N.E.2d 1250 (1977).

⁶⁹ Jorgenson v. Meade-Johnson Laboratories, Inc., 483 F.2d 237 (10th Cir. 1973).

limited in order to avoid liability for torts against all childbearing women. Doctors, hospitals, and pharmaceutical companies are seen as logical and justifiable choices for inclusion in this class.⁷⁰ It remains to be seen whether manufacturers or employers are also to be included.

Wrongful Life

A final prenatal tort to be considered is sometimes referred to as "wrongful life." A wrongful life claim does not allege that the defendant caused injury to the plaintiff, but rather that the defendant's conduct contributed to the plaintiff actual conception and birth, with the result that the plaintiff was born with a genetic, developmental, or other shortcoming. Wrongful life suits are generally brought against physicians and hospitals, and are typically based on unsuccessful sterilization or abortion procedures, as well as other medical practices and procedures (including the failure to perform appropriate procedures) that fail to diagnose an injured fetus and alert the parents so that the parents can decide whether to abort. Because there are drugs and possibly occupational exposures that decrease the effectiveness of oral contraceptives, it is also possible to imagine that a wrongful life claim could be considered in such a situation. The underlying premise of a wrongful life claim is that abortion or lack of conception would have been preferable to the birth of the injured plaintiff. Prior to the legalization of abortion in 1973,⁷¹ courts refused to consider abortion as a viable option and even today resist the notion that nonexistence could ever be preferable to even a severely burdened life.

At least 16 wrongful life cases have been brought in 8 jurisdictions to date. The intermediate appellate courts in two of those jurisdictions have recognized the claims.⁷²

⁷⁰ M. Baram, Reproductive Hazards in the Workplace: Tort Liability Law (May 1984) (unpublished report).

⁷¹ Roe v. Wade, 410 U.S. 113 (1973).

⁷² See Rogers, Wrongful Life & Wrongful Birth: Medical Malpractice in Genetic Counseling and Prenatal Testing, 33 S.C.L. Rev. 713, 717 n.23 (1982).

⁷³ See Curlender v. BioScience Laboratories, Inc., 106 Cal. App. 3d 811, 165 Cal. Rptr. 477 (1980); Park v. Chessin, 60 A.D.2d 80, 400 N.Y.S.2d 110 (1977), modified sub nom. Becker v. Schwartz, 46 N.Y.2d 401, 386 N.E.2d 807, 111 N.J. 2d 895 (1978).

The majority's rejection of wrongful life claims has rested on several grounds. Courts argue that, by asserting that he or she should not have been conceived or born, a plaintiff fails to present a legally cognizable injury.⁷⁴ The calculation of damages by comparing impaired life with non-existence is one the courts are either unwilling or unable to make. In addition, public policy is invoked to deny the claim for fear that anyone born into adverse circumstances would have a cause of action against the party responsible for those circumstances.⁷⁵

Arguments in favor of granting a cause of action for wrongful life focus on the plaintiff pain and suffering due to another's actions. According to these arguments, liability should be im-

⁷⁴See, e.g., *Zepeda v. Zepeda*, 41 Ill. App. 2d 240, 190 N.E.2d 849 (1963) (a minor child's claim against his father for being born illegitimate denied], cert. denied, 379 U.S. 945 (1964).
⁷⁵Id.

posed on grounds of fairness and to deter future misconduct.⁷⁶

An important implication of recognizing wrongful life claims is the possibility of a defective child's suit against its mother for exposing the child to harm in utero or by working at a hazardous job, while an argument can be made that a pregnant woman's liberty interests are paramount to those of the embryo/fetus during at least some stages of gestational development (and, indeed, this was the Supreme Court's holding in *Roe*), at least one court has recognized and tacitly approved the possibility of fetal suits against the mother. In response, the State legislature enacted a law barring all claims by a child against its mother alleging that the child should not have been conceived or born.⁷⁷

⁷⁶See *Curlender*, 106 Cal. App. 3d at 829, 165 Cal. Rptr. at 488.
⁷⁷See Cal. Civ. Code § 43.6 (West 1982).

INTANGIBLE INJURIES RESULTING FROM REPRODUCTIVE HEALTH HAZARDS

Whenever a reproductive harm is suffered by a worker, it is necessarily accompanied by other, intangible losses to the worker or family members. While these intangible losses are difficult to evaluate, they are nevertheless real harms and, in certain circumstances, legally cognizable. Two such intangible harms are considered here: loss of consortium⁹⁰ and emotional distress.⁹¹

Loss of Consortium

Loss of consortium is the legal term applied to the loss incurred by a spouse when a marital partner suffers a personal injury. Loss of consortium encompasses any diminution or impairment of marital companionship, affection, and sexual relations.

Loss of consortium is not in itself a theory of liability, but rather an element of damage in an action based on one of the theories of liability

articulated above. Because suits for loss of consortium are derivative, in the sense of being occasioned by an injury to the worker, they are generally precluded (along with tort suits by the workers themselves) by workers' compensation statutes.

Nevertheless, a suit for loss of consortium may be brought in cases where the injured worker retains the right to sue by virtue of circumstances constituting an exception to the exclusivity rule (discussed in the following section). In these cases, the workers' spouse must still allege and prove negligence,⁹² a product defect,⁹³ or some other basis of liability.

Some courts have held that a physical injury to one's spouse is an essential element of an action for loss of consortium,⁹⁴ while other courts recognize a spouse's case for loss of consortium

⁹⁰See *Loss of Consortium Claims: Rare But Not Impossible*, O.S.H. Rep. (BNA) 37 (May 1983).

⁹¹See *Galante*, *When the Mind is Hurt*, 6 Nat'l. L. J., May 28, 1984, at 1.

⁹²See, e.g., *Rodriguez v. Bethlehem Steel Corp.*, 12 Cal. 3d 382, 525 P.2d 669, 115 Cal. Rptr. 765 (1974).

⁹³See *General Electric Co. v. Bush*, 88 Nev. 36 (J. 498 P.2d 366 (1972)).

⁹⁴E.g., *Slovensky v. Birmingham News Co.*, 358 SO. 2d 475 (Ala. App. 1978).

Roe v. Wade and Fetal Rights

The issue of fetal rights was addressed at length in the Supreme Court's landmark abortion decision in *Roe v. Wade*.⁷⁸ The Court held that a woman's constitutional right of privacy "is broad enough to encompass [her] decision whether or not to terminate her pregnancy."⁷⁹ Nevertheless, the Court emphasized, a State may limit the right to abort if such limitation would serve a "compelling State interest."⁸⁰

The Court considered what State interests would be sufficiently "compelling" to justify criminal abortion statutes and discussed three possible justifications: discouraging immoral conduct, safeguarding the health of pregnant women, and protecting fetal life.

The Court quickly rejected the first justification, both because the State had not claimed it and because the courts have never considered it seriously. The second justification, concern for the health of pregnant women, grew from the historical dangers of abortion techniques. The Court examined more recent evidence that mortality for modern abortion procedures is lower than mortality for childbirth, at least when abortions are performed early in pregnancy in licensed facilities.⁸¹ The Court concluded that a State's interest in protecting a woman's health from the dangers of abortion does not become compelling until the end of the first trimester (13th week), at which time the woman's risk of death from abortion exceeds her risk of death from normal childbirth. After that point, the State may regulate the abortion procedure "to the extent that the regulation reasonably relates to the preservation and protection of maternal health."⁸² Prior to the "compelling" point, an abortion may be performed without State interference.

The Court's reasoning implies that a change in abortion-associated or maternal mortality data would affect the time at which the State's interest in the woman's health would become "compelling." Recent data indicate that abortion does not become riskier than live birth until some point between the 16th and 20th week of gestation, or well into the second trimester.⁸³ Thus abortion early in the second trimester may be safer than childbirth and a

State's "compelling" interest would not justify legislation until later in pregnancy.⁸⁴ Recent data indicate abortion-associated mortality is declining much faster than maternal mortality. During the 5-year period following the *Roe* decision, maternal mortality in the United States declined approximately 38 percent, from approximately 13 to 8 deaths per 100,000 live births, while mortality associated with all legal abortions declined more than 85 percent, from 3.4 to 0.5 deaths per 100,000 legal abortions.⁸⁵ Such advances in medical science are the basis for arguments that the trimester analysis of *Roe* should be abandoned.⁸⁶

The third justification, concerning the State's interest in protecting fetal life, was also discussed. The Court held that the word "person," as used in the Constitution, does not include the unborn, and therefore the fetus itself has no constitutional right to survive.⁸⁷ The Court resolved the State's interest in the fetus with regard to the biological stages of prenatal development rather than attempting a philosophical determination of when human life begins. The Court held that a State acquires a compelling interest in the potential human life of the fetus at the moment of viability, which occurs during the early third trimester.⁸⁸ After that time, a State may prohibit all abortions that are not necessary to protect the life or health of the pregnant woman.⁸⁹ The fetus' right to survive is thus never paramount to the woman's right to life or health. Furthermore, States are not constitutionally required to prohibit third-trimester abortions because fetuses are not constitutionally protected "persons."

In sum, the Supreme Court ruling in *Roe* essentially states that:

- during the first trimester, a State may not restrict abortions;
- during the second trimester, a State may restrict abortions only to the extent reasonably necessary for the protection of maternal health; and

⁷⁸See generally King, *The Jurisdictional Status of the Fetus: A Proposal for Legal Protection of the Unborn*, 77 Michigan L. Rev. 1947 (1979).

⁷⁹Tietze, *supra* note 83.

⁸⁰E.g., *City of Akron v. Akron Center for Reproductive Health*, 103 S. Ct. 2481, 2504 (1983) (O'Connor, J., dissenting).

⁸¹410 U.S. at 158.

⁸²*Id.* at 160.

⁸³Some commentators believe that the mother and viable fetus should be protected equally. See King, *supra* note 84.

⁷⁸410 U.S. 113 (1973).

⁷⁹*Id.* at 153.

⁸⁰*Id.* at 154.

⁸¹*Id.* at 163.

⁸²*Id.* at 163. For example, the State may require that abortions after the first trimester be performed in a hospital.

⁸³C. Tietze, *Induced Abortion: A World Review* (1981).

- during the third trimester, a State may promote its interest in potential human life by restricting or even proscribing abortions, except where it is necessary to preserve the life or health of the pregnant woman.

The Court apparently concluded that the fetus had no constitutional right to life even when viable, for an abortion is still an option after the fetus is viable unless the State chooses to proscribe abortions during the third trimester. Even if the State chooses to regulate or proscribe third-trimester abortions, it apparently cannot forbid abortions when they are necessary to preserve the life or health of the pregnant woman. Thus the State's legal right to protect (or refuse to protect) potential human life and the pregnant woman's right to preserve her life and health are both always paramount to any legal right of the fetus to be born.

The resulting situation, describe by some as anomalous, is that a woman may legally and without liability abort a fetus (even a viable fetus, if the State has not passed a law forbidding such abortions or if it is necessary for the pregnant woman's life or health). Yet in every State, liability attaches to a person who merely injures a viable fetus that

is later born alive (even if it only lives for a few seconds), and a few States grant the nonviable fetus this same right. On the *Porter case*, a Georgia court granted recovery notwithstanding the fact that the fetus was never born, nor even viable when lost.)

This situation suggests that although a fetus never has a constitutional right to life, it may sometimes have a statutory or common law right (the existence and application of which varies from State to State) to be uninjured if it lives, especially if the injury occurs after the fetus becomes viable. It may also have a statutory or common law right to life which may be upheld against all but the woman who carries it.

It has been suggested that this is the rational result of a series of public policy balancing tests, in which the woman's right to privacy and reproductive freedom in early pregnancy, and to health and life in later pregnancy, are superior to the fetus' right to survive, while a fetus' right to survive and be healthy may be superior to any other person's right to interfere wrongfully with the fetus' life or health and to avoid payment of damages for the injury.

predicated on a mental or emotional injury to the other spouse.⁸⁵ In either case, a loss of consortium suit could clearly result from reproductive harm to a worker if the exclusivity rule does not apply.

Emotional Distress

Emotional distress can result from an occupationally induced physical injury (e.g., miscarriage, sexual dysfunction, sterility, or a birth defect) or even the fear of being injured by a workplace exposure. Toxic tort actions alleging psychic injury from the fear of reproductive or other harms are increasingly common.⁸⁶ The worker, the worker's spouse, the impaired child, even the worker's extended family can all suffer serious emotional effects.

⁸⁵*Molien v. Kaiser Foundation Hospitals*, 27 Cal. 3d 916, 616 P.2d 813, 167 Cal. Rptr. 831 (1980); *Agis v. Howard Johnson Co.*, 371 Mass. 140, 355 N.E.2d 315 (1976).

⁸⁶*Galante*, supra note 91, at 28. See generally Note, *Increased Risk of Cancer as an Actionable Injury*, 18 Ga. L. Rev. 563 (spring 1984).

The traditional legal view of emotional distress has been that such losses were not compensable unless they accompanied some physical injury and were, in turn, manifested by some physical consequence or accompanying physical illness.⁸⁷ For example, a plaintiff seeking damages for emotional distress arising out of exposure to a reproductive hazard would have to show that exposure to the hazard had resulted in some physical injury, even if only a nominal injury, in order to recover. The plaintiff would then have to present further evidence of some objective symptoms of emotional distress, such as sleeplessness.

More recently, most courts have recognized intentional infliction of emotional distress as grounds for bringing suit, even when no physical injury occurred.⁸⁸ In addition, negligent infliction of emotional distress is now recognized as an independent cause of action in eight States.⁸⁸

⁸⁷See generally *W. Presser*, supra note 1, § 12 at 49-62.

⁸⁸*W. Presser*, supra note 1, at 52.

⁸⁹*Galante*, supra note 91, at 28,

Moreover, in 1980, California became the first major jurisdiction to allow recovery for emotional distress when the plaintiff could present no physical evidence of the psychic injury.¹⁰⁰ Most States

¹⁰⁰*Molien v. Kaiser Foundation Hospitals*, 27 Cal. 3d 916, 616 P.2d 813, 167 Cal.Rptr. 831 (1980).

still require some objective symptoms, however, before they will consider emotional distress to be compensable.¹⁰¹

¹⁰¹See, e.g., *Payton v. Abbott Laboratories*, 386 Mass. 540, 437 N.E.2d 171 (1982).

SUITS AGAINST EMPLOYERS: THE EXCLUSIVITY RULE, REVISITED

In most States, the statutory exclusivity rule of the workers' compensation statute has been construed as a bar to common law and wrongful death actions against the employer by the injured worker, the spouse of the injured worker, and the worker's dependents and children in being at the time of the worker's injury. Thus tort claims by the worker, spouse, and existing children against the employer will fail in most States due to the exclusivity rule¹⁰² unless the plaintiff can claim and prove that the case comes within an exception to the rule. Various exceptions and limitations on the scope of the exclusivity rule have been defined by the courts and legislatures in some States, and one can discern a recent trend of uncertain strength to permit loss of consortium actions by the spouse of an injured worker, despite the rule.

Whether the exclusivity rule will be applied to bar tort suits by the fetus or impaired child or descendants, born or conceived after the worker's injury, is an open question. Because exclusivity provisions generally refer to, or have been interpreted as being applicable to, excluding tort suits by workers, spouses, and children in being and do not mention suits by future children, it can be argued that the exclusivity rule does not apply to the unborn and unconceived. Injuries to the unborn can be viewed as consequential injuries similar to the loss of consortium or emotional distress suffered by the spouse, and therefore might be barred by the exclusivity rule in most States. Yet, courts that want to refuse to extend the exclusivity rule to such cases may be able to

¹⁰²A. *Larson*, *infra* note 106, at § 66.00. See also *Williams v. Schwartz*, 61 Cal. App. 3d 628, 131 Cal. Rptr. 200 (1976); *Williams v. State Compensation Insurance Fund*, 50 Cal. App. 3d 116, 123 Cal. Rptr. 812 (1975); *Cole v. Dow Chemical Co.*, 112 Mich. App. 198, 315 N.W.2d 565 (1982).

construe narrowly the relevant statutory language or legislative intent, or depart from the view that such injuries are merely consequential to the worker's injury, because they involve breach of an independent duty by the employer to the injured fetus, child, or descendant. This view would also be supported by the fact that State compensation laws do not provide a benefit schedule for this type of loss.

At present, the exclusivity rule will usually bar tort suits against employers for reproductive injury by workers, spouses, and dependents unless some legal argument can be used to pierce the exclusivity veil. The following discussion focuses on two principal arguments that have proven effective in worker suits against employers in some jurisdictions: dual capacity and intentional tortious conduct.

Dual Capacity Exception

This exception has been adopted by a few States to permit the worker both to secure compensation benefits and to sue the employer at common law. The exception applies when the employer caused the injury while acting in a relationship to the worker that is outside of, or in addition to, the employment relationship. Dual capacity may be said to exist when the employer is also a manufacturer of the product that caused the worker's injury¹⁰³ or provides medical services in a negligent fashion.¹⁰⁴

¹⁰³See, e.g., *Mercer v. Uniroyal, Inc.*, 49 Ohio App.2d 279, 361 N.E.2d 492 (1977) (truck driver injured by tire blowout was permitted to sue employer as manufacturer of a defective tire).

¹⁰⁴*D'Angona v. Los Angeles County*, 27 Cal. 3d 661, 613 P.2d 238, 166 Cal. Rptr. 177 (1980) (hospital worker suffering from work-related disease was permitted to recover for negligent medical treatment by the hospital-employer).

Dual capacity thus redresses the inequity of a situation where the rights of an injured worker to recover under the common law would otherwise depend on the identity of the provider of defective goods or services. Under the exception, the employer can be sued and held liable at common law for independent duties it owes to employees in its other, nonemployer, capacity.¹⁰⁵ Under the dual capacity exception, a company that manufactures a product posing a reproductive hazard would be equally subject to liability to its own injured employee as it would be to the injured employee of another company that uses the hazardous substance in its own production process.

This exception has been strongly opposed by industry, and has been rejected in 23 States. Nevertheless, California, Ohio, and a few other industrial States have adopted the exception to permit suits against employers under product liability theory when the employer also acts as the manufacturer, seller, or distributor of the defective workplace product.¹⁰⁶

Application of the exception to employers who provide medical services has not suffered the same rejection experience, and may be increasingly important. The favorable case law to date involves only hospital or physician employers who provide medical services to employees as well as to the public, but could provide a basis for permitting suits by injured workers against industrial employers that have medical benefits programs and are now beginning to engage in screening, biological monitoring, or medical surveillance of employees.¹⁰⁷

¹⁰⁵See Note, Workers' Compensation: The Dual Capacity Doctrine, 6 Wm. Mitchell L.Rev. 813 (1980).

¹⁰⁶A. Larson, *The Law of Workmen's Compensation* § 72.81-72.83 (Desk ed. 1983). In addition to Mercer, supra note 103, see Kohr v. Raybestos-Manhattan, Inc., 522 F. Supp. 1070 (E.D. Pa. 1981); Bell v. Industrial Vangas, Inc., 30 Cal. 3d 268, 637 P.2d 266, 179 Cal. Rptr. 30 (1981). Bell marks a very significant expansion of the exception for situations where the employer is not in the business of manufacturing or selling the defective product to the public, but is found to be in a dual capacity because it was in the business of "purchasing . . . processing, preparing, testing, inspecting . . . repairing, installing, endorsing . . . licensing" the use of defective products. See also Moreno v. Leslie's Pool Mart, 110 Cal. App. 3d 179, 167 Cal. Rptr. 747 (1980); and Douglas v. Gallo Winery, 69 Cal. App. 3d 103, 137 Cal. Rptr. 797 (1977).

¹⁰⁷See U.S. Congress, Office of Technology Assessment, *The Role of Genetic Testing in the Prevention of Occupational Disease* (Washington, DC: U.S. Government Printing Office, April 1983). See also M.A. Rothstein, *Medical Screening of Workers* (1984).

In addition, suit may be brought in some States by the worker or his or her family against individual officers or consultants of the employer firm for breach of a particular duty they owed the worker. This is not a true exception to the exclusivity rule, since it involves a third party with an independent duty the breach of which is not subject to workers' compensation law. Instead, it constitutes an option for the worker to pursue a common law action, despite the exclusivity rule, against a member of his or her employer's firm. So far, this option has been permitted primarily where the worker is injured by the negligence of a corporate physician, or independent medical personnel hired by the employer to provide medical examinations in a consulting capacity.¹⁰⁸

A physician's failure to diagnose a worker's illness accurately, to treat the patient appropriately, or to carry out any other legal obligations of a physician to a patient can thus provide the basis of a tort suit against the physician.¹⁰⁹ State courts are divided on this issue, however, with some holding that a doctor-patient relationship exists as a matter of law (i.e., the law deems the relationship always to exist) between a corporate physician and an employee, while others disagree, and at least one court has decided that a doctor owes a duty to disclose certain medical information to an employee even in the absence of a physician-patient relationship.¹¹⁰

Physicians can seek to dismiss such suits on the ground that they are "fellow employees" who enjoy the immunity from tort suits afforded by workers' compensation law. But some courts have rejected this contention, on the rationale that the physician is more of an independent contractor than an employee. The rationale for this conclusion is that the employer is unable to fully control the physician's work, which is regulated by State medical licensure and other laws establishing the autonomy of a physician's functions and the duties owed by a physician to a patient.¹¹¹

Finally, a few courts have found that the employer itself, when in possession of medical in-

¹⁰⁸See Annot., 28 A.L.R. 3d 1066 (1969); F. Baron, *Piercing the Compensation Veil: Third-Party Remedies for Job-Related Injuries*, in *Occupational Disease Litigation* 78 (S. Birnbaum ed. 1983).

¹⁰⁹Annot., 28 A.L.R. 3d 1066 (1969).

¹¹⁰Id.

¹¹¹Id.

formation as to an employee's ill health or risk of ill health, owes an independent and affirmative duty to inform the worker. Failure to carry out this duty in these cases has led to employer tort liability, overriding the exclusivity rule.¹¹²

Intentional Tort Exception

A second exception to the exclusivity rule is provided in a large minority of States (by statute in most and by court decision in a few others) for intentional torts by employers. Under this exception, evidence that an employer's conduct manifested a deliberate attempt to injure a worker can be used by the worker to overcome the exclusivity rule and bring a tort action against the employer, since intentional injury is not the type of accidental workplace injury contemplated by workers' compensation law.¹¹³

This exception has met with slow and narrowly defined acceptance by the courts in States where it is not statutorily prescribed, and courts adopting the exception have usually set very high standards of proof, requiring the employee to show that the employer acted with "actual, specific, and deliberate intent to injure" the worker.¹¹⁴ Thus, in most States, recklessly endangering an employee is not enough to create tort liability for an employer, and an employer who has knowledge of an occupational disease hazard but fails to warn the employees at risk, or who in fact fraudulently misrepresents the safety of the workplace (e.g., by removing warning or use labels from hazardous substances), is still protected by the exclusivity rule and escapes tort liability.¹¹⁵

Several recent cases indicate, however, that some courts are reducing the standards of proof and are liberalizing the definition of intentional injury to permit worker tort suits against employers. Employers have been sued for fraudulently concealing the nature and extent of the worker's occupationally caused injuries, when such concealment aggravated the worker's condition;¹¹⁶ for failing to warn workers of a known disease hazard and not reporting the known hazard as required by law;¹¹⁷ for deliberately removing safeguards from the workplace (or failing to install them), which had been previously installed (or required) to comply with OSHA health or safety requirements;¹¹⁸ and for fraud and conspiracy to deceive workers about employment hazard conditions.¹¹⁹ In addition, courts in California and a few other States have refused to bar worker tort actions against the employer for the intentional infliction of emotional distress, but in some cases have limited the exception to cases that do not involve compensable physical injuries.¹²⁰ These decisions reflect an increasingly accepted assumption that employers "in the business" of working with toxic hazards should know about such hazards, and that ignorance is the result of deliberate inattention.

This liberal trend is valuable to workers who have suffered reproductive injuries, since few cases involving reproductive injury can be expected to meet the narrow criterion that an intentional tort must involve strong evidence of a direct intent to injure, and not merely carelessness, callousness, or recklessness.

¹¹²Id. See also *Union Carbide Co. v Stapleton*, 237 F.2d 229 (6th Cir. 1956); *Coffee v. McDonnell-Douglas Corp.*, 8 Cal 3d 551, 503 P.2d 1366, 105 Cal. Rptr. 358 (1972); Annot., 69 A.L.J. 2d 1213 (1960).

¹¹³E.g., *Barnes v Chrysler Corp.*, 65 F. Supp. 806 (N.D. Ill. 1946); *Pochat v Pendleton*, 187 Misc. 296, 63 N.Y.S.2d 313 (1946).

¹¹⁴Note, *Exceptions to Exclusive Remedy Requirement of Workers' Compensation Statutes*, 96 Harv. L. Rev. 1641 (1983).

¹¹⁵E.g., *Phifer v Union Carbide Corp.*, 492 F. Supp. 483 (E.D. Ark. 1980) (failure to warn employee of hazard or provide protective clothing held not to rise to the level of intentional conduct required to invoke exception to exclusivity rule); *Kofren v Amoco Chemicals Corp.*, 441 A.2d 226 (Del. 1982) (claim against employer for "intentionally" omitting employer's truth about hazards of asbestos exposure was barred by exclusivity rule).

¹¹⁶E.g., *Johns-Manville Corp. v. Contra Costa Superior Court*, 27 Cal. 3d 465, 612 P.2d 948, 165 Cal. Rptr. 858 (1980).

¹¹⁷E.g., *Blankenship v. Cincinnati Milacron Chemicals, Inc.*, 69 Ohio St. 2d 608, 433 N.E.2d 572, cert. denied, 459 U.S. 857 (1982).

¹¹⁸*Mandolidis v. Elkins Industries, Inc.*, 246 S.E.2d 907 (W. Va. 1978).

¹¹⁹The "deliberate intention" was not limited to intent to kill or injure, but included conduct constituting at least intentional tort or willful misconduct.

¹²⁰*McDaniel v. Johns-Manville Corp.*, 487 F. Supp. 714 (N.D. Ill. 1978).

¹²¹*McGee v. McNally*, 119 Cal. App. 3d 891, 174 Cal. Rptr. 253 (1981).

DEFENDANTS

Potential Defendants

It is common practice for a plaintiff's attorney to name all plausible defendants in a tort action, thereby forcing each defendant to come forward with a legal or factual basis for exculpation. By naming all of these defendants in a single lawsuit rather than filing one lawsuit for each defendant, the plaintiff can optimize his or her chances for recovering against one or more defendants, and avoid the possibility that the juries in separate proceedings will reach inconsistent results.

Negligence

In a reproductive hazard lawsuit in which negligence is alleged, the list of potential defendants obviously begins with those responsible for the existence of the hazard. While one's employer and fellow workers may enjoy immunity for their negligence under the applicable workers' compensation law, others who are responsible for a hazard may not enjoy similar immunity. These parties may include workplace design engineers or architects,¹²¹ outside safety or insurance consultants or inspectors,¹²² or the owner of the premises (other than one's employer) at which work is taking place.¹²³ Any of these persons may have been negligent in creating or evaluating the workplace hazard, and thus may be liable for negligence if they failed to exercise ordinary care in the provision of their professional services.

Similarly, others (including company physicians) who could have prevented or ameliorated a reproductive harm may be held liable for negligently failing to do so, as noted in the section on dual capacity.

Strict Liability and Product Liability

The least burdensome evidentiary requirements exist for strict and product liability suits because the defendant's negligence need not be proven.

¹²¹Comment, Recent Statutory Developments Concerning the Limitations of Actions Against Architects, Engineers and Builders, 60 Ky. L.J. 462, 465 (1972).

¹²²*Kohr v. Johns Manville Corp.*, 534 F. Supp. 256 (E.D. Pa. 1982).

¹²³E.g., *Mahoney v. J.C. Penney Co.*, 71 N.M. 244, 377 P.2d 663 (1963).

Hence, persons arguably engaged in abnormally dangerous activities and commercial sellers of products are potentially important defendants in a tort action. The former category might include, for example, the operator of a hazardous waste facility, who may be strictly liable for reproductive harms to workers other than its own employees who come on to the premises to deliver waste or to transact other business. (Employees of the facility would be subject to the exclusivity rule.) The category of sellers would include all commercial sellers, beginning with the manufacturer, and including wholesalers, distributors, and retailers. In some circumstances, repairers, installers, construction contractors, and rebuilders might be deemed to be sellers if they deliver products to buyers in the course of rendering services.¹²⁴

Deceit

A party who engages in intentional deceit may also be named as a defendant in an action arising out of reproductive harm, regardless of whether the person actually created the hazard in question.¹²⁵

Multiple Defendants

In some cases, tortious conduct by separate defendants might have led to a reproductive injury that would not have occurred but for the concurrence of separate acts. In an exaggerated example: a manufacturer produces a dangerously contaminated chemical product, an independent quality control inspector unreasonably fails to discover the contamination, a distributor sells the chemical to the employer of a particular worker, a second manufacturer makes defective personal protective equipment and sells it to the employer, the employer knows that the personal protective equipment is defective but represents to the employee that it is functional, and a physician negligently fails to diagnose the employee's uptake of the dangerous chemical.

¹²⁴*Toledo P. & W.R.R. v. Burlington N., Inc.*, 67 Ill. App. 3d 928, 385 N.E.2d 937 (1978).

¹²⁵*Garcia v. Halsett*, 3 Cal. App. 3d 319, 82 Cal. Rptr. 420 (1970).

Whenever more than one defendant is named in a tort action, the question arises as to how to best apportion responsibility among the various defendants. It is often impossible to establish the precise contributions of multiple independent factors to their injuries. Because of this problem, many jurisdictions have adopted the *substantial factor rule*,¹²⁶ which states that any defendant whose activity was a substantial factor in bringing about the plaintiff's injury can be held liable for the entire injury. In the hypothetical example cited, all six defendants may be held liable for the employee's injuries. Thereafter, if the court finds a reasonable basis for apportioning liability among the defendants, it may do so.¹²⁷

The usual mechanism for apportioning liability among defendants is the cross-claim, in which a defendant files a claim against another defendant, seeking either *indemnity* or *contribution*. Indemnity is the recovery from another party of the full amount of one's liability. Contribution is the recovery from another party of a portion of one's liability. As a general rule, a passively negligent defendant may obtain indemnity from one who is actively negligent.¹²⁸

Critics of this rule have often noted that logic does not support imposition of the entire liability on a single party. It has been suggested that requiring all responsible parties to share in the loss would be more equitable. For this reason, contribution has come to dominate the allocation of responsibility among people who commit torts.¹²⁹ Although an integral aspect of contribution is apportionment by fault, it is not always clear which party is mostly at fault, as can be seen from the example discussed here.

Liability When Defendant Is Unidentifiable

A troubling problem arises when only one defendant's act was a substantial factor in bringing

about the plaintiff's harm but it is impossible to identify that defendant. This situation may be especially likely to arise in reproductive harm cases involving toxic exposures, both because it may be impossible to identify which of several reproductive health hazards gave rise to the injury and because the precise commercial seller of a generic product may not be known.

The traditional legal rule applicable to such situations, known as the *alternative liability theory*, was first articulated in a 1948 case in which the plaintiff was injured by the pellet from the gun of one of two hunters who negligently fired in the plaintiff's direction.¹³⁰ Because it was clear that both hunters had exposed the plaintiff to an unreasonable risk of harm, the court shifted the burden of proof to the hunters to demonstrate who actually caused the injury. Unless one hunter proved that the other was responsible, both would be held liable and the plaintiff could recover his full damages from either.

Application of the alternative liability theory in reproductive harm cases is more complex than application of the theory to the hunting case, however. In that case, it was known that both defendants acted negligently and that one of the defendants was certainly responsible for the plaintiff's injury. In contrast, it may be impossible to place responsibility for the existence of a particular chemical in the workplace on a particular manufacturer when dozens or even hundreds of chemical manufacturers may be involved to varying degrees.

In an analogous situation, a group of DES-exposed daughters brought suit for their injuries against a number of companies that had manufactured the drug. It was unclear which of the manufacturers was responsible for each plaintiff's injuries. The court responded to the problem of allocating responsibility by creating a new legal theory, known as the *market share theory*,¹³¹ apportioning responsibility to each manufacturer based on its share of the DES market at the time the injuries occurred. This avoided the inequitable consequences of the alternative liability the-

¹²⁶Anderson v. Minn. St.P. & S.S.M.R.R., 146 Minn. 430, 179 N.W. 45 (1920); Restatement (Second) of Torts § 431A (1965).

¹²⁷See, e.g., Velsicol Chem. Corp. v. Rowe, 543 S.W.2d 337 (Tenn. 1976).

¹²⁸E.g., Sargent v. Interstate Bakeries, 86 Ill. App. 2d 187, 229 N.E.2d 769 (1967).

¹²⁹Ford Motor Co. v. Robert J. Poeschel, Inc., 21 Cal. App. 3d 694, 98 Cal. Rptr. 702 (1971).

¹³⁰Summers v. Tice, 33 Cal. 2d 80, 199 P.2d 1 (1948).

¹³¹Sindell v. Abbott Laboratories, 26 Cal. 3d 588, 607 P.2d 924, 163 Cal. Rptr. 132, cert. denied, 449 U.S. 912 (1980).

ory, which could have resulted in imposing all of the responsibility on a manufacturer with only a small share of the market.

The difficulty that the market share theory poses in reproductive health hazards cases is that injuries may not have been caused by exposure to a single product. Rather, the harm may be due to the additive or synergistic effects of exposures to a variety of hazards. When this is the case, the market share theory suggests that it may be most appropriate to impose partial responsibility on **each** manufacturer of **each** of the chemicals that contributed to the injury. The problem is that, although liability can easily be divided among manufacturers for a particular chemical under market share theory by examining the manufacturers' respective market shares, liability cannot easily be divided among the manufacturers of different substances.

For example, if the plaintiff is exposed to two reproductive health hazards, A and B, which have additive or synergistic effects, liability should theoretically be divided between all manufacturers of A and all manufacturers of B, based on each hazard's respective contribution to the plaintiff's injury. The liability of all manufacturers of A and B, respectively, would then be divided among those manufacturers based on each company's market share of A or B. While it may be relatively easy to identify market share, for the purpose of allocating responsibility **among** producers of A or **among** producers of B, it is not easy to identify the respective contributions of A and B to the plaintiff's injury for the purpose of dividing liability between makers of A and makers of B.

The Problem of Bankruptcies and Successor Corporations

In the last analysis, awards of compensation for reproductive harms are illusory if the defendant against whom the judgment is rendered is no longer in business, or if a chapter 11 bankruptcy reorganization¹³² has absolved the defendant of

¹³²Chapter 11 of the Federal bankruptcy statute protects a business from its creditors so that the business can continue to operate and, after it has financially recovered, pay its debts 11 U.S.C. §§ 1101-1174 (1982).

responsibility to pay any judgment. Each of these possibilities is especially problematic in cases where injuries occur long after the time of exposure or where many similar actions are brought against a single product manufacturer.

The reorganization petition filed in Federal bankruptcy court by the Manville Corp. in 1982¹³³ raised for the first time the possibility that a large number of occupationally diseased workers (both Manville employees and construction industry workers exposed to Manville products) may ultimately be unable to recover the full measure of their damages from the company. Indeed, the precise purpose of the reorganization petition is to shield the corporation from the approximately 16,500 pending and 30,000 expected future lawsuits arising out of exposure to the company's asbestos products. The Manville case points out an important fact: the resources of any business enterprise are not limitless. In a case where a single manufacturer is liable for a large number of occupational or product liability injuries, corporate resources can be depleted and some of the persons injured can go uncompensated, even when they have won their cases in court.

To avoid such crushing liabilities, stockholders have sometimes dissolved an existing corporation with such liabilities and formed a new corporation to carry on the enterprise. When a new enterprise acquires an existing corporation, the assets and liabilities of the corporation are passed on to the new enterprise.¹³⁴ For this reason, a new enterprise may seek to purchase only the assets of an existing corporation, but not its stock.* Today, however, courts are more willing to look at the motivations of such transactions and are less inclined to allow legal responsibility to be circumvented, especially if the new enterprise is engaged in the same line of business as the old one, using the same premises and equipment, and employing many of the same people.¹³⁵

¹³³See Note, The Manville Bankruptcy: Treating Mass Tort Claims in Chapter 11 Proceedings, 96 Harv L. Rev. 1121 (1983).

¹³⁴Menacho v. Adamson [United Co., 420 F.Supp.128 (D.N.J. 1976); Applestein v. United Board & Carton Corp 60 N.J. Super. 333, 159 A.2d 146, aff'd, 33 N.J. 72, 161 A.2d 474 (1960).

¹³⁵"In *Forrest Laboratories, Inc. v. Pillsbury Co.*, 452 F.2d 621 (7th Cir. 1971).

¹³⁶Shannon v. Samuel Langston Co., 379 F. Supp. 797 (W.D. Mich. 1974).

It is precisely because the courts scrutinize methods of avoiding liability that the bankruptcy strategy has proven so attractive to Manville and others who face potentially ruinous liability. Thus, chapter 11 reorganization is now being touted by

some as a viable risk management technique for risk-laden businesses.¹³⁷

¹³⁷Power, Voluntary Chapter 11: A Viable Risk Management Tool?, Risk Mgmt. 19 (Dec. 1983).

LEGAL CAUSATION

Proving Legal Causation

The greatest obstacle to recovery for any reproductive harm against any of the potential defendants under any of the theories of liability is proof that exposure to one or more hazards was more likely than not a substantial factor (though not necessarily the only factor) in causing the particular reproductive injury for which monetary damages are sought. This is known in the law as *causation*, and the burden of proving it rests on the plaintiff. The requisite standard of proof is the preponderance of the evidence standard articulated in the preceding chapter.

To prove legal causation of a reproductive harm from a chemical, physical, or biological substance, the plaintiff must show the existence of a chain of events or facts which, taken together, are deemed legally sufficient to show that it is more likely than not that the plaintiff was reproductively injured by a workplace hazard. The specific events and facts to be proven will generally necessitate evidence of:

- hazardness of the substance (e.g., mutagenicity, teratogenicity, toxicity);
- emission of the substance in the workplace (e.g., levels, duration);
- plaintiff's exposure to the substance (e.g., level, duration, type of exposure);
- plaintiff's uptake of the substance (e.g., as measured in blood, urine, etc.);
- biological response after plaintiff's exposure (e.g., blood level, chromosomal change); and
- plaintiff's reproductive injury.

A plaintiff who fails to establish any one of these facts will generally lose in the tort action.

Because each of these facts may involve considerable medical and scientific uncertainty, the

practical problem of proving legal causation by a preponderance of the evidence can be a formidable and costly procedure requiring the testimony of several scientific and medical experts. Since each party will have its own experts testifying in support of its contentions, a personal injury trial may become a "battle of experts," with each party attempting to convince the jury that its experts are more qualified. The need for expert witnesses in personal injury litigation has spawned an industry of experts willing to provide litigation support.

The principal expert used in tort litigation where personal injuries are at issue is the medical doctor.¹³⁸ The physician can provide expert and direct evidence pertaining to the nature of the injury (diagnosis) and its status over time (prognosis). If the personal medical history of the plaintiff is available to the doctor, or better yet, if the doctor has been the plaintiff's personal physician, the doctor may be able to provide direct evidence of the plaintiff's prior health.

This doctor, or another medical expert, may then be willing and capable of providing an expert opinion as to the missing link—causation—in the standard format required by most courts in personal injury actions. Generally, the physician does this by testifying that, based on professional qualifications, knowledge, and experience, the expert's opinion and experience leads him or her to believe that it is a "reasonable medical certainty" that the plaintiff's exposure to one or more workplace agents caused the plaintiff's injury.¹³⁹

¹³⁸Mitchell, Cancer Causation and Risk in Chemical Litigation and Regulation, 3 *Env'tl. Analyst* 6 (Nov. 1983).

¹³⁹*Id.* See also Henderson, Medical Causation in Products Liability Disease Litigation, *Trial* 53 (June 1981); Tillevitz, Judicial Attitudes Towards Legal and Scientific Proof of Cancer Causation, 3 *Colum. J. Env'tl. L.* 344 (1977) (listing of cases in which variations on "reasonable medical certainty" were accepted).

Without this reasonable certainty, the opinion testimony will generally be excluded from the jury's consideration.¹⁴⁰

The problem with using medical practitioners as the principal experts in personal injury litigation is the limited experience and perspective of most doctors. Clinical physicians are generally concerned with diagnosis and treatment, whereas biomedical researchers and epidemiologists focus more on the etiology of disease. "The definition of causation holds far more fascination for society and lawyers than it does for doctors."¹⁴¹ Thus, although animal studies may show a substance to be toxic to an animal fetus, a clinician may be reluctant to draw conclusions based on animal studies alone because of the considerable species variation in effects. Doctors are also likely to stress the role of various environmental and genetic factors outside of the workplace, notwithstanding the fact that such interactions are likely to be legally irrelevant so long as the workplace exposure played a substantial role in the reproductive harm. Furthermore, few physicians are knowledgeable about occupational disease.

The testifying physician will often need scientific data in order to provide an opinion on causation; this usually requires prior testimony by one or more expert witnesses from the health sciences. It has been noted that "each toxic tort action should be regarded as a mini-research project with scientists and lawyers as co-principal investigators."¹⁴² The testimony of a physician is deemed essential to establish or rebut causation in a particular case and is considerably strengthened by—indeed, in most cases, requires—epidemiological data, animal studies, and other scientific evidence in order to draw convincing inferences regarding the cause of a particular plaintiff's injury. But the judicial response to epidemiological and toxicological evidence has usually been skeptical. **Most courts are of the opinion that scientific evidence, by itself, is insufficient to either prove or disprove causation of a particular disease in a particular person,**

¹⁴⁰Mitchell, *supra* note 138, at 6 (citing W. Prosser, *The Law of Torts* 218 (2d ed. 1955)).

¹⁴¹Mitchell, *supra* note 138, at 6 (citing A. Golden, *Pathology: Understanding Human Disease*, 108 (1983)).

¹⁴²Epstein, *The Role of the Scientist in Toxic Tort Case Preparation*, *Trial* 38 (July 1981).

with toxicological evidence deemed of more limited evidentiary value than epidemiological evidence. This is based on the judiciary's concerns regarding the applicability and relevance of epidemiological and toxicological evidence to a specific individual case, and the ability to extrapolate study group results to another group which includes the plaintiff.¹⁴³ Scientific evidence is therefore viewed by the parties mainly as a set of building blocks on which a physician may rely to support an opinion on medical causation.

To enhance the supporting roles of toxicological and epidemiological data, both plaintiffs and defendants have sought to package such scientific findings by using risk assessment modeling. The risk assessment will attempt to evaluate and quantify all factors deemed scientifically relevant, thereby generating probabilistic outcomes as to human health risk.¹⁴⁴ Risk assessment may be a persuasive method of packaging information relating to causation in a specific case, if the assessment or model includes the results of scientifically valid studies and considers all relevant causal elements and their interrelationships. However, this approach often runs into problems based on the model's assumptions regarding extrapolation from a study group to the plaintiff (an epidemiological issue), extrapolation from animals to humans (a toxicological issue), and extrapolation from high to low doses (a toxicological issue).¹⁴⁵ Other problems arise from the nature of quantitative risk assessment itself, including the issues of the quantity of data needed to create a meaningful model and whether a single model can be developed to represent all cases. Predictions made from individual models are only as good as the assumptions they contain. As one commentator noted:

A one-hit model assumes that the risk of a particular injury from a particular substance is

¹⁴³See generally Hall & Silbergeld, *Reappraising Epidemiology: A Response to Mr. Dore*, 7 *Harv. Envtl. L. Rev.* 441, 442 (1983); McElveen & Eddy, *Cancer and Toxic Substances: The Problem of Causation and the Use of Epidemiology*, 33 *Clev. St. L. Rev.* 29 (1984).

¹⁴⁴Shelton, *Defending Cancer Litigation: The Causation Defense, For the Def.* 12 (Jan. 8, 1982).

¹⁴⁵See Leape, *Quantitative Risk Assessment in Regulation of Environmental Carcinogens*, 4 *Harv. Envtl. L. Rev.* 86 (1980).

directly proportional to exposure. Halving the exposure is assumed to halve the risk. Under this assumption, no substance ever reaches a "no effect" level, but, rather, it is assumed that somewhere in a given population, some person will be so sensitive that exposure to even a single molecule of a substance could trigger an adverse reaction . . . [This] may not bear any resemblance to known scientific data, nor . . . [be] valid in pin-

pointing the cause . . . or even necessarily the probability of the cause . . . from low-level exposure. In fact, for most data sets, the "one-hit" model, as applied by the Cancer Assessment Group (of EPA), . . . is really designed to assure safety, and its use results in a safety factor. 146

¹⁴⁶Id.

OTHER CONSIDERATIONS

Statutes of Limitations and Repose

State statutes of limitations and repose may limit a plaintiff right to sue for reproductive and other injuries, due to the passage of time. Statutes of *limitations* require that a lawsuit be initiated within a specified period of time, generally 1 to 3 years, after the right to sue has accrued. In the past, the right to sue (and thus the running of the statute) was considered to begin at the time the plaintiff's injury was caused, even if the plaintiff had not yet become aware of any injury. Thus, if a surgeon negligently left a sponge in the plaintiff's chest cavity, the statute of limitations would begin to run immediately, notwithstanding the plaintiff's ignorance of the situation and lack of symptoms until several years later. The traditional application of such statutes could thus bar a plaintiff from suing,

To ameliorate the harsh effect of such a rigid time bar, most States have by statutory amendment or judicial decision adopted the discovery rule, holding that the right to sue and the running of the statute begin at the time the plaintiff's injury was discovered or reasonably should have been discovered.¹⁴⁷ For example, if a plaintiff was made sterile by an occupational exposure to a hazardous substance, and did not attempt to conceive children until some years later, most courts would begin the statutory countdown at the time the plaintiff discovered or reasonably should have discovered the injury, whichever is earlier. In the case of toxic torts, a few courts would not begin counting until the plaintiff not only discovered

the fact of the injury but also discovered (or reasonably should have discovered) the causal connection between the injury and the defendant's conduct. 1⁴⁸

In recent years, the widespread adoption of discovery rules has been met with counter reform measures, often proposed by manufacturers who fear unlimited liability for the life of their products or the duration of long latency periods. As a result, some States have enacted *statutes of repose* for products liability suits that require that a lawsuit be initiated within a specified period of time (generally 10 years) after the occurrence of the incident that gave rise to the injury. Statutes of repose may therefore prevent plaintiffs from suing for reproductive diseases with latency periods longer than the statutory period, as well as bar plaintiffs who fail to discover reproductive problems due to prolonged sexual abstinence or use of contraception.

The current status of State statutes of limitation and repose is one of very little uniformity, as a number of State courts have declared their State's statute of repose to be unconstitutional. 149

Prior Litigation

Two legal principles, designed to promote the efficient use of judicial resources, may have an

¹⁴⁸See, e.g., *Frederick v. Calbio Pharmaceuticals*, 89 Cal. App. 3d 49, 152 Cal. Rptr. 292 (1979); *Raymond v. Eli Lilly & Co.*, 117 N.11, 164, 371 A.2d 170 (1977).

¹⁴⁹See, e.g., *Lankford v. Sullivan*, Long & Hagerty, 416 So. 2d 996 (Ala. 1982); *Battila v. Allis Chalmers Mfg. Co.*, 392 So. 2d 874 (Fla. 1980); *Bolick v. American Barmag Corp.*, 54 N.C. App. 589, 284 S.E. 2 (188 (1981)). See also McGovern, *The Variety Policy and Constitutionality of Product Liability Statutes of Repose*, 30 Am. U.L. Rev. 579 (1981).

¹⁴⁷See, e.g., *Williams v. Borden, Inc.*, 637 F. 2d 731 (10th Cir. 1980); *Louisville Trust Co. v. Johns-Manville Products Corp.*, 580 S.W.2d 497 (Ky. 1979).

important impact on reproductive hazard litigation. The first of these is *res judicata*, a doctrine which holds that a judgment on the merits of a prior suit involving the same parties (or those who have certain relationships with such parties) bars another suit on the same grounds. For example, if a worker sues a product manufacturer for intentionally concealing the hazardous nature of a product, whoever loses the lawsuit may not relitigate at a future time, notwithstanding the discovery of new evidence after the trial.

The second doctrine is *collateral estoppel*, which applies when the second suit is based on a similar injury to a different person. Under the doctrine of collateral estoppel, the judgment in the prior suit precludes relitigation of the particular issues actually litigated and necessary to the outcome of the first lawsuit. Since certain types of suits against a single defendant or group of defendants will necessarily involve many of the same issues in each case (e.g., was the product dangerously defective?), collateral estoppel is potentially an economical device to avoid relitigating the same issues. Under the collateral estoppel doctrine, once a product has been adjudged defective or an activity ruled to be abnormally dangerous, the defendant is precluded from relitigating that issue in a later lawsuit brought by another plaintiff. The second plaintiff can dispense with evidence on the issue and proceed to the other elements of his or her case (generally, the nature and extent of the particular plaintiff's injury).

Until recently, however, the doctrine of collateral estoppel was not available for use by plaintiffs in such ways. The doctrine was limited to circumstances where "mutuality" of estoppel existed.¹⁵⁰ This restriction meant that collateral estoppel was unavailable unless the party seeking to invoke the estoppel would himself have been barred from relitigating the point if the prior judgment had been the reverse. For example, a product liability plaintiff would not be able to use collateral estoppel to demonstrate defectiveness since he or she would not be bound by a judgment against some other plaintiff based on a lack of a product defect.

¹⁵⁰S(19), e.g., *Bigelow v. [redacted] Dominion Co.*, 225 U.S. 111, 127 (1912).

In many jurisdictions, the mutuality of estoppel requirement has been abandoned.¹⁵¹ The distinct trend of judicial authority is to permit the type of "offensive" collateral described here.¹⁵² Only in cases where it would be unfair to the defendants (e.g., where the plaintiff could have joined a prior suit, but failed to do so to avoid the burden of an adverse judgment while using collateral estoppel to reap the benefits of a favorable judgment) will a court that does not require mutuality refuse to impose offensive collateral estoppel.¹⁵³

Sovereign Immunity

Under the common law, the concept of the government's immunity from liability was firmly grounded in the notion that "the King can do no wrong" and could not be sued without the government's permission. Because of the involvement of the Federal Government in the inspection and certification of workplaces and the provision of information concerning reproductive health hazards, the question arises as to whether the Government can be held liable for its negligence in performing any of these functions. Under the Federal Tort Claims Act (FTCA), the United States is liable for:

... any negligent or wrongful act or omission of any employee of the Government while acting within the scope of his office or employment, under circumstances where the United States, if a private person, would be liable to the claimant in accordance with the law of the place where the act or omission occurred.¹⁵⁴

An exception to this rule exists: the Government cannot be held liable for "any claim arising out of . . . misrepresentation [or] deceit. . . ."¹⁵⁵

The dividing line between negligence (which can serve as the basis for a lawsuit) and misrepresentation (which cannot) is not entirely clear in cases involving inspections, certifications, and failure to warn. It appears that if an inspection is conducted exclusively for the purpose of mak-

¹⁵¹See, e.g., *Blonder-Tongue Laboratories, Inc. v. University of Illinois Foundation*, 402 U.S. 313 (1971).

¹⁵²Restatement (Second) of Judgments § 88, Reporter's Note (1982).

¹⁵³See *Parkland Hosiery Co. v. Shore*, 439 U.S. 322, 331 (1982).

¹⁵⁴28 U.S.C. § 1346(b) (1982).

¹⁵⁵*Id.* at § 2680(h).

ing a statement about the inspected premises (e.g., that they comply with regulations or are free from hazards), and the primary responsibility for safety continues to lie with the premises' owner or operator, then the Government's failure is alleged misrepresentation and not actionable. But if the inspection is conducted as part of a program assuring safety compliance, and the Government takes on some responsibility for assuring safety, then the claimed wrong may be negligence in inspection and is not barred.¹⁵⁶ In either case, Government workplace inspections are difficult bases for imposing liability on the United States because of the limited waiver of sovereign immunity by the FTCA.

Conclusion

Whether or not workers' compensation is made to apply to some or all reproductive harms, the tort liability system will continue to be available for recovery of damages against parties outside the system. Indeed, for workers injured by exposure to hazardous products in the workplace, both the workers' compensation system and product liability action against commercial sellers of such products will likely continue to be available as avenues of redress though opportunities to collect through either have limitations.

In light of this fact, the possibility of double recovery is raised. In some jurisdictions, this possibility is eliminated by a rule which subtracts any compensation from "collateral sources" (e.g., workers' compensation) from tort judgments. In other jurisdictions, workers' compensation benefits must be repaid if damages from the same injury are recovered from a third party such as a product manufacturer. In still others, the possibility of a true windfall recovery is regarded as so remote—because of the low levels of workers' compensation and the substantial legal fees that

are paid by prevailing plaintiffs in tort actions—that no such set-off is deemed necessary. Resolution of this debate involves consideration of circumstances beyond those presented in reproductive hazard cases, however, and cannot be achieved within this more narrow context.

Considerable interest in "victim's compensation" legislation, designed to provide a speedier and more effective remedy for toxic torts, has been evidenced at both the State and Federal levels in recent years. Such legislation is designed to remedy the problems posed by the substantial barriers to recovery by toxic tort plaintiffs—particularly in the area of causation—which have been discussed here. Whether such barriers are as substantial in practice as they are in theory has not been demonstrated, however. Indeed, it is instructive to note that victim's compensation legislation is sometimes supported by industry, if it includes limitations on liability and an exclusivity rule barring tort actions against those who pay compensation under such statutes. In contrast, such legislation is typically opposed by the plaintiff's bar and consumer and environmental groups if such exclusivity provisions are incorporated and damages for intangible harms (e.g., pain and suffering) are limited. Again, however, resolution of this policy debate exceeds the scope of the reproductive harm compensation issue.

One important tort law issue that is limited in scope to reproductive harms involves the rights of the unborn to recover damages for prenatal or even pre-conceptual torts. A small trend in favor of allowing such recovery, regardless of the fetus' subsequent live birth or viability at the time of the tortious exposure, may be on a collision course with the abortion rights established in *Roe v. Wade*. The increasing recognition of the fetus' right to recovery for tortious injury may be consistent with the Supreme Court's holding that a fetus is not a "person" within the meaning of the Constitution if fetal rights are seen as subordinate to the pregnant woman's rights but superior to the rights of third-party tortfeasors.

¹⁵⁶M. Baram, *supra* note 38