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Infertility Caused by Exposure to Environmental Endocrine Disruptors

I. Introduction

In recent years, an increasing number men and women have become infertile as a result of harmful toxins circulating in our environment.¹ Today, infertility is a common reproductive disorder that affects ten to fifteen percent of couples in the United States.² Surprisingly, most of the environmental toxins that affect an individual's ability to procreate are found in the consumer goods we use everyday, in the workplace and in our natural resources.³ Many American companies have produced, and continue to produce, toxic chemicals that directly or indirectly affect an individual's ability to reproduce by causing infertility.⁴ When these environmental toxins cause involuntary infertilization or other reproductive disorders, the producers of such harmful substances are taking away an individual's fundamental right to procreate.⁵

Environmental toxins, which can cause infertility both in men and women, inevitably injure both spouses.⁶ While the infertile spouse is

1. SUBCOMM. ON REPRODUCTIVE & NEURODEVELOPMENT TOXICOLOGY, COMMITTEE ON BIOLOGIC MARKERS, BOARD ON ENVIRONMENTAL STUDIES AND TOXICOLOGY, COMMISSION OF LIFE STUDIES, & NATIONAL RESOURCE COUNCIL, BIOLOGIC MARKERS IN REPRODUCTIVE TOXICOLOGY 15 (National Academy Press 1989), *available at* <http://books.nap.edu/books/0309039797/html/R1.html> (last visited Mar. 14, 2004).

2. NAT'L INST. FOR OCCUPATIONAL SAFETY & HEALTH, THE EFFECTS OF WORKPLACE HAZARDS ON FEMALE REPRODUCTIVE HEALTH 10 (National Institute for Occupational Safety and Health Feb. 1999), *available at* [http://www.cdc.gov.noish/99-104.html](http://www.cdc.gov/noish/99-104.html) (last updated Mar. 23, 1999) (last visited Mar. 14, 2004) [hereinafter WORKPLACE HAZARDS ON FEMALE REPRODUCTIVE HEALTH].

3. NAT'L RES. DEF. COUNCIL, ENDOCRINE DISRUPTORS, *at* <http://nrdc.org/health/effects/gendoc.asp> (last visited on Mar. 14, 2004) [hereinafter NRDC]; *see also* MARYANN NAPOLI, HORMONE DISRUPTING CHEMICALS (HealthFacts Nov. 1998), *at* <http://findarticles.com/cf/dls/m0815/1998/Nov/5325027/print.jhtml> (last visited Oct. 30, 2002) [hereinafter HORMONE DISRUPTING CHEMICALS].

4. HORMONE DISRUPTING CHEMICALS, *supra* note 3. Every year more than two-thousand chemicals enter the market place, the majority of which do not even go through the simplest tests to determine their toxicity.

5. *Skinner v. Oklahoma*, 316 U.S. 535, 541 (1942).

6. *Lacy v. G.D. Searle & Co.*, 484 A.2d 527, 533 (Del. Super. Ct. 1984). The Court discussed that a couple planning to raise a family when one partner is injured by damage to a reproductive organ; the couple together is ultimately injured because the

affected directly, both physically and mentally, the other spouse is affected indirectly.⁷ The spouse who is indirectly injured by the environmental toxin suffers injury because he or she has lost the right to procreate with his or her partner, a right previously enjoyed in the marriage before the toxin caused involuntary infertilization to the physically injured spouse.⁸

As a result of the infertile spouse's inability to procreate, the indirectly injured spouse may have a loss of consortium claim, which can be brought against the wrongful tortfeasors who caused his or her spouse to become involuntarily infertile. The spousal loss of consortium claim allows the indirectly injured spouse to recover damages for the destruction of emotions,⁹ activities,¹⁰ and rights formerly enjoyed by the married couple.¹¹ Ultimately, the ability to procreate is a fundamental right;¹² a right to which the couple was entitled before it was wrongfully taken from them¹³ due to the adverse effect of an environmental reproductive hazard.

II. Background on Reproductive Hazards

A. *Environmental Toxins that Cause Infertility*

Today, people are exposed to many hazardous substances in their daily lives that can cause infertility, even without conscious or intentional exposure to such hazards.¹⁴ These substances that affect the reproductive health of men and women are called "reproductive hazards."¹⁵ Among the reproductive hazards that cause infertility are chemicals such as organo chlorine compounds,¹⁶ cadmium,¹⁷ lead,¹⁸

ability to reproduce lies with both spouses and not just one of them.

7. *Id.*

8. *Id.*

9. *Id.* at 532.

10. *Id.*

11. *Lacy*, 484 A.2d at 532.

12. *Skinner*, 316 U.S. at 541.

13. *Lacy*, 484 A.2d at 527.

14. NRDC, *supra* note 3.

15. WORKPLACE HAZARDS ON FEMALE REPRODUCTIVE HEALTH, *supra* note 2, at 2.

16. JAQUELINE JOHNSON, NUTRITIONAL AND ENVIRONMENTAL APPROACHES TO INFERTILITY (Positive Health Publication Ltd.), available at <http://www.positivehealth.com/permit/articles/Womens%20Health/john58.htm> (last visited Mar. 14, 2004) [hereinafter JOHNSON].

17. *Id.*

18. WORKPLACE HAZARDS ON FEMALE REPRODUCTIVE HEALTH, *supra* note 2, at 4; see also NAT'L INST. FOR OCCUPATIONAL SAFETY & HEALTH, THE EFFECTS OF WORKPLACE HAZARDS ON MALE REPRODUCTIVE HEALTH (1997), available at <http://www.cdc.gov/niosh/malrepro.html> (last updated Jan. 23, 1997) (last visited Mar.

heptachlor,¹⁹ dibromochloropropane,²⁰ bisphenol A,²¹ ethylene oxide,²² and other hormone disruptor chemicals.²³ Furthermore, many of these chemicals are used everyday in common industries such as health care,²⁴ home remodeling,²⁵ and agriculture.²⁶ Several chemicals that act as reproductive hazards are found in insecticides and herbicides used in

14, 2004) [hereinafter WORKPLACE HAZARDS ON MALE REPRODUCTIVE HEALTH]. This toxin can cause infertility in both women and men. Not only can lead be found in old paint, but it still can be found in brass and bronze foundries, rubber products, and battery manufacturing plants. EPA, TOXICOLOGICAL PROFILE FOR LEAD 6 (July 1999), available at <http://www.atsdr.cdc.gov/toxprofiles/tp13.html> (last visited Mar. 14, 2004).

19. JOHNSON, *supra* note 16. This chemical, mainly used as a DDT replacement, is a by-product of methoxychlor. Heptachlor, HPTC, is primarily used as a pesticide on fruits and vegetables. Also, as an endocrine disruptor this chemical lowers the male hormone testosterone.

20. WORKPLACE HAZARDS ON MALE REPRODUCTIVE HEALTH, *supra* note 18. This chemical is a man-made colorless liquid that has a "sharp smell." EPA, TOXICOLOGICAL PROFILE FOR DIBROMOCHLOROPROPANE 1 (Sept. 1992), available at <http://www.atsdr.cdc.gov/toxprofiles/tp36-cl.pdf> (last visited Mar. 14, 2004). In the past it has been used as a pesticide, but industries continue to manufacture this chemical. *Id.* This chemical is currently used to make materials resistant to burning. *Id.* The main health affect that this chemical causes is reproductive harm to men, especially infertility. *Id.* Currently, the Environmental Protection Agency does not know how much of this chemical is being manufactured or produced in the United States. *Id.*

21. HORMONE DISRUPTING CHEMICALS, *supra* note 3. Bisphenol A is an endocrine disruptor which mimics the female hormone estrogen. *Id.* It is used in many common household products and used to produce many consumer goods. It is commonly found in the lining of food cans, microwavable dishes, bottle tops, and baby bottles. *Id.* The previous examples are just a few of the frequent consumer goods that are manufactured using this chemical. Even though bisphenol A can lead to harsh reproductive hazards, such as infertility, manufacturers of this chemical are not required to warn of its effects through product labeling. *Id.*

22. VINCENT D. MORTIMER, JR. ET AL., CONTROL TECHNOLOGY FOR ETHYLENE OXIDE STERILIZATION IN HOSPITALS 2 (Nat'l Inst. of Occupational Safety & Health 1989), available at <http://www.cdc.gov/niosh/89-120.html> (last visited Mar. 14, 2004) [hereinafter MORTIMER]. This chemical is used in the sterilization of surgical instruments in the health care profession, as well as in the production of certain pesticides. *Id.* With the growth of medical technology, many medical instruments can no longer be sterilized by the original method of steam, therefore increasing the need to use ethylene oxide. *Id.*

23. HORMONE DISRUPTING CHEMICALS, *supra* note 3. Estrogen and testosterone, the two major hormones used in the reproductive process, are found in the bloodstream. *Id.*; see also NRDC, *supra* note 3. The EPA's working definition of endocrine disruptors is a chemical that "interfere[s] with the synthesis, secretion, transport, binding, action, or elimination of natural hormones in the body that are responsible for the maintenance of homeostasis (normal cell metabolism), reproduction, development, and/or behavior." ExttoxNet (University of California-Davis, Oregon State University, Michigan State University, Cornell University, and the University of Idaho), *Questions about Endocrine Disruptors*, available at <http://ace.orst.edu/info/exttoxnet/faqs/pesticide/endocrine.htm> (last visited Mar. 14, 2004) [hereinafter ExttoxNet].

24. WORKPLACE HAZARDS ON FEMALE REPRODUCTIVE HEALTH, *supra* note 2, at 4.

25. *Id.*

26. NRDC, *supra* note 3.

both agriculture and in the home.²⁷ Moreover, common household goods that frequently contain reproductive hazards are microwavable dishes,²⁸ food cans,²⁹ and bottle tops.³⁰ Unquestionably, reproductive hazards are regularly found in our environment without our awareness of their dangerous presence.

B. How Reproductive Hazards Cause Infertility

Although reproductive hazards can cause infertility in many ways, in order to initially cause reproductive disorder the victim must consume or absorb the toxin. Reproductive hazards affect both men and women by entering the body in several different ways. Inhalation,³¹ ingestion,³² and contact with the skin,³³ are the three most common ways reproductive hazards enter an individual's body.

Once the reproductive hazards enter the body, they can cause involuntary infertilization in numerous ways. Most commonly, infertility is caused when the reproductive hazards disrupt the endocrine system;³⁴ at this point, the reproductive hazards are generally called "endocrine disruptors."³⁵ The disruption of the endocrine system by the endocrine disruptor occurs by altering natural hormone levels,³⁶ halting or stimulating the production of natural hormones,³⁷ or changing the way hormones travel through the body.³⁸ Endocrine disruptors have chemical properties very similar to natural hormones that allow "binding to hormone specific receptors on the cells of target organs."³⁹ In other words, the endocrine disruptors attach to the receptors of different natural hormones that are vital to the process of procreation and major organs and act like hormones to disrupt the functions of the natural hormone.

The endocrine system is a complex network of glands and hormones

27. *Id.*

28. HORMONE DISRUPTING CHEMICALS, *supra* note 3.

29. *Id.*

30. *Id.*

31. WORKPLACE HAZARDS ON MALE REPRODUCTIVE HEALTH, *supra* note 18; *see also* WORKPLACE HAZARDS ON FEMALE REPRODUCTIVE HEALTH, *supra* note 2, at 13.

32. WORKPLACE HAZARDS ON MALE REPRODUCTIVE HEALTH, *supra* note 18; *see also* WORKPLACE HAZARDS ON FEMALE REPRODUCTIVE HEALTH, *supra* note 2, at 13.

33. WORKPLACE HAZARDS ON MALE REPRODUCTIVE HEALTH, *supra* note 18; *see also* WORKPLACE HAZARDS ON FEMALE REPRODUCTIVE HEALTH, *supra* note 2, at 13.

34. NRDC, *supra* note 3.

35. *Id.*

36. *Id.*

37. *Id.*

38. *Id.*

39. ExttoxNet, *supra* note 23.

that regulates many of the body's functions.⁴⁰ Several functions that the endocrine system regulates are growth,⁴¹ development and maturation,⁴² and the operation of many organ functions.⁴³ Another basic role of the endocrine system is to control the sex characteristics and reproductive functions of an individual.⁴⁴

The hormones in the endocrine system serve as the body's chemical messengers.⁴⁵ Therefore, endocrine disruptors cause problems when they enter an individual's body and begin to mimic the natural hormone messengers.⁴⁶ In doing so, the endocrine disruptors send false signals that either block the natural hormones and render them unable to carry out normal functions or mimic the natural hormones which leaves the body with excess hormones trying to carry out the same functions.⁴⁷ Consequently, these disruptions greatly affect the functions that the natural hormones control.⁴⁸

Although endocrine disruptors affect the fertility of both men and women, the method by which they cause infertility varies based on gender. In women, hormone disruptors specifically upset the hormone estrogen.⁴⁹ The endocrine disruptors cause damage to the "woman's egg or change the hormones needed to regulate the normal menstrual cycle," potentially causing infertility.⁵⁰

Conversely, in men, endocrine disruptors cause infertility by stopping the actual production of sperm; as a result there are fewer sperm present to fertilize an egg.⁵¹ Infertility may also result when an endocrine disruptor changes the shape of the sperm, which causes the sperm to have trouble swimming to reach the egg, thus preventing fertilization of the egg.⁵² Additionally, male infertility is caused when endocrine disruptors cause changes or breaks in the DNA of the sperm; the effect of these changes can prevent the sperm from fertilizing the egg.⁵³ Clearly, the effects of endocrine disruptors on both men and

40. NRDC, *supra* note 3.

41. *Id.*

42. *Id.*

43. *Id.*

44. ExttoxNet, *supra* note 23.

45. HORMONE DISRUPTING CHEMICALS, *supra* note 3.

46. *Id.*

47. *Id.*

48. NRDC, *supra* note 3.

49. ExttoxNet, *supra* note 23.

50. WORKPLACE HAZARDS ON FEMALE REPRODUCTIVE HEALTH, *supra* note 2, at 10.

51. WORKPLACE HAZARDS ON MALE REPRODUCTIVE HEALTH, *supra* note 18. When a sperm's DNA is damaged by reproductive hazards it means the sperm is unable to fertilize a woman's egg.

52. *Id.*

53. *Id.*

women can be life altering.

C. *How Endocrine Disruptors are Deposited into Our Environment*

Endocrine disruptors are deposited in our environment through countless types of activities;⁵⁴ however, most endocrine disruptors are found in the industrial workplace.⁵⁵ Yet, even though most endocrine disruptors are found in the workplace, society is exposed to endocrine disruptors daily without their awareness. Exposure to endocrine disruptors can occur through the contamination of food,⁵⁶ water,⁵⁷ and air.⁵⁸ Endocrine disruptors enter our air and water as the byproduct of many chemicals,⁵⁹ through manufacturing processes,⁶⁰ and through the burning of plastics.⁶¹ Thus, concern arises when a manufacturer accidentally or negligently burns plastics or dumps endocrine disruptors on land or in water without taking the requisite precautions to prevent or at least minimize society's exposure to the endocrine disruptors. All of the aforementioned activities can lead to involuntary exposure to endocrine disruptors which, in turn, may lead to a spouse becoming involuntarily infertile.

III. Loss of a Fundamental Right to Procreate

The right to reproduce is fundamental in nature.⁶² The Supreme Court held in *Skinner v. Oklahoma*⁶³ that individuals have a fundamental right to reproduce⁶⁴ and that involuntary sterilization requires a strict scrutiny standard of review.⁶⁵ The concepts of marriage and procreation are essential to the very existence and survival of the human race and, traditionally, are mutually inclusive.⁶⁶

Once this right has been taken away from an individual without his

54. NRDC, *supra* note 3; *see also* HORMONE DISRUPTING CHEMICALS, *supra* note 3.

55. NRDC, *supra* note 3.

56. *Id.*

57. *Id.*

58. *Id.*

59. *Id.*

60. NRDC, *supra* note 3.

61. *Id.* Not only are endocrine disruptors found in the water and air, they also accumulate in the fat of many common food sources such as hamburgers. *Id.*; *see also* HORMONE DISRUPTING CHEMICALS, *supra* note 3.

62. *Skinner v. Oklahoma*, 316 U.S. 535, 536 (1942).

63. *Id.* In this case, Oklahoma created a statute that allowed the courts to render a judgment against a habitual criminal to become sexually sterile by a procedure conducted by the state.

64. *Id.*

65. *Id.* at 541. The Court recognized that involuntary sterilization is an irreparable injury, which deprives an individual of a basic liberty.

66. *Id.*

or her consent, it is not recoverable.⁶⁷ The industries or manufacturers that accidentally or negligently discharge endocrine disruptors without taking the appropriate safety measures are running the risk of involuntarily infertilizing an individual. This is prohibited behavior based on the fundamental right to procreate.⁶⁸

IV. The Loss of Consortium Claim

A. *The History of the Loss of Consortium Claim*

The loss of consortium claims are based on the ability of an individual to recover compensation for the impairment of a relationship.⁶⁹ Over time, loss of consortium claims have evolved dramatically. Originally, loss of consortium claims were based primarily on economic losses, such as loss of services.⁷⁰ Traditionally, it was a claim that could be brought only by the husband for the economic loss of his wife's services.⁷¹

In recent years, however, the loss of consortium claim has been greatly expanded.⁷² Perhaps most importantly, it has come to be recognized as a cause of action that a wife may bring for injury to her husband by a third party.⁷³ As years passed and society began to view the rights of women differently, the judicial system began to recognize that the husband-dominated rule was outdated.⁷⁴ Thus, courts began to change their views regarding who could bring loss of consortium claims,

67. *Skinner*, 316 U.S. at 541.

68. *Id.*

69. Thomas A. Demetrio, *Loss of Consortium: A Continuing Evolution*, 36 SEP TRIAL 42, 42 (2000).

70. Dan B. Hobbs & Paul T. Hayden, *Torts and Compensation Personal Accountability and Social Responsibility for Injury*, 515 (W. Group 2001) [hereinafter *Torts and Compensation*].

71. *Diaz v. Eli Lilly & Co.*, 302 N.E.2d 555, 556 (Mass. 1973). The Supreme Judicial Court of Massachusetts, in discussing whether a wife had a loss of consortium claim for the injuries to her husband against a manufacturer for negligently failing to give adequate warnings of the dangers involved to users of Parson, discussed the history of the loss of consortium claim. This Court noted that in jurisdictions that do not recognize a loss of consortium claim, it is mainly due to a fear that a couple will receive double recovery.

72. *Id.* at 556-57; see also *Torts and Compensation*, *supra* note 70, at 515.

73. *Diaz*, 302 N.E.2d at 558-59.

74. *Barnes v. Outlaw*, 964 P.2d 484, 486 (Ariz. 1998). This court stated that Arizona law, in 1954, originally refused to recognize a wife's cause of action for the loss of consortium of her husband. *Id.* (citing *Jeune v. Del E. Webb Constr. Co.*, 269 P.2d 723, 723-24 (Ariz. 1954)). Then twenty years later the court overruled *Jeune* stating that "the common law or judge-made law is unjust or out of step with the times, we have no reluctance to change it." *Barnes*, 964 P.2d at 486 (citing *City of Glendale v. Bradshaw*, 503 P.2d 803, 805 (Ariz. 1972)).

with the result that in modern courts, husbands and wives both have the ability to bring a loss of consortium claim against a third party for an economic loss of their spouse's services.⁷⁵

Not only did courts begin to recognize that the wife may be entitled to a loss of consortium claim for injury to her husband, but judicial systems also began to recognize that this cause of action necessarily included intangible values of the marital relationship.⁷⁶ Today, the loss of consortium claim is not limited to purely economic losses, but may also consist of the loss of support or services in a marital relationship.⁷⁷ Courts have begun to recognize that the claim therefore embraces elements of a marriage such as felicity,⁷⁸ love,⁷⁹ companionship,⁸⁰ affection,⁸¹ society,⁸² sexual relations,⁸³ solace,⁸⁴ or any of the other pleasures of life.⁸⁵ Spousal consortium may encompass many of the elementary components of relationships that are needed in order to achieve a life filled with happiness.⁸⁶ Overall, loss of consortium claims include countless diverse elements that comprise a marital relationship.⁸⁷

The policy behind loss of consortium claims is to provide damages to the indirectly injured spouse when he or she loses a fundamental enjoyment or right within the marriage.⁸⁸ The central principle behind a loss of consortium claim rests upon the notion that when one spouse is injured in a way that diminishes the ability of the couple to fully enjoy each other's company, the indirectly injured spouse should be entitled to the same legal recourse as the injured spouse.⁸⁹

In general, the loss of consortium claim is described as the loss of certain rights and privileges inherent in the marital relationship.⁹⁰

75. *Millington v. Southeastern Elevator Co.*, 239 N.E.2d 897, 898 (N.Y. 1968).

76. *Barnes*, 964 P.2d at 486.

77. *Millington*, 239 N.E.2d at 899.

78. *Id.*

79. *Id.*; see also *Lacy*, 484 A.2d at 533.

80. *Millington*, 239 N.E.2d at 899.

81. *Id.*

82. *Id.*

83. *Id.*

84. *Id.*

85. *Lacy*, 484 A.2d at 532.

86. *Id.* at 533. The expansion of spousal consortium generally includes love, physical and emotional support, aid, hopes and expectations, and all the assistance that goes together with the marriage relationship. *Id.*

87. *Id.* at 532; see also *Millington*, 239 N.E.2d at 899.

88. *Lacy*, 484 A.2d at 533.

89. *Torts and Compensation*, *supra* note 70, at 518.

90. *Zwicker v. Altamont Emergency Room Physicians Med. Group*, 118 Cal. Rptr. 2d 912, 915 (Cal. Ct. App. 2002). In this case the patients sued their physician for failing to diagnose patient's condition early enough to prevent loss of his testicle. The court spent a substantial part of its discussion on the marriage requirement and jurisdictions that have found exceptions to this requirement.

Although the definition of spousal consortium claims is seemingly consistent among the states,⁹¹ the requirements for a loss of consortium claim and the compensable rights and privileges that married couples are entitled to vary by state jurisdictions.⁹²

B. The General Requirements of a Loss of Consortium Claim

In most jurisdictions that accept loss of consortium claims, there are typically three elements that must be proven in order to establish a valid spousal consortium claim.⁹³ The cause of action for a loss of consortium claim is based upon whether the spouse suffered injury which deprived the other spouse of some benefit which formerly existed in the marriage,⁹⁴ whether the injured spouse has a valid cause of action for recovery against the tortfeasor,⁹⁵ and whether the indirectly injured spouse was married to the injured spouse at the time the injury occurred.⁹⁶

The marriage requirement is the constraint on loss of consortium claims that causes the most controversy concerning premarital and latent injuries.⁹⁷ A majority of jurisdictions acknowledge the marriage requirement for a loss of consortium claim.⁹⁸ In order to establish a valid loss of consortium claim the couple must be married at time of injury, or in the case of endocrine disruptors, at the time the spouse was exposed to such toxins.⁹⁹ The marriage status does not require the indirectly injured spouse to be in physical proximity of the site of injury,¹⁰⁰ but the couple

91. Demetrio, *supra* note 69, at 65.

92. See *Lacy*, 484 A.2d 527 (Del. Super. Ct. 1984); see also *Millington*, 239 N.E.2d 897 (N.Y. 1968); see also *Barnes*, 964 P.2d 484 (Ariz. 1998); see also *Zwicker*, 118 Cal. Rptr. 2d 912 (Cal. Ct. App. 2002).

93. *Lacy*, 484 A.2d at 532. The Superior Court of Delaware decided that a husband has a loss of consortium claim in a medical malpractice suit because of his wife's inability to bear children and for her emotional pain and suffering.

94. *Id.*

95. *Id.*

96. *Id.*

97. *Zwicker*, 118 Cal. Rptr. 2d at 916.

98. *Id.*

99. *Id.*; see also *Stager v. Schneider*, 494 A.2d 1307, 1315 (D.C. 1985). California is an example of a state that recognizes the marriage requirement. The injured spouse and the indirectly injured spouse have to have a marital relationship at the time of injury. *Zwicker*, 118 Cal. Rptr. 2d at 919. The marriage requirement can cause great difficulty in deciding reproductive hazard cases. It is extremely complicated to determine what specific exposure to a reproductive hazard caused the spouse's infertility if there had been numerous exposures to endocrine disruptors. For example, when an industry does not properly protect its employees who work regularly with chemicals that cause infertility, either through inadequate warnings or with a lack of safety measures or precautions, it may be difficult to establish which exposure actually caused the infertility.

100. *Lacy*, 484 A.2d at 532.

does need to be married at the time of injury.¹⁰¹ The marriage requirement excludes recovery for married couples who have suffered loss of consortium which resulted from a premarital and latent injury to the directly injured spouse.¹⁰²

Jurisdictions that have upheld the marriage requirement do so based on three justifications.¹⁰³ The first is the presumption that the law does not allow an individual to “marry a cause of action.”¹⁰⁴ The phrase “marry a cause of action” suggests that a tortfeasor should not be held liable for a claim that arises simply because the injured party decided to marry after the injury.¹⁰⁵ Once the party decides to marry, the tortfeasor is not liable to the indirectly injured spouse for damages because prior to the marriage, the tortfeasor was liable only to the injured spouse for damages.¹⁰⁶

The second justification employed by the courts to uphold the marriage requirement is that couples assume the risk of future loss of consortium at the time of marriage.¹⁰⁷ Thus, once a couple enters into marriage, they both take each other “as they are,” including any injuries that the other has sustained prior to the marriage.¹⁰⁸

The final justification that courts have used to uphold the marriage requirement is that allowing loss of consortium claims arising from premarital and latent injuries could result in unlimited liability for the negligent tortfeasor.¹⁰⁹ The public policy behind limiting liability is that courts want to continue to compensate the injured parties for foreseeable

101. *Id.*

102. Paul Davis Fancher, *To Have and Not Hold: Applying the Discovery Rule to Loss of Consortium Claims Stemming From Premarital, Latent Injuries*, 53 VAND. L. REV. 685, 694 (2000) [hereinafter Fancher]. This article discussed the reasons why the marriage requirement is not appropriate in latent injuries to one spouse and why the discovery rule should apply to spousal loss of consortium claims that arise from premarital, latent injuries.

103. *Stager*, 494 A.2d at 1315; *see also* *Green v. Am. Pharm. Co.*, 960 P.2d 912, 918 (Wash. 1998).

104. *Kociemba v. G.D. Searle & Co.* 682 F. Supp. 1577, 1578 (D. Minn. 1988). In this case the husband of a user of an intrauterine device sued the manufacturer for loss of consortium. The court noted that the general rule for loss of consortium claims include the marriage requirement, but the court then noted that there are exceptions to this general rule.

105. *Zwicker*, 118 Cal. Rptr. 2d at 916; *see also* Fancher, *supra* note 102, at 695.

106. Fancher, *supra* note 108, at 699-700.

107. *Green*, 960 P.2d at 918. This case concerned a husband's loss of consortium claim against the manufacturer of drug products for the difficulty in his wife's pregnancy. The court stated that the “assumption of risk” rationale is a weak one because the husband could not have known his wife's latent and unknown injury; therefore, he could not have assumed this risk. *Id.*

108. *Rademacher v. Torbensen*, 13 N.Y.S.2d 124, 124 (N.Y. App. Div. 1939).

109. *Green*, 960 P.2d at 918; *see also* Fancher, *supra* note 102, at 694-95.

injuries without placing an undue burden on the tortfeasor.¹¹⁰

Conversely, there are some courts that recognize exceptions to the marriage requirement.¹¹¹ In *Kociemba v. G.D. Searle & Company*,¹¹² the court noted the general rule that precludes a loss of consortium claim when the injury predates the marriage.¹¹³ This court then stated that there is an exception to the general rule in unusual cases.¹¹⁴ The special circumstance that arose in *Kociemba v. G.D. Searle & Company* was that neither spouse knew or could have known that the wife's infertility predated their marriage.¹¹⁵ The court noted that the general rule is inapplicable when a premarital injury manifests itself after the marriage because the parties were unaware of the latent injury prior to their marriage.¹¹⁶

V. Analysis

A. Potential Compensable Injuries

When a directly injured spouse becomes infertile due to an endocrine disruptor, the indirectly injured spouse also loses his or her right to procreate within the confines of their marriage. Whether courts will recognize that when one partner loses a fundamental right, his or her spouse also bears a similar loss, depends on whether the courts consider the inability of a couple to procreate a loss of consortium between the spouses. Certain fundamental rights, such as the right to procreate, are created through marriage.¹¹⁷ The right to procreate is shared in a marriage because one spouse's inability to procreate translates into the couple, together, being unable to fulfill this right.¹¹⁸

When one spouse becomes infertile, the couple not only suffers the loss of their right to procreate, but may also suffer financially. Infertility remedy measures, such as infertility treatments,¹¹⁹ domestic adoption,¹²⁰

110. Fancher, *supra* note 108, at 699.

111. *Kociemba*, 683 F. Supp. at 1578; *see also* *Wagner v. International Harvester Co.*, 455 F. Supp. 168, 169 (D. Minn. 1978).

112. *Kociemba*, 683 F. Supp. at 1577.

113. *Id.* at 1578 (citing *Wagner*, 455 F. Supp. at 168).

114. *Kociemba*, 683 F. Supp. at 1578 (citing *Wagner*, 455 F. Supp. at 169).

115. *Kociemba*, 683 F. Supp. at 1578.

116. *Id.*; *see also* *Furby v. Raymark Indus. Inc.*, 397 N.W.2d 303 (Mich. Ct. App. 1986); *see also* *Stager*, 494 A.2d at 1307.

117. *Lacy*, 484 A.2d at 533.

118. *Id.* This Court stated that an injury to a reproductive organ of one partner is an injury to both.

119. Advanced Fertility Center of Chicago, *Infertility Treatment Options*, at <http://www.advancedfertility.com/treatment.htm> (last visited Mar. 14, 2004) [hereinafter *Infertility Treatment Options*].

international adoption,¹²¹ or in vitro fertilization,¹²² could involve enormous unexpected expenses for the couple. Thus, if the couple decides to explore non-traditional reproductive measures outside of the marriage, the tortfeasor who caused the involuntary infertilization should ultimately bear the expense related to the procedures, because without the harm created by the tortfeasor, the couple would neither have sought nor expended the money for such remedies. In effect, the indirectly injured spouse should have a claim against the chemical producer, manufacturer, distributor, or whomever accidentally or negligently deposited the endocrine disruptors into the environment and caused the defect that resulted in the injured spouse's infertility.¹²³

B. Potential Issues Facing Recovery for Injuries

Several legal concerns arise when endocrine disruptors are unintentionally or negligently released into the environment and cause infertility, specifically, whether the indirectly injured spouse has a cognizable loss of consortium claim against the tortfeasor. When a spouse is injured by the negligent acts of a third party who discharges endocrine disruptors causing him or her to become infertile, this injury causes the remaining spouse to suffer indirect injury. Thus, when a spouse suffers a bodily injury due to the negligence of a third party, typically the indirectly injured spouse has a cognizable claim against the tortfeasor for the loss of consortium resulted from the injury to his or her spouse.¹²⁴ Courts should view infertility similarly. When one spouse loses his or her fundamental right to reproduce, the indirectly injured spouse should also be compensated for the injury and loss of the fundamental right.

After coming into contact with endocrine disruptors, the ability to procreate, which existed within the marriage prior to the negligent act by the tortfeasor, no longer exists. Courts have specifically recognized that a loss of consortium claim includes the "privilege of procreation and the anguish of the 'non-injured spouse.'"¹²⁵ These have been described as

120. Adopting Organization, *The Cost of Adopting*, available at www.adopting.org/costOfAdopting.html (last visited Mar. 14, 2004) [hereinafter *Cost of adopting*].

121. Adopt-A-Child, *Common Questions*, available at <http://www.adopt-a-child.org/Questn.html> (last visited on Mar. 14, 2004) [hereinafter *Adopt-A-Child*].

122. Advanced Fertility Center of Chicago, *In Vitro Fertilization Procedures*, available at <http://www.advancedfertility.com/ivfprocedures.htm> (last visited Mar. 14, 2004) [hereinafter *In Vitro Fertilization Process*].

123. *Lacy*, 484 A.2d at 533.

124. *Id.* at 531. This court concluded that injury to the reproductive organ of one spouse is, in effect, injury to both.

125. *Id.*

rights that are reciprocal between a wife and husband.¹²⁶ When one spouse becomes infertile due to endocrine disruptors, the couple has been deprived of an opportunity to have children,¹²⁷ and fortunately, the loss of consortium includes the frustration of the primal drive of reproduction.¹²⁸ The injury to the reproductive organs of one spouse is essentially an injury to both spouses,¹²⁹ and the indirectly injured spouse's loss is considered equal to the directly injured spouse's loss.¹³⁰ After all, neither spouse has the ability to take pleasure in his or her "legally sanctioned and morally proper privilege of copulation or procreation"¹³¹ and, therefore, both are deprived of their full enjoyment of the marital relationship.¹³²

The ability to procreate and have a family with one's spouse is a pleasure of life that is shared within a marital relationship. As such, the loss of sharing parenthood with one's spouse is properly incorporated into the loss of consortium claim.¹³³ The inability to procreate as a result of an endocrine disruptor accidentally or negligently placed in the environment by the conduct of a third party falls within the category of a loss of other pleasures of life.¹³⁴ Many individuals enter into a marriage with the primary goal of having a family,¹³⁵ when one spouse becomes infertile due to an endocrine disruptor, the couple loses this ability. It is not just the injured spouse that loses this ability; both spouses have lost their ability to procreate based on the notion that marriage creates a single entity. The loss of the expectation of sharing parenthood with one's spouse is a proper element that is included within the loss of consortium claim.¹³⁶

The first two requirements that need to be satisfied for a sufficient claim of loss of consortium are adequately fulfilled when endocrine disruptors are accidentally or negligently placed into our environment. Spousal consortium sufficiently satisfies the first requirement that the spouse suffer an injury that deprives him or her of a benefit formerly

126. *Thill v. Modern Erecting Co.*, 170 N.W.2d 865, 867 (Minn. 1969).

127. *Lacy*, 484 A.2d at 533.

128. *Thill*, 170 N.W.2d at 867.

129. *Lacy*, 484 A.2d at 533.

130. *Id.*

131. *Id.*

132. *Id.*

133. *Id.*

134. *Lacy*, 484 A.2d at 532-33.

135. *Millington*, 239 N.E.2d at 900.

136. *Lacy*, 484 A.2d at 533. This court also stated that even though the indirectly injured spouse suffers no physical injury, he or she suffers nonetheless. The indirectly injured spouse's injuries, as well as some of the injured spouse's injuries, are a result of the emotional and mental stress of losing the ability to procreate. The indirectly injured spouse also suffers emotionally by watching the injured spouse suffer physically.

existing in the marital relationship.¹³⁷ The ability to procreate with one's spouse, as discussed above, is a benefit or enjoyment existing in the marriage before one spouse's infertility injury caused by an endocrine disruptor.¹³⁸ Therefore, after the injury both the injured spouse and the indirectly injured spouse have been deprived of this right to procreate within the marriage, satisfying the first element of the test for a loss of consortium claim.¹³⁹

The second requirement, that the injured spouse have a valid cause of action against the tortfeasor, is also adequately satisfied. When a third party injures an individual, the injured party has a valid claim for recovery against the tortfeasor.

The third element of a loss of consortium claim requiring marriage renders most loss of consortium claims unsuccessful. The marriage requirement bars recovery to a spouse for a latent premarital injury,¹⁴⁰ particularly relevant to injuries resulting from endocrine disruptors,¹⁴¹ which generally manifest themselves well after exposure to the harmful chemical.

The fact that a premarital injury is latent begs the question of whether an individual is knowingly "marrying a lawsuit."¹⁴² If an injury is latent, there is a question as to how either spouse can be aware of the injury and, therefore, how the indirectly injured spouse can knowingly "marry a lawsuit." If the injured spouse is not aware of his or her injury, there can be no burden on the indirectly injured party to know of that fact.¹⁴³

One cannot assume a risk of which he or she is unaware.¹⁴⁴ This is true even in the situation where one spouse is rendered infertile by endocrine disruptors. The assumption of risk is not a prudent answer to the argument that indirectly injured spouses should be barred from recovering for premarital and latent injuries that occurred prior to marriage.¹⁴⁵ Moreover, the precise moment a person was exposed to an endocrine disruptor is often difficult to determine, let alone establish. The difficulty that arises in the determination of when the spouse became injured suggests that the indirectly injured spouse cannot be aware of the injury to his or her spouse at the time they enter into the marriage, especially if the injury occurred before marriage. The conclusion that a

137. *Id.*

138. *Id.*

139. *Id.*

140. *Zwicker*, 118 Cal. Rptr. 2d at 917.

141. *Green*, 960 P.2d at 919.

142. *Stager*, 494 A.2d at 1316.

143. *Id.*

144. *Green*, 960 P.2d at 918.

145. *Id.* at 918-19.

spouse assumes a risk of loss of consortium may be a correct conclusion for injuries to one's spouse that are reasonably apparent or blatantly obvious.¹⁴⁶ However, latent injuries are injuries not readily apparent; therefore, a person cannot assume a risk for that of which he or she had no knowledge.¹⁴⁷ The indirectly injured spouse's loss of consortium claim cannot accrue until the injured spouse's claim against the tortfeasor has accrued.¹⁴⁸

Injustice would result if a spousal consortium claim were defeated on the ground of unlimited liability. The scope of a loss of consortium claim is not expanded by permitting a spouse to recover for latent premarital injuries¹⁴⁹ caused by endocrine disruptors. By allowing the indirectly injured spouse to recover for loss of consortium resulting from a premarital latent injury would not bring about unlimited liability because the tortfeasor is still liable only to traditional consortium parties.¹⁵⁰ So? While it is foreseeable that the injured party will later marry and the injury may affect the couple's relationship, a claim for latent and premarital injuries would not extend beyond a traditional loss of consortium claim, producing unlimited liability.¹⁵¹ Allowing a spouse to recover under a loss of consortium claim for a latent premarital injury will not create unlimited tort liability, because recovery simply provides relief to the indirectly injured spouse, already protected under loss of consortium principles.¹⁵²

The loss of consortium claim should begin to accrue upon the discovery of the spouse's infertility.¹⁵³ The discovery of the injury to the spouse is when there is a cognizable claim.¹⁵⁴ This discovery rule delays the running of the statute of limitations until the claimant discovers or should have discovered the cause of action.¹⁵⁵ There is a fundamental unfairness in the toxic exposure context to bar loss of consortium damages for a latent premarital injury when the injured or indirectly injured spouse has no knowledge of the injury.¹⁵⁶

The right to marry and to procreate and create a family is not viewed as individualized; rather it is an inherent right, shared by couples.

146. *Stager*, 494 A.2d at 1315.

147. *Kociemba*, 683 F. Supp. at 1578; *see also Stager*, 494 A.2d at 1315; *see also Green*, 960 P.2d at 918.

148. *Stager*, 494 A.2d at 1315.

149. *Green*, 960 P.2d at 919.

150. *Id.*; *see also Stager*, 494 A.2d at 1316.

151. Fancher, *supra* note 102, at 699.

152. *Green*, 960 P.2d at 918; *see also Fancher*, *supra* note 102, at 699.

153. *Stager*, 494 A.2d at 1316.

154. *Furby, Inc.*, 397 N.W.2d at 306; *see also Stager*, 494 A.2d at 1316.

155. *Stager*, 494 A.2d 1316; *see also Fancher*, *supra* note 102, at 699-700.

156. *Green*, 960 P.2d at 918.

For many individuals, the loss of a spouse's ability to reproduce leaves the spouse with no other options to be a parent. However, there are several measures available to couples who want to start a family despite one spouse's involuntary infertility¹⁵⁷ due to an endocrine disruptor. These measures include in vitro fertilization,¹⁵⁸ artificial insemination,¹⁵⁹ domestic adoption,¹⁶⁰ and international adoption.¹⁶¹ Although these options are readily available to couples that face infertility, it is ultimately the couple's choice whether to go forward with any of these measures to create a family.

Several other considerations arise when a tortfeasor's actions eliminate a couple's fundamental right to procreate. Not only does the couple bear the emotional pain of being unable to procreate naturally through their marriage, but if they choose to seek a remedy for their infertility, the cost to conceive can be prohibitive.¹⁶²

If the couple chooses to proceed with a medical procedure, numerous issues arise that are not of concern in natural conception. The couple has to spend money for a medical procedure for one spouse in order to help the couple procreate.¹⁶³ Along with the procedural expenses, the couple also has to bear the health risks of such medical procedures. Further, the couple will face the emotional trauma of whether or not the alternative procedure will be successful.¹⁶⁴

157. Advanced Fertility Center of Chicago, *Artificial insemination for infertility Intrauterine insemination*, available at <http://www.advancedfertility.com/insem.htm> (last visited Mar. 14, 2004) [hereinafter *Artificial Insemination*].

158. *In Vitro Fertilization Process*, *supra* note 122.

159. *Artificial Insemination*, *supra* note 157. Artificial insemination is a procedure that is used to help women who are facing infertility problems.

160. *Cost of Adopting*, *supra* note 120.

161. *Id.*

162. Most options that the couple may have in obtaining a child outside of the marriage or using medical procedures to reproduce vary in cost depending on a variety of factors.

163. In vitro fertilization costs approximately \$8,000 to \$10,000 nationwide. However, this cost does not always include all of the services necessary to complete the in vitro fertilization process. The cost of this procedure typically includes standard services needed to carry out the procedure, but certain costs are excluded. Excluded costs generally include the cost of freezing or storing embryos, and prescreening costs. In addition the cost of in vitro fertilization increases if the couple needs an egg donation; a complete egg donation cycle excluding the donor's fee is approximately \$10,350. *In Vitro Fertilization Process*, *supra* note 69.

164. In vitro fertilization accounted for 97% of the procedures completed in assisted reproductive technology, and resulted in a live birth for women thirty-five years old and younger 32.2% of the time. National Center for Chronic Disease Prevention and Health Promotion, *1999 Assisted Reproductive Technology Success Rates*, available at <http://apps.nccd/cdc.gov/ART00/nation99.asp> (last reviewed Sept. 11, 2002) [hereinafter *Reproductive Technology Success Rates*]. For women in the age thirty-five to thirty-seven the rate of assisted reproductive technology resulting in a live birth was 26.2%. *Id.* The success rates for women over the age of thirty-eight continue to decrease for every

There are options beyond medical procedures available to infertile couples to help them create a family. A common solution to dealing with infertility is adoption.¹⁶⁵ Again, adoptions, like other opportunities available to infertile couples have economic and emotional costs.¹⁶⁶ The emotional costs in considering adoption are the waiting period of adoption and the possibility that the adoption may never come to fruition.

Along with medical procedures, the process of adopting a child can also be very lengthy. There are many steps involved in the adoption process¹⁶⁷ and, depending on the individual circumstances, the adoption process could last for years.

The couple has the emotional pain of dealing with the fact that they can no longer procreate due to an endocrine disruptor, but there are also the issues of how to remedy their infertility problem and start a family. The expenditures that a couple makes hoping to find away around their

age group. *Id.*

165. Many infertility informational sites and pamphlets give related information concerning adoption services. The information provides contact information for adoption organizations or services available to answer questions that the infertile couple may have concerning the details of adoption. Also, most infertility information gives information on when it is time to stop infertility treatments and start researching non-medical ways to create a family, such as adoption. Carolyn Berger, When to Consider Adoption (The American Infertility Association), available at http://www.americaninfertility.com/adoption/carolyn_berger_when_to_consider_adoption.html (last visited Mar. 14, 2004).

166. An international adoption can range in price from \$15,000 to \$20,000. However, this cost rarely includes the cost of travel to the foreign country to receive your child. Adopt-A-Child, *supra* note 68. Domestic adoption can also be rather expensive depending on the type of agency the couple employs. A domestic adoption through a public agency can range in price from a free service to \$2,500. *Cost of Adopting, supra* note 67. A domestic adoption through a private adoption agency can range in price from \$4,000 to \$30,000. *Id.*

167. Like the price of adoption, depending on whether the couple is seeking an international or domestic adoption, the process for the two types of adoptions are very different. Letter from Adoption House, Adoption Agency, Wilmington, Delaware, to Potential Client (Nov. 23, 2002) (on file with author). For domestic adoption, the process includes performing a home study, locating a birthmother, pre-screening birthmothers, performing legal services, obtaining family background and health information, providing counseling to birthmothers, educational intake of adoptive parents, and post-placement visits. For international adoption processes, the process is a lengthier than domestic adoption. The process for international adoption includes: home study and counseling services; preparation and filing of INS documents (in the U.S. and overseas); preparation of legal documents; preparation of a dossier with all required levels of authentication of each document; identification of a child eligible for adoption; interface with CIS, foreign agencies, American and foreign embassies; communication with foreign facilitators for information about the child; referrals to American physicians who are trained and experienced with evaluating video and photos of internationally adoptive children; coordination with a physician in the country of adoption; assistance with travel preparations; arrangement with a travel escort in the country of adoption; post-placement services; re-adoption in the U.S. for residents; and assistance with naturalization and citizenship services for the adopted child. *Id.*

infertility is a compensable economic injury. These expenditures represent economic losses that were created by the release of endocrine disruptors. If the tortfeasor did not accidentally or negligently release the endocrine disruptors into the environment the couple would not face such expenditures. The monetary remuneration recovered from the tortfeasor in a loss of consortium claim should include the costs to compensate the couples and rectify their infertility. Without this just compensation, the couple would suffer irreparable injury due to the endocrine disruptors. They still face the irreparable injury, the money doesn't somehow repair the infertility.

When a couple becomes infertile due to the negligent acts of another, they are robbed of the fundamental right to procreation. This situation occurs when a manufacturer or producer of an endocrine disruptor negligently releases an endocrine disruptor into the environment and accordingly denies the couple the ability to procreate. People have a right to procreate; and when a right is taken from an individual, that individual should be justly compensated. This country was founded on individual rights,¹⁶⁸ and allowing a private party to take away such rights without providing the injured party with legal recourse betrays the values upon which this country was founded. The irreversible nature of the injury of infertilization compounds the wrong inflicted.¹⁶⁹ However, the nominal value of the right to procreate is one that is hard to determine; after all how do you nominally measure the repercussions of the loss of an individual's fundamental right to procreate?

VI. Conclusion

The physical and emotional injuries that affect the involuntarily infertilized person has profound repercussions on the indirectly injured spouse. A loss of consortium claim is the ideal way to compensate the indirectly injured spouse for his or her loss. Conceiving and creating a family is an activity that implicitly requires both spouses; it cannot be done individually. An indirectly injured spouse loses his fundamental right to procreate when a spouse is physically injured and left without the ability to conceive. The spousal consortium claim allows the indirectly injured spouse to be compensated for his or her loss, a loss so valued in the institution of marriage,¹⁷⁰ the ability to procreate.

Courts should consider employing the discovery rule when deciding a spouse's consortium claim based upon his or her spouse becoming

168. *Coplin v. U.S.*, 6 Cl. Ct. 115, 148 (Fed. Cir. 1984).

169. *Skinner v. Oklahoma*, 316 U.S. 535, 541 (1942).

170. *Barnes v. Outlaw*, 964 P.2d 484, 486 (Ariz. 1998).

involuntarily infertile due to an endocrine disruptor. Such a rule allows equity and justice to be served. Furthermore, when computing compensation courts should consider the expenses the couple may necessarily expend in order to pursue their desire to create a family.

The ability to bear children and create a family may be considered by some spouses an essential element of a successful marriage.¹⁷¹ The indirectly injured spouse's claim is rightly justified under the spousal consortium claim when their spouse loses his or her ability to procreate, because that spouse has lost a fundamental right.

Leah Weldon

171. Wal-Mart Stores, Inc. v. Alexander, 868 S.W.2d 322, 328 (Tex. 1994).

