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Rethinking Workplace Safety: An Integration and Evaluation of Sick Building Syndrome and Fetal Protection Cases

Andrea Giampetro-Meyer^{*}

This article examines the legal development of two workplace safety situations. The purpose of the article is to demonstrate society's need to rethink our policies and priorities in reaching occupational safety decisions. First, the article presents fact situations that help the reader understand hazards that have led to, first, sick building syndrome cases and, second, fetal protection cases. Second, the article explains the legal development of each kind of case. Third, the article integrates and evaluates the legal development of these two occupational safety cases. Additionally, the article presents ideas employers, courts, legislators, government regulators, and employees should consider when they confront situations in which they must attempt to balance society's need for technological progress and its need to protect workers' health.¹

Balancing society's need for technological improvements with its need to protect workers' health engenders persistent dispute in the United States.² The extent to which a person emphasizes one need over the other depends primarily on that person's value assump-

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1. Views about workplace safety are not completely polemic. No one would argue we should pursue technological advances no matter what the risk, or that the workplace must be completely safe at the cost of societal progress. For an excellent discussion of approaches to risk, *see generally* THE LANGUAGE OF RISK: CONFLICTING PERSPECTIVES ON OCCUPATIONAL HEALTH (D. Nelkin ed. 1985) [hereinafter LANGUAGE OF RISK] (This book focuses on anthropological and sociological approaches to risk. It explores the interests and biases of different groups, such as employees and employers, their perceptions of risk and strategies of management and control.).

2. Other countries face workplace safety issues similar to ours. *See, e.g.*, Swinton, *Regulating Reproductive Hazards in the Workplace: Balancing Equality and Health*, 33 U. TORONTO L.J. 45 (1983) (explaining that courts in Ontario have resolved fetal protection issues similar to those in America).

tions.³ Industry advocates typically see occupational health hazards as minimal, unavoidable, and acceptable;⁴ labor advocates see them as a serious threat to workers, their families, and their unborn children.⁵ These different perspectives reflect divergent opinions about the relative importance of safety and progress.⁶

By enacting legislation⁷ and regulations,⁸ and by reaching judicial decisions,⁹ policymakers attempt to balance the conflicting values involved in reaching complicated workplace safety decisions. This article looks at two particularly complicated workplace safety situations. The first involves airborne hazards in buildings, such as allergens and viruses, that result in employee health problems ranging from coughing and rashes to death. These hazards have recently triggered "sick building syndrome" lawsuits.¹⁰ The second involves hazards in industry, such as lead and vinyl chloride, that scientists have linked to fetal harm. These hazards led to fetal protection policies in which employers banned women in their childbearing years from the workplace. Women filed fetal protection cases, arguing that these policies constitute unlawful sex discrimination.¹¹

Sick building syndrome and fetal protection cases represent two

3. Value assumptions are beliefs about which values are the most important. Values are standards of conduct that we endorse and expect people to meet. M. BROWNE & S. KEELEY, *ASKING THE RIGHT QUESTIONS: A GUIDE TO CRITICAL THINKING* 52-58 (2d ed. 1986).

4. Hilgartner, *The Political Language of Risk: Defining Occupational Health*, in *LANGUAGE OF RISK*, *supra* note 1, at 25, 28. Hilgartner compares the ideologies, beliefs, and language used by industry and labor advocates when discussing workplace safety issues. The author explores the ways in which these interest groups frame issues and subsequently draft policies to resolve workplace safety issues.

5. *Id.* at 33.

6. The value conflict between safety and progress is one of several conflicts present in workplace safety decisions. Another is the clash between individualism and collective responsibility. For a discussion of value conflicts, see M. BROWNE & S. KEELEY, *supra* note 3, at 56-58.

7. See, e.g., *The Occupational Safety and Health Act*, 29 U.S.C. §§ 651-78 (1970). The OSH Act attempts to balance progress and safety.

8. Several administrative agencies enact regulations that balance progress and safety. For example, the Environmental Protection Agency (EPA) is currently attempting to balance these values in the context of indoor pollution. See *EPA Reports to Congress on Indoor Pollution Issues*, *INDOOR POLLUTION L. REP.*, June 1987, at 3 (outlining EPA's goals and approaches to resolving the indoor pollution issue); see also Shay, *Action on Indoor Air Issues Likely to Quicken in 1988*, *INDOOR POLLUTION L. REP.*, Dec. 1987, at 1 (outlining EPA's programs and policies regarding indoor pollution).

9. See, e.g., *Hayes v. Shelby Memorial Hosp.*, 726 F.2d 1543 (11th Cir. 1984); *Wright v. Olin Corp.*, 697 F.2d 1172 (4th Cir. 1982); *Zuniga v. Kleberg County Hosp.*, 692 F.2d 986 (5th Cir. 1982). In these fetal protection cases, courts struggled with the competing values of equality, safety, and progress.

10. See *infra* text accompanying notes 39-48.

11. See *infra* text accompanying notes 135-54.

different employee responses to unsafe workplaces. This article asks why employers, legislators, government regulators, and employees have reacted differently to the hazards that initiated these lawsuits. Questioning the legal development of these cases allows us to reexamine our policies and priorities in reaching occupational safety decisions.

The initial section of the Article briefly presents fact situations that help the reader understand the development of fetal protection and sick building syndrome cases. It also presents a fact situation demonstrating that both cases can occur together. The next section presents a thorough discussion of the legal development of sick building syndrome and fetal protection cases. The final section integrates and evaluates the legal development of these two occupational safety cases; it explains the links between the cases and points out inadequacies in how our legal system has responded to workplace safety issues.

I.

BACKGROUND

Workers have demonstrated their interest in occupational safety for many years. Historically, developments in medical knowledge have sparked increased employee interest in workplace safety. As early as the fifth century B.C., Hippocrates suggested a connection between workers' jobs and their health.¹² Over time, technological progress brought with it new risks, which medical researchers subsequently studied. In 1775 Percivall Pott made the first discovery of work-related cancer,¹³ when he reported that London chimney sweeps were likely to develop scrotal cancer.¹⁴

American workers first expressed their fears about safety during

12. Bardana, *Office Epidemics: Why Are Americans Suddenly Allergic to the Workplace?*, 26 SCIENCES 38, 40 (1986) (Hippocrates advised his fellow physicians to consider occupation as a possible factor in disease).

13. Comment, *Employment Rights of Women in the Toxic Workplace*, 65 CALIF. L. REV. 1086, 1115 n.10 (1977) [hereinafter *Employment Rights of Women*] citing Wagner, *Occupational Carcinogenesis: The Two Hundred Years Since Percivall Pott*, 271 ANNALS OF THE N.Y. ACADEMY OF SCIENCES (1976).

14. *Id.*

the 1920s,¹⁵ and continue to do so today.¹⁶ Their specific concerns have varied over time. Consider the following scenarios, which focus on occupational health concerns workers face today.

Scenario 1

Several male and female employees worked in an office building in Alaska. We focus on four females, ages 34-45. Prior to working in this office building, these women enjoyed good health. After starting work, however, they experienced the following symptoms: irritability, extreme fatigue, chest tightness, non-productive cough, shortness of breath, and fever.¹⁷ Doctors examined the women and discovered that they suffered from acute, chronic and recurrent bronchitis, vertigo, hypokalemia, severe tracheobronchitis, and sinusitis.¹⁸ An investigation of the building determined that a variety of fungi contaminated the heating, ventilation and air conditioning system.¹⁹ The plaintiffs filed personal injury claims against the

15. See G. MARKOWITZ & D. ROSNER, "SLAVES OF THE DEPRESSION": WORKERS' LETTERS ABOUT LIFE ON THE JOB (1987). This book explains that Americans who held jobs during the Great Depression experienced such unsafe and poor working conditions that they were little better off than the unemployed. The authors present letters workers sent to the President and Secretary of Labor expressing their concerns about working conditions in various industries.

16. See D. NELKIN & M. BROWN, WORKERS AT RISK: VOICES FROM THE WORKPLACE (1984). This book presents a documentary on workers who are routinely exposed to chemicals in modern America. The authors capture the perceptions of workers' views of risk in the workplace by conducting open-ended interviews with people who work with chemicals in a wide range of occupations and try to understand factors influencing different responses to perceived risk. One particularly interesting section of the book focuses on workers' anxieties and fears. The authors state that "the idea that work may put food on the table but bring harm to one's children may be the deepest of all fears." *Id.* at 46. Both men and women worry that health problems may extend to their families and their abilities to bear normal children. This perception is relevant to discussions about what managers should do to minimize reproductive hazards.

17. This scenario is based on an indoor pollution case that is pending in Alaska. See *Indoor Air Suit Filed by Alaskan State Workers*, INDOOR POLLUTION L. REP., Dec. 1987, at 3, 7. The case, *Henley v. Blomfield Co.*, No. 3AN-86-10483 (3d Jud. Dist. Anchorage), was filed by employees of the State Department of Labor.

18. *Id.* at 7.

19. *Id.* at 3. The Department of Labor began to occupy the new office building in 1980. From 1980-85, employees in the building complained about poor janitorial services, extreme temperatures, inadequate ventilation, and carpet and hallway odors. In 1985 the Department of Labor investigated the building and discovered that the heating, ventilation, and air conditioning system was contaminated. The contents of the building, especially the lobby carpet, were contaminated by bacteria that grew primarily because the carpet was dampened by leaking toilets and urinals on the first and second floors of the building. *Id.* The building owner and his contractors attempted to decontaminate the building, and the Department of Labor returned to the renovated building

architect, contractors, and the owner of the building.²⁰ Alaska's Workers' Compensation Act gives employers immunity from these suits.²¹

Scenario 2

Owners of a manufacturing plant in West Virginia exposed their male and female workers to lead on a regular basis.²² A company medical doctor compiled scientific evidence linking lead exposure to fetal harm, such as birth defects. The company decided to exclude from the workplace all women of childbearing age except those who demonstrated they were unable to conceive.²³ As a result of this decision, the company transferred some women to other jobs, with a reduction in pay. Five women underwent sterilization to keep their jobs.²⁴ Thirteen women subsequently filed a class action suit against the company, alleging that the employer's policy of banning women from certain jobs violates Title VII of the Civil Rights Act of 1964.²⁵

Scenario 3

The inadequate ventilation in an office building regularly exposed male and female workers to cigarette smoke.²⁶ A company doctor compiled scientific evidence that established a link between cigarette smoke and harm to developing fetuses.²⁷

in December of 1986. However, employees still experienced physical reactions on the job. *Id.* at 7.

20. *Id.* at 7. The plaintiffs are suing under strict liability, negligence, and warranty theories. They are seeking damages for past and future physical, emotional, and economic injuries. Plaintiffs are seeking punitive damages due to the defendants' allegedly reckless behavior. Also, plaintiffs' family members are seeking damages for loss of consortium.

21. *Id.*

22. This scenario is based on *Oil, Chem. & Atomic Workers Int'l Union v. American Cyanamid Co.*, 741 F.2d 444 (D.C. Cir. 1984), one of the first fetal protection cases. For a more detailed description of the case, see Williams, *Firing the Woman to Protect the Fetus: The Reconciliation of Fetal Protection with Employment Opportunity Goals Under Title VII*, 69 GEO. L.J. 641, 642 (1981).

23. Williams, *supra* note 22, at 641,642, citing letter from J.S. Tobin, M.D., Associate Corporate Medical Director, American Cyanamid Company, to Marjorie M. Smith, ACLU (Dec. 8, 1977).

24. *Id.* at 642. The choice was made because of seniority. The company says in its complaint that the transferred women had an opportunity for reassignment, but elected to stay at the lower paying jobs because of the time of day of the shift.

25. *Id.*

26. Scenario 3 is purely hypothetical.

27. Medical research has not developed to the extent that we can determine that passive smoking affects a developing fetus. However, scientists have studied the effect of

Based on this scientific evidence, the company considered banning women in their childbearing years from areas of the building permeated by cigarette smoke. Meanwhile, both male and female employees sensitive to cigarette smoke were concerned about their health on the job. They experienced symptoms such as coughing, irritability, and shortness of breath. They wanted the company to compensate them for their injuries, and explored their legal options.²⁸

The first scenario depicts a sick building syndrome case;²⁹ the second, a fetal protection case.³⁰ The third scenario, though hypothetical, might develop into either a fetal protection or a sick building syndrome case. It demonstrates that the hazards that lead to sick building syndrome and fetal protection cases can occur together. Some substances in the workplace that generate employee concerns and potential lawsuits also affect a developing fetus and thus trigger an employer's fetal protection response.

These scenarios have led to different kinds of lawsuits. Before focusing on the legal development of these cases, consider the following possibilities. In Scenario 2, the lead exposure case, employees could have pursued some course of action to compel the employer to make the workplace safe, even for fertile women and their unborn children. The women could have sought damages, at least under workers' compensation statutes, for injuries to their childbearing capacity. Instead, however, employers took the first step. Compare the employees' passivity in Scenario 2 to their assertiveness in Scenario 1.

In Scenario 1, the sick building case, the employer could have taken employees who are especially sensitive to indoor pollution out of the workplace—an "employee protection policy." Notice, however, that employees took the first step. Although workers' compensation statutes precluded them from suing the employer, they actively sought legal relief from others such as the building owner.

a mother's smoking on a developing fetus. *See, e.g., Kleinman & Kopstein, Smoking During Pregnancy*, 1967-80, 77 AM. J. PUB. HEALTH 823 (1987). They have also studied the general issue of passive smoking. *See, e.g., Repace & Lowrey, Indoor Air Pollution, Tobacco Smoke, and Public Health*, 208 SCI. 464 (1980); *Passive Smoke: Risk to Nonsmokers Only?*, 131 SCI. NEWS 360 (1987).

28. Employees would complain to OSHA in this situation. They could also file workers' compensation claims. They probably could not sue the employer for civil monetary damages because of exclusivity provisions in workers' compensation statutes. *See infra* text accompanying notes 143-46.

29. *See infra* text accompanying notes 31-133.

30. *See infra* text accompanying notes 134-78.

Both factual and legal reasons help explain why the workplace safety issues presented in Scenarios 1 and 2 have developed differently. Before exploring these reasons, we need to examine the relevant statutes and cases in both fetal protection and sick building syndrome cases.

II.

THE LEGAL DEVELOPMENT OF WORKPLACE SAFETY CASES

A. Sick Building Syndrome: Legal Development

Scientific interest in indoor pollution in homes³¹ and offices³² began in the early 1970s.³³ The general public in America³⁴ and around the world³⁵ has developed an interest in indoor pollution since the early 1980s. This interest includes concern about sick

31. This article focuses on indoor pollution in the workplace. For an in-depth discussion of indoor pollution in residential buildings, see Comment, *Behind Closed Doors: Indoor Air Pollution and Government Policy*, 6 HARV. ENVTL. L. REV. 339 (1982). Many of the Comment's ideas about indoor pollution in the home are also relevant to pollution in the office. For instance, the Comment presents concise scientific information on specific indoor pollutants, such as radon, products of combustion, formaldehyde, asbestos, and chemical fumes. *Id.* at 343-60.

32. One recent book and several recent scientific articles discuss indoor pollution in offices. See, e.g., J. STELLMAN & M. HENIFIN, OFFICE WORK CAN BE DANGEROUS TO YOUR HEALTH 140 (1983) (explains different kinds of air pollution); White, Clarkson & Chang, *Health Effects from Indoor Pollution: Case Studies*, 12 J. COMMUNITY HEALTH 147 (1987) (describes case studies of specific indoor pollution situations, such as malathion contamination of an office, pesticide poisoning in a school, and organic solvents in a school following carpet installation); Godish, *Indoor Air Pollution in Offices and Other Non-residential Buildings*, 48 J. ENVTL. HEALTH 190 (1986) (describes health effects of indoor pollution, investigations of offices for indoor pollution, and causes of indoor air pollution); Taylor, *A Growing Concern with Indoor Air*, 11 EPA J. 18 (1985) (focuses on indoor air pollution in both homes and offices); *Offices Can Be Sick Places to Work In*, NEW SCIENTIST, Dec. 12, 1985 at 36 (considers the effects of temperature in office buildings on employee complaints about the air); Gilbert, *Hazards of the Toxic Office*, SCI. DIG., Aug. 1984 at 24 (describes indoor air pollution and explains ventilation standards).

33. Comment, *supra* note 31, at 339, n. 2.

34. This interest has led to lawsuits. See *infra* text accompanying notes 76-104. The interest has also led to a few articles in management and law-related publications. See Blum, *'Sick Building Syndrome' Structures Face Legal Scrutiny Over Illnesses*, Nat'l L.J., Jan. 25, 1988, at 1, col. 3; The Conservation Foundation, *The Epidemic of Indoor Pollution*, 60 BUS. & SOC'Y REV. 53 (1987); Diamond, *Liability in the Air: The Threat of Indoor Pollution*, A.B.A. J., Nov. 1, 1987, at 78.

35. See Spengler, *IAQ Meeting in Berlin*, INDOOR POLLUTION L. REP., Dec. 1987, at 1. During August, 1987, the Institute for Water, Soil and Air Hygiene hosted the fourth International Conference on Indoor Air Quality and Climate in Berlin. Over 650 scientists, physicians, engineers, architects and public officials from throughout the world attended the conference.

building syndrome, the consequence of some forms of indoor pollution.

Within the last few years, employees,³⁶ legislators³⁷ and government regulators³⁸ have taken an active interest in indoor pollution issues. Courts have become involved in indoor pollution cases involving substances such as asbestos, and are in the initial stages of reviewing cases that focus on the hazards that can lead to sick building syndrome. Before reviewing the legal development of indoor pollution issues in general and sick building syndrome in particular, this section provides some background information.

Parties involved in these disputes have not formulated a uniform definition of indoor pollution.³⁹ In fact, when employees express concerns about health problems they attribute to the workplace environment, some physicians dismiss these concerns as worker hypochondria,⁴⁰ while others view these health problems as a national epidemic that deserves serious attention.⁴¹ Despite this lack of consensus about the importance of health effects of indoor pollution, scientists would agree on some of the general elements of an indoor pollution definition.

Most scientists agree that the methods and materials we use to build and take care of buildings cause indoor pollution. The failure of ventilation systems to filter these pollutants exacerbates the problem.⁴² Contaminants include formaldehyde, asbestos, radon, cigarette and tobacco smoke, airborne bacteria, viruses and fungi, carbon monoxide, and chemicals, such as phenol, methanol, toluene, and xylene.⁴³ Exposure to these contaminants can produce symptoms which range from sneezing to cancer.

Scientists use the phrase "sick building syndrome" to describe the effects of exposure to certain contaminants listed as indoor pollutants and to distinguish it from the health effects that result from all types of indoor pollution. Scientists think that microorganisms, allergens, viruses, and particulates of synthetic materials, such as fi-

36. See *infra* text accompanying notes 76-107.

37. See *infra* text accompanying notes 108-23.

38. See *infra* text accompanying notes 124-33.

39. See Bardana, *supra* note 12, at 39-40.

40. *Id.* at 44. Bardana states that "to the extent that sick building syndrome is an expression of our anxieties, it is a social problem, and not a medical problem at all. In short, for most of America's fifty million office workers, fear is probably the greatest occupational hazard of all."

41. *Id.* at 39-40.

42. See Diamond, *supra* note 34, at 78. This definition is basic. Some scientists describe indoor pollution more technically. See Godish, *supra* note 32, at 190-92.

43. Bardana, *supra* note 12, at 42; Comment, *supra* note 31, at 339-40.

berglass insulation usually cause sick building syndrome.⁴⁴ The syndrome includes a constellation of symptoms, primarily, breathlessness, dry cough, bronchial asthma, rashes and itching.⁴⁵ Cancer-causing agents, such as asbestos⁴⁶ and formaldehyde⁴⁷ are not usually included under causes of "sick building syndrome." Infectious diseases are the most serious type of sick building syndrome. Legionnaire's disease, for example, is fatal in 15-20% of cases.⁴⁸

Most articles that discuss sick building syndrome and indoor pollution in general focus on ventilation systems.⁴⁹ Scientists have long recognized the importance of effective ventilation in buildings.⁵⁰ A ventilation system determines the quality of indoor air by controlling the amount of outside air that flows into the building. It also determines air cleanliness, and the rate at which pollutants are either exhausted to the outside or recirculated through the building. When the ventilation system circulates only limited fresh air or particularly polluted outside air through a building, indoor air pollution becomes a problem.⁵¹

In the United States, the American Society of Heating, Refriger-

44. Bardana, *supra* note 12, at 42-44. Bardana states that building sickness takes one of the five forms, four of which can be linked to a specific type of indoor pollution. These are allergic aleolitis (caused by high levels of airborne microorganisms within a building leading to breathlessness, dry cough, and flulike symptoms), common allergies (aggravated by airborne allergens leading to hay fever and bronchial asthma), infectious diseases (caused by poor ventilation leading to two forms of legionella, which can cause Legionnaire's disease or Pontiac fever, which is less serious), and eye irritations (caused by airborne particles of synthetic materials, like fiberglass insulation). These four forms make up less than half of all building sickness complaints. Bardana estimates that the majority of complaints (60%) fall into a category of undiagnosed mucous irritations, such as sneezing, headaches, soreness of eyes, nose, and throat.

45. *Id.*

46. Asbestos is, however, a serious form of indoor pollution. See Comment, *supra* note 31, at 355-58. Asbestos is present in approximately 2,000 to 3,000 products, including items in offices such as roofing and flooring materials, pipes, and insulation.

47. Formaldehyde is also a serious form of indoor pollution. *Id.* at 352-55. Formaldehyde is primarily an industrial chemical, although it can be present in offices.

48. Bardana, *supra* note 12, at 42.

49. See, e.g., Indoor Air Standard Being Updated, 50 J. ENVTL. HEALTH July-Aug. 1987, at 24 [hereinafter Indoor Air Standard]; Janssen, *Building Industry Awaits Outcome of Ventilation Caucus*, INDOOR POLLUTION L. REP., Sept. 1987, at 1.

50. Bardana, *supra* note 12, at 41. Bardana explains that the importance of ventilation was first acknowledged in the 18th century, when physicians began to link the death of English sailors to crowded, unventilated cabins on their ships. A minimum ventilation standard was first proposed by British architect Thomas Tredgold. The first American to establish a standard was a physician, who announced his standard in 1893. It remained in effect in 25 states for 53 years. In 1946, the American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) established a new standard. This organization has been establishing standards in America since that time

51. J. STELLMAN & M. HENIFIN, *supra* note 32, at 140.

ating and Air Conditioning Engineers (ASHRAE) sets minimum standards for indoor ventilation.⁵² These minimum standards have changed over time due to changing circumstances, such as the energy crisis in the 1970s.⁵³ The ASHRAE has changed its standards since the energy crisis,⁵⁴ and is currently revising these standards.⁵⁵

ASHRAE'S methods of determining and implementing ventilation standards fail to protect office workers for several reasons. First, ASHRAE's standards do not have the force of law.⁵⁶ In addition, these standards are typically part of building codes, which usually apply only to new buildings.⁵⁷ Also, agencies enforce the standards poorly.⁵⁸ Finally, since ASHRAE's guidelines cover only thirty-four compounds,⁵⁹ they fail to regulate hundreds of chemicals present in the workplace.⁶⁰

The energy crisis initiated additional changes in construction materials and architectural designs which increased the prevalence of indoor pollution. For instance, builders used insulation more frequently. The insulation included materials such as formaldehyde, which gave off toxic gases and residues.⁶¹ Owners sealed buildings originally designed with open windows to reduce heating and cooling costs.⁶² Architects designed new buildings with sealed mechanical ventilation systems, rather than windows that open.⁶³ Congress encouraged these changes by providing tax incentives for building owners who reduced energy costs through many methods, including reducing air ventilation.⁶⁴

As ventilation systems became less effective, office workers began

52. Bardana, *supra* note 12, at 41.

53. *Id.*

54. The standard set forth during the energy crisis proved to be inadequate. ASHRAE subsequently established a new standard in 1981. However, this revised standard was controversial because of its emphasis on the regulation of tobacco smoke and the low limit recommended for indoor formaldehyde levels. The version adopted by most business codes today is ASHRAE's 1973 standard, the one formulated during the energy crisis. Janssen, *supra* note 49, at 1.

55. *Id.*; see also Indoor Air Standard, *supra* note 49, at 24. Also, some sources indicate that ASHRAE has already drafted a ventilation standard for acceptable indoor air quality. However, it will be quite some time before it is incorporated into building codes. See The Conservation Foundation, *supra* note 34, at 55.

56. Gilbert, *supra* note 32, at 24.

57. The Conservation Foundation, *supra* note 34, at 55.

58. *Id.*; see also Bardana, *supra* note 12, at 41.

59. Gilbert, *supra* note 32, at 24.

60. *Id.*

61. Bardana, *supra* note 12, at 41-42.

62. J. STELLMAN & M. HENIFIN, *supra* note 32, at 140.

63. Bardana, *supra* note 12, at 41-42.

64. Diamond, *supra* note 34, at 79.

to face a new occupational health hazard. By 1980, sick building syndrome became a major concern of the National Institute for Occupational Safety and Health, the Centers for Disease Control, and state labor and health agencies.⁶⁵ These agencies have increased investigations of health complaints from office workers.⁶⁶ In addition, office workers began to file lawsuits.⁶⁷

Because public interest in sick building syndrome⁶⁸ is so new⁶⁹, there are no judicial decisions available that focus specifically on this syndrome.⁷⁰ However, certain older indoor pollutants, such as asbestos⁷¹ and formaldehyde,⁷² have generated case law. The only sources of judicial guidance for sick building syndrome are those few cases that plaintiffs have settled,⁷³ have filed and are currently litigating,⁷⁴ or have resolved through the workers' compensation system.⁷⁵

The first sick building syndrome case was *Buckley v. Kruger-Bensen-Ziemer*.⁷⁶ Here, an employee of Raytheon Company in California sued several parties who were involved in constructing and furnishing the building in which the employee worked. Specifically, the employee sued an architect, contractor, subcontractors, and

65. Bardana, *supra* note 12, at 42.

66. *Id.* See also Godish, *supra* note 32, at 190. Investigations typically are conducted by local or state health departments, private consultants, in-house corporate industrial hygienists, or health hazard investigation teams of the National Institute of Occupational Safety and Health (NIOSH).

67. It also is not surprising that writers are urging employers to take preventive measures. See, e.g., Robertson, *Prevention is the Best Cure*, INDOOR POLLUTION L. REP. Apr. 1988, at 1 (monitoring indoor air quality will save money in the long run by reducing employee absenteeism and lawsuits). Some articles give advice on how to conduct investigations of indoor pollutants. See, e.g., Godish, *supra* note 32, at 192 (explains how to conduct indoor air investigations); Finkelstein, *The Use of Technical Experts*, INDOOR POLLUTION L. REP. Mar. 1988, at 1 (technical experts can help track down the source of indoor air complaints and provide expert testimony).

68. See *supra* text accompanying notes 44-48.

69. See *supra* text accompanying notes 31-38.

70. Some courts have reached decisions recently that might affect indoor pollution cases indirectly. See, e.g., Kirsch, *Vermont Gets OK to Apply CERCLA to Indoor Air Suit*, INDOOR POLLUTION L. REP. Jan., 1988, at 1 (the state of Vermont succeeded in a novel attempt to stretch the liability provisions of the federal Superfund statute to cover the costs of cleaning up workers' homes that were allegedly contaminated with hazardous chemicals from a worksite).

71. For additional information on asbestos litigation, see generally Sugarman, *Doing Away with Tort Law*, 73 CALIF. L. REV. 555 (1985); Olick, *Chapter 11 — A Dubious Solution to Massive Toxic Tort Liability*, 18 FORUM 361 (1983).

72. For additional information on formaldehyde litigation, see generally *id.*

73. See *infra* text accompanying notes 76-82.

74. See *supra* notes 17-21; see *infra* text accompanying notes 83-84.

75. See *infra* text accompanying notes 99-104.

76. Blum, *supra* note 34, at 1, col. 3.

manufacturers of products used in the building.⁷⁷ Although the employer was immune from common law liability under California's workers' compensation statute,⁷⁸ the employee did file a workers' compensation claim.⁷⁹ The employee alleged that he suffered from exposure to toxic substances in his office building.⁸⁰ This exposure caused him to become dizzy at work, lose his motor control and concentration, fall, hit his head, and subsequently lapse into a coma.⁸¹ Tests indicated he suffered damage to his nervous system and brain. Ultimately, the defendants and employer settled the lawsuit and workers' compensation claim.⁸²

An additional sick building syndrome case, *Henley v. Blomfield Co.*, (described in Scenario 1 in the first section of this article) has been filed in Alaska.⁸³ Here, a variety of fungi contaminated the office building. Doctors determined the plaintiffs suffered from bronchitis, vertigo, hypokalemia, and sinusitis.⁸⁴

Although the two preceding cases have not yielded instructive judicial decisions, they have highlighted employees' probable strategies for recovering in sick building syndrome cases. In both cases employees aggressively asserted their rights to a healthy work environment.⁸⁵ Employees can assert claims against several parties, including manufacturers, sellers of homes, contractors, builders, architects, engineers, and building owners.⁸⁶ These claims will include causes of action under several theories,⁸⁷ including breach of

77. *Id.* at 31, col. 3 & 4.

78. CAL. LABOR CODE § 3602 (West 1988).

79. Blum, *supra* note 34, at 1, col. 3.

80. *Id.* at 1, col. 3.

81. *Id.*

82. *Id.* at 31, col. 3 & 4.

83. *See supra* notes 17-21 and accompanying text. Another lawsuit stemming from the same fact situation is also pending in Alaska. In that case, *Blomfield Co. v. State*, No. 3 AN-87-2082 (3d Jud. Dist. Anchorage), a landlord is suing the state for breaking the lease in the building in which the office workers were exposed to indoor pollutants. The case will probably be resolved through arbitration. Blum, *supra* note 34, at 32, col. 1.

84. *See supra* text accompanying notes 17-21.

85. Employees were not initially assertive in fetal protection cases. *See infra* text accompanying notes 139-50.

86. Diamond, *supra* note 34, at 84.

87. *Id.* Other employee actions might include fraudulent concealment of a workplace hazard, injunctive relief, and suits for unjust dismissal. Similar theories have been asserted in radon cases. *See Radon Liabilities and Defenses*, INDOOR POLLUTION L. REP. Sept. 1987, at 1.

contract,⁸⁸ breach of express⁸⁹ and implied warranties,⁹⁰ negli-

88. Breach of express and implied warranties would constitute breach of contract.

89. Express warranties are defined by the Uniform Commercial Code. Express warranties by the seller are created as follows:

(a) Any affirmation of fact or promise made by the seller to the buyer which relates to the goods and becomes part of the basis of the bargain creates an express warranty that the goods shall conform to the affirmation or promise.

(b) Any description of the goods which is made part of the basis of the bargain creates an express warranty that the goods shall conform to the description.

(c) Any sample or model which is made part of the basis of the bargain creates an express warranty that the whole of the goods shall conform to the sample or model.

U.C.C. § 2-313(1).

90. Implied warranties are defined by the Uniform Commercial Code. The implied warranty of merchantability provides that:

(1) Unless excluded or modified (Section 2-316), a warranty that the goods shall be merchantable is implied in a contract for their sale if the seller is a merchant with respect to goods of that kind. Under this section the serving for value of food or drink to be consumed either on the premises or elsewhere is a sale.

(2) Goods to be merchantable must be at least such as

(a) pass without objection in the trade under the contract description; and

(b) in the case of fungible goods, are of fair average quality within the description; and

(c) are fit for the ordinary purposes for which such goods are used; and

(d) run, within the variations permitted by the agreement, of even kind, quality and quantity within each unit and among all units involved; and

(e) are adequately contained, packaged, and labeled as the agreement may require; and

(f) conform to the promises or affirmations of fact made on the container or label if any.

(3) Unless excluded or modified (Section 2-316) other implied warranties may arise from course of dealing or usage of trade.

U.C.C. § 2-314.

The implied warranty of fitness for a particular purpose provides that:

Where the seller at the time of contracting has reason to know any particular purpose for which the goods are required and that the buyer is relying on the seller's skill or judgment to select or furnish suitable goods, there is unless excluded or modified under the next section an implied warranty that the goods shall be fit for such purpose.

U.C.C. § 2-315.

gence,⁹¹ strict liability,⁹² fraud,⁹³ misrepresentation,⁹⁴ nuisance,⁹⁵ and assault.⁹⁶ Employers might get involved in lawsuits indirectly, through third-party suits.⁹⁷ Employees cannot usually assert direct claims against the employer,⁹⁸ but they can file workers' compensation suits.

Workers who do file workers' compensation claims can point to a case in which a state did accept an employee's claim based on sick building syndrome. In *Goldman v. Broward County Board of Century Commissioners*,⁹⁹ a Florida workers' compensation board accepted an indoor pollution claim as compensable. The case involved a Broward County librarian who had been employed at a county library for two years.¹⁰⁰ She suffered from loss of energy, post-nasal drip, coughing and congestion, burning eyes, sore throats, and loss of voice when she was in the building.¹⁰¹

Ms. Goldman filed a workers' compensation claim which Broward County initially denied. The county stated that Ms. Goldman

91. See generally W. KEETON, D. DOBBS, R. KEETON & D. OWEN, PROSSER AND KEETON ON TORTS 681-89 (5th ed. 1984) [hereinafter PROSSER AND KEETON ON TORTS] (explains negligence and liability for physical harm to persons and tangible things in a products liability context).

92. *Id.* at 692-94 (explains strict liability in tort for physical harm to persons and tangible things in a product liability context). Strict liability is typically defined by section 402A of the Restatement (Second) of Torts, which provides:

(1) One who sells any product in a defective condition unreasonably dangerous to the user or consumer or to his property is subject to liability for physical harm thereby caused to the ultimate user or consumer, or to his property, if

(a) the seller is in the business of selling such a product, and
(b) it is expected to and does reach the user or consumer without substantial change in the condition in which it is sold.

(2) The rule as stated in Subsection (1) applies although

(a) the seller has exercised all possible care in the preparation and sale of his product, and
(b) the user or consumer has not bought the product from or entered into any contractual relation with the seller.

RESTATEMENT (SECOND) OF TORTS § 402A (1965).

93. Fraud and misrepresentation theories are often used interchangeably.

94. PROSSER AND KEETON ON TORTS, *supra* note 91, at 725-70 (explains remedies for misrepresentation, representation and nondisclosure, basis of responsibility, justifiable reliance, and damages for misrepresentation).

95. *Id.* at 616-54 (explains the meaning of nuisance, private nuisance, substantial and unreasonable interference, remedies for nuisance).

96. *Id.* at 43-46 (defines the tort of assault).

97. Diamond, *supra* note 34, at 84; see *infra* note 149 and accompanying text.

98. See *infra* notes 143-46 and accompanying text.

99. *Florida Accepts Employee's Indoor Illness Claim*, INDOOR POLLUTION L. REP., Jan. 1988 at 1.

100. *Id.*

101. *Id.*

suffered "no accident or injury as defined by Florida law, there was no hazard greater to Ms. Goldman than to the general public, and that Ms. Goldman's allergies were personal to her and inherent in her system."¹⁰² Ultimately, however, the County accepted her claim. The board of commissioners based its decision on the testimony of a microbiologist, who stated the *aspergillus niger* contamination constituted a dangerous and hazardous condition.¹⁰³ The commissioners also considered the testimony of Ms. Goldman's physician, which established a link between Ms. Goldman's illness and her exposure to a contaminated workplace.¹⁰⁴

Employees will probably continue to file lawsuits and workers' compensation claims for sick building syndrome and other indoor pollution issues. Employers should consider that employees might find ways to get around workers' compensation restrictions and sue them directly.¹⁰⁵ For example, employees can sue other parties such as contractors or architects, who might find a way to bring the employer in as a third-party defendant.¹⁰⁶ Also, employees can claim the employer intended to expose workers to dangerous workplace conditions.¹⁰⁷ Finally, employees can assert the dual-capacity doctrine, which would allow the employee to sue an employer who

102. *Id.*

103. *Id.*

104. *Id.*

105. See generally Comment, *Exclusivity Provisions of Workers' Compensation Statutes: Will the Dual Injury Principle Crack the Wall of Employer Immunity?*, 55 U. CIN. L. REV. 549 (1986) [hereinafter *Exclusivity Provisions*]. This article focuses on the intentional tort exception to the exclusivity provision of workers' compensation statutes. Specifically, it focuses on fraudulent concealment by employers, and "dual injury" cases.

106. Diamond, *supra* note 34, at 84.

107. See generally *Exclusivity Provisions*, *supra* note 105, at 552-57. The rationale behind exceptions for intentional torts is that workers' compensation statutes are designed to compensate employees who are *accidentally* injured on the job. The presence of intentional conduct takes the injury out of the workers' compensation statutory intent.

Two Ohio cases have important implications in workplace safety cases. In *Blankenship v. Cincinnati Milicron Chem., Inc.*, 69 Ohio St. 2d 608, 433 N.E.2d 572 (1982), the Supreme Court of Ohio held employees could sue their employers for civil damages on an intentional tort claim, outside of the workers' compensation system. That case involved an employer who knowingly exposed workers to dangerous chemicals. The employer failed to warn employees about the dangerous conditions, and also failed to report these conditions to the appropriate government agencies. In another case, *Jones v. VIP Development Co.*, 15 Ohio St. 3d 90, 472 N.E.2d 1046 (1984), the Ohio court adopted a standard of proof that allows extreme negligence, in cases where there is belief that injury is substantially certain to occur, to constitute "intent." See generally *Exclusivity Provisions*, *supra* note 105, at 552-54; see also Ballam, 25 AM. BUS. L.J. 63 (1987) (explores these Ohio cases in detail).

acts in some additional capacity, such as a building owner or operator.¹⁰⁸

One disadvantage of resolving indoor pollution issues through the courts is that so far, the remedies have been compensatory rather than preventative.¹⁰⁹ This may also reflect plaintiff's trial strategies of requesting damages rather than injunctive relief or of filing individual rather than class actions. To prevent injuries, many suggest we need to enact legislation to empower regulatory agencies to study and resolve indoor pollution problems. Some legislators have already introduced indoor pollution bills.¹¹⁰

Senator George Mitchell of Maine introduced the first indoor pollution bill in August of 1987.¹¹¹ This bill, the Indoor Air Quality Act of 1987¹¹² attempts to "create a national program to reduce that threat to human health posed by exposure to indoor pollutants."¹¹³

Specifically, the bill would authorize \$25 million to establish a national research, development, and demonstration program.¹¹⁴ The bill would require the Environmental Protection Agency (EPA) to research the health effects of specific contaminants, such as cleaning solvents, cigarettes, and asbestos and publish indoor contamination health advisories.¹¹⁵ Additionally, the program would issue research grants to state, local, and other agencies.¹¹⁶

The bill also provides \$10 million to develop and publish a national indoor air quality response plan, establish an office of Indoor Air Quality within the EPA's Offices of Air and Radiation, and create a national indoor air quality information clearing house.¹¹⁷ Finally, the bill would establish a senior-level National Air Quality Council that would be chaired by the EPA and include representa-

108. Diamond, *supra* note 34, at 84; see *Exclusivity Provisions*, *supra* note 105, at 554-55.

109. See Comment, *supra* note 31, at 342.

110. Bills that focus on specific indoor pollutants, such as tobacco smoke, asbestos, and radon, are also pending before Congress. *Indoor Air Legislation in Heavy Traffic*, INDOOR POLLUTION L. REP. Nov. 1987, at 3.

111. *1987 Air Quality Act*, 1 INDOOR POLLUTION L. REP. Aug. 1987, at 2. Representative Joe Kennedy has introduced a House version of Senator Mitchell's bill. *Kennedy Bill*, INDOOR POLLUTION L. REP., Jan. 1988, at 2.

112. S. 1629, 100th Cong., 1st Sess. (1987).

113. Shay, *Reagan Administration Calls New Indoor Air Bill Overkill*, INDOOR POLLUTION L. REP., Nov. 1987, at 1,6.

114. *Id.*

115. *Id.*

116. *Id.*

117. *Id.*

tives of other agencies.¹¹⁸

The Reagan administration opposes the Mitchell bill. J. Craig Potter, an EPA official,¹¹⁹ announced the administration's opposition to the bill at a Senate subcommittee hearing.¹²⁰ He stated that "the \$58 million a year program would cost too much and tried to do too much too soon."¹²¹ The administration might find a different version of an indoor air quality act like that drafted by Representative Claudine Schneider more acceptable.¹²² Schneider's bill would raise the Federal budget by less than \$15 million.¹²³

Both of these proposed bills rely on the EPA as the primary regulator of indoor pollution even though the EPA has historically focused its efforts on outdoor pollution.¹²⁴ In addition, the EPA has already demonstrated its reluctance to act on indoor air quality issues. At a hearing to consider whether Congress should amend the Clean Air Act to address indoor pollution,¹²⁵ the EPA said that state and local agencies should resolve these issues.¹²⁶ The EPA intends to emphasize building the capacity of state and local governments, as well as the private sector, to remedy indoor pollution issues.¹²⁷ The EPA could regulate indoor pollution through other

118. *Id.*

119. *Id.* at 1. Potter is the EPA's Assistant Administrator for Air and Radiation.

120. *Id.* This Senate subcommittee is the Environmental Protection Subcommittee of the Senate Environment Committee.

121. *Id.* Democratic and Republican panel members criticized Potter's testimony for showing another Reagan administration attempt to obstruct environmental legislation.

122. *Schneider Bill Update, INDOOR POLLUTION L. REP.*, May 1988, at 2.

123. *No Frills Bill, INDOOR POLLUTION L. REP.*, Nov. 1987, at 2.

124. No federal administrative agencies have rushed to be the primary regulator of indoor pollution. They have been reluctant for several reasons. First, scientific evidence to support their actions is weak. Second, some regulators fear that a focus on indoor pollution will reduce interest in outdoor pollution. Third, at least through the early 1980's, the public had not pressured the government to regulate. Finally, clear statements about statutory authority do not exist. *See Comment, supra* note 31, at 360.

125. Kirsch, *More Attention to Indoor Air Risks Urged, INDOOR POLLUTION L. REP.*, June 1987, at 1. This article explains that the EPA, the scientific community and public interest groups have differing views on how the government should resolve indoor pollution problems. Scientists want additional government funds for research. Public interest groups think the EPA has been ineffective. They want the EPA to regulate indoor pollution under the Clean Air Act, which historically has applied only to outdoor pollution.

126. *Id.* at 4.

127. *Id.*; *See also EPA Reports to Congress on Indoor Pollution Issues, INDOOR POLLUTION L. REP.*, June 1987, at 3. This article summarized an EPA statutorily mandated report to Congress on its activities regarding indoor air pollution. The EPA outlined its program, which has two goals: to identify the nature and magnitude of health and welfare problems posed by indoor air pollution, and to reduce the risk to human health and productivity from exposure to indoor pollution. The EPA plans to

laws that empower them to do so,¹²⁸ but the agency refuses to act aggressively absent a strong Congressional mandate.

Congress could empower other administrative agencies to resolve indoor pollution issues. For residential indoor pollution, the Consumer Product Safety Commission (CPSC) could pursue the issue.¹²⁹ In office situations, the Occupational Safety and Health Administration (OSHA) could act aggressively.¹³⁰ Unfortunately, however, the OSH Act focuses on safety in an industrial context.¹³¹ Investigators have discovered that indoor air contaminants in offices comply with OSHA's standards. Thus OSHA will not respond to the small concentrations of several contaminants that make the workplace hazardous.¹³²

Now that this section has reviewed the factual and legal development of hazards scientists have linked to sick building syndrome, it continues by exploring the factual and legal development of hazards scientists have linked to fetal harm.

B. *Fetal Protection: Legal Development*

Scientists express great concern about occupational health risks that might affect an employee's reproductive capacity or a developing fetus.¹³³ Scientists have studied many substances suspected of causing reproductive harm but many unanswered questions remain.¹³⁴ Legal action in reproductive health cases developed more quickly and along different lines than in sick building syndrome

accomplish these goals by: emphasizing non-regulatory federal action, encouraging state and local governments to play an active role in coordinating and encouraging other federal agencies that have responsibility and authority over indoor air, and coordinating EPA activities with those of the private sector.

128. For example, the EPA could regulate under the Toxic Substances Control Act, which grants the EPA the authority to regulate "chemical substances" that "present an unreasonable risk of injury to health or the environment." 15 U.S.C. §§ 2601-2629 (1976 & Supp. IV 1980). See Comment, *supra* note 31, at 372-73 for a discussion of some of the problems with getting the EPA to regulate substances under TSCA.

129. See Scanlon, *CPSC's Role in Indoor Air Issues*, INDOOR POLLUTION L. REP., Oct. 1987 at 1, 4-5; see also Shay, *supra* note 31, at 374-75.

130. See *infra* text accompanying notes 171-73.

131. Bardana, *supra* note 12, at 42.

132. *Id.*

133. See Fatkin, Ashford, Chess & Richardson, *Chemical Hazards at Work: Whose Business? A Panel Discussion*, 9 HARV. ENVTL. L. REV., 331, 339 (1985) (Panelist Ashford, former chairman of the National Advisory Committee on Occupational Safety and Health, explains how OSHA has also been weakened by jurisdictional battles with the EPA and the CPSC).

134. See generally J. STELLMAN, *WOMEN'S WORK, WOMEN'S HEALTH: MYTHS AND REALITIES* (1977).

cases. Before explaining the legal development of fetal protection cases, this section provides some factual background.

Scientists have linked several substances to a variety of reproductive abnormalities. These substances include chemicals such as lead, benzene, and vinyl chloride¹³⁵ and other substances such as radiation.¹³⁶ Beyond this general linking of substances and harm, scientists face two types of unresolved questions. First, they do not know which of these substances in what doses, can harm a fetus.¹³⁷ Second, they have not yet determined the specific kind of harm a particular hazard might inflict on workers.¹³⁸

Scientists have divided adverse reproductive outcomes caused by toxic substances into three categories: fertility, chromosomal and developmental. First, some substances affect male and/or female fertility or ability to reproduce but do not cause fetal harm.¹³⁹ Second, some substances affect the chromosomes of a worker prior to or at the time of conception.¹⁴⁰ These chromosomal abnormalities can produce spontaneous abortion of the fetus, retardation of fetal development or birth defects in a child.¹⁴¹ Third, some substances affect the developing fetus itself. These substances can cause abnormal development directly, or by transmission to the fetus through the placenta.¹⁴²

Employees and their children have legal remedies available to compensate them for reproductive injuries. Recall, however, that employers took the first legal step in these situations by enacting fetal protection policies. This may be a response to the legal difficulties employees and their children face in these cases.

Workers' compensation statutes present the greatest barrier to employees seeking damages for reproductive injuries. Workers' compensation statutes provide compensation to employees for inju-

135. For a more in-depth discussion of the scientific aspects of reproductive hazards, see McElveen, *Reproductive Hazards in the Workplace*, 20 FORUM 547, 547 (1985); See also Timko, *Exploring the Limits of Legal Duty: A Union's Responsibility with Respect to Fetal Protection Policies*, 23 HARV. J. ON LEGIS. 159, 164-67 (1986).

136. See generally Stellman, *Protective Legislation, Ionizing Radiation and Health: A New Appraisal and International Survey*, 12 WOMEN & HEALTH 105 (1987). This article uses the hazard of ionizing radiation as a specific case study of issues related to fetal protection, such as the failure to recognize that many hazards that affect women also affect men.

137. McElveen, *supra* note 135, at 547.

138. *Id.* at 560.

139. *Id.*

140. *Id.*

141. *Id.*

142. *Id.*

ries that arise out of and in the course of employment;¹⁴³ they apply only to work-related injuries.¹⁴⁴ These statutes are advantageous to employers because their exclusive remedy provisions protect employers from common law tort suits by employees to recover for work-related injuries.¹⁴⁵ The advantage to the employee of quick compensation must be weighed against the limited financial benefits provided.¹⁴⁶

These statutes present two special problems for employees with reproductive injuries. First, the exclusivity provisions deny employees the possibility of receiving large tort damages.¹⁴⁷ Second, courts do not consider reproductive injuries to be "work-related" because they do not affect the employee's ability to perform his or her job.¹⁴⁸ In rare circumstances, employees can avoid workers' compensation exclusivity principles, such as when the employer engages in intentionally harmful conduct.¹⁴⁹ Overall, however, workers' compensation statutes discourage workers with reproductive injuries from filing claims.

Children injured because of hazards their parents experienced on the job do not face these serious problems. The exclusivity principles do not bar tort suits by children against employers.¹⁵⁰

The idea that children might sue employers generated a considerable amount of fear in the business community in the 1970s, and many employers predicted widespread litigation.¹⁵¹ In fact, these fears were groundless and children did not resort to litigation on a broad scale.¹⁵² This perceived impending crisis spurred employers to enact fetal protection policies. Typically, these policies ban female employees in their childbearing years from jobs that would expose them to potentially harmful substances. Although employees had not legally challenged their initial exposure to reproductive hazards, they did challenge the fetal protection policies themselves.

143. See 1 A. LARSON, WORKMEN'S COMPENSATION LAW § 2.10 (1983).

144. *Id.*

145. See *Exclusivity Provisions*, *supra* note 105, at 549.

146. *Id.*

147. *Id.*

148. McElveen, *supra* note 135, at 561.

149. See *supra* notes 105-108 and accompanying text.

150. McElveen, *supra* note 135, at 563.

151. See Williams, *supra* note 22, at 644. This prediction triggered fetal protection policies. Employers also justify their fetal protection programs by claiming they have a moral obligation to protect the next generation.

152. McElveen, *supra* note 135, at 548 ("widespread litigation has not yet occurred"); Williams, *supra* note 22, at 646 ("To date, employers' fears about suits by offspring of women have not been realized").

These policies, which expressly ban women but not men from the workplace, justified female plaintiffs' suspicions that fetal protection policies run counter to the protection from unlawful sex discrimination guaranteed by Title VII of the Civil Rights Act of 1964 (Title VII).¹⁵³ Employers claimed that their fetal protection policies were enacted in the interests of employee and fetal safety. Thus, they were merely complying with the OSH Act's mandate that employers must "furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to employees."¹⁵⁴

Courts have attempted to balance employee and fetal safety with women's rights to enjoy a workplace free from sexual discrimination in some important judicial decisions. Although the United States Supreme Court has not yet ruled on the legality of fetal protection policies, United States Courts of Appeals have rendered

153. 42 U.S.C. § 2000e-2(a) (1982). Under Title VII, plaintiffs with discrimination claims typically base their claims on disparate treatment and disparate impact theories. Most courts have scrutinized fetal protection cases under the disparate impact theory. Under this theory, courts do not focus on an employer's discriminatory intent. Rather, they look at an employer's facially neutral employment practice that has a disproportionate impact on women. If the plaintiff shows this kind of practice, the employer has the opportunity to show the apparently neutral job practice is required because of "business necessity." Finally, plaintiffs can respond by showing an alternative business practice that would serve the employer's needs, but would not have as great an impact on women.

In fetal protection cases, courts typically focus on the "business necessity" element of disparate impact claims, and the final element, the review of less discriminatory alternatives. See generally, LEVIN-EPSTEIN, PRIMER OF EQUAL OPPORTUNITY (4th ed. 1987).

For articles that provide Title VII information, in the context of fetal protection, see e.g., Note, *Birth Defects Caused by Parental Exposure to Workplace Hazards, The Interface of Title VII with OSHA and Tort Law*, 12 U. MICH. J.L. REF., 237 (1979); Note, *Exclusionary Employment Practices in Hazardous Industries: Protection or Discrimination?*, 5 COLUM. J. ENVTL. L. 97 (1978); Ashford & Caldart, *The Control of Reproductive Hazards in the Workplace: A Prescription for Prevention*, 5 INDUS. REL. L.J. 523 (1983); Furnish, *Prenatal Exposure to Fetally Toxic Work Environments: The Dilemma of the 1978 Pregnancy Amendments to Title VII of the Civil Rights Act of 1964*, 66 IOWA L. REV. 63 (1980); Nothstein & Ayres, *Sex-Based Considerations of Differentiation in the Workplace: Exploring the Biomedical Interface Between OSHA and Title VII*, 26 VILL. L. REV. 239 (1981).

154. 29 U.S.C. § 654(a)(1) (1970). Some employers have argued that the OSH Act requires employers to make the workplace safe even for women in their childbearing years. This argument has failed. See note 158 *infra*. For another situation in which the OSH Act and Title VII are both at issue, see Shapiro, *Remedies for Sex-Discriminatory Health and Safety Conditions in Male-Dominated Industrial Jobs*, 10 GOLDEN GATE U. L. REV. 1087 (1980) (Both the OSH Act and Title VII are violated by the maintenance of equipment and machinery designed to meet male, rather than male-female averages).

some significant decisions: *Wright v. Olin Corporation*,¹⁵⁵ *Zuniga v. Kleberg County Hospital*,¹⁵⁶ and *Hayes v. Shelby Memorial Hospital*.¹⁵⁷ *Oil, Chemical & Atomic Workers International Union v. American Cyanimid Company*¹⁵⁸ attracted renewed public attention when Judge Bork, who authored the decision, was unsuccessfully nominated for a position on the United States Supreme Court.¹⁵⁹

Legal experts have scrutinized these cases in detail,¹⁶⁰ so this article will not review them in detail. However, *Wright*¹⁶¹ is worth reviewing because it shows how courts in general have resolved fetal protection issues. In *Wright*, the United States Court of Appeals for the Fourth Circuit considered the legality of the Olin Corporation's fetal protection policy. The purpose of the policy was "to protect the unborn fetuses of pregnant women from the damaging toxic effects of certain chemicals."¹⁶² At Olin, lead poisoning posed the greatest danger to developing fetuses.

Olin decided to separate their jobs into three categories: restricted, controlled and unrestricted. Restricted jobs banned fertile women aged five through sixty-three. Controlled jobs allowed women only after individual evaluation and clearance. Women admitted to these positions had to sign a form acknowledging their awareness of the risks involved. All women could apply for un-

155. 697 F.2d 1172 (4th Cir. 1982). For extensive discussions of this case, see, e.g., Note, *Employment Discrimination-Fetal Vulnerability and the 1978 Pregnancy Amendments—Wright v. Olin Corporation*, 19 WAKE FOREST L. REV. 905 (1983); Note, *Employment Discrimination—Wright v. Olin Corp.: Title VII and the Exclusion of Women from the Fetally Toxic Workplace*, 62 N.C. L. REV. 1068 (1984); Note, *The Legality of Fetal Protection Policies Under Title VII: Wright v. Olin Corp.*, 34 SYRACUSE L. REV. 1131 (1983).

156. 692 F.2d 986 (5th Cir. 1982).

157. 726 F.2d 1543 (11th Cir. 1984).

158. 741 F.2d 444 (D.C. Cir. 1984). In this case, a Union appealed an order from an OSHA review commission that stated that an employer's policy of giving fertile women working at a plant where they were exposed to lead the choice of being sterilized or losing their jobs was not cognizable under the OSH Act. Judge Bork held that the OSH Act's general duty clause does not apply to policies because they are not physical conditions of the workplace. Also, the employer's policy did not constitute a "hazard" under the general duty clause.

159. Originally, the case received public attention. See, e.g., Bronson, *Issues of Fetal Damage Stir Women at Chemical Plants*, Wall St. J., Feb. 9, 1979, at 1, col. 1. The case received additional attention when Bork's nomination to the United States Supreme Court was pending. See generally, *Did Robert Bork Bend the Rules in a 1984 Case?* U.S. News & World Rep., July 20, 1987, at 12; *The Bork Battle*, 110 NEWSWEEK, Sept. 14, 1987, at 22.

160. See notes 153 & 155 *supra*.

161. 697 F.2d 1172 (4th Cir. 1982).

162. *Id.* at 1182.

restricted jobs.¹⁶³

The United States Court of Appeals for the Fourth Circuit did not outlaw this fetal protection policy under Title VII. Rather, the court set forth a strict test to determine the legality of fetal protection policies.¹⁶⁴ First, the employer must show that the "significant risk of harm to the unborn children of women workers from their exposure during pregnancy to toxic hazards in the workplace make necessary, for the safety of unborn children, that fertile women workers, though not men workers, be appropriately restricted from exposure to those hazards."¹⁶⁵ Second, if the employer meets the first part of the test, the employee/plaintiff can rebut the employer's justification for the policy by showing "acceptable alternative" policies the employer could pursue that would accomplish the employer's safety goals, but would have a lesser differential impact between men and women.¹⁶⁶

The United States Courts of Appeals for the Fifth and Eleventh Circuits used a similar¹⁶⁷ analysis to resolve fetal protection issues in *Zuniga*¹⁶⁸ and *Hayes*.¹⁶⁹ These cases show that fetal protection policies must pass a relatively burdensome legal test to survive an employee's challenge. Bork decided *Oil, Chemical & Atomic Workers*,¹⁷⁰ under the OSH Act.

In addition to judicial responses to hazards that affect employees' reproductive capacities, legislative responses seem appropriate.

163. *Id.*

164. *Id.* at 1190-92. This test is based on the "business necessity" and "less discriminatory alternative" elements of disparate impact cases. See note 153 *supra*.

165. *Id.* at 1190-91.

166. *Id.* at 1191-92.

167. Several differences exist in the courts' reasoning in these cases. For example, *Hayes* was decided after the Pregnancy Discrimination Act (PDA), 42 U.S.C § 2000e (K) was enacted; *Wright* and *Zuniga* were decided before the PDA went into effect. Also, some courts have classified fetuses as "business invitees," while others have not.

168. The *Zuniga* case involved an X-ray technician who filed a lawsuit against her employer after her employer fired her when the employer found out the plaintiff was pregnant. The United States Court of Appeals for the Fifth Circuit held that the plaintiff proved a prima facie disparate impact case under Title VII, and that the employer could try to prove the business necessity defense. The court determined that the hospital incorrectly failed to consider less discriminatory alternatives in the plaintiff's situation. *Zuniga v. Kleberg County Hospital*, 692 F.2d 986 (5th Cir. 1982).

169. In *Hayes*, the United States District Court for the Eleventh Circuit also faced a case in which a hospital had fired an X-ray technician because of her pregnancy. The court held that the employer violated Title VII. The court determined that the employer had not established the link between the plaintiff's exposure to radiation and fetal harm, and that the hospital could have pursued less discriminatory alternatives. *Hayes v. Shelby Memorial Hospital*, 726 F.2d 1543 (11th Cir. 1984).

170. See note 158 *supra*.

However, while Congress proposed the Indoor Air Quality Act as a response to indoor pollution, it has not adopted a special "Reproductive Hazards Act." However, other federal laws like the OSH Act should protect employees in these situations.

Unfortunately, OSHA has taken few steps to protect employees from hazards that affect their reproductive ability and their unborn children.¹⁷¹ OSHA has regulated few workplace toxins. The agency has been particularly ineffective under the Reagan administration, which has cut its budget and put apathetic leaders in charge of establishing new standards.¹⁷² Thus, OSHA fails to regulate several substances. Even if OSHA does regulate a particular substance, the standards must be "feasible," from the employer's point of view, thus current or future standards might not adequately protect either adults or fetuses.¹⁷³

In addition to OSHA, only the Equal Employment Opportunity Commission (EEOC) has responded to reproductive hazards. However, the EEOC has addressed the fetal protection policies themselves, not the hazards that preceded them.¹⁷⁴ In 1980, the EEOC and the Department of Labor proposed guidelines for the policies.¹⁷⁵ Then, in 1981, the EEOC withdrew these proposed guidelines and decided to review policies on a case-by-case basis.¹⁷⁶ The EEOC has not, however, scrutinized fetal protection policies which currently regulate thousands of workplaces.¹⁷⁷ These policies continue to exclude women from particular jobs.¹⁷⁸ Meanwhile, the

171. See *Employment Rights of Women*, *supra* note 13, at 1119 ("Despite the presence of more than a thousand substances in the work environment with some harmful capacity, only a fraction are effectively regulated."). Another law that might help is the Toxic Substances Control Act. However, the EPA has not enforced that law aggressively. See Timko, *supra* note 135, at 171-72.

172. Timko, *supra* note 135, at 169.

173. *Id.*

174. Interpretive Guidelines, 45 Fed. Reg. 7514 (to be codified at 41 C.F.R. Pt. 60-20) (proposed Feb. 1, 1980).

175. *Id.*

176. Withdrawal of Proposed Interpretive Guidelines, 46 Fed. Reg. 3916 (1981).

177. Timko, *supra* note 135, at 174.

178. In 1979, reporters estimated that at least 100,000 hazardous jobs are closed to women because of fetal protection policies. Williams, *supra* note 22, at 647.

It is hard to estimate whether the number of policies has risen or decreased since that time. On the one hand, such policies might have increased because courts have determined the policies are legal. Also, employers might still be fearful of lawsuits by children exposed to hazardous conditions through parental exposure in the workplace. On the other hand, since courts have scrutinized fetal protection policies carefully, employers might be reluctant to enact them because they might fear that women will challenge the policies. Also, our society's shift from blue-collar to white-collar work might make the policies less necessary because white-collar jobs are typically less hazardous.

government still fails to aggressively regulate the hazards that originally stimulated fetal protection policies.

III.

INTEGRATION AND EVALUATION OF SICK BUILDING SYNDROME AND FETAL PROTECTION CASES

Fetal protection and sick building syndrome cases offer several interesting points of comparison. This section presents these points and details inadequacies and inconsistencies in our legal system's response to these workplace safety problems.

In the first place, both types of cases began with an occupational health hazard OSHA could not correct or prevent. In sick building cases,¹⁷⁹ OSHA failed to shield office workers from harmful exposure to contaminants, nor did it protect women in their childbearing years from harmful exposure to various chemicals and radiation.¹⁸⁰ If employers had complied with the OSH Act's general mandate,¹⁸¹ employees would not have needed to pursue legal remedies.

Second, sick building syndrome cases have arisen in white-collar jobs, while fetal protection cases have arisen primarily in blue-collar jobs.¹⁸² Thus, each case involves different risks and remedies. However, that does not mean one risk is more serious than the other.

Clearly office work is safer than coal mining or working in a steel mill.¹⁸³ Yet office hazards affect many more people than factory or mine hazards because our society has shifted toward a service-oriented economy.¹⁸⁴ In addition to their greater numbers, office employees have higher safety expectations. Thus, blue-collar workers accept conditions white-collar workers may find intolerable.¹⁸⁵ The

179. See *supra* notes 130-33 and accompanying text.

180. See *supra* notes 170-73 and accompanying text.

181. See *supra* text accompanying note 154.

182. See *Employment Rights of Women, supra* note 13, at 1120. Examples of blue-collar fetal protection policies include ones at Bunker Hill smelter in Kellogg, Idaho (lead exposure), St. Joe Minerals Corporation (lead exposure), Delco-Remy Division of General Motors (battery plant-lead exposure); see also Timko, *supra* note 135, at 162. (Fetal protection policies exist or have existed at several major blue-collar companies, including B.F. Goodrich, Allied Chemical, Dow Chemical, DuPont, Firestone, General Motors, Goodyear, Gulf Oil, Monsanto, and Sun Oil).

183. STELLMAN & HENIFIN, *supra* note 32, at 164 (OSHA focuses on heavy industry, not office work); see also Bardana, *supra* note 12 at 44 ("Ramazzini's coal miners and Dickens's factory workers would surely have been amused by our concern over indoor air quality.").

184. Bardana, *supra* note 12, at 41; see also STELLMAN & HENIFIN, *supra* note 32, at 12.

185. Blum, *supra* note 34, at 32, col. 4 (quote by Jeanne Stellman).

office worker is concerned about comfort and any threat to health, while the blue-collar worker focuses on serious or life-threatening hazards.¹⁸⁶ However, indoor pollution includes a wide range of conditions, from minor illnesses to life threatening asbestos contamination. Thus, many people associate sick building syndrome with asbestos cases and consequently attach greater importance to sick building syndrome cases.¹⁸⁷

The preceding two points indicate that Congress should consider revising the OSH Act. First, Congress should redefine the "feasibility" aspect of employer compliance with the law.¹⁸⁸ If employers did not have this escape, they would be forced to consider remedying workplace hazards, rather than banning women from the workplace. Second, OSHA should go beyond its historic concern with heavy industry and develop standards that are appropriate for office buildings.¹⁸⁹ The societal shift from heavy industry to service-oriented job requires revisions in workplace safety laws. Employers in office buildings can comply with the current OSHA standards, but these inadequate standards do not prevent sick building syndrome.

A third distinction between the two cases is that fetal protection cases to date have involved female employees and unborn children; sick building syndrome cases commonly involve both female and male employees, and no unborn children.¹⁹⁰ This distinction allows us to question employers' rationale for enacting employment bans in one case but not the other and leads to two observations. First, fetal protection cases became a "women's issue," while indoor pollution cases did not. Second, the presence of unborn children in fetal protection cases presents a greater threat to employers than workers suffering from sick building syndrome.

Despite society's disparate treatment of these cases, fetal protection cases are no more a "women's issue" than sick building syndrome cases. Scientifically, it is difficult to justify banning only women from exposure to workplace hazards which may also impair male reproductive capacities.¹⁹¹ Legal scholars have suggested that

186. *Id.*

187. *See* note 71 *supra*.

188. The OSH Act requires OSHA standards to be "feasible." OSH Act § 6(6)(5), 29 U.S.C. § 655 (b)(5) (1982).

189. STELLMAN & HENIFIN, *supra* note 32, at 157.

190. However, sick building cases might involve unborn children in the future. *See supra* notes 26-28 and accompanying text.

191. *See, e.g.,* Note, *supra* note 153, at 102 (anesthetic gases affect both men and women); *Employment Rights of Women*, *supra* note 13, at 1117-18 ("Men's workplace exposure to hazardous substances has been linked to not only personal procreative dis-

the fetal protection issue presents another example of protecting women based on unjustified assumptions about their gender.¹⁹² Thus we "protect" only women in a situation in which both women and men need protection. We should eliminate workplace hazards for all employees.

Suspiciously, employers have enacted fetal protection policies in male-dominated, but not female-dominated industries.¹⁹³ For instance, we do not "protect" nurses by banning them from the workplace, despite their exposure to radiation.¹⁹⁴ This inconsistent policy suggests discriminatory motives on the part of the employers.

Another interesting question related to this "women's issue" is why employers proposed employment bans for employees exposed to reproductive hazards, but not for employees exposed to indoor pollution. Employers could have chosen to single out those employees more susceptible to indoor air problems, such as those with a history of allergies or asthma, and ban them from the workplace.

Employers probably have not imposed these bans for several reasons. First, they might fear lawsuits based on discrimination against handicapped individuals;¹⁹⁵ although current law is unclear as to whether sensitivity to office contaminants constitutes a "handicap."¹⁹⁶ Second, employers can more easily distinguish female from male employees than sensitive, allergy-prone employees from non-sensitive ones. Third, employers' need for workers might make them reluctant to ban employees from offices. In fetal protection cases employers did not experience labor shortages when they banned women from the workplace because women constituted a

orders, but also to reproductive abnormalities in their wives . . . and to deaths of and defects in their children."); Stellman, *supra* note 136, at 19 ("Ionizing radiation exposure is thus an example of an occupational hazard where . . . the male is more vulnerable [than the female]."); STELLMAN, *supra* note 134, at 179 ("there is good evidence that lead affects male reproductive ability.").

192. See, e.g., Williams, *supra* note 22, at 653-55 (The author provides historical examples of special limits placed on women's employment in the name of the health of their offspring, such as maximum hour laws); See also Stellman, *supra* note 136, at 107 (The author explains this country's history of gender-based protectionism. For example, some states prohibited women from traditional male jobs such as skilled factory work by enacting night prohibition rules, but they still permitted women to work in traditionally female jobs, such as nursing).

193. Stellman, *supra* note 136, at 122-23.

194. *Id.*

195. These lawsuits would be brought under the Rehabilitation Act of 1973, 29 U.S.C. § 701 (1984; amended October 21, 1986).

196. See generally Larson, *What Disabilities are Protected Under the Rehabilitation Act of 1973?*, 37 LAB. L.J. 752, 759-60 (1986) (explaining that it remains unclear whether sensitivity to tobacco smoke will be regarded as a protected handicap. A few courts have ruled on the issue. So far, the decisions have been split.)

small minority of workers in blue-collar settings,¹⁹⁷ but women dominate the office workforce.

The preceding discussion suggests that fetal protection issues are not only "women's issues." When the United States Supreme Court ultimately rules on a fetal protection case, it should strike these policies down as discriminatory. All employees working under hazardous conditions in the future must be careful lest their situation become merely a "women's issue."

The presence of unborn children in fetal protection but not indoor pollution cases has interesting implications regarding workers' compensation statutes. The hazards that relate to reproductive problems constitute a greater threat to employers than indoor pollution problems because damaged children can sue for tort damages, while employees can not.¹⁹⁸ If Congress revised workers compensation statutes to provide that damaged children fall under the exclusivity principle and can not sue for tort damages, fetal protection policies would lose their attractiveness to employers.¹⁹⁹ However, this would not resolve our concerns about safety because men, women, and developing fetuses would still suffer from workplace hazards. The exclusivity principle is less burdensome to sick building syndrome victims who can sue other parties, architects and contractors for example, instead of employers.²⁰⁰

In addition, fetal protection cases preceded sick building syndrome cases.²⁰¹ Perhaps our value assumptions evolved over time and we are now more concerned about safety than eager for technological progress. Further, our scientific knowledge changes over

197. For example, when the American Cyanamid Corporation announced its fetal protection policy in 1977, only 400 of 41,000 workers were women. Removing women from the workforce did not have a major impact on production. Note, *supra* note 153, at 101.

198. See note 150 and accompanying text *supra*. But see *Barth v. Firestone Tire and Rubber Co.*, 661 F. Supp. 193 (N.D. Cal. 1987) for a novel approach that gave a worker the right to sue the employer for state tort claims. In this case, the plaintiff succeeding in convincing the court that he did not have an "injury" for workers' compensation purposes, but that he did have an injury sufficient to state a tort claim against his employer. He claimed injury in that his exposure to chemicals on the job increased his risk of cancer. Employees exposed to reproductive hazards could make the same argument. See generally Kirsch, *Barth* Decision Encourages Suits, *INDOOR POLLUTION L. REP.*, Aug., 1987, at 1,4.

199. Legal scholars have made this suggestion. See generally, Williams, *supra* note 22.

200. See text accompanying notes 76-82 *supra*.

201. Sick building syndrome cases have been filed at the trial court level within the past few years; appellate courts were reviewing fetal protection cases in the early 1980s.

time.²⁰² Employees in sick building cases have an advantage if scientists can provide plaintiffs with more accurate information about indoor pollution. As scientists learn more about substances that cause fetal harm, legislators and courts should go back and review fetal protection cases to see which situations truly warrant employment bans.

Finally, unions have expressed an interest in sick building syndrome,²⁰³ while, as with most "women's issues," unions have not supported employees in fetal protection cases.²⁰⁴ Unions, which have a significant interest in increasing their membership, might focus on issues such as indoor pollution. By doing so, they can attract white-collar workers, who historically have not joined unions.²⁰⁵ Perhaps unions will reconsider their position on fetal protection policies for the same reason.

CONCLUSION

Employers, courts, legislators, government regulators, and employees all have a legitimate interest in workplace safety. However, their interests diverge because each places different weight on progress, profits, and safety. All of these parties will continue to argue vigorously over how to balance these competing goals, for we will never reach a consensus about the relative importance of workers' health and technological improvements. The most we can ask for is that policymakers will carefully consider complicated workplace issues and try to create workplaces free of gender discrimination that balance our needs for safety with our needs for progress.

202. See generally Bazelon, *Science and Uncertainty: A Jurist's View*, 5 HARV. ENVTL. L. REV. 202 (1981); LANGUAGE OF RISK, *supra* note 1, at 18-19.

203. Unions have adopted indoor pollution as an issue that might help them gain new members. Rieland, *Is Your Office Making You Sick?* WASHINGTONIAN, Mar. 1988, at 116, 122.

204. See Timko, *supra* note 135, at 160-61 ("labor unions have not played a very significant role in either developing or challenging fetal protection policies"); see generally WOMEN AND TRADE UNIONS IN ELEVEN INDUSTRIALIZED COUNTRIES II (1984).

205. See Doyle, *Area Wage Surveys Shed Light on Declines in Unionization*, 108 MONTHLY LAB. REV. 13, 17 (1985); see also Hirsch, *The Determination of Unionization: An Analysis of Interarea Differences*, 33 INDUS. & LAB. REL. REV. 147, 149, 155 (1980).

