Perpetuating risk? Workers' compensation and the persistence of occupational injuries

Emily A Spieler

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ARTICLE

PERPETUATING RISK? WORKERS’ COMPENSATION AND THE PERSISTENCE OF OCCUPATIONAL INJURIES

Emily A. Spieler

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I. INTRODUCTION

In 1992, state and federal workers’ compensation programs\(^1\) consumed over sixty-two billion dollars.\(^2\) This figure dwarfs, by a factor of over 100, the combined budgets of the three federal agencies whose primary focus is on the

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1. These include state workers’ compensation programs which provide wage replacement (temporary total and permanent disability benefits), permanent partial disability benefits, and medical and rehabilitation treatment related to occupational injuries or illnesses arising out of employment, as well as equivalent federal programs such as those under the Federal Employees’ Compensation Act, 5 U.S.C. §§ 8101-8193 (1988) (providing compensation to federal government employees), the Black Lung Benefits Act, 30 U.S.C. §§ 901-945 (1988) (providing compensation for lung diseases associated with coal mining), and the Longshore and Harbor Workers’ Compensation Act, 33 U.S.C. §§ 901-950 (1988) (providing compensation for ship, harbor, shipyard, railroad, river, and other workers).

2. John F. Burton, Jr., Workers’ Compensation Costs, 1960-1992: The Increases, The Causes, and The Consequences, JOHN BURTON’S WORKERS’ COMPENSATION MONITOR, Mar.-Apr. 1993, at 1, 1 [hereinafter Burton (1993)]. This 1992 figure is an estimate; final data were not yet available. Id. Other sources put the figure higher. E.g., Richard W. Palczynski, Coping with the Crisis, BEST’S REV., Nov. 1992, at 69, 69 (stating that the amount was $65 billion in 1992 and that it grows by 10% each year); Cecily Raiborn & Dinah Payne, The Big Dark Cloud of Workers’ Compensation: Does It Have A Silver Lining?, 44 LAB. L.J. 554, 554 (1993) (setting the amount in 1991 at $70 billion, or double the cost in 1985).
occupational safety and health of American workers. In fact, workers' compensation, designed to compensate victims of work-related injuries, illnesses, and fatalities, represents our primary allocation of publicly mandated funds to safety and health in the workplace. Not surprisingly, the dramatic and persistent increases in these costs in recent years have not been welcomed by employers (who must pay them), by politicians (who must confront the political pressure which accompanies them), or by workers and labor unions (who must defend benefit levels in the political arena).

At the same time, available data appear to indicate that injury rates, and in particular injuries which result in lost work time, have not declined during this period of exploding costs. We are thus confronted with two inescapable and obvious facts: the persistence of occupationally-induced morbidity and mortality continues to prevent substantial

3. In 1992, the budgets for key federal occupational safety and health agencies were: Occupational Safety and Health Administration (OSHA), $297.08 million; Mine Safety and Health Administration (MSHA), $182.04 million; and National Institute for Occupational Safety and Health (NIOSH), $103.45 million; for a total of $582.57 million. BUDGET OF THE UNITED STATES GOVERNMENT: FISCAL YEAR 1993, apps. One-691 to One-694; NIOSH budget information provided by Jennifer Ballew, Acting Principal Management Official, NIOSH, October 18, 1993. The Congressionally approved budget for NIOSH is reduced to an allocation of $99.259 million within the Centers for Disease Control and Prevention (CDC). Ballew, supra. OSHA, MSHA, and NIOSH are the only agencies whose exclusive jurisdiction relates to occupational safety and health; this does not, however, represent the total outlay for health and safety nationally. Twenty-three states have approved state plans and therefore enforce the general occupational safety and health standards; state allocations to these agencies' budgets are not tallied anywhere. In addition, numerous federal agencies are charged by other laws with specific occupational health and safety enforcement and related activities. For example, the Environmental Protection Agency (EPA) prescribes regulations to protect workers engaged in hand labor operations in fields treated with pesticides pursuant to the Federal Insecticide, Fungicide, and Rodenticide Act Amendments of 1988, 7 U.S.C. § 136w (1988). The EPA is also directed to manage asbestos contractor accreditation and testing pursuant to the Asbestos Hazard Emergency Response Act of 1986, 15 U.S.C. §§ 2646(b)-2655 (1988). The Occupational Safety and Health Administration (OSHA) and the EPA regulate conditions for workers engaged in hazardous waste and emergency response operations under the Superfund Amendments and Reauthorization Act of 1986, 42 U.S.C. §§ 9651(f) (1988). The Nuclear Regulatory Commission (NRC) is responsible for safety and regulation involving all facilities and materials associated with the processing, transport, and handling of nuclear materials pursuant to the Energy Reorganization Act of 1974, 42 U.S.C. § 5844 (1988). The Department of Transportation enforces occupational standards under the Federal Railroad Safety Act of 1970, 45 U.S.C. § 431 (1988). The Department of Transportation now enforces the Motor Carrier Safety Act of 1990, 49 U.S.C. §§ 2501-2521 (1992), which covers commercial motor vehicle safety vehicle operators. No federal office maintains a total record of the relevant budget allocations.

4. Refer to part II.A infra.

5. Refer to part II.B infra.
reduction in aggregate workers' compensation costs; and the high cost of this social insurance program expends resources which might better be applied elsewhere. American workers and enterprises are therefore paying a price for both the persistent levels of injury and disease and the growing costs of workers' compensation.

It would seem reasonable to expect that rising compensation costs would stimulate employers to engage in efforts to prevent occupational injury and disease. There is no persuasive evidence that this is so, however. Neither aggregate safety data nor more focused empirical studies give strong support to the notion that the high costs of workers' compensation in the aggregate, or enterprise-specific costs, have motivated large numbers of employers to take injury prevention activities seriously. This is remarkable, in view of the fact that empirical studies do show that enterprises with aggressive safety programs often exhibit lower, sometimes substantially lower, workers' compensation costs, and that the reduction in these costs more than offsets the cost of safety initiatives.

There is no consensus with regard to defining the socially optimal level of safety in the workplace. Public health

6. Refer to notes 136-41 infra and accompanying text.

7. See Rochelle V. Habeck et al., Disability Prevention and Management and Workers' Compensation Claims, at V-15 (1988) [hereinafter Upjohn Report]; Cynthia Robinson, Office of Policy Research, California Department of Insurance, Lowering Workers' Compensation Insurance Costs by Reducing Injuries and Illnesses at Work 11 (1993) [hereinafter California Insurance Study]. Workers Compensation: Strategies for Lowering Costs and Reducing Workers' Suffering (Edward M. Welch ed., 1989) [hereinafter Welch]. It is thus not at all surprising that the failure of deterrence in this field has been previously noted. See, e.g., Felice Morgenstern, Deterrence and Compensation: Legal Liability in Occupational Safety and Health 65, 65 (1982); Robert S. Smith, Have OSHA and Workers' Compensation Made the Workplace Safer?, in Research Frontiers in Industrial Relations and Human Resources 557, 571-72 (David Lewin et al. eds., 1992); Geoffrey C. Beckwith, The Myth of Incentives in Workers' Compensation Insurance, 2 New Solutions 52, 52 (1992); Burton (1993), supra note 2, at 1. These prior analyses have not fully explored the particular impact of the workers' compensation liability paradigm on employer behavior. They have also not recognized the importance of the attributes of the employment relationship and the resulting effects on the behavior of both employers and employees within this compensation system.

8. "A thing is safe if its risks are judged to be acceptable... . . . Safety is obviously a highly relative attribute that can change from time to time and be judged differently in different contexts. Knowledge of risks evolves, and so do our personal social standards of acceptability." William W. Lowrance, Of Acceptable Risk: Science and the Determination of Safety 8-9 (1976). While risk is assessed through empirical, scientific activity and is a measure of the probability and severity of harm, safety involves judging the acceptability of risks, a "normative, political activity." Id. at 75-76. "Equity of distribution of risks, benefits, and costs is a judgment of fairness and social justice." Id. at 95 (emphasis omitted).
advocates maintain that no worker should be seriously impaired or killed by a controllable hazard and that risks are best controlled, to the extent possible, through application of engineering principles which eliminate the possibility of individual human error. Congress echoed this view in 1970 in the Occupational Safety and Health Act. At the other end

9. "[P]reventing all preventable accidents may not be economically efficient, but may be justified on equity grounds." Nicholas A. Ashford, Crisis in the Workplace: Occupational Disease and Injury, A Report to the Ford Foundation 390 (1976). The slogan of the National Safety Workplace Institute is "Job safety for everyone, with no one left out." William J. Mankaesd & Charles Helm, Promoting Workplace Safety and Health in the Post-Regulatory Era: A Primer on Non-OSHA Legal Incentives that Influence Employer Decisions to Control Occupational Hazards, 17 N. Ky. L. Rev. 9, 15 n.29 (1989); see also Centers for Disease Control & Prevention, Occupational Injury Panel, Occupational Injury Prevention, in Injury Control in the 1990s: A National Plan for Action 329 (1992) [hereinafter CDC Injury Report] ("[O]ccupational injuries should not be regarded as inherent in the workplace, nor should they be acceptable. Occupational injury is an enormous and costly problem. Most incidents resulting in worker injuries are preventable and could be averted if known prevention strategies were more widely implemented."); Edward L. Baker & J. Donald Millar, Foreword to American Public Health Association, Preventing Occupational Disease and Injury xi (James L. Weeks et al. eds., 1991) [hereinafter Preventing Occupational Disease and Injury] (stating: "The mission of public health is to 'fulfill society's interest in assuring conditions in which people can be healthy.' In the workplace, the mission of occupational health can be viewed similarly") (citation omitted). For books which espouse public health as the primary concern in health and safety, see generally Daniel M. Berman, Death on the Job: Occupational Health and Safety Struggles in the United States (1978); Joseph A. Page & Mary-Win O'Brien, Bitter Wages (1973); Lawrence White, Human Debris: The Injured Worker in America (1983).

10. "The most effective intervention to date for reducing injuries have been those involving engineering, biomechanics, and environmental designs, the mainstays of the safety science approach to injury prevention." CDC Injury Report, supra note 9, at 330; see also Preventing Occupational Disease and Injury, supra note 9, at 55.

There is a hierarchy of technical controls derived from a conceptual model that consists of a hazard source, an environment into which the hazard may be released, and the worker. From most to least effective, technical controls include positive engineering that prevents generation of the hazard at its source, environmental controls that are implemented in the work environment, and personal protective devices that individual workers can wear or use... Personal protective devices are less effective than the other two kinds of controls and should be used only as temporary measures or when positive engineering or environmental controls are not feasible.

Id. at 8-9. OSHA has generally adhered to this approach. Mark A. Rothstein, Occupational Safety and Health Law § 74 (3d ed. 1990).

11. Occupational Safety and Health Act of 1970, 29 U.S.C. §§ 651-678 (1988). In its legislative findings, Congress stated that its purpose was "to assure so far as possible every working man and woman in the Nation safe and healthful working conditions and to preserve our human resources." Id. § 651(b). The Act further imposes a general duty on an employer to "furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees." Id. § 654(a). The courts have been somewhat less aggressive, however, when reviewing OSHA's standards than this statutory language would appear to imply. The plurality
of the debate on risk and safety, economists argue that optimal conditions are achieved when the marginal benefit of providing safety is equal to its marginal cost. These different paradigms reflect fundamentally different views regarding the value of worker health.

This argument over optimization should not, however, be controlling when discussing the current status of workers' compensation and occupational risk: Both public health advocates and industry representatives agree not only that injuries at work are largely preventable but that enterprise-specific activities can substantially reduce an employer's workers' compensation liability, often with a net economic gain to the enterprise. Although this may not be universally true for all risks or all employers, it is true for a sufficient number of these risks to raise substantial questions about this apparent market failure. It in fact appears that we have failed to

opinion in Industrial Union Department, AFL-CIO v. American Petroleum Institute, 448 U.S. 607, 639 (1980) held that the promulgation of a new standard must be based on findings that the standard is reasonably necessary and appropriate to remed[y] a significant risk of material health impairment. But see American Textile Mfrs. Inst., Inc. v. Donovan, 452 U.S. 490, 512 (1981) (holding that the Act does not require OSHA to demonstrate that its standard reflects a reasonable relationship between the costs and benefits associated with the standard).

12. See John D. Worrall & Richard J. Butler, *Experience Rating Matters*, in *Workers' Compensation Insurance Pricing: Current Programs and Proposed Reforms* 81, 82 (Philip S. Borba & David Appel eds., 1988) [hereinafter Worrall & Butler, *Experience Rating Matters*] (noting that firms in perfectly competitive worlds provide safety to the point where the marginal benefit of such provision is equal to its marginal cost). For a discussion of marginal benefits and costs, see Richard A. Posner, *Economic Analysis of Law* 163-64 (4th ed. 1992) (explaining that "expected accident costs and accident costs must be compared at the margin, by measuring the costs and benefits of small increments in safety and stopping investing in more safety at the point where another dollar spent would yield a dollar or less in added safety"); see also George L. Priest, *The Current Insurance Crisis and Modern Tort Law*, 96 *Yale L.J.* 1521, 1537 (1987) (discussing general tort liability and insurance models and noting "regardless of context, the accident prevention question is whether it was cost-effective for the provider or for the consumer to have made greater investments to prevent the loss").

13. Refer to notes 7-9 supra; see also William D. Hager, *Loss Costs and Beyond*, *Best's Rev.*, Nov. 1990, at 44, 48 (focusing on Texas, the author, who was president of the National Council on Compensation Insurance, noted: "When things go wrong, we have the spectacle of Texans arguing about the fine points of their workers' compensation law as a cure for rising costs even as industry engineers try to confront what the *Wall Street Journal* described as 'a recent rash of petrochemical and oil refinery blasts that has prompted closer scrutiny of plant operations by government, industry and union officials and tough enforcement of safety rules.' It's true that the Texas workers' compensation law could use improvement . . . [but] the Phillips and ARCO disasters are man-made catastrophes, and some of the fault lies not in our laws but in ourselves. After all, no matter how generous the benefit levels or absurd the jury verdicts, if fewer people get injured or killed, costs will contain themselves. As every public health official knows, prevention is always cheaper than the cure.").

14. Refer to part III.B.1 *infra* (discussing insurance rating schemes).
achieve an optimal solution from the standpoint of public health advocacy and economic efficiency and social utility.

By preventing workplace morbidity and mortality, we would avoid more than the individual suffering of injured workers or the costs paid by employers. We would also escape the rancorous and unending political debates regarding distribution of costs and adequacy of compensation, and we would minimize the tensions between employees and employers which accompany both the occurrence of injury and the filing of compensation claims. The superior value of prevention—over compensation—is obvious.

Why then have these costs not motivated more employers to implement aggressive safety practices? This article attempts to explore this apparent paradox. In Part II, I review the current costs of workers' compensation, trends in injury data, and the relationship between injuries and costs. To what extent are costs, in the aggregate, the result of increasing incidence of injury and disease? To what extent are these costs a reflection of expanding definitions of compensable injury and disease, increases in benefit levels, or medical price inflation? Are injured workers reaping the benefit of the increasing resources poured into workers' compensation programs and simply pursuing more claims? Can management practices at the enterprise level actually impact compensation costs—or are the costs a reflection of conditions which are not within management control? Although the data are faulty, available information appears to suggest that the level of occupational risk present in modern workplaces remains high and is a substantial, although not the sole, cause of the current explosion of costs.

Part III explores the possible explanations for the failure of these rising costs to promote primary prevention of

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15. The availability of insurance may lessen the incentive of an insured person to take precautions. As the individual's incentive to avoid losses declines, the size of the losses will increase. For example, if someone with theft insurance leaves a valuable possession in plain view on the seat of an unlocked parked car, the likelihood that the possession will be stolen increases; absent insurance, the individual would (presumably) have locked the object in the trunk. This phenomenon is referred to in the economics and insurance literature as "moral hazard." A. MITCHELL POLINSKY, AN INTRODUCTION TO LAW AND ECONOMICS 56 (2d ed. 1989). In workers' compensation, the term is applied most commonly in studies showing that workers appear to file more claims for compensation as the level of benefits rises. E.g., Richard J. Butler & John D. Worrall, Claims Reporting and Risk Bearing Moral Hazard in Workers Compensation, 55 J. RISK & INS. 191, 192 (1991) [hereinafter Butler & Worrall, Moral Hazard]. It can also be used to describe the failure of the insured employer, who is immunized by workers' compensation from common-law liability, to take adequate precautions to prevent injuries and illnesses.
workplace morbidity. To what extent is it reasonable to expect a system of no-fault compensation to have serious deterrent effects? What are the particular attributes of the workers' compensation model, and the friction and transactional costs inherent in it, which diminish deterrence? This discussion is drawn from existing empirical studies, historical sources, legal developments, and personal observations. Despite occasional lip service to the safety objective, there is a serious question as to whether workers' compensation was ever designed in a manner likely to promote prevention. The particular history and design of the program must be examined in light of other factors: remarkable ignorance, political hysteria, a view of workers as opportunistic or fraudulent abusers, and the inequality of the underlying employment relationship. Moreover, the design of the program encourages motivated employers to attempt to prevent workers' compensation costs by reducing the filing of claims instead of the occurrence of injuries. Together, these factors create a system in which the "feedback loop," which should alert employers to the financial and labor-management advantages of aggressive primary prevention, fails.

Part IV looks to the future. The consequence of the failure of this feedback loop to change the underlying health and safety conditions in workplaces has been to focus much of the current political debate regarding workers' compensation on ways to reduce costs by limiting benefit levels or eligibility: that is, to make injured workers pay for our failure to reduce injuries. But recently prevention and safety rhetoric has reemerged within the context of workers' compensation political debates. State legislatures in at least thirteen states have passed amendments to their workers' compensation or state safety and health laws expanding the direct and indirect connections between compensation and deterrence. Given

16. Primary prevention is the prevention of the occurrence of a disease or injury. Immunizations are a method of primary prevention of infectious disease. According to one public health source, "primary prevention is the preferred means of disease control. In the workplace, this is largely an engineering activity." Preventing Occupational Disease and Injury, supra note 9, at 8.

what we know about the failure of workers' compensation to affect employers' aggregate behavior in the past, can these new efforts be expected to have significant impact? More importantly, what is the best way to design these safety initiatives in order to achieve decreased occupational mortality and morbidity and, therefore, decreased workers' compensation costs?

Raising questions regarding the deterrent value of workers' compensation should not be interpreted as an argument against continuing to provide adequate compensation to injured workers. Sometimes those who have argued in favor of deterrence, upon finding that the system does not effectively encourage prevention, have thence been driven to argue that workers' compensation has failed: that increasing the adequacy of benefits primarily results in socially sub-optimal behavior.\textsuperscript{18}

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\textsuperscript{18}. In particular, studies have noted a correlation between increasing benefits and increasing numbers of claims filed. See Ronald G. Ehrenberg, Workers' Compensation, Wages, and the Risk of Injury, in New Perspectives in Workers' Compensation 71, 81-86 (John F. Burton, Jr. ed., 1988) (summarizing nine prior studies which conclude that higher workers' compensation benefits are associated with higher frequency of claims' filing); see also Butler & Worrall, Moral Hazard, supra note 15, at 191; Richard J. Butler & John D. Worrall, Work Injury Compensation and the Duration of Nonwork Spells, 95 Econ. J. 714, 722-23 (1985); Richard J. Butler, Wage and Injury Rate Response to Shifting Levels of Workers Compensation, in Safety and the Workforce: Incentives and Disincentives in Workers' Compensation, supra, at 61; Richard J. Butler & John D. Worrall, Workers' Compensation: Benefits and Injury Claims Rates in the Seventies, 65 Rev. Econ. & Stat. 560 (1983); James R. Chelius, The Incentive to Prevent Injuries, in Safety and the Workforce: Incentives and Disincentives in Workers' Compensation, supra, at 154, 160 [hereinafter Chelius, Incentive to Prevent Injuries]; James R. Chelius, The Influence of Workers' Compensation on Safety Incentives, 35 Ind. & Law Rel. Rev. 241 (1982) [hereinafter Chelius, Influence of Workers' Compensation] (suggesting that one way to manage the apparent conflict between prevention and benefits is to raise injury taxes on employers but not to make the whole tax payable to employees); James R. Chelius, The Control of Industrial Accidents: Economic Theory and Empirical Evidence, 38 Law & Contemp. Probs. 700 (1974) [hereinafter Chelius, Control of Industrial Accidents]; Georges Dionne & Pierre St-Michel, Workers' Compensation and Moral Hazard, LXXIII Rev. Econ. & Stat. 236 (1991); John D. Worrall, Compensation Costs, Injury Rates, and the Labor Market, in Safety and the Workforce: Incentives and Disincentives in Workers' Compensation 1 (John D. Worrall ed., 1983); Digests of Important Publications, John Burton's Workers' Compensation Monitor, Sept.-Oct. 1992, at 14-16 (summarizing John A. Gardner, Benefit Increases and System Utilization: The Connecticut Experience (1991)) (finding longer duration and higher numbers of claims filed in Connecticut after a statutory benefit increase in 1987). As a result of this observed phenomenon, some have argued that benefits should not be increased. See, e.g., Ehrenberg, supra, at 95 (concluding that the "trick, then, is to alter existing policy to increase employers' incentives to improve safety without altering employees' incentives. One possibility is to hold benefit levels at their current real levels but to increase the extent of experience rating. . . . An alternative is to increase the payroll tax but not the level of benefits . . . ."); Economic Report of the President 197 (1987). But c.f. Edward Yelin, The Myth of Malingering: Why Individuals Withdraw from Work in the Pres-
I therefore feel compelled to make what appears to be an obvious point: The primary purpose of workers' compensation is distribution of social insurance benefits, not deterrence of injuries. Failure in deterrence does not argue in favor of program failure; it merely tells us that alternative approaches to deterrence may be preferable if we believe that adequate compensation of victims of workplace injuries and illnesses is essential and that injuries in the workplace are preventable and should be prevented.

While the country gears up to expand the rights of disabled workers to work under the Americans with Disabilities Act, we appear to have been unable to achieve an optimal level of prevention of disability caused by work. This article is an attempt to contribute to a discussion which will hopefully yield cost-effective means to achieve the goal of "lowering costs and reducing workers' suffering."

II. THE PARADOX

There are three essential conclusions which can be drawn from the available data regarding workers' compensation costs and injuries. First, the aggregate cost of workers' compensation programs is rising rapidly. Second, frequency of injuries, particularly those which involve lost work time, is not declining. Third, despite a variety of other factors that contribute to the increasing costs of workers' compensation, the frequency...
of reported injuries and the cost of injuries can be substantially affected by managerial decision-making within enterprises.\footnote{25}{As discussed in part III.C. infra, the reduction of costs may not always be associated with an actual reduction in the rate of illness and injury; it may simply be associated with different claims filing behavior by workers or changed management practices which affect claims costs.}

It appears paradoxical that despite increasing costs, injury rates have not declined significantly. The following discussion summarizes the existing literature and data which substantiate these three points. The implications of these conclusions are discussed more fully in Part III of this Article.

A. Costs

The announcement in 1993 that the national cost of workers' compensation had reached sixty-two billion dollars\footnote{26}{Refer to note 2 supra.} reflects a continuation of the workers' compensation “crisis” in cost escalation. Compensation programs cost $2.1 billion in 1960, $5.2 billion in 1971, $20.3 billion in 1979, $53.1 billion in 1990, and $57 billion in 1991.\footnote{27}{Burton (1993), supra note 2, at 1. These figures are not adjusted for inflation.} Expressed as an average cost per $100 of payroll, and thereby adjusting for aggregate payroll increases, costs rose from $1.11 per $100 in 1970 to $2.27 per $100 in 1989.\footnote{28}{1992 SOCIAL SECURITY BULLETIN, ANNUAL STATISTICAL SUPPLEMENT 313 tbl. 9.B1 [hereinafter 1992 STATISTICAL SUPP.; see also John F. Burton, Jr. & Timothy P. Schmidle, Workers’ Compensation Insurance Rates: National Averages Up, Interstate Difference Widen, JOHN BURTON’S WORKERS’ COMPENSATION MONITOR, Jan.-Feb. 1992, at 1 (estimating the rate in 1989 at 2.225% of payroll utilizing adjusted rates based on 44 selected industrial classifications). It should be remembered that this is an average; the percent of payroll paid for workers’ compensation varies enormously from one industrial group to another, ranging from over $40 per $100 of payroll for loggers in the timbering industry in many jurisdictions to under $1 per $100 for employees in finance and insurance. The spreading of risks and costs among different employer groups is discussed more fully below, Part III infra. Note that the number expressed as a percent of payroll is more useful than the aggregate costs of the total programs. Both the number of workers and the percent of the covered workforce has grown in recent years: The number of workers covered by workers’ compensation programs rose from 45 million in 1960, representing 80% of the workforce, to 94 million in 1989, or 87% of the workforce. John F. Burton, Jr., Workers’ Compensation Coverage: National Trends, State Differences, JOHN BURTON’S WORKERS’ COMPENSATION MONITOR, July-Aug. 1992, at 1. Obviously, the aggregate cost figures, unadjusted for workforce growth or for inflation, can be misleading.} The rate of increase of costs in other social insurance programs, albeit significant, has been
far less than these increases in workers' compensation.29

Prior to 1970, workers' compensation attracted little attention: relatively steady and low costs for employers meant that insuring against workers' injuries, diseases, or death was a stable proposition for both the property/casualty insurance industry and employers.30 Employers benefitted greatly from this arrangement; workers' compensation insurance provided them with broad immunity from tort liability for workplace injuries and illnesses.31 Workers received benefits that might otherwise not have been available. Despite the evident inadequacy of the benefit structure,32 workers and their


30. For example, from 1953 to 1972 workers' compensation costs rose from 0.94 to 1.14 per $100 of payroll, a 21% increase in a twenty year period; in contrast, from 1973 to 1980, costs rose from 1.17 to 1.94 per $100 of payroll, a 66% increase in seven years. Worrall, Compensation Costs, Injury Rates, and the Labor Market, supra note 18, at 9. John Burton, using his own data, showed an increase from 0.586% of payroll in 1958 to 0.772% in 1972. Burton & Schmidle, supra note 28, at 1, 9-12 & tbl. 8.

31. For a more extensive discussion of the issues related to this extensive immunity, refer to notes 216 & 247 infra.

32. Benefit levels were, by modern standards, remarkably low. See THE REPORT OF THE NATIONAL COMMISSION ON STATE WORKMEN'S COMPENSATION LAWS 13-14 (1972) [hereinafter COMMISSION REPORT] (stating that Congress declared in the Occupational Safety and Health Act of 1970 that serious questions had been raised about the adequacy of workers' compensation laws). This may well explain both the low frequency of claims and the politically acceptable low level of cost of the program in the pre-World War II years. Compensation systems generally excluded claims from eligibility which involved injuries which were the result of expected events; accidents were narrowly defined to include only the unexpected. For example, "[i]f a man strained his back while doing regular work in the usual fashion, it was to be expected." Id. at 45. In addition, most occupational disease and injury claims unrelated to observable single traumatic events were excluded from coverage. See id. at 50. Diseases of everyday life, which could have been the result of non-occupational exposures, were generally not compensable. Id. Statutes of limitation excluded other claims because they began to run within a short time of the worker's last exposure to the disease-causing agent, rather than when a disability developed or a diagnosis was made. See W.W. Allen, Annotation, When Limitation Period Begins to Run Against Cause of Action or Claim for Contracting of Disease, 11 A.L.R.2d 277, 283-89 (1950).

On those claims which were approved, the amount that was paid was quite low. In many states, statutes contained no automatic escalation of the maximum weekly benefit payments. COMMISSION REPORT, supra, at 60. Maximum weekly benefit levels therefore did not rise in the absence of direct legislative intervention. As a result, in some states the maximum weekly benefit amount remained static for years. Id. Most states initially set a limit on weekly benefits of 50% of lost wages.
representatives accepted this system; low expectations in general with regard to rights at work may have contributed to this acquiescence. Employers' costs did increase prior to 1970, but at a relatively slow rate, despite a substantial increase in reported injury rates during the 1960s.33

In the 1960s, public criticism began to focus on these programs and particularly on the inadequate level of benefits offered to injured workers by most states.34 This criticism was voiced in a political environment in which Congress was taking aggressive steps to address excessive workplace injury and illness rates by regulating workplace hazards.35 Responding to the criticisms regarding compensation programs, Congress created the National Commission on State Workmen's Compensation Programs as part of the Occupational Safety and Health Act in 1970.36 The Commission's purpose was to investigate alleged inadequacies in the state compensation systems and to address calls to federalize workers' compensation programs.37 The members of the Commission, drawn

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Id. In 1972, a majority of claimants still received less than two-thirds of their lost wages and, on average, maximum weekly benefits were capped at 55% of the state's average weekly wage. John F. Burton, Jr., The Twentieth Anniversary of the National Commission on State Workmen's Compensation Laws: A Symposium: Observations of John F. Burton, Jr., JOHN BURTON'S WORKERS' COMPENSATION MONITOR, Nov.-Dec. 1992, at 1, 5 [hereinafter Burton, Twentieth Anniversary]. In a majority of states in 1972, the maximum weekly benefit was equal to or less than the poverty level for a family of four. COMMISSION REPORT, supra, at 56. No state allowed more than ten years of recovery for a permanent total disability; most set the limit at below six years. See id. at 65. In 1972, in eleven states the maximum permanent total disability award was less than $25,000, an amount less than the average American worker earned in four years. Id. Medical benefits for injuries were often limited and did not provide for the full cost of care for serious injuries; initially, no program provided for more than 90 days of medical benefits for an injury. ASHFORD, supra note 9, at 389. Furthermore, most states endorsed a system of settlement of claims which allowed insurance carriers to settle a claim with an injured worker (or his or her attorney) for amounts less than the full statutory benefit.


34. Major concerns about benefit levels and eligibility criteria, particularly for occupational diseases, had been raised in well documented monographs in the 1940s and 1950s. See generally ARTHUR H. REEDE, ADEQUACY OF WORKMEN'S COMPENSATION (1947); HERMAN M. SOMERS & ANNE R. SOMERS, WORKMEN'S COMPENSATION: PREVENTION, INSURANCE, AND REHABILITATION OF OCCUPATIONAL DISABILITY (1954). These concerns did not hit public attention, however, until the renewed movement for workplace health and safety also focused on the issue of compensation.


36. COMMISSION REPORT, supra note 32, at 13-14.

37. Id.
from industry, labor, universities, state compensation programs, and the insurance industry, reached consensus that the state programs were seriously deficient.\textsuperscript{38} In its 1972 report, the Commission set five general objectives: broad coverage of employees and work-related injuries and diseases, substantial protection against interruption of income, sufficient medical care and rehabilitation services, encouragement of safety,\textsuperscript{39} and effective delivery of services.\textsuperscript{40}

Rather than endorsing federalization of the program or advocating that remedies for work injuries be sought outside the compensation system, the Commission recommended retaining the boundaries of the program.\textsuperscript{41} While acknowledging the need to improve workplace safety, the Commission did not address this goal in its nineteen "essential" recommendations, which were all directed to the expansion of benefits and eligibility and improvement of the administrative design of the program.\textsuperscript{42}

In the event that these recommendations were not adopted by 1975, the Commission suggested that Congress enact legislation which would "guarantee compliance."\textsuperscript{43} The goal was to increase the level of compensation protection offered to injured workers in all states and to decrease the level of variation among state programs.\textsuperscript{44} The resulting public debate and improvements in mandated benefit levels, which were enacted in many states,\textsuperscript{45} contributed to substantial and rapid increases in total program cost as both worker awareness of

\textsuperscript{38} Id. at 24-25.

\textsuperscript{39} The report stated, rather emphatically, that "[t]he encouragement of safety is one of the basic objectives of a modern worker's compensation program." Id. at 87.

\textsuperscript{40} Id. at 35-40.

\textsuperscript{41} Id. at 25.

\textsuperscript{42} Id. at 126-27.

\textsuperscript{43} Id. at 127.

\textsuperscript{44} This focus on interstate variability was fueled both by concerns about inequities between jurisdictions and the resulting political concerns which are fed by the knowledge that employers can (or think that they can) attain lower workers' compensation costs in other states. This is a concern which is often voiced by employers' organizations during political debates regarding changes in state workers' compensation programs. Despite this attempt by the National Commission, interstate variability in insurance rates continues to plague workers' compensation programs. See Burton & Schmidle, supra note 28, at 6-9.

\textsuperscript{45} The average state compliance with the nineteen essential recommendations of the Commission increased from 6.8 in 1972, when the Report was issued, to 12.0 in 1980. Burton, Twentieth Anniversary, supra note 32, at 5. Compliance with the recommendations then slowed as costs escalated and states realized that no action would be taken to federalize the program. Id. The average compliance reached only 12.7 (out of the possible 19.0) by 1992. Id.
benefit eligibility and actual benefit levels rose. Thus, the National Commission, the most concerted attempt to reform workers' compensation since its inception, was at least partially successful in its own terms: it contributed to increases in the adequacy and availability of benefits. As costs increased, however, the primary focus of political activism shifted from the inadequacy of benefits to the impact of continued interstate variations in cost on each state's economic development and the overall cost of the program to employers, which some viewed as excessive.

Nevertheless, employers' costs did not rise steadily after 1978. A rapid plunge in insurance prices (and therefore employer costs) from 1980 to 1984 reflected the condition of the financial market: high interest rates led to aggressive price cutting by insurance carriers. After 1984, however, the rapid upward climb in employers' costs resumed, causing the average percent of payroll paid for workers' compensation to climb by 13.3 percent per year from 1984 to 1990. Needless to say, this growth rate outdistanced both the rate of growth of the civilian payroll and the rate of inflation for this period.

The aggregate cost of the program and its rate of increase have met with rising hysteria. Insurance trade articles carry titles such as "Workers' Comp: 24 Months to Meltdown" and


50. From 1984 to 1990, the average annual increase in the general Consumer Price Index was about 4.5%. U.S. BUREAU OF THE CENSUS, DEPT OF COMMERCE, STATISTICAL ABSTRACT OF THE UNITED STATES 469 (1992).

PERPETUATING RISK

refer to the "death spiral" and "nightmare" of workers' compensation. In one industry survey, seventy percent of employers reported that workers' compensation costs were threatening their financial results; in another, five of the fifteen most highly ranked public policy concerns related to workers' compensation and workplace safety issues.

This perception of crisis is the direct result of increasing aggregate, as well as enterprise-specific, costs. Because of cost escalation, insurance carriers press for increases in rates charged to employers; rate increases are, however, seen as antithetical to business development in each jurisdiction in which they are sought. Political and regulatory pressure is brought to bear to restrain rate increases; insurers respond that the rates are inadequate to support the costs and threaten to leave the jurisdiction unless the state legislature enacts programmatic changes which will restrain costs, generally by reducing benefit levels, restricting eligibility for

years.


54. In this 1991 study, 70% of the 576 employers who participated said workers' compensation costs are threatening their bottom line; 30% said workers' compensation costs would be out of control in the next five years. See David M. Katz, What Employers Can Do About the Workers Comp. Crisis, NAT'L UNDERWRITER, PROP. & CASUALTY/RISK & BENEFITS MGMT. EDITION, Jan. 7, 1991, at 21 (citing a study by Tillinghast, a New York based risk management consulting firm).

55. ALEXANDER & ALEXANDER, U.S. RISK MANAGEMENT SURVEY 5 (1992) (on file with author). In this 6th annual survey, questionnaires were sent to 1900 risk managers who were asked to rank, in importance to their companies, 74 legislative and regulatory issues. Most respondents were executives at companies with sales of $500 million or more. Id. at 7. "Workplace health and safety topics, including five workers' compensation issues, dominate [Alexander & Alexander's] findings." Id. at 2. In the overall ranking of categories, workplace health and safety issues placed first. Id. at 6. Workers compensation was projected to remain a critical issue in the next three to five years. Id. at 2.

benefits, or expanding fraud units.\textsuperscript{57}

The price of workers' compensation insurance to insured employers is largely, but not exclusively, dependent on the aggregate cost of benefits.\textsuperscript{58} In 1989, the ratio of benefits to costs stood at a comparatively high 0.70: that is, about seventy percent of the amount paid by employers was paid in benefits on claims.\textsuperscript{59} The cost of benefits has increased steadily over the last twenty years: $1295 million in 1960; $3563 million in 1971; $12,027 million in 1979; $30,733 million in 1988.\textsuperscript{60} Expressed in more useful form as a percent of payroll, benefits rose from 0.59\% of covered payroll in 1960, to 0.66\% in 1970, 1.07\% in 1980, 1.58\% in 1989, and 1.70\% in 1990.\textsuperscript{61} Thus, the total cost to employers, 2.27\% of payroll in 1989,\textsuperscript{62} was (not surprisingly) considerably higher than the cost of benefits in that same year.\textsuperscript{63} Unaffected by the vagaries of the financial and insurance markets, benefits, unlike employer costs, do not decrease in response to high interest rates.

Aggregate benefits paid by all state and federal workers' compensation programs are affected by numerous factors: the

\begin{itemize}
  \item \textsuperscript{57} See Freedman, supra note 56, at 20 (describing this process).
  \item \textsuperscript{58} Benefits include all monies paid out in order to meet the insurer's obligation to the insured. In workers' compensation claims, this will include any money paid directly to the claimant and fees paid to health care and rehabilitation providers. Other factors influencing cost for employers include: the insurance pricing mechanisms which assign employers to industrial classifications and then determine the spread of risk through each class; the insurer's administrative costs, including legal costs; the state of the financial market, particularly as it affects the interest rate earned and projected to be earned on reserves; and the rate of return paid to investors or, in the case of mutual funds, to insureds.
  \item \textsuperscript{59} This ratio has shown some historical fluctuation, but remained at approximately the 70\% level from 1983 through 1989. Burton (1992), supra note 47, at 2 tbl. 1. It was at a low of 54\% in 1980; since 1982 it has fluctuated between 67 and 71\%. William J. Nelson, Jr., Workers' Compensation: Coverage, Benefits, and Costs 1989, Soc. Sec. Bull., Spring 1992, at 51, 56. Fluctuation in this ratio is primarily the result of changes in the insurance and financial markets. See id. at 2. Of course, refusals by state insurance agencies to approve requested rate increases for the regulated workers' compensation insurance market force the ratio of benefits to costs upward. See Klein, supra note 52, at 7-8 (noting that only half of the rate increases filed by the National Council on Compensation Insurance, the rating organization in the majority of states, have been approved). It is important to note that as the total amount paid by employers for workers' compensation insurance coverage rises, and this benefit to cost ratio remains constant, the amount of money retained by the insurance carriers increases. Note also that efficiency in any insurance market would argue in favor of reducing these non-benefit costs. This can be done: The West Virginia Workers' Compensation Fund, for example, pays out over 90\% of its collected premium in benefits on claims.
  \item \textsuperscript{61} 1992 Statistical Supplement, supra note 28, at 313.
  \item \textsuperscript{62} Refer to note 48 supra and accompanying text.
  \item \textsuperscript{63} Id.
\end{itemize}
nature and degree of risk in covered industries, the size of the workforce covered by workers’ compensation, the earnings of the covered workers, levels of wage rates, severity and frequency of paid claims, costs of medical and rehabilitative treatment, the likelihood that injuries will result in claims, the liberality of the review process when claims are litigated, the administrative handling by state and federal agencies (including the likelihood of settlement below full mandated benefit costs prior to completion of litigation), and the mandated benefit rates.

Benefits are divided among four primary categories: temporary total disability, paid while a worker is off work recovering from an injury or acute episode of a chronic illness; permanent partial disability, for permanent disabilities which do not prevent the worker from remaining in the active workforce; permanent total disability, for workers who are unable to return to work or to perform work which is comparable to that which they performed prior to the injury; and medical and physical rehabilitation benefits, largely paid directly to providers of health and rehabilitative services who provide services to workers for their occupational injuries and diseases. Numerically, about three-fourths of claims involve temporary total disability although the majority of money is expended on permanent disability, including both partial and total cases; most, but not all claims involving permanent disability have their genesis in “lost time” claims.

A substantial portion of the total benefits paid goes to health care providers and lawyers, not to injured workers.

64. See Lampman & Hutcheson, supra note 29, at 121. A significant component of the increase in benefits attributable to benefit rates was the result of increases in weekly benefits. The National Commission on State Workmens’ Compensation Laws report in 1972 recommended that all states set the maximum weekly benefit at least at the level of that state’s average weekly wage. Burton (1993), supra note 2, at 4. Prior to 1972, states had paid, on average, 55% of this average wage; by 1980, this had grown to an average of 91%, and many states had enacted automatic annual increases which tracked the state’s average weekly wage. Id.

65. In many jurisdictions, age, education, and skill of the injured worker will be considered, in addition to medical impairment, in making a determination regarding permanent total disability. See 1C ARTHUR LARSON, WORKMEN’S COMPENSATION LAW § 57.60, at 10-389, § 57.61(c), at 10-437 to -438 (1993).

66. In 1986, 72% of all cases were those in which the workers suffered a temporary total disability. Nelson, 1984-88 Benchmark, supra note 60, at 44.

67. The percent of all benefits which are paid for temporary disability cases rose from 18% in 1982 to 25% in 1986. Id. at 44. These figures appear to include the cost of medical treatment for the injury. Payment for permanent disability cases, both partial and total, accounts for one fourth of the cases but almost three-fourths of the cash payments. Id. Examples of cases in which lost-time benefits are not paid but permanent disability results include many occupational disease claims.
However. The medical component of workers' compensation benefits has risen from 33.6% of total workers' compensation benefit costs in 1960, to 40.9% in 1990, to 50% in 1993. In every recent year, the rate of inflation for medical costs within the workers' compensation programs has exceeded the already alarming rate of increase in U.S. health care expenditures generally.

Notably, the level of litigation over claims has risen as benefit costs have grown. Payments to health care providers who perform evaluations and to lawyers have been increasing. The medical cost component can be easily quantified because health care providers are paid directly by the insurer. The cost of lawyers is more difficult to determine, however. Defense of claims is generally included in the administrative costs charged by insurance carriers, but the cost of legal representation to workers is almost always taken


69. Regaining Control of Worker's Compensation Costs, supra note 68, at 1.

70. Burton (1993), supra note 2, at 18 tbl. A7 (Health Care Expenditures, US and Workers' Compensation, 1972-1990). As a result of this troubling inflationary spiral, President Clinton's Health Security Act (HSA) proposes that health care related to workers' compensation claims be included in the cost containment strategies to be applied to the health care system generally. In the proposal, health care costs related to workers' compensation claims would be managed and approved through the regional health alliances and health plans. The costs themselves will ultimately be paid, however, by the workers' compensation insurance carrier. S.1757/H.R. 3600, 103d Cong., Reg. Sess. § 10002(a)(1) (1993). States or regional health alliances may develop alternative payment methodologies for treatment of compensable conditions or the workers' compensation carrier may negotiate alternative payment arrangements directly with the health plan. Id. § 10002(b). If the final version of health care reform resembles this proposal, workers' compensation premiums will not drop; medical costs will continue to be paid through these premiums. The HSA mandates a study and report regarding the workers' compensation provisions within two years after implementation. Id. § 10022. As a result of cost containment efforts generally, the hope is that the rate of increase of workers' compensation medical costs will decline.

71. LESLIE I. BODEN, REDUCING LITIGATION: EVIDENCE FROM WISCONSIN (1988). Obviously, the increased tendency to challenge claims has not succeeded in reducing the overall costs of the system; some employers assert, however, that the aggregate costs would be even greater if litigation were not pursued.

72. There are some exceptions to this, of course. Self-insured employers must pay the litigation costs associated with challenged claims themselves. In addition, some state funds (e.g., West Virginia) do not provide legal assistance on defense of all claims.
from the benefit amount paid directly to workers.\footnote{73}

As litigation and medical costs have grown, the relative proportion of benefits paid to workers has declined and the component paid to others—including medical providers, lawyers, rehabilitation specialists, third party claims administrators—has risen. Thus, while the amount of total benefits paid has increased as a percent of payroll, the amount that is paid directly to individual injured workers may not be increasing or may be doing so at a much slower pace.\footnote{74}

Workers’ compensation costs can no longer be characterized as modest and stable. Presumably, the incentive to reduce claims should have risen with these costs. Unquestionably, escalation in costs has provoked a steady and insistent call for new reform of the workers’ compensation system. While states continue to amend their workers’ compensation laws, often on an annual basis, the OSHA reform bill pending in Congress now calls for a second National Commission to study the adequacy and efficacy of the current workers’ compensation system.\footnote{75}

\footnote{73. States often regulate the fees that can be charged by claimants’ representatives. See, e.g., \textit{W. VA. CODE} § 23-5-5 (1993) (limiting claimant’s attorney’s fees to 20\% of 208 weeks of benefits).}

\footnote{74. The numbers available on this are somewhat contradictory. According to one source, National Council on Compensation Insurance statistics show that workers’ compensation delivered the same direct economic compensation, on average, to an injured worker in 1989 ($6049) as it did in 1980 ($6044), but that the amount paid to medical services providers rose by 63\%, from $2188 to $3564, on average, during the same period. Michael Pritula, \textit{Starting Over in Workers’ Comp.}, 92 \textit{BEST'S REV.}, Jan. 1992, at 22, 24 (numbers adjusted for inflation). If these numbers are accurate, then it is difficult to accept the assertion that increasing levels of benefits are exacerbating the problems of moral hazard as workers file claims in increasing numbers. Refer to note 15 & 18 supra. Nevertheless, Pritula indicates that the number of claims grew from 21 to 28 per 1000 workers in the period from 1984 to 1989, noting that this occurred at least in part because employers failed to emphasize safety programs. Pritula, supra. In contrast, only a slight increase in compensable cases per covered worker was observed between 1950 and 1980. Lampman & Hutchens, supra note 29, at 124. In any event, the total cost per claim has undoubtedly been increasing. Estimates of this trend vary somewhat. One source asserts that the average cost per claim, when not adjusted for inflation, has tripled over the last decade. Raiborn & Payne, supra note 2, at 554. The important conclusion to be drawn here is that the primary component of increasing cost may be the cost of medical and other services.}

\footnote{75. \textit{H.R. 1280}, 103d Cong., 1st Sess., Title XIII, § 1301 (1993). The bill would establish a 15 member Commission which would have the following duties: to review the recommendations of the prior National Commission to determine the extent to which they were implemented and the barriers to implementation; to study the feasibility of utilizing worker’s compensation data to target loss prevention activities on high risk occupations; to study workers’ compensation laws to determine whether they effectively meet financial and medical needs of injured workers, whether the administrative systems under the laws are adequate, and whether they provide adequately for occupational injuries and illnesses, including sufficient recuperative time}
B. Injuries

Public concern about the persistence of occupational injuries is almost always spurred by the occurrence of workplace catastrophes. The fire at Imperial Foods in Hamlet, North Carolina, which killed twenty-five workers and injured another fifty-six, recently stimulated another round of concern.76 Mainstream professional publications, such as the Journal of the American Bar Association, joined the voices of health and safety activists and labor unions in expressing concern about the persistence of serious workplace hazards.77 The fact that this expression of public concern and outrage tends to dissipate between catastrophes does not mean that it is not justified: Rates of reported occupationally-induced injuries and illnesses have simply not declined in recent years.

Quantifying workplace morbidity and mortality is not easy. When the Centers for Disease Control and Prevention (CDC) convened an expert panel, chaired by a well-regarded injury epidemiologist,78 to discuss prevention of occupational injuries, a considerable amount of its early discussions focused on the lack of reliable data and the discrepancies among various reporting systems.79 The panel was ultimately forced to admit that there was not even an accurate count of traumatic occupational fatalities, presumably the most objective and easily counted events among occupational injuries. Estimates of deaths due to traumatic occupational injury vary widely. The

before an injured worker returns to full duty; to investigate the relationship between worker's compensation, safety and health programs, and insurance rates and services; to determine the feasibility of preempting state workers' compensation laws with a national program; and to evaluate the factors responsible for interstate differentials in premiums for high hazard occupations. Id. § 1301(c)(1)-(4).


[Things may be getting worse again: In 1990 alone, injury rates rose by 6 percent, and occupational illness rates jumped by 17 percent . . . . Why are so many U.S. workers hurt or killed on the job? The main reason, according to many workplace-safety advocates, is a serious lack of government commitment and resources.]

Id. at 47.

78. Susan P. Baker, Professor at Johns Hopkins University School of Public Health served as chair of the panel; she is the first editor of Injury Fact Book (2d ed. 1991) as well as author of numerous articles in the area of injury epidemiology.

79. As a member of the panel, I had the opportunity to listen to the serious concerns raised by epidemiologists and other public health professionals regarding the abysmal state of data in this field.
National Safety Council reported 10,400 fatalities in 1989.80 In that same year, the National Traumatic Occupational Fatality (NTOF) study conducted by the National Institute for Occupational Safety and Health (NIOSH) reported 5,714 deaths81 and the Bureau of Labor Statistics (BLS) reported 3,600.82 Despite these numerical discrepancies, all of the

80. NATIONAL SAFETY COUNCIL, ACCIDENT FACTS 37 (1991) [hereinafter ACCIDENT FACTS]. According to National Safety Council (NSC) figures, the workplace death rate declined steadily from 1938 to 1990. Id. The figure of 10,500 covers both the public and private civilian work force but excludes deaths due to homicide or suicide, despite the increasing level of occupational homicides reported by the Bureau of Labor Statistics. Refer to note 82 infra.

81. The figure of 5,714 represents a traumatic fatality rate of 5.6 per 1000 civilian workers. The NTOF program, which began to study occupational fatalities for the year 1980, is based on a study of death certificates, not employer reports. NIOSH collects death certificates when the decedent was 16 years of age or older and the death certificate has a positive response to the injury at work item. Unpublished data from the NTOF study which covers the period 1985-89 was supplied to the author by Elinor Jenkins, Division of Safety Research, National Institute for Occupational Safety and Health, Aug. 15, 1993. NTOF data for the period 1980-85 can be found in NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH, NATIONAL TRAUMATIC OCCUPATIONAL FATALITIES, 1980-1985 (1988). As the 1988 publication notes:

The accuracy and completeness of death certificate data depends upon the knowledge and accuracy of those who fill out death certificates. It is likely that some cases are missing from NTOF. For example, it is suspected that NTOF excludes some occupational motor vehicle fatalities and some occupational homicides because these fatalities may not always be identified as 'injury at work.'

Id. at 1-2.

The NTOF data for the period 1980 through 1989 indicates that 62,289 civilian workers died from injuries sustained while working during this period. CENTERS FOR DISEASE CONTROL & PREVENTION, NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH, FATAL INJURIES TO WORKERS IN THE UNITED STATES, 1980-1989: A DECADE OF SURVEILLANCE * (1993). The leading causes of these fatalities were motor vehicle crashes (23%), machine-related incidents (14%), homicides (12%), falls (10%), electrocutions (7%), and being struck by falling objects (7%). Id. It is interesting to note that the fatality rate for male workers (9.8 per 100,000 workers) was 12 times higher than for women (0.8 per 100,000). Id. The average annual fatality rate per 100,000 civilian workers decreased from 8.9 in 1980 to 5.6 in 1989, a 37% decrease. Id. at xi.

82. BUREAU OF LABOR STATISTICS, U.S. DEPT OF LABOR, BULL. No. 2399, OCCUPATIONAL INJURIES AND ILLNESSES IN THE UNITED STATES BY INDUSTRY 1990 (1992) [hereinafter BLS 1990]. This figure represents the BLS annual survey of occupational fatalities for private sector employers with 11 employees or more. However, BLS admits that "fatalities are difficult to measure in an establishment survey, and, therefore, the Bureau believes that the count of fatalities presented . . . is significantly understated." Id. at 7. It appears that the differences in the numbers between the NTOF and BLS reported fatality rates represent an underreporting of fatal injuries in several high risk industries in the BLS data. Nancy Stout-Wiegand, Fatal Occupational Injuries in US Industries, 1984: Comparison of Two National Surveillance Systems, 78 AM. J. PUB. HEALTH 1215, 1216 tbl. 1 (1988).

BLS has, however, recently revised its reporting of occupational fatalities. In its first National Census of Fatal Occupational Injuries, BLS reported 6,083 fatalities due to work injuries in 1992; about one-third of these resulted from highway acci-
commentaries on these numbers agree on the following: the number and rates of occupational fatalities have certainly declined over time; the documentation of these deaths is inadequate; and, irrespective of the final tally, these fatalities can be prevented and, therefore, occur too frequently.

Statistics on the incidence and severity of non-fatal work-related injuries and illnesses are maintained by the Bureau of Labor Statistics (BLS), based upon reports supplied by employers under the mandatory reporting requirements instituted pursuant to the Occupational Safety and Health Act of 1970. Questions continuously arise regarding the validity of the statistics developed in this program as well: both the

dents or homicides (each of which accounted for over 1000 deaths). BUREAU OF LABOR STATISTICS, U.S. DEP'T OF LABOR, USDL-93-406, U.S. DEP'T OF LABOR NEWS, Oct. 1, 1993, at 1 [hereinafter U.S. DEP'T OF LABOR NEWS]. In comparing occupational fatality figures from the above three sources, investigators have concluded that substantial undercounting of fatal work injuries results from relying on a single source for data. Of 583 work fatalities identified from two or more source documents in Colorado and Texas in 1990, 562 (97%) were identified in death certificates, 361 (62%) were identified in workers' compensation reports, and 191 (33%) were identified in the fatality reports employers submitted as required by OSHA. Digests of Important Publications, JOHN BURTON'S WORKERS' COMPENSATION MONITOR, Mar.-Apr. 1992, at 25 (citing Guy Toscano & Janice Windau, Further Test of A Census Approach to Compiling Data on Fatal Work Injuries, MONTHLY LAB. REV., Oct. 1991, at 33-36). The new BLS National Census, which draws on multiple sources of data, presumably represents a more accurate count. See Guy Toscano & Janice Windau, Fatal Work Injuries: Results From the 1992 National Census, MONTHLY LAB. REV., Oct. 1993, at 39 (noting that the elderly, workers in farming, transportation, mining, and construction have higher risk of workplace fatalities).

83. The National Safety Council data, for instance, show deaths to have declined from 14,500 in 1933 to 10,500 in 1990. ACCIDENT FACTS, supra note 80, at 37. Some hazardous industries have shown a substantial decline in fatalities. In coal mining, for example, 1000 miners were killed annually in the 1930s and 1940s; that number had declined to about 100 deaths per year by 1982. COMMITTEE ON UNDERGROUND COAL MINE SAFETY, COMMISSION ON ENGINEERING AND TECHNICAL SYSTEMS, TOWARD SAFER UNDERGROUND COAL MINES 43 tbl. 4 (1982).

84. The failure to have some certainty about the numbers affects not only discussions about compensation but also makes it impossible for epidemiologists to follow trends and set priorities for prevention. The CDC Injury Report comments: "Despite the limitations, existing data indicate that the magnitude of occupational injury is staggering. . . . Ideally, all occupational injury should be considered unacceptable, especially severe traumatic occupational injury resulting in death: objectives that call for reductions should be considered minimal goals." CDC Injury Report, supra note 9, at 331, 348. Notably, current BLS statistics indicate that 40% of occupational fatalities occur in transportation accidents and 20% involve assaults or violent acts. U.S. DEP'T OF LABOR NEWS, supra note 82, at 3. Known preventive strategies, such as safety devices for motor vehicles (e.g., airbags) and effective gun control might therefore result in significant reductions in workplace deaths.

data collection process itself and potential employer incentives to underreport influence the final counts. One recent report estimated that BLS numbers underestimate the seriousness of workplace injuries by a factor of four to nine times. Nevertheless, this data base is the primary one which provides a glimpse into the current status of occupational morbidity—and it is not an encouraging picture.

Over six million occupational injury and illness cases were

86. For example, length of time off work in these numbers is affected by the way in which BLS closes the reporting period and other specific aspects of the methodology underlying the data. Arthur Oleinick et al., Current Methods of Estimating Severity for Occupational Injuries and Illnesses: Data From the 1986 Michigan Comprehensive Compensable Injury and Illness Database, 23 AM. J. INDUS. MED. 231 (1993). A National Academy of Sciences report concluded there was considerable underreporting in the BLS annual survey. COUNTING INJURIES AND ILLNESSES IN THE WORKPLACE: PROPOSALS FOR A BETTER SYSTEM (Earl S. Pollack & Deborah Gellerman Keimig eds., 1987).

87. During the 1980s, several large employers were subjected to substantial fines by OSHA for their failure to report injuries accurately. Burton (1993), supra note 2, at 8. Some commentators postulate that these fines may have increased the likelihood that employers are currently reporting more accurate numbers. Id. Others, based upon the low likelihood that OSHA will ever inspect most workplaces (because the OSHA budget supports far too few inspectors to ever reach most enterprises), maintain that employers continue to have "enormous incentives" to underreport. Telephone Interview with James Weeks, Sc. D., Occupational Health Research Scientist, George Washington University (Aug. 10, 1993). Dr. Weeks suggested that the BLS numbers are so inadequate as to be "garbage." Id. The reporting problems are compounded in the case of occupational diseases; the disease may be linked to an exposure which occurred many years earlier, sometimes at another workplace. Occupational disease data also suffers from the lack of experience of many primary care physicians in the diagnosis of occupational disease. Additionally, company medical departments may be disinclined to provide such diagnoses to workers who will then become eligible for compensation benefits. See, e.g., Johns-Manville Prod. Corp. v. Contra Costa Sup. Ct., 612 P.2d 948, 955-55 (Cal. 1980) (finding corporate liability when the company medical department failed to disclose to workers that their X-rays revealed asbestos-related lung abnormalities, when the workers continued to be exposed to asbestos in the workplace, resulting in aggravation of the workers' condition). The legislature in California later codified this holding to create liability when an employer fraudulently conceals the existence of an injury and its connection with employment. CAL. LAB. CODE § 3602 (West 1992); see also Million v. E.I. duPont de Nemours & Co., 501 A.2d 505, 507 (N.J. 1984) (stating that the plaintiff's recovery was not limited to workers' compensation where the employer fraudulently concealed injuries from the employee); Martin v. Lancaster Battery Co., 606 A.2d 444 (Pa. 1992) (allowing the plaintiff to recover when the employer fraudulently withheld information from the employee, preventing the employee from taking action to reduce the severity of his condition). The same incentive that can lead employers and insurers to attempt to reduce hazards can also lead them to hide information. ASHFORD, supra note 9, at 404. Thus, the issue of data in this area is tied not only to the various economic incentives, but also to the complex interrelationship between employers and workers. Refer to part III.C infra.

88. Arthur Oleinick & Jeremy V. Gluck, Faulty Data Play Down Job Injuries, N.Y. TIMES, Aug. 15, 1993, at F13 (noting that "this gross inaccuracy about important health and safety data carries ominous implications for public policy").
reported in private industry in 1991. Of these, almost 2.8 million were serious enough for the worker to lose work time or experience restricted work activity, resulting in 60 million reported lost workdays in that year. The incidence rate for injuries in 1991 averaged 7.9 per 100 full time private sector workers, ranging from an average of 2.3 in finance and insurance industries to a high of 12.8 in construction. The rate of injury for the service sector (6.4) was, not surprisingly, lower than the rate for goods producing industries, which averaged 11.3 cases per 100 full time workers.

In addition to the sheer volume of the numbers of reported injuries, which public health officials and advocates view as "largely preventable," three aspects of the data reported by the BLS are particularly troubling. First, while the incidence of all reported illnesses and injuries declined somewhat from 1972 to 1982, it has edged upward in recent years. It is true that the total count of injury cases in the BLS data base involve a considerable number of minor injuries. More troubling, therefore, is the fact that the rate of injuries involving time lost at work (injuries which are presumptively more severe) has not declined and that the average length

89. BUREAU OF LABOR STATISTICS, U.S. DEPT OF LABOR, BULL. 2424, INJURIES AND ILLNESSES IN THE UNITED STATES BY INDUSTRY 1991, at 2 (1993) [hereinafter BLS 1991]. This is a rate of 8.4 per 100 full time private sector workers. Id.
90. Id. The National Safety Council, which counts only injuries which result in lost time, reported 1.8 million disabling injuries for 1990. ACCIDENT FACTS, supra note 80, at 34. A disabling injury is defined in this report as one which results in death, permanent disability, or any degree of temporary total functional disability beyond the day of the injury. Id. at 105.
91. The National Safety Council estimated lost workdays at 75 million for 1990; in this figure, fatalities are included at an average loss of 150 days per case and permanent impairments are included at actual days lost plus an allowance for lost efficiency resulting from impairment. ACCIDENT FACTS, supra note 80, at 35.
93. Id.
94. Refer to note 9 supra.
95. BLS 1991, supra note 89, at 1 tbl. 1. Total cases declined from 11.0 per 100 workers in 1973 to a low of 7.6 in 1983 and then rose to 8.8 in 1990. Data for 1991 shows a slight drop (to a rate of 8.4); it is too early to say that this represents a reversal of the earlier trend. Id.
96. Recordable injuries for BLS purposes include all injuries—such as cuts, fractures, sprains, amputations, etc. which result from work-related events—which involve loss of consciousness, restriction of work or motion, transfer to another job, or medical treatment (other than first aid). Id. at 73.
97. Lost workday cases were reported at a rate of 3.3 cases per 100 workers in 1972 and 4.1 in 1990. This figure also dropped in 1991, to 3.9 cases per 100 workers. Id. This is despite the fact that the use of lost workdays as a criterion for "reporting injuries or as a proxy for severity ... may be misleading because of the employer's incentive to return injured workers to the workplace to avoid 'reportable' injuries, even if they cannot perform their usual tasks." CDC Injury Report, supra
of time lost as a result of these injuries has steadily increased.98

Second, reports of occupational diseases involving cumulative trauma have skyrocketed. Injuries are generally defined as the result of a single traumatic event.99 Occupational diseases comprise everything else: acute and chronic illnesses including those caused by inhalation, absorption or ingestion of substances, and repeated exposure to a particular hazard.100 In general, occupational diseases are consistently underreported in all data systems; uncertainty regarding causality, existence of these diseases in the general population, long latency periods before symptoms appear, as well as scientific disagreement, mean that illnesses caused by work are much less likely than injuries to be reported by employers on OSHA forms or to be reported by workers to workers' compensation programs.101 The recent phenomenal growth in the reporting of musculoskeletal problems resulting from cumulative or repetitive trauma is significant from several vantage points. The sheer numbers are alarming: of the 368,000 new cases of occupational disease reported by

note 9, at 334.

98. Lost workdays per case rose from 47.9 in 1972 to 86.5 in 1991. BLS 1991, supra note 89, at 1.
99. For example, OSHA defines occupational injuries as “any injury such as a cut, fracture, sprain, amputation, etc., which results from a work accident or from a single instantaneous exposure in the work environment.” Id. at 42.
100. This is the BLS categorization. Some workers' compensation programs classify any health effect of an acute event as an injury. For example, an acute exposure to chlorine resulting in respiratory damage may be characterized as either an injury or an illness, depending upon the system.
101. Several empirical studies confirm that diseases are grossly underreported in workers' compensation data. For example, only 24% out of over 600 individuals diagnosed with severe work-related silicosis in state-based surveillance programs in Michigan and New Jersey, ever filed for workers' compensation benefits. Ken D. Rosenman et al., Mortality Rates Among persons with Silicosis Reported to Two State Based Disease Surveillance Systems, in PROGRAM SYLLABUS, SECOND INTERNATIONAL SYMPOSIUM ON SILICA, SILICOSIS, AND CANCER 174-87 (1993). Similarly, in a study of 238 people with work-related carpal tunnel syndrome, only one-third filed claims for compensation. Rebecca S. Miller & Donald C. Iverson, Carpal Tunnel Syndrome Study in ASPN: Final Report (1990) (on file with the author). A 1980 report estimated that 3% of occupational diseases, and 43% of occupational injuries, received compensation in 1971. U.S. DEPT OF LABOR, AN INTERIM REPORT TO CONGRESS ON OCCUPATIONAL DISEASE (1980); see also ASHFORD, supra note 9, at 416 (noting that, at the time his book was written, occupational disease accounted for only 1% of workers' compensation payments; Ashford also provides a general discussion regarding the underreporting of occupational diseases); WHITE, supra note 9, at 43 (estimating that 5% of occupational diseases result in compensation claims). These estimates regarding the extent to which diseases are compensated are obviously guesses, based upon suppositions regarding the true underlying rate of disease.
employers in 1991, 223,600 were cumulative trauma cases.\textsuperscript{102} Repetitive trauma cases rose from eighteen percent of reported occupational illnesses in 1981 to sixty-one percent in 1991,\textsuperscript{103} in fact, almost all of the increase in reported occupational illness is in this category.\textsuperscript{104} These claims are coming from both goods-producing and service industries.\textsuperscript{105} This means that the anticipated decline in illnesses associated with work is not occurring because of increases in reported cases in the relatively less hazardous industries.

Third, the industries identified by BLS to be “high impact” (i.e., industries reporting 100,000 or more injury cases in 1991) included primarily service sector industries with large numbers of workers.\textsuperscript{106} Although the rates of injury and of severe injury in these industries are lower than the rates for most manufacturing and mining jobs, the number of injuries in non-hazardous industries has important implications for the persistence of occupational injuries.

Finally, and perhaps most troubling, the vast majority of reported injuries involve old and familiar hazards, not new ones. The largest number of reported injuries result in musculoskeletal disorders. Workers file claims for strains and sprains, being hit by or struck by objects, falls, and machinery and motor vehicle mishaps. These injuries involve well known hazards for which there is a substantial literature that explores preventive techniques.\textsuperscript{107}

In short, the available data demonstrate a troubling persistence of occupational injuries and illness, in both goods-producing and service jobs. The incidence of illnesses and injuries which require time off from work and significant medical treatment has not declined as health and safety regulation has expanded, compensation costs have risen, and the economy has shifted from goods to service-producing jobs.

\textsuperscript{102} BLS 1991, supra note 89, at 5.
\textsuperscript{103} Id. at 5 tbl. 5.
\textsuperscript{104} Id. at 5 cht. 5.
\textsuperscript{105} Id. at 6.
\textsuperscript{106} Industries reporting more than 100,000 injury cases in 1991 were: eating and drinking establishments; hospitals; grocery stores; trucking and courier services; nursing and personal care facilities; department stores; motor vehicles and equipment manufacturing; hotels and motels. Id. at 2 tbl. 3.
\textsuperscript{107} The strains and sprains result primarily from material handling such as lifting and carrying heavy objects. Falls often occur because of slippery floors. California Insurance Study, supra note 7, at 1-6; see also CDC Injury Report, supra note 9, at 340-43 (stating that the top 10 injury categories were selected because they occur frequently, are often severe and often preventable; they include injuries, such as burns and lacerations, and external causes, such as falls and motor vehicle mishaps).
C. Costs/Injuries

Three issues must be addressed in exploring the relationship between compensation cost escalation and high occupational morbidity and mortality. First, what are the possible explanations for increasing workers' compensation costs? Second, how have employers and insurers responded to escalating costs? Third, is there any evidence that employers can effectively decrease compensation costs?

1. Explanations for Cost Escalation. Explanations regarding the escalation in workers' compensation costs and the persistence of injuries cluster into five categories: persistence of workplace hazards, attributes of the workers' compensation system, worker behavior, demographic and industrial changes, and reporting variability and data validity.

a. Persistence of workplace hazards. Although internal inflation of costs due to legislatively mandated benefit levels and rising medical costs account for a substantial portion of the cost escalation in workers' compensation, the remainder of the escalation is closely linked to the number and severity of reported injuries. The rate of reports of relatively severe injuries which are costly to compensation systems climbed through the 1980s. Workers are still getting injured; compensation costs are rising as a result of the incidence of reported injuries and illnesses.

b. Attributes of the workers' compensation system. Wide variations in costs, injury rates, and benefit levels among states make it difficult to assess the impact of changes in definitions of compensable conditions and of structural changes in workers' compensation systems. In fact, there is remarkably little correlation among rates of reported injuries, state ranking by liberality of benefit levels, and employer costs for...

108. The occurrence of injuries or illnesses and the filing of claims (or reporting of injuries) are not equivalent. Refer to note 101 supra. To the extent that claims are not filed, even if an injury has occurred, costs will be reduced despite the persistence of injuries. For some employers, whose interest focuses solely on the costs associated with compensation claims, the goal therefore becomes to limit the frequency of the filing of claims rather than to limit the injury rate. For a full discussion of this issue, refer to part III.C infra.

109. Refer to notes 80-82, 97-98 supra and accompanying text.
compensation.110 States with high aggregate costs report both high and low rates of injury.

Nevertheless, certain changes in the workers’ compensation systems have unquestionably contributed to increasing costs. The recognition of the work-relatedness of health conditions has expanded dramatically over the last thirty years. Not surprisingly, recognition of new compensable conditions expands compensation costs. At their inception, workers’ compensation programs focused on providing benefits to those individuals who were injured in “accidents”—traumatic, unexpected, observable events.111 This led, for example, to the exclusion both of occupational diseases and musculoskeletal injuries resulting from repetitive trauma. Over time, this definition expanded to include diseases caused by exposure to both physical and non-physical agents such as dusts, fumes, and noise.112

For example, a 1992 article in an insurance trade journal noted that Aetna Life and Casualty had found that forty-five percent of its claim payments were for cumulative trauma disorders.113 Thus, at the same time that new technology has contributed to these injuries,114 and their reported incidence

110. See Eleventh Annual Grant Thornton Manufacturing Climates Study 152-53 (1990) (hereinafter Grant Thornton Study (showing wide variation in ranking of states with regard to statutory benefit levels and employer premium costs)); Burton & Schmidle, supra note 28, at 10. Ashford notes that “there does not appear to be a systematic relationship ... between the level of benefits and the safety record in the State.” Ashford, supra note 9, at 398. Furthermore, there is a surprisingly poor correlation between premium rates and average benefits across states. Id.

111. Refer to note 32 supra.

112. Problems with determining compensability of occupational diseases are compounded by the fact that many workers’ compensation systems historically excluded diseases of everyday life (even if arguably occupationally-caused) or set statutes of limitations based upon time of exposure, which may have occurred years before the worker developed the disease and discovered its work-relatedness. Difficulties in proving “work-relatedness” also result in increased litigation over the compensability of conditions. As noted above, the vast majority of occupational diseases are probably not compensated. Refer to note 101 supra.

113. Aetna Ergonomics Workbook Now Available to Employers, Nat’l Underwriter, Prop. & Casualty/Risk & Benefits Mtg. Edition, Oct. 5, 1992, at 15; see also Junius C. McElveen, Jr., Recent Trends in Workers’ Compensation, 18 Empl. Rel. Law J. 255 (1992) (noting large increase in repetitive trauma claims); Ruth Gastel, Occupational Disease: Insurance Issues, Ins. Info. Inst. Rep., Jan. 1993 (indicating that “[s]ome insurance industry data support the BLS figures. However, several insurers believe that a much greater proportion of workplace injuries than is indicated by the BLS data are due to cumulative trauma. In an informal survey of its national accounts, one large national insurer found that about 45 percent of injuries and 63 percent of workers' compensation claim payments were due to repetitive motion injuries.”).

114. California Insurance Study, supra note 7, at 35.
has risen dramatically,\textsuperscript{115} workers' compensation systems have expanded their willingness to compensate for illnesses caused by non-acute events. This expansion of the flexibility of the definition of compensable conditions, and the accompanying growth in claims filing, causes some employers and insurers to be highly suspicious about the diagnoses.\textsuperscript{115}

Even with the large number and size of compensation claims currently associated with repetitive trauma, these claims are probably vastly underreported in the compensation systems. In one study, twenty percent of people afflicted with cumulative trauma disorders became unable to work and another thirty-five percent required modified work activities, but only about one-third of the workers with occupationally-caused disorders filed claims for compensation.\textsuperscript{117} The implication of trends in cumulative trauma disorders and claims is troubling: the changing nature of work does not promise either reduced injury rates or fewer compensation claims.\textsuperscript{118} In fact, the pandemic nature of some cumulative exposure diseases could bring massive costs to compensation systems if the rate of claims filing actually reflects the incidence of the diseases.\textsuperscript{119}

\begin{itemize}
\item[115.] Refer to notes 102-05 supra and accompanying text.
\item[116.] This suspicion has been applied to cumulative trauma disorders. Similarly, insurers are now expressing concern about diagnoses of reflex sympathetic dystrophy (RSD) syndrome, a relatively rare condition in which a simple injury may trigger significant and persistent pain. "While RSD is a very real and debilitating condition, insurers are concerned that increased knowledge about it is causing an increase in the number of RSD diagnoses and claims. . . . Costs associated with RSD can be enormous as patients and doctors search for answers to the pain." \textit{New Workers' Comp Claims}, \textit{Med. Benefits}, Aug. 30, 1993, at 10-11.
\item[117.] Miller & Iverson, supra note 101, at 9-10 tbl. 18. There were a total of 552 people with carpal tunnel syndrome in this study. \textit{Id}. at 9. The disorder was job-related for 43\% of these, or 238. \textit{Id}. at 9. Of the 552, 14\% filed workers' compensation claims. \textit{Id}. Therefore, if only people whose disorder was job-related filed claims, one-third of those who could legitimately file claims did so. Lawrence Fine, M.D., Director of the Division of Surveillance, Hazard Evaluation, and Field Studies (DSHEFS) of the National Institute for Occupational Safety and Health, reported on this study at the New Challenges in Occupational Health conference in Houston on March 4, 1993. For other similar findings, refer to note 101 supra.
\item[118.] California Insurance Study, supra note 7, at iii.
\item[119.] Noise-induced hearing loss (NIHL), for example, probably afflicts a majority of older industrial workers and miners. \textit{See generally} 1B \textsc{Larson}, supra note 65, § 41.51 (discussing the potentially pandemic nature of hearing loss claims). However, NIHL rarely results in lost time from work. Because hearing loss is also attributable to aging, most compensation systems have been reluctant to provide any, or very much, compensation for this well-documented, occupationally-caused, objectively determinable impairment. \textit{See id}. § 41.54. The underreporting of occupational diseases (which involve cumulative exposure to workplace hazards rather than traumatic events) to workers' compensation programs is a frequent subject of study and commentary. Refer to note 101 supra. Professor Larson notes, with regard to this, that
\end{itemize}
In addition to expanding the definitions of compensable conditions, legislatures in many states have also increased levels of statutory benefits, expanded medical benefits, and, in some places, broadened the definition of covered workers.\textsuperscript{120} As noted above, the National Commission's Report in 1972 precipitated an expansion of benefits during the 1970s.\textsuperscript{121} The combination of expanded benefit levels, increases in the covered workforce, expansions in the definitions of compensable conditions, and increasing friction costs have contributed significantly to cost escalation.

c. Worker behavior. While workers and their representatives point to the persistence of occupationally-caused morbidity and mortality, some employers and economists argue that worker behavior is the primary cause of increased costs. Several studies conclude that workers file more claims when benefit levels rise: that increases in statutory benefit levels are associated with rising numbers of lost-time claims and with lengthening duration of claims.\textsuperscript{122} The estimated magnitude of this increase in claims varies. The two explanations that are offered for this phenomenon—decreased

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the early workers' compensation laws made no serious attempt to address compensation for occupational diseases, in part because the “heavy incidence of certain diseases in particular industries or areas would make their full coverage an impossible burden on the compensation system.” 1B LARSON, supra note 65, § 41.20, at 7-488. Similarly, with regard to restrictions imposed on compensation for respiratory diseases, Larson speaks of “the fear that the compensation system could not bear the financial impact of full liability for dust diseases simply because they were so wide spread in particular industries.” Id. § 41.81, at 7-685. Legal barriers to awarding compensation for occupational diseases were therefore established; some of these persist today. E.g., id. § 41.80, at 7-681, 7-684. 120. See 1 LARSON, supra note 65, § 5.30, at 2-21 to 2-24 (discussing increases in percentage of employees covered and maximum benefits); ANNE TRAMPOSH, AVOIDING THE CRACKS: A GUIDE TO THE WORKERS’ COMPENSATION SYSTEM 16-20 (1991) (discussing the commonalities in the compensation benefits in many states, including medical benefits, wage loss benefits, and death benefits).

121. For example, medical benefits are now provided so that the injured worker will receive lifetime treatment for his or her occupational injury or disease. See generally U.S. CHAMBER OF COMMERCE, 1993 ANALYSIS OF WORKERS COMPENSATION LAWS (1993) [hereinafter U.S. CHAMBER OF COMMERCE]. States have raised minimum and maximum benefit levels, so that in the majority of states injured workers will receive two-thirds of their pre-injury gross wage (to a maximum, generally, of 100% of the state average weekly wage). Id. Minimum and maximum benefit levels are now tied to the state's average weekly wage so that the maximum weekly benefit now increases automatically in at least 45 states. Id. In addition, the majority of jurisdictions have expanded the availability of permanent total disability benefits so that these benefits are awarded to people who, as a result of occupational injuries, become totally disabled through a combination of factors, including age, education, and the state of the labor market. Refer to note 65 supra.

122. Refer to note 18 supra (listing some of these studies).
attentiveness to safety as a result of increasing adequacy of benefits, and increased claims filing behavior independent of increasing injury rates—are discussed in more detail in part III.C of this Article. Some of the authors of these studies have concluded that benefit rates should be curtailed in order to control this perceived (negative) phenomenon,123 their focus is therefore on the potential inducement to workers offered by the availability of more adequate benefits, rather than upon establishing a benefit which provides economic adequacy to workers who are partially or totally disabled from working.

d. Demographic and industrial changes. Demographic, wage, and industrial changes influence costs as well. First, and most obviously, total cost is associated with increased covered payroll. Increasing numbers of workers and legislative expansion of the categories of covered employees meant that covered payroll increased ten-fold from 1960 to 1990.124 Again, although this provides a partial explanation for the rise in costs, it cannot account for the rise in the percent of payroll paid in workers' compensation premiums.

Second, the shift to a service-sector economy does not appear to be providing the anticipated major shift away from occupational morbidity. The relative decline in more hazardous goods-producing jobs and increase in service-sector jobs has not meant that the reported injury and illness cases in either the BLS data set or in workers' compensation programs has declined.125

Third, the increasing duration of lost time claims is associated at least in part with the aging of the workforce: while more experienced workers generally have fewer injuries,126 injuries of older workers tend to be more severe and require a longer healing period.127 The number of lost

123. See, e.g., Ehrenberg, supra note 18, at 77; Chelius, The Influence of Workers' Compensation on Safety Incentives, supra note 18, at 155.
125. Refer to note 106 supra and accompanying text.
126. California Insurance Study, supra note 7, at 18 (citing a four year study of construction accidents showing that a greater percentage of accidents occur during the first year of work for an employee, regardless of the workers' age); see also Upjohn Report, supra note 7, at V-6 to V-7 (stating that low claims employers tend to have employees with more years of experience).
127. See Alan E. Dillingham, Demographic and Economic Change and the Costs of Workers' Compensation, in SAFETY AND THE WORK FORCE: INCENTIVES AND DISINCENTIVES IN WORKERS' COMPENSATION, supra note 18 at 163; Nelson, 1984-88 Benchmark, supra note 60, at 46 (stating that although older workers have a lower
workdays per claim is expected to continue increasing as the median age of workers rises.128

e. Reporting variability/data validity. Data validity problems raise separate questions about the interpretation of trends in the reports of occupational injuries. To the extent that neither employers' reports nor workers' compensation claims provide us with an accurate picture of the true level of occupational morbidity and mortality, it is impossible to assess the interaction between claims and costs.129 The fact is that changes in claims or reports of injuries may reflect nothing but changes in reporting.

2. Employer and Insurer Responses to Costs. Increasing costs have not been ignored by either employers or their insurers. Many of their reported responses have not been focused on primary prevention, however.

a. Changes in the insurance market. Increasing costs have had significant effects on the workers' compensation commercial insurance market. Self insurance has increased as employers attempt to extricate themselves from the additional costs incurred through insurance and, in return, assume the risk of loss themselves.130 At the behest of insurance carriers,
states have moved to deregulate this portion of the insurance market and to allow competitive pricing of workers' compensation insurance.\textsuperscript{131} Not surprisingly, deregulation results in competitively lower pricing for employers who are favorable risks.\textsuperscript{132} As a consequence, higher risk employers are forced into the residual (high risk) market to purchase this mandatory insurance.\textsuperscript{133} There has been an explosion nationally in both the number of employers in the residual market and the extent to which the residual market operates at a deficit.\textsuperscript{134}

b. \textit{Enterprise and insurer attempts to contain costs}. There is no question that insurers, and to a lesser extent employers, are aware that compensation costs are not immutable and can be affected by their own behavior. Three variables affect workers' compensation costs: the occurrence of injuries, the filing of claims, and the cost of claims once filed. Employers and insurers recognize, and can influence, all three of these variables.

First, they have, of course, attempted to reduce both the number and severity of injuries and the numbers of claims filed after injuries have occurred.\textsuperscript{135} Private insurance carriers expend between one and two percent of their gross revenue on "loss control" efforts;\textsuperscript{136} these efforts include both

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\item Escalating rapidly, most notably health insurance.
\item \textsuperscript{131} Workers' compensation rates were traditionally regulated through administered pricing systems. Burton (1993), supra note 2, at 11. Deregulation was implemented in many states during the 1980s. \textit{Id.} Open competition removes all regulation on pricing and was adopted in Arkansas in 1981; 16 other states followed by 1990 (Colorado, Connecticut, Georgia, Illinois, Indiana, Kentucky, Louisiana, Maine, Maryland, Michigan, Minnesota, New Mexico, Oregon, Rhode Island, South Carolina, Vermont). \textit{Id.} at 20 tbl. A11.
\item \textsuperscript{132} See, e.g., H. Allan Hunt et al., The Impact of Open Competition in Michigan on the Employers' Costs of Workers' Compensation, in WORKERS' COMPENSATION INSURANCE PRICING: CURRENT PROGRAMS AND PROPOSED REFORMS 140-41 (Philip S. Borba & David Appel eds., 1988) (describing the decrease in costs for some employers after the deregulation of the workers' compensation insurance industry in Michigan).
\item \textsuperscript{133} For the nature and effects of the residual market, refer to part III.B.1.c infra.
\item \textsuperscript{134} Burton (1993), supra note 2, at 11. For the resulting problem of subsidy for high risk employers, refer to part III.B.1.c infra.
\item \textsuperscript{135} Refer to part III.C.3 infra.
\item \textsuperscript{136} Telephone Interview with Barry Llewellyn, Vice-President, National Council on Compensation Insurance (Feb. 26, 1993) (stating that insurance carriers expend less than one percent). Members of the National Association of Casualty & Surety Agents expend about two percent of annual revenue on loss control services. Novak, supra note 53, at 32. Loss control includes any activity by an insurer which will reduce the amount paid out to an insured. In this context, it may include, for exam-
cost containment strategies and safety efforts. Loss control initiatives in the private insurance market are also utilized as marketing tools and for purposes of competitive pricing. Part III.B of this Article discusses these efforts in greater detail.

Second, employers and insurers have focused efforts on costs incurred in claims, particularly medical cost containment devices and early return-to-work programs. These efforts are directed not at the underlying rates of injuries but are, instead, a post hoc approach focusing on the cost of a claim after these injuries occur.

c. Political attempts to constrain systemic costs. Finally, the political hysteria surrounding workers’ compensation has grown with the increase in workers’ compensation costs. Political solutions focus on three areas: medical cost containment; benefit reductions, restrictions on eligibility of claims, and increased system-vigilance against fraud; and an attempt to reintroduce safety and prevention into workers’ compensation legislation. The nature and success of these responses are discussed in Part IV of this Article.

3. Successful Ventures into Cost Control. Thus, costs are rising, injuries are not declining, hysteria is growing, and there is little evidence that costs motivate employers or insurers to act aggressively to decrease injuries. Evidence does indicate, however, that if employers take prevention seriously, the cost savings can be substantial.

Anecdotal accounts of such success abound. Mennen Company claims to have cut back injury claims by ninety percent after instituting an aggressive safety program. John Deere Company attributes a seventy-four percent decrease in their OSHA recordable injury rate from 1975 to 1984 to development of facility-based occupational health and

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137. See generally Greenwood & Taricco, supra note 68.
138. Refer to part II.A supra.
139. Safety Program At Mennen Co. Cuts Claims More Than 90 Percent, 3 Workers' Comp. Rep. (BNA) 169 (1992). The effort at Mennen to reduce back injuries resulted in a 92% reduction in workers' compensation claims at five plants between 1989-91. The program included safety audits and subsequent design of a safety program, including training, minor engineering changes (including reducing size of shipping boxes), an aggressive light duty program, creation of safety committees, and weekly safety meetings.
safety goals supported by management. An automobile parts manufacturing company implemented revised material handling procedures in 1986 and experienced a seventy-three percent reduction in annual injury-related workers' compensation claims. Cord Moving and Storage Company in California reportedly made a concerted effort to improve safety by hiring a safety manager, establishing training programs, performing equipment maintenance, investigating accidents, and developing an incentive program; after three years, workers' compensation losses were reduced 116 percent, even though the company had grown over ten percent. Weyerhauser Company instituted a combined safety and post-injury control program and trimmed workers' compensation costs from $700 per employee in 1984 to $300 in 1990. And the stories go on.

In 1988, the W.E. Upjohn Institute for Employment Research completed a major study of workers' compensation claims for the State of Michigan. Michigan, like most states in the country, was beset by charges that workers' compensation costs exceeded those in neighboring states and created a negative economic development climate. At the same time, employers in the same industries paid widely divergent insurance rates for compensation coverage, based upon experience rating factors. The Upjohn Report studied intrastate variations in insurance rates among employers, attempting to explain why some insured employers achieved such substantially better experience, and therefore substantially lower rates, in the workers' compensation program.

140. CDC Injury Report, supra note 9, at 338 (citing P.W. Lanclanese, Training: Vital to Safety's Success, 1984 REKINDLE 11, 13 (Oct. 1984)).
143. Richard W. Palczynski, Coping with the Crisis: Examining Workers' Compensation, BEST'S REV., Nov. 1992, at 69, 94.
144. See, e.g., Martha H. Miller, A Corporate Safety and Health Program: The First Line of Defense, in Welch, supra note 7, at 57-63; James C. Soule, Commitment at Steelcase, in Welch, supra note 7, at 65-71; Kevin M. Meade, An Attitude Problem, in Welch, supra note 7, at 73-80.
145. Upjohn Report, supra note 7. The report was submitted to the Bureau of Workers' Disability Compensation, Michigan Department of Labor. Id.
146. Id. at I-2.
147. Id. at I-4.
The purpose of the study was to identify organizational variables associated with employers with high and low workers' compensation claims experience "in order to provide guidance to employer initiated actions that may favorably impact their workers' compensation experience." The study concluded that considerable variation exists in claims incidence among employers even within the same industry and that a "significant portion of the variance among employers ... is due to policy and behavioral differences that are under company control." As in other studies, the largest companies (over 500 employees) tended to be in the low claims group. High claims employers had significantly more employees with less than two years of seniority, were much less likely to provide training to their new employees, and had more turnover among their workers. High claims employers were somewhat more likely to be unionized, although the report notes that forty percent of the low claims employers were also unionized. Somewhat against conventional wisdom, a wide variety of factors were found not to be significant in predicting compensation experience. These included geographic location, type of insurance (including self insurance), age of the workforce, rurality, gender breakdown of the workforce, and use of part time workers or routine overtime.

Most importantly, "low claims employers engage in

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148. The study was designed as follows. Researchers identified employers in four industries (food production, fabricated metals, transportation equipment, and health services) which were in the top 15% and bottom 15% in terms of workers' compensation claims experience. Id. at II-2 to II-3. The identification of the study group did not rely upon the modification factors assigned for experience rating purposes but, rather, on the actual claims experience. The study included both self insured and insured employers. Only firms with 50 or more employees which had at least one closed case for the relevant period were studied. The researchers note that the employers with the very best claims experience may have been excluded from the study. High and low firms were drawn from homogeneous populations relative to accident exposures. Id. at II-3. Identified firms were asked to complete an extensive questionnaire; the self-reported responses to the questionnaire form the basis for the conclusions in the report. A total of 63 firms agreed to participate in the study and returned questionnaires. Id. at II-1 to II-9. The participating employers represented a cross-section of employers in the chosen industries. See id. at II-4.

149. Id. at I-4.

150. Insurance costs for the employers studies varied within the same industry by a factor of six. Id.

151. See id. at I-3 to I-4 (emphasis added).

152. Id. at III-2.

153. Id. at III-21, V-6 to V-7, V-9. Seventy-five percent of low claims employers provided safety training to new employees. Id. at III-21.

154. Id. at V-5 to V-6.

155. Id. at III-3 to III-6, V-5 to V-6, V-8.
systematically different patterns of behavior to prevent and manage work related disabling conditions. In its introduction, the report noted that accident prevention is the key element in controlling occupational injuries. With regard to safety programs, low claims employers showed significantly higher ratings of achievement on the safety and prevention subscale. Low claims employers also demonstrated more aggressive approaches to disability management, including return-to-work programs.

Equally telling were the findings with regard to corporate culture. Low claims employers consistently showed less suspicion of both injured workers and the compensation system. They were more likely to treat their employees as "stakeholders," they were less likely to feel that the rate of absenteeism in the enterprise was unfavorable, even though there was no significant difference in absence rates between the two groups of employers. They achieved significantly higher scores in a variety of self assessment evaluations regarding organizational behavior, including safety and prevention activities, employee participation in problem solving, and information and communication transfer.

The Upjohn study indicates that workers' compensation costs and claims experience are within the autonomous control of enterprises. The study does not attempt to explore why the corporate culture and safety practices of some employers differ so markedly from others. There is no indication in the report that the cost of workers' compensation was a primary motivator for low claims employers. It appears (although this

156. Id. at V-9.  
157. Id. at I-9 (noting that "this requires the establishment of an effective safety program that has the capacity to identify hazardous conditions, ensure proper design of facilities and machinery, train employees, ensure safe work practices and motivate employee safe behavior").  
158. Under this category, low claims employers reported increasing employee awareness through the use of incentives, recognition, rewards and peer influence for individual and departmental achievements in safety and lost time control... Pre-employment screenings, including back exams and physicals for health and disability, as well as counseling and training for those experiencing accidents and injuries were also noted. Ergonomic work site modifications also appeared to be frequently employed or planned as strategies. Id. at V-13. Several of these strategies may result in reductions in claims filing, and therefore cost reduction, without reducing injuries. Id. at V-14 to V-15.  
159. Id. at V-11.  
160. Id. at V-10 to V-11.  
161. Id. at V-10.  
162. Id. at III-8 to III-9.  
163. Id. at V-9 to V-10.
is certainly not verifiable) that the differences in corporate culture spawned the differences in workers' compensation experiences, rather than the reverse.\textsuperscript{164}

The Upjohn study also does not distinguish between managerial techniques which prevent the occurrence of injuries and those which might simply discourage the filing of claims;\textsuperscript{165} it is not clear that the decrease in costs in low claims firms is necessarily associated with improved safety in all of these firms. Although low claims employers clearly demonstrated a higher score on safety and prevention activities,\textsuperscript{166} the study also notes that "low claims employers also showed a very interesting differences [sic] in the number of injuries that turned into compensable claims. It appears that low claims employers are somehow able to prevent many accidents from becoming lost work day injuries."\textsuperscript{167} In other words, low claims employers may have both prevented injuries \textit{and} successfully encouraged workers not to file claims.\textsuperscript{168}

Motivated by similar concerns which led to the Upjohn study and alarmed by the substantial increases in costs in the California workers' compensation system, the California

\textsuperscript{164} This impression is confirmed by Kevin Meade, a Michigan businessman, who writes,

It is clear to us that by making our organization and our management at the plant level responsive to people's concerns about safety and health issues, we were able to effect a change in employee attitudes that was reflected in workers' compensation costs. Some of our attempts at change were certainly successful; grievances went down, lost-time accidents diminished, and workers' compensation costs decreased dramatically . . . I think there is . . . an interrelation between employee attitudes and things that indicate employee attitudes and workers' compensation. I think they go hand in hand and I think you can control and influence workers' compensation costs in your facilities without concentrating specifically on workers' compensation. In fact, if you concentrate on workers' compensation, I think you are at the wrong end of the problem. Your company's safety record and your people's opinion of how you respond to and deal with safety problems in the plant are what are going to cause attitudes to improve, opinions to change, and accidents and costs to go down.

Meade, supra note 144, at 80.

\textsuperscript{165} Cf. Ison, supra note 20, at 726 (discussing practices that have been adopted to reduce recorded claims costs including discouraging workers from reporting claims).

\textsuperscript{166} Upjohn Report, supra note 7, at III-17.

\textsuperscript{167} Id. at V-14.

\textsuperscript{168} This is consistent with a study conducted by Boeing that indicated that employees who disliked their jobs and their supervisor were more likely to "injure" their backs—i.e., file claims for back injuries. See Pritula, supra note 74, at 80. Successful strategies to discourage claims may reflect an employer's greater willingness to accommodate workers who are injured. Lower claims filing experience may, on the other hand, be the result of implicit coercion which makes workers perceive that the filing of a claim will result in adverse employment consequences. Refer to part II.C \textit{infra} for a full discussion of this issue.
legislature directed the State Department of Insurance to investigate workers' compensation claims in 1989. The legislature directed the Department of Insurance to study the types and causes of injuries and illnesses which resulted in significant proportions of workers' compensation losses; to determine whether employer size or insurance experience rating contributed to significant differences in types of injuries; and to identify investments employers could make which would be most effective in reducing the injuries causing major proportions of the losses. Finally, the Insurance Department was asked to recommend methods to encourage employers to make investments identified as most likely to reduce workers' compensation losses.

The study, completed in February 1993, concluded:

- Employers can minimize the rate and severity of injuries by as much as forty percent.
- Cost effective actions were often identified by employees.
- The primary causes of large claims were commonplace

169. See CAL. INS. CODE § 11745 (Deering 1989) (repealed 1992) (directing the insurance commissioner of California to review workers' compensation claims and prevention strategies); California Insurance Study, supra note 7, at XV (stating that the Senate Bill was enacted because of concern with the rate of injuries and the cost of compensation).

170. See, e.g., Peter Kerr, Vast Amount of Fraud Discovered in Workers' Compensation System, N.Y. TIMES, Dec. 29, 1991, at L1, L14 (reporting that in California as much as 20% or more of claims may involve cheating, and recounting stories about the encouragement of fraudulent claims by pitchmen working for doctors and lawyers).

171. GRANT THORNTON STUDY, supra note 110, at 152-53 (showing, out of 50 states, California with the 4th lowest statutory average cost per case and third highest premium cost for employers); see also Burton & Schmidle, supra note 28, at 10; John F. Burton, Jr. & Timothy P. Schmidle, Comparing States' Benefits: Multiple Choices, JOHN BURTON'S WORKERS' COMPENSATION MONITOR, Nov.-Dec. 1991, at 6 (showing that in 1989 California ranked 47th of 50 jurisdictions in average benefits provided by statute for all types of cases).

172. California Insurance Study, supra note 7, at i.

173. Id. This study looked only at serious indemnity claims, which were determined to account in California for 20% of claims but 85% of incurred losses in any policy year. See id.

174. See id. at iii (noting individual employers committed to having a healthy workplace have reduced injury rates by up to 40%).

175. See id. at iii-iv (citing Ford Motor Company's use of ergonomics committees at each plant for nearly a decade as an example of soliciting employee input).
injuries and not new or unknown risks.\textsuperscript{176}

- Not all effective primary prevention actions require spending large amounts of money.\textsuperscript{177}
- Changes which improve health and safety also improve productivity.\textsuperscript{178} In fact, changes in material handling were most often motivated by productivity, not safety, concerns.\textsuperscript{179}
- The most significant causes of injuries were known hazards with proven prevention strategies.\textsuperscript{180} For example, the high incidence of injuries among carpenters and roofers\textsuperscript{181} was the result of familiar hazards of construction which “have changed little over time”;\textsuperscript{182} a study of burn injuries concluded that “lack of compliance with safety orders was a major cause of the injuries.”\textsuperscript{183} In the trucking industry, in which one in six drivers reported work-related injuries in 1989, two-thirds of the accidents resulted from overexertion, falls or slips, or motor vehicle accidents.\textsuperscript{184}

The report concludes:

Although requirements to improve working conditions are not acceptable if they unduly burden employers, the evidence suggests that employers can minimize the risk and severity of injury in a cost-effective manner. In fact, strategies to minimize the risk of injury have been found to increase productivity and profit.\textsuperscript{185}

In sum, there appears to be no question that employers can decrease costs of compensation by efforts which are internal to

\textsuperscript{176} See id. at 6 tbl. 3. Strains, sprains, fractures, contusions, punctures, concussions and lacerations comprised two-thirds of the injuries (66.8\%). Another 14\% were for claims filed for cumulative trauma injuries. Psychiatric claims constituted 3.7\% of claims. All other types of claims were 1\% or less of the total. These data also confirm the continuing allegation that occupational diseases—particularly occupationally-caused hearing loss and respiratory disease—are rarely compensated. Id. at 11.

\textsuperscript{177} Some inexpensive investments, such as supplying personal fall arrest system to a five person crew of roofers or slip resistant soled shoes to employees, have a pay-back period of less than one year. Even more costly investments have rapid payback periods. For example, a conveyor belt to reduce carrying injuries had a two year payback. Job rotation, requiring almost no investment, can have significant impact on repetitive trauma disorders. See id. at iv.

\textsuperscript{178} See id. at iv-v. For example, a company with a high incidence of carpal tunnel syndrome (CTS) began a program of morning calisthenics, five-minute hourly breaks, and frequent job rotation. Their productivity increased from two-thirds to 95\%, and their incidence of CTS “almost disappeared.” Id. at iv.

\textsuperscript{179} Id. at 88.
\textsuperscript{180} Id. at 11.
\textsuperscript{181} One in six carpenters and one in five roofers were injured in 1989. Id. at 13.
\textsuperscript{182} Id.
\textsuperscript{183} Id. at 17.
\textsuperscript{184} Id. at 56-57, 65-66 tbl. 1.
\textsuperscript{185} Id. at v.
the enterprise. There is little evidence, however, to show that the costs themselves are the predominant reason that these managerial techniques are adopted; general corporate culture appears to be the primary determinant of compensation activity. Thus, at the July 1993 conference on the future of the U.S. workplace sponsored jointly by the Departments of Labor and Commerce, the characteristics of high performance workplaces were found to include commitment to total quality, ongoing training for workers, employee participation, work organization centered around self-managing, innovative compensation systems, emphasis on diversity, a safe and healthy workplace, and sensitivity to family issues.186 Safety and health appears to be an integral component of successful corporate culture, not a byproduct of high workers' compensation costs.

III. EXPLORING THE PARADOX

The resulting question is inescapable: If it makes both economic and managerial sense, why would more employers not adopt the strategies observed among low claims employers in the studies in California and Michigan? The following sections explore four interrelated explanations for the failure of high workers' compensation costs to promote effective deterrence of workplace injuries.

Part A examines the history and consequences of the no-fault design of the workers' compensation system.187 This no-fault design often results in the view that the root cause of compensation claims does not lie in employer behavior (or misbehavior).

Part B looks at the distribution of costs among employers and the impact of insurance pricing on deterrent effects in workers' compensation.188 Not only has the general insurability of risks limited the deterrence value of the liability, but the particular pricing mechanisms and subsidies within the workers' compensation insurance market dilute any deterrent effect. Moreover, despite the apparent internalization of costs by employers, significant components of these costs are borne by workers, other social insurance programs, and the general populace.

187. Refer to notes 192-261 infra and accompanying text.
188. Refer to notes 262-372 infra and accompanying text.
Part C explores the impact of the employment relationship and the law governing that relationship on the behavior of employers and employees within this social insurance structure. The inherent inequality of the bilateral employment relationship engenders a prevalent view that behavior of employees is the primary cause of increased costs and should therefore be the primary focus of employer activity and program redesign. The problem is perceived to be either unsafe activity on the part of workers or the filing of unnecessary claims by workers. Increases in internalization of costs may result in unintended pressure on employers to decrease claims cost independent of injury rates instead of stimulating efforts at prevention. This behavior confounds the process of assessing both the extent of injuries and the appropriateness of costs.

Part D reviews the transactional costs which are generated as a result of the particular structure of workers’ compensation. Employer ignorance about the extent to which prevention may influence expenditures contributes to these transaction costs. The ability to blame legislators, doctors, and lawyers (in addition to workers) for the escalation in costs creates a barrier to employer self-scrutiny. Interstate variations reinforce the view that the problems lie in the legislative design of the program, not with conditions within workplaces. The end result is a “rush to the statehouse door” instead of an internal safety audit.

A. The Workers’ Compensation Paradigm

1. The Rise of Workers’ Compensation Programs. Suffering and death from industrial work jolted the American social consciousness at the turn of the twentieth century. Spectacular industrial expansion in the latter half of the nineteenth century resulted in an explosion of work-induced disability. Real

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189. Refer to notes 273-460 infra and accompanying text.
190. Refer to notes 461-82 infra and accompanying text.
192. Peak industrial injury rates were reached during the first decade of the twentieth century. In the year ending June 30, 1907, 4534 railroad workers were killed; mine injuries resulted in the deaths of 2534 men in that same year. See SOMERS & SOMERS, supra note 34, at 7-9. An estimated 35,000 deaths and two million injuries occurred each year during this period; one quarter of the injuries produced disabilities lasting longer than one week. The railway injury rate doubled between 1889 and 1906. See Lawrence M. Friedman & Jack Ladinsky, Social Change and the Law of Industrial Accidents, 67 COLUM. L. REV. 50, 60 (1987).
catastrophes (including the deaths of 361 miners in a coal mining explosion in West Virginia and of 164 women in New York City in the Triangle Shirtwaist Fire) and muckraking fiction (such as Upton Sinclair's mesmerizing account of work in the meatpacking plants in Chicago) combined to change the way people thought about injury at work.

One sign of the rising tide of concern came in the form of dramatic changes in the way courts and juries responded to injured workers' lawsuits against employers. Perhaps encouraged by public opinion which blamed capitalists and industrial enterprises for the extent of their misery, increasing numbers of employees brought tort actions against their employers, seeking damages for work-related injuries. Injured employees undoubtedly were bucking the system: employers had been aggressively shielded from legal liability for workplace injuries by preindustrial notions of their duty of care; common-law defenses which evolved in the latter part of the nineteenth century appeared to offer an almost impregnable shield to successful lawsuits. But workers brought suit; judges, perhaps acceding to growing public pressure, allowed the cases to be heard by juries; and juries, reflecting the changing views of the times, began to bring in verdicts that, more and more frequently, were a resounding statement that industry

194. See Somers & Somers, supra note 34, at 32. The fire occurred on March 25, 1911, the day after the New York court found the first mandatory workers' compensation law to be unconstitutional in Ives v. South Buffalo Ry. Co., 201 N.Y. 271 (1911), on grounds that the workers' compensation law was "plainly revolutionary" and amounted to an unconstitutional taking.
196. See Friedman & Ladinsky, supra note 192, at 59-69 (noting that industrial injury litigation increased because of the larger number of injuries due to technological change and providing an historical account of the rise of popular hostility against financial institutions, the railroads, and corporations).
197. During the nineteenth century, workers injured at work were unlikely to prevail when they brought suit against their employers. Their difficulties were rooted in two problems. First, proving negligence hinged upon a showing that the employer had violated its very limited duty of care to its employees. Second, plaintiffs had to overcome judicially-developed defenses of assumption of risk, the fellow servant rule, and contributory negligence. Workers who knew of the risks inherent in the work before accepting employment, or whose injuries were in some part the result of their own or co-worker negligence, could not prevail. Professor Richard Epstein argues that the development of these defenses in fact represented an expansion of the duty of care owed by employers to employees (rather than a retraction). Richard A. Epstein, The Historical Origins and the Economic Structure of Workers' Compensation Law, 16 GA. L. REV. 775, 776-79 (1982). In any event, the common-law defenses significantly impeded recovery by workers. See Friedman & Ladinsky, supra note 174, at 53.
would be held culpable for the hardship of its workers. Plaintiffs won awards in growing numbers;\textsuperscript{199} the number of cases, and of reported cases, increased substantially.\textsuperscript{200}

Industrial carnage was almost universally viewed as an inevitable, albeit unfortunate, consequence of modern industrial enterprise. Commissions established to study the issue,\textsuperscript{201} preambles to state laws,\textsuperscript{202} and contemporaneous

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199. See id. at 261 (stating that most injury cases turned on whether the worker was negligent, but most juries were very hesitant to find that the employee was at fault).

200. During this period, exceptions developed to the traditional defenses. For example, the duty to furnish a safe place to work, safe tools, and safe appliances developed as an exception to the fellow servant rule. See Friedman & Ladinsky, supra note 192, at 62. Employer liability laws, including the Federal Employer Liability Act of 1908, 35 Stat. 65 (codified as amended at 45 U.S.C. § 51 (1988)), provided statutory modification to the common-law defenses as well. See SOMERS & SOMERS, supra note 34, at 318. As a result, workers began to prevail in civil actions. For example, in Wisconsin, of 307 personal injury cases involving workers that were reviewed by the state supreme court in 1907, nearly two-thirds had been decided in favor of the worker in the lower courts (although some of these were reversed on appeal). See Friedman & Ladinsky, supra note 192, at 61. Between 1818 and 1873, the Illinois Supreme court ruled on only 25 cases involving master-servant law; by 1910, that number had grown, on average, to 13 cases per year. Berkowitz & Berkowitz, supra note 198, at 261-62. In a study of industrial conditions in Pittsburgh between 1908 and 1913, families of workers who died in industrial accidents received some compensation in 216 of 304 cases. See id. at 262. In another study, involving 604 fatalities before 1911 in three states, 32.5\% received no compensation and 19.7\% received over $500. See SOMERS & SOMERS, supra note 34, at 24. In fact, a study by Richard Posner showed an average award in cases in which the employee lost a limb or had an equivalent injury in 1905 of $10,138, at a time when the average earnings were about $500 per year. See WHITE, supra note 9, at 69 (citing Richard Posner, Theory of Negligence, 1 J. LEGAL STUD. 29 (1972)). On the other hand, a New York study in 1910 showed that of 48 fatality cases in Manhattan which were studied, 18 families received no compensation, only four received over $2000, and most received less than $500. See Friedman & Ladinsky, supra note 192, at 66.

201. For example, the Report of the House of Representatives accompanying the bill providing for the appointment of a Congressional Commission on Employers' Liability and Workmen's Compensation noted: "One of the most pressing problems of interstate commerce that today demands the attention of congress is that of wisely and equitable [sic] adjusting the loss to workmen of life and earning power which is the certain and inevitable consequence of modern methods of transportation." REPORT OF THE WEST VIRGINIA EMPLOYERS' LIABILITY LABORERS COMPENSATION COMMISSION, PART I: LIABILITY AND COMPENSATION LAWS 255-56 (1911) [hereinafter WEST VIRGINIA REPORT].

202. The Washington statute, for example, stated: "Injuries in such works, formerly occasional, have become frequent and inevitable." See Arthur B. Honnold, Theory of Workmen's Compensation, 3 CORNELL L.Q. 264, 266 (1918). Similarly, the Maryland statute stated: "Whereas, the common law system governing the remedy of workmen against employers for injuries received in extra hazardous work is inconsistent with modern industrial conditions, and injuries in such work, formerly occasional, have now become frequent and inevitable." Id. at 267.
commentators reiterated this theme. The courts presented the same motif irrespective of any efforts at safety regulation, the “price of our manufacturing greatness will still have to be paid in human blood and tears.”


Whence arose the movement for such revolutionary legislation? It is largely due to the introduction, in recent times, of new methods of industry. The use of modern agencies, especially steam and electricity, led to great changes in the modes of manufacturing and transportation. Workmen are now frequently employed in large masses, so that the personal supervision of the employer is no longer possible. The danger of serious harm to the workman in some modern undertakings was at first much greater than under the old forms of industry; and it was more difficult to prove fault on the part of the employer . . . . The accidents are not unfrequently due to the dangers inherent in the method of work; and the damaging results may be viewed as “inevitable” in the broad sense of the term.

Id.; see also Honold, supra note 202, at 264 (noting the following:

[A]ccidents and injuries to employees, particularly those engaged in hazardous employments, or working about dangerous machinery, were inevitable. In fact, it could approximately be determined in advance what would be the number of accidents in any particular employment. With each succeeding year, the number of these accidents increased. Breakage of the human machine was just as certain to occur as breakage of the machinery used in carrying on industries.

(emphasis added).


These statutes have been enacted in response to public sentiments and beliefs, widely prevalent, that the burdens, delays, inadequate relief and unequal operation of the common-law remedies as applied to industrial accidents rendered them unsuited to modern conditions. The evils of the common-law remedies, which were not noticeable in the days of small and scattered shops, few employees, and simple tools, became intolerable in the days of crowded factories, equipped with complicated and dangerous machinery. The changes incident to this industrial development had not only largely increased the opportunities for avoidable injury, but had multiplied the dangers of inevitable accidents.

Id. at 451. (emphasis added). As late as 1943, in a case arising under the 1939 amendments to the Federal Employers’ Liability Act, the U.S. Supreme Court opined:

Assumption of risk is a judicially created rule which was developed in response to the general impulse of common law courts at the beginning of this period to insulate the employer as much as possible from bearing the “human overhead” which is an inevitable part of the cost—to someone—of the doing of industrialized business. The general purpose behind this development in the common law seems to have been to give maximum freedom to expanding industry. The assumption of risk doctrine for example was attributed by this Court to “a rule of public policy, inasmuch as an opposite doctrine would not only subject employers to unreasonable and often ruinous responsibilities, thereby embarrassing all branches of business,” but would also encourage carelessness on the part of the employee.


205. Borgnis v. Falk Co., 133 N.W. 209, 215 (Wis. 1911). This was the first case to hold a state workers’ compensation statute constitutional. The full quote from Borgnis is instructive:
Roosevelt joined the call for reform, noting in 1907:

[I]t is neither just, expedient, nor humane; it is revolting to judgment and sentiment alike that the financial burden of accidents occurring because of the necessary exigencies of their daily occupation should be thrust upon those sufferers who were least able to bear it.206

The primary concern was the destitution and poverty caused by the injuries and, ultimately, who should pay the resulting costs. Some European countries, following Germany's lead, established social welfare programs to address the developing demands of displaced and disabled workers during the nineteenth century.207 The United States, in contrast, did not develop any national social welfare agenda before the turn of the century. Nevertheless, public opinion galvanized around this issue. Industrialists were faced with a rising level of uncertainty and potential liability for injuries. Employers occasionally even offered "lifetime" contracts to injured

It is matter of common knowledge that this law forms the legislative response to an emphatic, if not a peremptory, public demand. It was admitted by lawyers, as well as laymen, that the personal injury action brought by the employé against his employer to recover damages for injuries sustained by reason of the negligence of the employer had wholly failed to meet or remedy a great economic and social problem which modern industrialism has forced upon us, namely, the problem of who shall make pecuniary recompense for the toll of suffering and death which that industrialism levies and must continue to levy upon the civilized world. This problem is distinctly a modern problem. In the days of manual labor, the small shop, with few employees, and the stagecoach, there was no such problem, or, if there was, it was almost negligible. Accidents there were in those days, and distressing ones; but they were relatively few, and the employé who exercised any reasonable degree of care was comparatively secure from injury. There was no army of injured and dying, with constantly swelling ranks marching with halting step and dimming eyes to the great hereafter. This is what we have with us now, thanks to the wonderful material progress of our age, and this is what we shall have with us for many a day to come. Legislating as we may in the line of stringent requirements for safety devices or the abolition of employers' common-law defenses, the army of the injured will still increase, and the price of our manufacturing greatness will still have to be paid in human blood and tears. To speak of the common-law personal injury action as a remedy for this problem is to jest with serious subjects, to give a stone to one who asks for bread. The terrible economic waste, the overwhelming temptation to the commission of perjury, and the relatively small proportion of the sums recovered which comes to the injured parties in such actions, condemn them as wholly inadequate to meet the difficulty.

Id. at 215.

206. Friedman & Ladinsky, supra note 192, at 68 n.69 (emphasis added).

employees in an attempt to avoid other liability. Both the size and the unpredictability of jury awards in lawsuits brought by injured workers, and the apparent trend toward ever-expanding liability, made employers and their organizations uncomfortable with the status quo; the leadership of the National Association of Manufacturers called insistently for a compensation system for injured workers.

At the same time, workers and their families were facing injury, death, and economic destitution. Economic recovery through litigation was equally uncertain for them and often failed to provide adequate compensation for the loss of the primary breadwinner for the family. The visible presence of large numbers of people who were displaced from work due to injuries—not due to lack of desire to work—called attention to the magnitude of the problem.

The perceived inevitability of significant harm and the uncertainty regarding the distribution of its attendant costs underlay the political consensus which emerged to support the workers' compensation bills which were introduced in state after state. The political movement for a social insurance

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208. See, e.g., Rhoades v. Chesapeake & Ohio Ry. Co., 39 S.E. 209 (W. Va. 1901) (following the amputation of the plaintiff's leg as a result of an industrial injury, he threatened to sue the employer for negligence but released his claim in return for a promise of continued employment; this lawsuit was brought in response to his subsequent termination). This case was recently cited in Williamson v. Sharvest Mfg. Co., 415 S.E.2d 271, 275 n.4 (W. Va. 1992) as an example of sufficient consideration for a lifetime employment contract.

209. See Berkowitz & Berkowitz, supra note 198, at 262 (observing that "the laws can be seen as the means by which employers protected themselves against an impulsive and hostile legal system").

210. Representatives and officers of the National Association of Manufacturers (NAM) publicly called for the creation of a compensation system which would provide payment to injured workers on a no-fault insured basis. John Kirby, President of NAM at that time, called for creation of a system "that will eventually distribute the burden over the community and which will insure the employer immunity from liability other than the payment into a fund, properly controlled, of a predetermined per capita sum upon the workmen in his employ." WEST VIRGINIA REPORT, supra note 201, at 258. A committee of the National Association of Manufacturers polled 25,000 manufacturers to learn their attitude toward compensation; of those who replied, more than 95% were favorable. See DOMENICO GAGLIARDO, AMERICAN SOCIAL INSURANCE 395 (1949).

211. Although some verdicts were large, many cases settled for very limited amounts and large numbers of workers received nothing at all. Refer to note 197 supra.

212. See MONROE BERKOWITZ, WORKMEN'S COMPENSATION: THE NEW JERSEY EXPERIENCE 5 (1960). Berkowitz notes that workers' compensation legislation was designed to reduce the uncertainty surrounding recovery amounts and to provide a no-fault social insurance program, stating, "[s]uch a drastic change can be rationalized only in terms of social welfare principles. Industrial injuries are conceived of as the inevitable by-product of modern industry." Id.; see also Friedman & Ladinsky, supra note 192, at 65-70 (discussing the economic impact on industry from the unpredict-
system, ultimately supported by progressives, trade unions, and employer organizations,213 focused on the need to provide certainty both to employers and workers. Workers' compensation was thus born out of an historic compromise in which workers relinquished their right to sue their employers in exchange for guaranteed (but limited) cash benefits from a no-fault system. Despite the lack of federal guidance in the development of social insurance models, most states passed legislation between 1910 and 1920 mandating employer-financed insurance to provide workers' compensation benefits, replacing common law negligence actions and employer liability statutes.214

All of these state statutes focused on the need to provide certainty for both workers and employers in a world in which injuries or death were an expected part of the industrial landscape. The compromise system which emerged provided this certainty. Workers' compensation was intended to be a self-contained system for dealing with the social, economic, and legal problems associated with workplace injuries.

2. The No-Fault System as a Shield to Employer Responsibility. The availability of workers' compensation benefits effectively discharged any further obligation that an employer had to an injured worker. Four legal doctrines combined to shield employers from any additional liability. First, the workers' compensation remedy was explicitly made exclusive.215 The breadth of this exclusivity, and therefore the resulting employer immunity from common law actions brought able costs of industrial accidents and suggesting that the existing tort system eventually represented a net economic loss to the industrial establishment, prompting industry to play a positive role in shaping new workmen's compensation law).

213. See GAGLIARDO, supra note 210, at 395 (stating that the workers' compensation movement eventually gained the support of the American Association for Labor Legislation, the National Civic Federation, the National Association of Manufacturers, the American Bar Association and the American Federation of Labor).

214. See Friedman & Ladinsky, supra note 174, at 70.

215. Professor Larson argues that there are “two central purposes to exclusiveness: first, to maintain the balance of sacrifices between employer and employee in the substitution of no-fault liability for tort liability, and second, to minimize litigation, even litigation of undoubted merit.” 2A LARSON, supra note 65, § 68.15, at 13-65. Employers not covered by workers' compensation would not, of course, be shielded from tort liability. See, e.g., Jones v. Rinehart & Dennis Co., 168 S.E. 482 (W. Va. 1933) (holding that the failure of workers' compensation to provide benefits for acute silicosis meant that victims of the notorious Hawks Nest Tunnel disaster could bring civil actions). For a general discussion of the exclusivity doctrine, see 2A LARSON, supra note 65, § 65.
by injured employees, was (and continues to be) remarkable.\(^\text{216}\) Whether the risk was inevitable or preventable at little cost, employers were shielded by the exclusivity provisions in these laws from any action for damages by employees or any on-going obligation to the workers after they were injured. Immunity provided under the workers' compensation compromise allowed employers full rein to be negligent or even reckless in their approach to safety; injuries were, after all, an

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216. The exclusivity doctrine has protected employers even in extreme cases involving reckless and wanton disregard for workers' lives. See, e.g., Briggs v. Pymm Thermometer Corp., 537 N.Y.S.2d 553, 556 (N.Y. App. Div. 1989). This case was a suit by employees against the employer to recover for injuries caused by excessive exposure to mercury. Id. at 554. The employer had previously been convicted of assault. Id. at 556. Plaintiffs charged that the employer had concealed a clandestine mercury recovery operation from OSHA inspectors and exposed workers to deadly levels of mercury, resulting in significant injuries and that the employer knew of the danger and knew that workers, if they had understood the danger, would have refused to continue working. Id. He did not explicitly intend to cause the death, however. He was therefore protected by the exclusivity provisions of the New York compensation law. Id. For background on the Pymm case, see People v. Pymm, 563 N.E.2d 1, 2 (N.Y. 1990) (upholding state conviction of Pymm for assault in the first and second degree and rejecting employer's argument that remedies under OSHA are exclusive and preempt state's ability to act under state's criminal code), cert. denied, 498 U.S. 1085 (1991).

Workers' compensation exclusivity has even been extended by a few courts (albeit a minority) to immunize employers from lawsuits involving statutorily created employee rights, including state law claims of illegal discrimination on the basis of disability or handicap. See, e.g., Karst v. F.C. Hayer Co., 447 N.W.2d 180, 186 (Minn. 1989) (following the reasoning of the Schachtner court that the Workers' Compensation Act barred the disability discrimination claim because the act provided a remedy for an employer's refusal to rehire); Norris v. Wisconsin, Dep't of Indus., Labor & Human Relations, 455 N.W.2d 665, 667 (Wis. Ct. App. 1990) (stating that the Workers' Compensation Act provides the exclusive remedy for an employer's refusal to rehire because a job-related injury creates a perceived disability); Schachtner v. Dep't of Indus., Labor & Human Relations, 422 N.W.2d 906, 909-10 (Wis. Ct. App. 1988) (reasoning workers' compensation is designed to provide the exclusive remedy for job-related injuries); see also Deborah A. Ballam, The Workers' Compensation Exclusivity Doctrine: A Threat to Workers' Rights Under State Employment Discrimination Statutes, 27 Am. Bus. L.J. 95, 102 (1989) (characterizing the exclusivity doctrine as the "sacred cow" of workers' compensation). After a brief period in which the exclusivity dam developed chinks, Professor Larson declared that the assault on employer immunity had failed. Arthur Larson, Tensions of the Next Decade, in NEW PERSPECTIVES IN WORKERS' COMPENSATION supra note 18, at 23 (concluding that "the doctrine of exclusiveness is in better health today than it was a few years ago"). Thus, the exclusivity doctrine remains part of the bedrock foundation of the workers' compensation political compromise, despite occasional court decisions which have appeared to weaken this doctrine. See generally David B. Harrison, Annotation, What Conduct is Willful, Intentional, or Deliberate Within Workmen's Compensation Act Provision Authorizing Tort Action for Such Conduct, 96 A.L.R.3d 1064 (1979) (summarizing the status of laws in various states); refer to note 247 infra.
inevitable component of the new technological age. The compensation laws provided employers with two critical components of legal armor: they exempted enterprises from liability for the exercise of their continued complete managerial control over safety risks and guaranteed a predictable, and for many years quite low, level of cost. 

Second, benefits were paid to injured workers whether or not the employer was at fault. While expanding the number of employees to whom benefits would be due, this no-fault principle also served to shield employers from any legal obligation to eliminate workplace hazards and from any psychological sense of fault. The view that these compensated injuries were an inevitable consequence of industrialization combined with the no-fault nature of the system to absolve employers from blame.

Third, the new programs were specifically designed to allow employers to insure the risk of workplace injuries. The combination of the enormous, growing, and apparently inevitable numbers of injuries and the declining protection from liability for employers led to the development of a comprehensive system of liability insurance in order to manage the costs associated with workplace injuries; it was, in fact, in

217. This did not substantially change until federal regulation of occupational safety and health expanded significantly after 1970. More recently, several states have experimented with an expansion of criminal prosecution in cases involving gross employer disregard for worker safety. See People v. Chicago Magnet Wire Corp., 534 N.E.2d 962, 968 (Ill. 1989) (stating that conduct identical to that subject to federal regulation can also be regulated by state criminal law), cert. denied, 493 U.S. 809 (1989); Pymn, 563 N.E.2d at 6 (stating that workers' compensation does not preempt state criminal laws or federal occupation and health standards, in the workplace).

218. Refer to notes 30-33 supra and accompanying text.

219. "[I]t must be remembered once again that this is a no-fault system as to both employer and employee. 'Unjust' results, by conventional standards, are commonplace." 2A Larson, supra note 65, § 68.15(e), at 13-108.

220. It has been a frequent criticism of no fault systems that the removal of fault based liability determinations avoids any possibility of effective deterrence. See, e.g., Thomas A. Ford, The Fault with 'No Fault', 61 A.B.A. J. 1071, 1072 (1975) (stating that the no fault system undermines responsibility and does not compel businesses and industries to review their standards, methods, and practices); Elisabeth M. Landes, Insurance, Liability, and Accidents: A Theoretical and Empirical Investigation of the Effect of No-Fault Accidents, 25 J.L. & Econ. 49, 49-50 (1982) (explaining that removing liability for damages to others permits malfeasors to shift some of the costs to potential victims, thereby limiting deterrence). Although the level of the actual payroll tax or premium paid by an employer does vary somewhat as a result of increased claims experience, this variation is often sufficiently attenuated and so obscured by ignorance that it tends to shield employers from a strong financial incentive to remove hazards. For a discussion of this issue, refer to part III.B infra.
this arena that liability insurance first became commonplace.\textsuperscript{221} Insurance solved a critical element of the workers' compensation puzzle by spreading costs and protecting individual employers from excessive losses. It thereby made the cost of industrial injuries more predictable and allowed employers to pass these costs directly to consumers in the pricing of products;\textsuperscript{222} thus emerged the frequently quoted slogan, "the cost of the product should bear the blood of the workman."\textsuperscript{223}

The later development of liability insurance for most fault-based torts was often viewed unfavorably by many commentators.\textsuperscript{224} To the extent that the tort system was expected to provide deterrence as well as compensation, insurance was initially viewed as allowing "antisocial conduct and a relaxation of vigilance toward the rights of others, by relieving the actual wrongdoer of liability."\textsuperscript{225}

In the workers' compensation paradigm, however, liability insurance made perfect sense. Since employers were to bear the costs without having committed any legal wrong, the natural

\begin{itemize}
\item \textsuperscript{221} W. Page Keeton et al., Prosser and Keeton on the Law of Torts \textsection 82, at 586 (5th ed. 1984). Liability insurance "developed first as a means of protecting employers against the increased litigation and liability resulting from employers' liability and workers' compensation acts. As the experience with this proved satisfactory, new demands were made for protection against other risks." \textit{Id.} In fact, most employers were insured for liability for workers' injuries by private casualty companies before the passage of workers' compensation laws. \textit{Reede, supra} note 34, at 233.

\item \textsuperscript{222} One of the early advocates for workers' compensation in Massachusetts, William W. Kennard, Chairman of the Commonwealth of Massachusetts Industrial Accident Board, said in 1918 that "the Workmen's Compensation Act is not a regulation of any substantive duty; it is exclusively an economic readjustment of the burdens of industrial accident from the shoulders of the employees to the shoulders of the consuming public." \textit{Beckwith, supra} note 7, at 72-73 n.63 (quoting a Letter to Governor Samuel McCall, published in \textit{Report of the Special Recess Committee on Workmen's Compensation}, Massachusetts General Court, Boston, Feb. 1919, at 23).

\item \textsuperscript{223} Keeton et al., \textit{supra} note 221, \textsection 80, at 573 (quoting a campaign slogan attributed to Lloyd George). Prosser and Keeton note:

\begin{quote}
The human accident losses of modern industry are to be treated as a cost of production, like the breakage of tools or machinery. The financial burden is lifted from the shoulders of the employee, and placed upon the employer, who is expected to add it to his costs, and so transfer it to the consumer. In this he is aided and controlled by a system of compulsory liability insurance, which equalizes the burden over the entire industry. Through such insurance both the master and the servant are protected at the expense of the ultimate consumer.
\end{quote}

\textit{Id.} at 554-55.

\item \textsuperscript{224} \textit{See id.} \textsection 82, at 585 (stating that "[l]iability insurance was attacked as a form of maintenance, by which professional litigants were provided to replace the true defendants").

\item \textsuperscript{225} \textit{Id.} As Prosser and Keeton note, this system led to observations by tortfeasors such as: "Don't worry, I carry insurance." \textit{Id.} at 586.
\end{itemize}
solution was to distribute the costs in a manner which would best incorporate those costs into the price of the products.\textsuperscript{226} Thus, consumers were ultimately to pay for the costs of workplace injuries. Since the imposition of costs on employers was a product of social policy, not blame due to wrong-doing, the intent was that cost ultimately would be spread, not fully internalized. To the extent internalization of costs was achieved at all, it was dependent upon insurance pricing decisions which were made by insurance carriers, primarily to maintain price equity.\textsuperscript{227}

Fourth, employers retained full managerial control over internal enterprise decisions. Workers' compensation legislation was not, and was not intended to be, a substantive legal intervention into the employment relationship.\textsuperscript{228} At the time workers' compensation legislation was passed, employers owed no general duty to employees to provide safe work or to accommodate workers who were absent or disabled as a result of occupational injury. An employer's duty was thus clearly circumscribed: the obligation was to buy insurance to make provision for the workers who were rendered destitute by inevitable "accidents"\textsuperscript{229} at work. From their inception, workers' compensation laws were designed to be a carefully circumscribed system to provide benefits, not safe jobs, to workers who were injured as a result of exposure to occupational hazards. Deborah Stone notes that the development of workers' compensation, "however fortunate for the injured worker in the short run, was also symbolically and politically a denial of responsibility of employers to prevent occupational injury."\textsuperscript{230}

The compensation levels provided to cushion this destitution were intentionally minimal. Workers' compensation was a cash transfer program designed to help the obviously destitute. Victims of no-fault based harm were really seen as

\begin{itemize}
\item \textsuperscript{226} See id. § 80, at 573 (stating that "human accident losses" were just part of the cost of doing business).
\item \textsuperscript{227} For a full discussion of the distribution of costs and pricing mechanisms within workers' compensation, refer to part II.B infra.
\item \textsuperscript{228} The nature of the general duty owed by the employer to the employee is discussed in part III.C infra.
\item \textsuperscript{229} The word "accidents" appears in quotation marks because injury epidemiologists believe that the environmental causes of adverse events can be identified and removed, much as immunizations can prevent childhood illnesses. Gordon S. Smith, Injuries as a Preventable Disease: The Control of Occupational Injuries from the Medical and Public Health Perspective, 30 ERGONOMICS 213, 213 (1987) (comparing passive protective devices, such as airbags, to immunizations). Injuries and fatalities therefore do not have the completely random character which "accident" implies. Id.
\item \textsuperscript{230} Deborah A. Stone, The Disabled State 191 (1984).
\end{itemize}
third party beneficiaries of a social aid contract, not as recipients of make-whole relief arising from a legal wrong. Moreover, modern notions of adequacy, which assume that wage replacement should approximate pre-injury income,\(^2\) were not prevalent at the time these laws were passed. The laws provided really limited,\(^2\) but theoretically certain,\(^2\) compensation to workers for some but by no means all of their industrial risk. Workers either returned to work quickly or were "paid off" and displaced from employment.

3. Workers' Compensation Laws and the Movement for Industrial Safety. Despite the persistent rhetoric of inevitability which surrounded the development of workers' compensation remedies, there was nevertheless a contemporaneous growth of advocacy for industrial safety, which recognized that at least many deaths and injuries could, and should, be prevented;\(^2\) this view unquestionably provided a counterweight to notions of inevitability of risk. Apparently enlightened industrialists combined with others to form the National Safety Council in 1912 and began to campaign for voluntary workplace-based changes.\(^2\) This voluntary safety movement, assisted by technological developments which changed workplace processes, claimed responsibility for significant reductions in occupational injuries over the ensuing decades.\(^2\)

\(^{231}\) See, e.g., COMMISSION REPORT, supra note 32, at 56 (recommending that workers' weekly benefits be at least 80% of their spendable weekly pre-injury earnings).

\(^{232}\) Refer to note 32 supra.

\(^{233}\) Substantial questions about the efficiency and certainty of the system grew over time, however. See COMMISSION REPORT, supra note 32, at 99-110.

\(^{234}\) SOMERS & SOMERS, supra note 34, at 198-210. The authors cite 1907-1912 as the birthdate of the modern safety movement. Around this time, employers began to acknowledge that, although legally an injury may not have been their fault, they could have prevented it. Id.

\(^{235}\) Id. at 201-02. Of course, the rising concern about safety, and the growing threat of substantive workplace regulation, may have contributed to the eagerness with which industrialists sought to promote voluntary improvements.

\(^{236}\) One frequently cited example of this is the experience of U.S. Steel, which invested $5 million in equipment and worker education, saw its injury rate fall 40%, and reduced its injury-related costs by 35%. BERMAN, supra note 9, at 77; see also SOMERS & SOMERS, supra note 34, at 202 (describing the general success of the safety movement in its early years). Some commentators attribute the decline in fatalities to the development of the workers' compensation system during this period. Cf. Robert C. Ellickson, Bringing Culture and Human Frailty to Rational Actors: A Critique of Classical Law and Economics, 65 CHI.-KENT L. REV. 23, 42 (1989) (citing one empirical study which draws this connection). The empirical evidence is limited, however, to the contemporaneous occurrence of reductions in fatalities and institution of workers' compensation. Therefore, the conclusion that workers' compensation was the cause of this decline may be fallacious.
Despite the early voluntary discussions of safety and removal of hazards in the workplace, attempts to require safety improvements through direct legal intervention into the employment relationship were consistently challenged by industry and thrown out by the courts. Not only were state laws which created the new workers' compensation systems initially struck down, but laws which were designed to promote general safety in industrial workplaces were held to be unconstitutional. Thus, the judiciary, which had consistently protected the employment-at-will doctrine after its development in the late nineteenth century, continued to support industrial attempts to protect managerial prerogative in the early twentieth century. In limited decisions, the courts endorsed the exercise of traditional state police powers in the arena of public safety, for regulation of extremely hazardous work, and for oversight of working conditions of

237. See, e.g., Ives v. South Buffalo Ry. Co., 94 N.E. 431, 448 (N.Y. 1911) (holding the New York law on workers' compensation unconstitutional); Cunningham v. Northwestern Improvement Co., 44 Mont. 180 (1911) (invalidating the 1909 miners' compensation act); Franklin v. United Rys. & Elec. Co., 2 Baltimore City Rep. 309 (1904). After the decision in Ives, seven states amended their constitutions to specifically authorize compensation legislation. SOMERS & SOMERS, supra note 31, at 32. Nine states circumvented the Ives decision by adopting non-compulsory laws which permitted employers to elect coverage or forfeit common-law defenses. Id. Compulsory laws did, however, receive judicial endorsement in 1917 from the U.S. Supreme Court. See New York Central R.R. v. White, 243 U.S. 188 (1917) (upholding New York's new compulsory law and noting: "In excluding the question of fault as a cause of the injury, the act in effect disregards the proximate cause and looks to one more remote—the primary cause, as it may be deemed—and that is, the employment itself"); Hawkins v. Bleakley, 243 U.S. 210, 212-13 (1917) (upholding Iowa's elective law); Mountain Timber Co. v. Washington, 243 U.S. 219, 239 (1917) (upholding Washington's exclusive state insurance fund).

238. See, e.g., Lochner v. New York, 198 U.S. 45, 61 (1905) (holding a maximum hour law for bakers, designed to promote safety in bakeries, unconstitutional "as an illegal interference with the rights of individuals, both employers and employees, to make contracts regarding labor upon such terms as they may think best").

239. The initial narrowly drawn occupational safety legislation does not appear to have been challenged in the courts with the same vigor as the wage and hour laws. See SOMERS & SOMERS, supra note 34, at 200 (stating that constitutionality of narrow safety laws was not seriously challenged, unlike other labor legislation). These specific laws were "detailed, inflexible, and rapidly obsolete." Id. Industry feared that more general statutes would give too much discretion to individual factory inspectors; they therefore successfully opposed them. Id. When challenged, the narrowly drawn laws appear to have frequently been upheld by the courts. See Adkins v. Children's Hosp., 261 U.S. 525, 569 (1923) (Holmes, J., dissenting) (listing a series of cases in which the Supreme Court had upheld limited intervention in private contractual relations). The specific safety legislation of the nineteenth century was, in fact, largely "cosmetic." ROTHSTEIN, supra note 10, at 2.

240. See, e.g., Holden v. Hardy, 169 U.S. 366, 398 (1898) (refusing to invalidate law governing hours of work in mines, smelters, and refineries on public safety grounds).
people who were viewed as in particular need of protection (primarily women and children).\textsuperscript{241} These were exceptions, however, to the general rule which resisted any serious legal intrusion into the at-will employment relationship. Until the New Deal, the courts considered substantive legal regulation of the employment to be a presumptively invalid intrusion into a private contractual relationship. It was not until the Supreme Court, confronted with massive misery and economic turmoil, upheld New Deal legislation that such intervention became constitutionally acceptable.\textsuperscript{242} This did not, of course, put an end to employer challenges to workplace safety regulation.\textsuperscript{243}

Although direct regulation was met with resistance from employers, the safety movement did imbue the early compensation movement with the rhetoric of safety. A majority of the investigating commissions established by states as a prelude to the drafting of workers' compensation statutes concluded that a primary result of the laws would be a reduction in injury frequency and severity.\textsuperscript{244} Nearly every monograph and treatise that has been written on workers' compensation has included what appears to be an obligatory chapter or section dedicated to prevention.\textsuperscript{245} The substantive provisions of most of the workers' compensation statutes, however, made little or no explicit provision for safety incentives or for employer

\textsuperscript{241.} See, e.g., Muller v. Oregon, 208 U.S. 412, 416 (1908) (upholding a statute that was designed to protect the health, safety, and welfare of female employees). But cf. Adkins, 261 U.S. at 554 (rejecting a minimum wage law for women and children enacted by Congress to regulate employment in the District of Columbia; the Court noted that the law, in protecting women, was protecting those “who are legally as capable of contracting for themselves as men”).

\textsuperscript{242.} NLRB v. Jones & Laughlin Steel Corp., 301 U.S. 1, 30 (1937) (upholding the constitutionality of the National Labor Relations Act); West Coast Hotel Co. v. Parrish, 300 U.S. 379, 400 (1937) (upholding the constitutionality of Washington statute setting minimum wage for women). This has been described, quite appropriately, as “a watershed constitutional event.” Fran Ansley, Standing Rusty and Rolling Empty: Law, Poverty, and America's Eroding Industrial Base, 81 Geo. L.J. 1757, 1787 (1993).


\textsuperscript{244.} REEDE, supra note 34, at 321.

\textsuperscript{245.} See, e.g., id. at 321-76 (discussing the safety movement and its prevention of injuries); SOMERS & SOMERS, supra note 34, at 197-235 (discussing prevention of injuries).
penalties for perpetuation of unnecessarily hazardous work.\textsuperscript{246} The compensation laws which did provide some increased liability for employer misconduct were of two types. Some states simply exempted intentional torts from the exclusivity provisions of the law. In general, these provisions were strictly construed; their application was limited to situations in which the worker could prove that the employer intended, not simply the existence of the hazardous conditions, but the occurrence of the injury itself.\textsuperscript{247} Other states, instead of removing

\textsuperscript{246} Several states did, however, give the agency established to administer the workers' compensation system the additional responsibility of developing safety rules and regulations. REEDE, supra note 34, at 322-23. Yet even when this occurred, this authority carried little real weight.

\textsuperscript{247} Workers' compensation statutes explicitly provide for a common-law right to sue for intentional injury committed by employers in Kentucky, Oregon, Washington, and West Virginia; for wilful misconduct in Arizona; and for a willful act or gross negligence resulting in death in Texas. 2A LARSON, supra note 65, § 69.10, at 13-334 to 13-335. In addition, a few states have judicially developed limited exceptions to exclusivity based upon findings that an injury was the result of intentional conduct, rather than an "accident" and, therefore, did not fall within the exclusive ambit of workers' compensation. See, e.g., Blankenship v. Cincinnati Milacron Chems., Inc., 433 N.E.2d 572, 576 (Ohio) (finding that injuries received as the result of intentional acts do not arise in the course of employment, and therefore exclusivity does not apply), cert. denied, 459 U.S. 857 (1982).

Nevertheless, the exclusivity doctrine has remained strong. Refer to note 216 supra. Until recently, even those states which allowed common-law actions for intentional injuries limited the applicability of this exception to situations in which the worker could prove that the employer intended the specific injury to be the outcome; these suits were therefore generally limited to physical assaults by employers on employees. 2A LARSON, supra note 65, § 69.22, at 13-343 to 13-349. Thus, workers could not pierce an employer's common-law immunity in situations involving aggravated negligence, breach of safety regulations, or failure to correct a hazard after several injuries had occurred. \textit{Id.} The commitment to safety, which appeared to have been embodied in the original legislative provisions allowing for common-law suits in limited circumstances, was not evident in the subsequent interpretations of these provisions. \textit{See id.}

More recently, however, some state courts have carved out exceptions to the exclusivity rule in order to allow workers to sue their employers in extreme situations in which there appears to be disregard for fundamental safety principles. \textit{Id.} at 13-353 to 13-362. These cases have relied on one of two theories. First, the statutory provision allowing workers to sue for intentional injuries is interpreted to allow common-law actions in situations involving conduct that meets a higher standard than mere negligence but which is less restrictive than the earlier interpretation of intentional harm. \textit{See, e.g., Beau champ v. Dow Chem. Co., 398 N.W.2d 882, 893 (Mich. 1986)} (holding that the exclusivity provision does not apply if the employer knew that the injury was substantially certain to occur and intended the act which caused the injury); \textit{Jones v. VIP Dev. Co., 472 N.E.2d 1046, 1055 (Ohio 1984)} (holding that an act committed with the knowledge that an injury was substantially certain to occur results in liability); \textit{Mandolidis v. Elkins Indus., 246 S.E.2d 907, 914 (W. Va. 1978)} (holding that reckless and wanton misconduct results in liability).

Second, injured workers have prevailed when their injuries were aggravated by the employer's fraudulent failure to disclose known safety risks. \textit{See, e.g., Johns-Manville Prod. Corp. v. Contra Costa Superior Ct., 612 P.2d 948, 956 (Cal. 1980)} (holding that the employer was liable for fraudulently concealing hazardous condi-
tions from the employee and the employee's doctor); Millison v. E.I. duPont de Nemours & Co., 501 A.2d 505, 516-17 (N.J. 1985) (holding actionable allegations that defendants fraudulently concealed knowledge of already contracted diseases); Martin v. Lancaster Battery Co., 606 A.2d 444, 447-48 (Pa. 1992) (holding that the employer's fraudulent misrepresentation resulting in a delay which aggravated a work related injury did not fall within the exclusivity provision); see also Gary T. Schwartz, The Beginning and the Possible End of the Rise of Modern American Tort Law, 26 Ga. L. Rev. 601, 679 (1992) (discussing some of the implications of these cases). See generally Harrison, Annotation, supra note 216 (providing a comprehensive review of intentional tort cases involving occupational injuries).

For a brief period, as a result of these state explorations with loopholes to the exclusivity bar, it appeared that the exclusivity doctrine was being eroded by the expansion of the intentional injury exceptions. This trend in judicial decisions seemed to be largely motivated by concerns that wanton disregard of workplace safety should not be protected by the mantle of immunity bestowed by workers' compensation.

In the first three states in which the courts reinterpreted the statutes, the state legislatures moved rather quickly to close this potential hole in employer immunity. In Ohio, the expansion of the common-law remedy was limited to situations in which the employer acts with deliberate intent to cause an injury, and damages were capped at $1,000,000. OHIO REV. CODE ANN. § 4121.80 (Anderson 1991). This legislative response was held to be unconstitutional under state law. Brady v. Safety-Kleen Corp., 576 N.E.2d 722, 730 (Ohio 1991). The current law in Ohio retains a common-law remedy for workers who can show that their injuries were substantially certain to occur. See, e.g., Jones, 472 N.E.2d at 1052.

In West Virginia, the legislature adopted a statutory definition of intentional injuries which allowed employees to pursue common-law remedies when they could prove that the employer maintained excessively dangerous conditions that the employer knew to be dangerous and which violated safety and health standards or standard business practice. W. VA. CODE § 23-4-2(c)(2) (Supp. 1993). Although it was the stated purpose of the legislature to reinforce the exclusive nature of the workers' compensation remedy, this statute appears to have codified the West Virginia court's adoption of a reckless and wanton standard for intentional injuries which the court had articulated in Mandolidis. 246 S.E.2d at 914. At the same time, the statute limited the availability of punitive damages to actions involving the older, more restrictive, intentional torts in which the employer intended the specific injury to result. See W. VA. CODE §§ 23-4-2(b), 23-4-2(c)(2)(iii)(A) (Supp. 1993). Subsequent judicial opinions interpreting this statute have permitted injured workers to prevail when employers have allowed known dangerous conditions to persist, resulting in a worker's injury. See, e.g., Mayles v. Shoney's, Inc., 405 S.E.2d 15, 27-28 (W. Va. 1990) (holding that the employer acted with deliberate intention in causing the employee's injuries and was subject to liability).

In Michigan, after the decision in Beauchamp, 398 N.W.2d at 882, the legislature adopted language restricting common-law actions to situations in which the employer had actual knowledge that an injury was certain to occur and willfully disregarded that knowledge. MICH. COMP. LAWS § 418.131(1) (Supp. 1993). The challenges to this statute have been unsuccessful. See Smith v. Mirror Lite Co., 492 N.W.2d 744, 745-47 (Mich. Ct. App. 1992) (applying the Michigan statute); Pawlak v. Redox Corp., 453 N.W.2d 304, 308 (Mich. Ct. App. 1990) (analyzing the action under the exception to exclusivity in the Michigan statute but holding that the employee could not recover because he had failed to prove intent).

The current status of these judicial re-interpretations of intentional injury is as follows. When the employer knows that hazardous conditions existed and were substantially certain to result in workplace injuries, at least four states (Louisiana, North Carolina, Ohio, and South Dakota) allow injured workers to circumvent the exclusivity provision of the state statute. See Bazley v. Tortorich, 397 So. 2d 475, 482 (La. 1981) (stating that the exclusive remedy rule is inapplicable to situations in
intentional torts entirely from the exclusivity bar, provided for increased benefits as a penalty for employer misconduct. These penalties were imposed in such circumstances as when an employer employed a minor below legal working age\textsuperscript{248} or, in a few states, when the employer was guilty of reckless and wanton or intentional misconduct, particularly if this conduct violated accepted safety practices or rules.\textsuperscript{249} The penalties

which the employers believe the results of their actions to be substantially certain to occur; Woodson v. Rowland, 407 S.E.2d 222, 228 (N.C. 1991) (stating that when an employer engages in misconduct knowing it is substantially certain to cause injury, the employer is liable to the injured employee); Fyffe v. Jeno's, Inc., 570 N.E.2d 1108, 1111-12 (Ohio 1991) (explaining that an employee can recover if the employer knew with substantial certainty that harm would result); VerBouwens v. Hamm Wood Prods., 334 N.W.2d 874, 876 (S.D. 1983) (stating that if the known danger poses a foreseeable risk and a substantial certainty of injury, then the employee can recover from the employer). Although some other states have softened the definition of intentional torts to some degree, only West Virginia appears to have maintained a standard which is somewhat, although not substantially, more lenient. See Mayles, 405 S.E.2d at 24 (allowing employees to recover from employers when they could prove the employer maintained excessively dangerous conditions, which the employer knew to be dangerous and which violated safety and health standards or standard business practice).

There does not appear to be any continuing threat to the exclusivity doctrine; plaintiffs' attempts to expand employer immunity in a substantial way have apparently failed. Nevertheless, some commentators continue to argue in favor of expanding tort liability in order to promote safety incentives. See generally Kenneth Matheny, Achieving Safer Workplaces by Expanding Employers' Tort Liability Under Workers' Compensation Laws, 19 N. Ky. L. Rev. 457 (1992) (arguing that exclusivity provisions often result in injustice).

Interestingly, there is no evidence that expanded employer liability in the above states has resulted in a relative decrease in occupational morbidity and mortality rates. No epidemiologic or statistical study has been done of injury and fatality rates in these states to investigate whether the expansion of liability can be associated with any reduction in injuries or illnesses. A review of the available data on fatality rates from the National Institute for Occupational Safety and Health National Traumatic Occupational Fatality study does not appear to indicate that, in the aggregate, fatality rates declined at a relatively greater rate subsequent to the change in the law in any of these states. Of course, this type of relatively cursory review of aggregate data lacks statistical validity; further study deserves to be done.

It is also important to note that the excess risk associated with this expanded liability is generally insurable. ROBERT E. KEETON & ALAN I. WIDISS, INSURANCE LAW: A GUIDE TO FUNDAMENTAL PRINCIPLES, LEGAL DOCTRINES AND COMMERCIAL PRACTICES § 5.3(g), at 494-96 (1988). Although some states impose limitations on the availability of insurance for punitive damages, compensatory damages, even those associated with employer misconduct, are always insurable.

\textsuperscript{248} 1B LARSON, supra note 65, § 47.52(a), at 8-396 to 8-398.

\textsuperscript{249} Arkansas, Connecticut, California, Illinois, Kentucky, Massachusetts, Missouri, New Mexico, North Carolina, Ohio, South Carolina, Utah, and Wisconsin are states where a penalty is imposed for certain employer misconduct, such as reckless or intentional acts. 2A LARSON, supra note 65, § 69.10, at 13-335 to 13-340. These penalties were generally an alternative to allowing common-law suits for intentional or reckless misconduct by employers. Intentional misconduct under these penalty provisions was equivalent to the intent required to evade exclusivity entirely in the
directed specifically at safety practices appear to have been utilized infrequently. In any event, the penalties themselves were (and are) small enough to have no impact on the direct cost to most insured employers.

4. The Workers' Compensation Paradigm Today. Workers' compensation laws today retain the same fundamental structure as they had when first enacted. Eligibility criteria and adequacy of benefits have expanded without changing the basic no-fault paradigm. Historically, attempts to alter this paradigm by providing return-to-work and rehabilitation programs for injured workers or expanding employer

states allowing limited common-law actions. Id. Intent was generally very narrowly construed, so that penalties were rarely assessed. See, e.g., Gibbs Automatic Moulding Co. v. Bullock, 438 S.W.2d 793, 794 (Ky. 1969) (denying additional compensation for employer's intentional breach of safety regulation because there was no showing that the employer had actual knowledge of the regulation). If any pattern at all can be discerned, it appears that the lesser the penalty, the lower the standard applied to intent. 2A LARSON, supra note 65, §69.22, at 13-343 to 13-349. Although violation of a safety standard appears to be adequate to create a foundation for a charge of willful misconduct, it is not necessarily adequate for an intentional injury. Id. §§ 69.22-24, at 13-343 to 13-370. Violation of federal or state OSHA regulations is not, in all states, grounds for penalty. Id. § 69.24(b), at 13-361 to 13-362.

250. Given the magnitude of the number of reported cases arising under state workers' compensation laws, the number which address the question of increased penalties is remarkably few. See 2A LARSON, supra note 65, § 69.22, 13-343 to 13-349. This can be viewed in one of three ways: that few injuries are the result of misconduct by employers; that misconduct is very narrowly defined; or that employees are unlikely to press claims for penalty compensation.

251. The penalties were generally established as a percentage of the workers' compensation award. See id. § 69.10, at 13-340 (ranging from a 100% increase in Massachusetts to much less in other states). Because of the rate-making methodologies used to determine premiums, this amount is unlikely to have a substantial impact on most employers' costs. Refer to part II.B infra.

252. A brief attempt during the 1950s to reform workers' compensation in order to provide effective rehabilitation opportunities for injured workers was abandoned. Berkowitz & Berkowitz, supra note 198, at 170-71. Regarding this failure, commentators concluded that workers' compensation programs were unable to assist injured employees in returning to work; they noted in particular that workers' compensation systems were simply not designed to reach into and alter the relationship between employers and injured workers. Id.

Interestingly, the failure of workers' compensation programs to develop effective rehabilitation efforts in the past is now the subject of considerable criticism. See, e.g., Peter S. Barth, The Twentieth Anniversary of the National Commission on State Workmen's Compensation Laws: A Symposium: Observations of Peter S. Barth, JOHN BURTON'S WORKERS' COMPENSATION MONITOR, Nov.-Dec. 1992, at 10-11. Peter Barth, who was Executive Director of the National Commission on State Workmen's Compensation Laws, wrote the following on the twentieth anniversary of the Commission's Report:

I want to turn to what I now believe was the core problem with the report. In my view, we lost sight of the absolutely central purpose of the compensation, i.e., to restore the injured worker to his or her pre-injury status as
liability did not meet with any significant or continuing success.

Workers’ compensation is a social insurance program which differs in important ways from traditional liability systems.

promptly as possible, including a return-to-work. Since 1972, state laws have been judged by many in terms of the number of essential recommendations that they comply with, yet reemployment is not one of these essential recommendations. Progressive states are so described because they have a high maximum weekly benefit level, not because of their return-to-work policies. [When an injured worker takes a lump-sum payment in settlement of a claim, everyone (the attorneys, the insurer, the employer, and the state’s workers’ compensation agency) views their responsibility as having ended. Ask them, as I have. By focusing on benefit adequacy, those of us involved with the commission’s report probably allowed everyone to think that the job of workers’ compensation is simply one of paying benefits. How did the National Commission let this omission occur? To understand that, one needs to recognize how awful state workers’ compensation laws were in 1972. In 1972, the problems were obvious, the benefits inadequacies were all too simple to recognize and impossible to defend, and in the minds of many, all could be remedied with a little bit of political will. What we do need are imaginative ways to provide incentives to the principal parties, that is, the worker, the employer, and the insurer, to restore the person as a worker. Perhaps that will be the legacy of the next national commission.

Id. Barth may have been ignoring the true roots of workers’ compensation in this statement, but he certainly echoed the rising concern about displacement of injured workers. See Emily A. Spieler, Injured Workers, Workers’ Compensation, and Work: New Perspectives on the Workers’ Compensation Debate in West Virginia, 95 W. VA. L. REV. 333, 340-41, 354, 375 (1992-93).

253. As noted previously, attempts through litigation to break down the exclusivity of workers’ compensation and expand employer common-law liability enjoyed some initial success in the 1970s and 1980s; there has been no further erosion of the exclusivity principle in recent years, however. Refer to note 247 supra.

254. Social insurance programs are built on the assumption that benefits have been paid for and become vested; this is true even when the programs are, like Social Security, funded on a “pay as you go” basis. They are intended to reduce (or prevent) poverty in “nonstigmatizing ways.” Jeffrey S. Lehman, To Conceptualize, To Criticize, To Defend, To Improve: Understanding America’s Welfare State, 101 YALE L.J. 685, 692 (1991). Social insurance programs guarantee future benefits to beneficiaries when specific non-need-based eligibility requirements are met. Participation in these programs is based on prior participation in the workforce or on direct financial contribution to the program. Theodore Marmor et al., America’s Misunderstood Welfare State: Persistent Myths, Enduring Realities 99 (1990). Eligibility for benefits can be based on such factors as age or disability, as in the case of social security, or disabilities suffered as a result of injuries or illnesses arising out of employment, as in the case of workers’ compensation. Workers undoubtedly pay for their workers’ compensation benefits, both by working, often receiving lower wages than would have been available in the absence of compensation costs, as well as through their statutory waiver of other remedies against the employer.

Perhaps as a result of the no-fault nature of the workers’ compensation system, workers’ compensation has taken on some of the political trappings of social welfare programs. In contrast to compensation associated with social insurance (which is deemed to be vested) or that which is associated with legal wrong (which is viewed as making the victim whole), social welfare programs mandate redistribution based upon need. There is strong antipathy for need-based programs in Ameri-
Eligibility for compensation is based upon the occurrence of an event—an injury or illness—but not upon the perpetration of a wrong. As a “no-fault” system, the victims, injured workers, are not presumptively the victims of wrongful harm; instead, they are simply the victims of workplace mishap.

In contrast, when redistribution is based upon the occurrence of harm, it is primarily derived from traditional tort liability schemes which link the availability of compensation to notions of wrong: the victim of the harm receives compensation; the perpetrator of the wrongful harm is charged with the cost of compensation. This appears “just,” in the distributive sense, because the victim is compensated and the wrongdoer, rather than innocent bystanders or victims, is forced to pay the costs of the injury. Moreover, it appears “just” in the normative sense because the internalization of costs is often viewed as providing an important incentive to deter repetition of the wrong.

Like tort liability systems, workers’ compensation provides payment to victims because of the occurrence of harm. As in tort systems, it is hoped that the payment of the costs by the employer will ultimately result in the minimization of both total costs and human suffering by providing the necessary incentive to prevent injuries. The presumption is that...
employers will invest in safety to the extent that the marginal costs of prevention are less than the marginal gain—and that relationship is understood. As costs rise, prevention should become more financially attractive; that is, the balance should be achieved through more effective prevention.  

But the no-fault, insured nature of workers' compensation impedes this process. Employees are entitled to limited compensation because of their status as workers injured at work, not because of their status as victims of fault-based harm at work. The amount of the compensation is limited; this limitation is, in part, justified on the basis that high levels of compensation create incentives for workers to stop working. Limitations on benefits are also, however, a reflection of the assumption that full compensation is based upon application of notions of fault, which are presumptively irrelevant to workers' compensation liability.

Employers are charged with the cost, but not because they are defined as the perpetrators of wrongful harm; there is, by definition, no wrongful harm in a no-fault system. The no-fault nature of the system masks, or perhaps obliterates, the commitment to individual corrective justice which imbues

Sugarman, supra note 19, at 565-73.

Similarly, Professor Guido Calabresi has argued that the tort system failed as a mechanism for internalizing costs for three reasons: imperfect insurance pricing, imperfect information, and a system of transfers which results in charging others for the costs of any injury. GUIDO CALABRESI, THE COSTS OF ACCIDENTS: A LEGAL AND ECONOMIC ANALYSIS 244-49 (1970). All of these are painfully present in the workers' compensation system and are addressed in this Article. For a summary of Calabresi's thinking on this issue, see Keith N. Hylton & Steven E. Laymon, The Internalization Paradox and Workers' Compensation, 21 HOFSTRA L. REV. 109, 126-29 (1992) (explaining Calabresi's theory of externalities, but rejecting his concerns regarding the impact of insurance because of trust in the market incentives in insurance arrangements). As the discussion of workers' compensation pricing in part II.B illustrates, it is not clear that trust in market incentives is merited.

256. When commentators argued for increased compensation for victims of occupational hazards prior to the 1972 Commission Report, supra note 32, they assumed that increased compensation would result in increased deterrence. As Arthur H. Reede wrote, "[a]dequate compensation makes safety more imperative. Increased safety makes adequate compensation possible." REEDE, supra note 34, at 371. This Article had its genesis in the fact that, at least up until now, this reciprocity has apparently failed to develop.

257. The National Commission, while noting the inadequacy of benefits in 1972, also warned that "[a]s the proportion of wages replaced is increased, the worker is assumed to have less incentive to return to work." COMMISSION REPORT, supra note 32, at 56. This is the issue of moral hazard: that, as benefits rise, workers will take fewer precautions, and thus file more claims. Refer to notes 15 & 18 supra. The behavior of workers is discussed at greater length in part III.C. Obviously, this tension plays out in the political arena, with those more concerned about the adequacy of benefits for injured workers on one side, and those who are more concerned about work disincentives on the other side.
discussions of tort liability. The no-fault legal paradigm tends to legitimize some employers' views that the fault lies elsewhere.258

258. In the workers' compensation literature it is sometimes forgotten that moral hazard can occur either ex ante or ex post the occurrence of the loss. Priest, supra note 12, at 1547; refer to note 15 supra (defining moral hazard). "Ex ante moral hazard is the reduction in precautions taken by the insured to prevent the loss. . . . Ex post moral hazard is the increase in claims against the insurance policy beyond the services the claimant would purchase if not insured." Priest, supra note 12, at 1547. The workers' compensation social science literature focuses to a significant degree on the moral hazard created for workers in the compensation system because of the economic security which is presumed to increase either workers' carelessness or filing of claims. Refer to note 18 supra.

Investigation of employer behavior has generally focused on assessing the effectiveness of merit-rating insurance pricing schemes in inducing greater preventive efforts by employers. See, e.g., JAMES R. CHELIUS & ROBERT S. SMITH, EXPERIENCE-RATING AND INJURY PREVENTION, in SAFETY AND THE WORKFORCE: INCENTIVES AND DISINCENTIVES IN WORKERS' COMPENSATION, supra note 18, at 128, 130; Chelius, Influence of Workers' Compensation, supra note 18, at 235, 237; Chelius, Incentive to Prevent Injuries, supra note 18, at 154, 155; Ehrenberg, supra note 18, at 18-20; Alan B. Krueger, Incentive Effects of Workers' Compensation Insurance, 41 J. PUB. ECON. 73, 74 (1990); see also John W. Ruser, Workers' Compensation and Occupational Injuries and Illnesses, 9 J. LAB. ECON. 325, 326 (1980) (discussing the effects of experience rating pricing on the business' safety investments). All of these studies conclude that experience rating fails to significantly increase employers' preventive efforts. See, e.g., CHELIUS & SMITH, supra, at 137 (stating that the effects of experience rating on employers' safety expenditures were negligible); Ehrenberg, supra note 18, at 19 (supporting the conclusions of Chelius and Smith). But see MICHAEL J. MOORE & W. KIP VISCUSI, COMPENSATION MECHANISMS FOR JOB RISKS: WAGES, WORKERS' COMPENSATION, AND PRODUCT LIABILITY 134-35 (1990) (concluding that in the context of fatal injuries workers' compensation plays a "constructive role . . . . [W]orkplace fatalities could double in the absence of this program. Worker's compensation thus represents by far the most influential governmental program for reducing workplace fatalities."); Worrall & Butler, Experience Rating Matters, supra note 12, at 92 (finding that in 15 industries studied in the period 1940-1971, a 10% increase in firm size led to a 4.95% decrease in the permanent partial injury rate and a 10.17% reduction in the all indemnity claims rate). These studies in part are an attempt to investigate the potential positive effects on employer preventive activities that may be derived from merit rating systems which make an individual employer's cost responsive to that employer's own claims experience. Some of the investigators note that employers' preventive activities may be obscured by the increased filing of claims by workers as benefits rise, or that employers' preventive efforts may decline when pricing schemes fail to make an employer's costs responsive to the costs incurred by that enterprise. See, e.g., Chelius, Incentive to Prevent Injuries, supra note 18, at 155 (stating that injury prevention by employers is influenced by the level of benefits given to the employee).

The workers' compensation paradigm poses a moral hazard for employers as well as employees; both employers and employees are insured by the program. The existence of a no-fault workers' compensation system undoubtedly depresses employers' incentives toward prevention in two ways. First, it provides an economic cushion for workers so that employers can feel that they have discharged any responsibility to injured workers. Second, the mechanisms for the distribution of costs and the maintenance of benefits below full costs of injuries (which are discussed at greater length in part II.B) mean that employers' liability may not always increase as the incidence or, particularly the severity, of injuries increases. See ASHFORD, supra note 9, at 417 (arguing that because employers do not pay the full social cost of
Advocates of prevention, relying upon the apparently certain costs of injury which the compensation laws created, believe that employers' enlightened self-interest should force them to engage in aggressive preventive practices. Their arguments presume that the forced internalization of cost will affect employers' practices, even if the employers are not charged with wrongful behavior, and even if there is a general belief that many injuries are inevitable. There is, however, an internal, paradoxical tension between the presumptions of inevitability (which are supported by the no-fault insurance paradigm) and assumptions of preventability (supported by the financial incentives). Arguably, this tension contributes to the political controversy surrounding compensation, as employers fight the costs of compensation without investigating the cause of the injuries.

The fact that employers have not committed a legal wrong does not obviate the fact that the employer may nonetheless have both control over the conditions leading to injuries and superior knowledge regarding strategies for prevention. It is not, however, at all clear that the relationship of costs to each additional disability, their incentive to reduce hazards is too low, and that the "problem of moral hazard is inevitable".

Current commentators continue to view the costs of workers' compensation as a source of incentive for safety. See, e.g., Paul C. Weiler, Workers' Compensation and Product Liability: The Interaction of a Tort and a Non-Tort Regime, 50 OHIO ST. L.J. 825, 843 (1989) (explaining that if employers have substantial financial responsibility for all workplace injuries, they will be sufficiently motivated to invest in precautions that will prevent their occurrence).

Workers' compensation was expected to induce employers to provide greater workplace safety because each firm would assume the costs of its workers' injuries more predictably than under tort liability. The costs of industrial injuries thus would be included among other business costs, and employers would be motivated to reduce them by increasing job safety.

ECONOMIC REPORT OF THE PRESIDENT, supra note 18, at 197. Other commentators have noted that the strict liability workers' compensation rules adopted by the states were supported by Calabresi's argument that "other things being equal, liability should be placed on the party best able to recognize a relationship between caretaking and costs, and to use this information to reduce accidents." Hylton & Laymon, supra note 255, at 128. This view echoes that of earlier workers' compensation commentators. Arthur H. Reede, for example, insisted that "[a]ll available evidence supports the view that workmen's compensation is a stimulus to prevention of industrial injuries." REEDE, supra note 34, at 324.

The presumption is, I think, that the pricing of workers' compensation insurance will provide a sufficient incentive to trigger preventive activities. This is the focus of part II.B of this Article.

This calls for an analysis of the difference between a legal wrong which causes harm and action which is not a legal wrong but which is known in advance to result in harm. Clearly, not all actions which are known to cause harm, even on a regular basis, are actionable as legal wrongs. It is precisely the process of drawing these lines which makes the problem of deterrence in workers' compensation so difficult.
prevention is obvious or even that the system itself is designed to induce improved safety as a result of increased costs. Even in theory, internalization of costs will only promote deterrence if costs and the payer's control over the occurrence of the harm are related, and the payer understands the relationship.

B. Distributing Cost

In order to maximize the potential deterrent effect from the imposition of liability, two initial objectives must be met: costs must be charged to, and internalized by, the entity responsible for the harm; and the costs must fluctuate with the degree or amount of harm. Aggregate cost, which does not fluctuate with individual experience, is unlikely to provide the necessary incentive to induce preventive activities. This section explores the extent to which workers' compensation achieves effective internalization of costs. 262

As noted above, our current system of liability insurance had its roots in employer liability for workplace injuries and grew with workers' compensation systems. 263 The first statutes which mandated employers to carry insurance created a state fund to provide the coverage. 264 States later established requirements either for purchase of private insurance or, in some jurisdictions, for proof of financial responsibility for purposes of self-insuring. 265

The requirement that employers purchase insurance to cover workers' compensation claims provided protection to both workers and employers. The desire for reliable protection was substantial enough to overwhelm any concern that insurance would dampen the deterrent effects of these costs. This insurance guaranteed that compensation would be available to the extent that it was required by law, irrespective of the financial status of the employer. Then, and now, employers incurred penalties for failing to obtain insurance. 266 In addition, the insurance mandate, when combined with the general

262. This exploration is undertaken as an exercise that is independent of the concern raised in the next section: that increased internalization of enterprise-specific costs may encourage perverse cost-containment strategies on the part of employers. Without abandoning the notion that unintended consequences may overwhelm the socially useful and intended consequences of cost internalization, it is nevertheless instructive to review the degree to which internalization has been achieved in the workers' compensation system.

263. KEETON ET AL., supra note 221, § 82, at 585.


265. See REEDE, supra note 34, at 231-32.

266. 2A LARSON, supra note 65, § 67.22, at 12-132 to 12-140.
limitations on liability inherent in the system, guaranteed the
economic stability of firms by protecting employers from both
the full cost of injuries and major fluctuations in costs
associated with these injuries.

The general implications of insuring a risk have become
much more obvious in the years since the first enactment of
workers' compensation statutes. Insurance is fundamentally an
arrangement that allows for the transfer and distribution of the
costs associated with risk. Insurance provides an
established prospective cost ("premium") which quantifies the
future risk and which protects the insured from any further
losses. The risk, and any incentives associated with assuming
the risk, are transferred to the insurer.

Insurance by its very nature requires the spreading of the
costs of risks through a population; it is the law of large
numbers which creates a sufficiently high probability that
predictions regarding the total losses for the pool will be
correct. As one commentator has noted, "the purpose of the
insurance is to protect the person liable from the consequences
of his liability; in so far as this protection can be bought at a
reasonable price, the economic deterrent effect of liability disap-
pears."

267. Keeton & Widiss, supra note 247, at 3. "For a price, usually referred to as
a premium, an insured transfers to an insurer the risk of loss or the responsibility
for certain costs that may arise . . . . [Thus] an insured will be able to avoid sus-
taining further losses." Id. at 11.

268. The effect of the insurance contract is, therefore, to transfer any incentives
to decrease claims costs from the insured employer to the insurer. The employer's
premium costs are set at the beginning of a policy year. If the insurer can reduce or
assist the employer in reducing the actual costs of claims during that year, the in-
surer will receive the benefit. Employers' gains will not appear until subsequent
policy years in which their premiums are adjusted to reflect past claims reductions
through the merit rating process that is discussed below. It is therefore surprising
that insurers have not pursued loss prevention more aggressively as a strategy. Re-
ferral to part III.C.2 supra. More recently, as state insurance regulators have resisted
rate increase applications, loss prevention has become more of a focus. See, e.g., Loss
Control and Prevention, IV NCCI DIGEST, Dec. 1990, at 1 (studying the possibilities
for loss prevention). "Insurers are no longer content to share the risk; they are com-
mitted to decreasing risks as well . . . . In the area of workers' compensation, this
means the establishment of a safe workplace." Id. The article notes further that "[i]t
is unclear whether the experience rating system has any effect on the average
employer's workplace injury rate." Id. at 9.

269. Morgenstern, supra note 7, at 65. Or, stated another way, "the existence
of liability insurance tends to undermine both the corrective justice and deterrence
rationales for the imposition of tort liability." Kenneth S. Abraham & Lance
Liebman, Private Insurance, Social Insurance, and Tort Reform: Toward a New Vi-
sion of Compensation for Illness and Injury, 93 Col. L. Rev. 75, 86 (1993). See gen-
ernally Kenneth S. Abraham, Distributing Risk: Insurance, Legal Theory, and
Public Policy (1986) (explaining the relationship between corrective justice and
liability insurance programs). Of course, as I have previously noted, corrective justice
Despite the high aggregate level of workers' compensation costs, the current methodology for the distribution of costs associated with occupational hazards fails to encourage improved safety practices among many employers for two reasons. First, costs are not spread in a manner which provide financial incentives to many employers to engage in primary prevention. The insurance pricing scheme, which provides some fluctuation of rates based upon the experience of individual employers and classes of employers, maintains the appearance of an incentive-based system. To the extent that insurance premiums are merit-based, the market would tend to reward low-risk employers with lower costs and penalize high-risk employers with higher costs. The particular nature of the pricing of workers' compensation premiums, however, tends both to attenuate the relationship between cost and risk for many employers, particularly smaller high risk employers, and to obfuscate the connection that does exist.

Second, despite the apparent internalization of costs, employers do not pay the full costs of injuries. A system of "sensible compensation" means that costs are transferred, directly and indirectly, to the injured workers, their families, to administrative agencies, and to others. These two issues are explored more fully in the following subsections.

1. The Workers' Compensation Insurance Pricing Scheme and Market. The nature of insurance means that costs associated with risk are shared. Generally, to the extent that rates are set based upon a group or community risk and are not adjusted for individual experience, those who make more or larger claims against the insurance will be subsidized by those who make smaller ones. This effect can be partially corrected by rate-making processes which adjust the rates of individuals within the group in order to reflect individual experience more accurately. The goal in the adjustment of rates is to pool that portion of the risk that involves uncertain or random events, and to individualize rates to the extent that the risks, and therefore the costs, are predictable.

Alternatively, the subsidization characteristic of insurance can be decreased by reducing the size of the risk pool, so that those in it will be closer to each other in experience, making the community rate charged closer to the actual experience of and deterrence were not foundation blocks of the workers' compensation system. Refer to part III.A.4 supra.

270. Weiler, supra note 234, at 840.
each member of the group. As experience-rating increases or pools become smaller, however, the advantages which flow from the sharing of risk decline.\textsuperscript{271} The result is that, in the workers' compensation market, there is a tension between more accurate merit rating, which should promote safety incentives, and class rating, which helps employers share financial risks related to occupational hazards in their industries.\textsuperscript{272}

In workers' compensation today, as costs and premiums have risen, questions of affordability, solvency, cost containment, equity and adequacy of benefits, and accuracy of pricing have all merited attention from the insurance industry.\textsuperscript{273} In order to understand the current concerns and their relationship to safety promotion, it is necessary to understand the mechanisms used by insurers to price employers' workers' compensation premiums.\textsuperscript{274}

\textsuperscript{271} Abraham, supra note 269, at 218. From insurers' perspectives, as the size of the pool grows, the amount of predictive uncertainty declines and less capital is needed to fund the future risk adequately. Telephone Interview with Robert Finger, Consulting Actuary, Milliman & Robertson, Inc. (Oct. 23, 1993). Insurers themselves are more concerned with issues of funding and marketing than with social policy implications of rating decisions.

\textsuperscript{272} Kenneth Abraham characterizes this tension as follows:

\begin{quote}
Stress on loss prevention in insurance obviously tends to reflect a focus on individual responsibility. In contrast, emphasis on risk distribution underscores the social consequences of loss. Both loss prevention and loss distribution, of course, are methods of avoiding the effects of injury and loss. But they do so from very different perspectives. Increased stress in the future on risk distribution could indicate an evolving recognition of the inevitability of a certain amount of injury in a society as technological and industrial as ours. At some point it would symbolize a very significant change in social perceptions: a collective acceptance of the current—and perhaps ultimate—inevitability of our world. Increased stress on loss prevention, on the other hand, would reflect the dominance of more traditional ideas about individual responsibility for loss and a continuing belief in the possibility of progress toward a safer, more secure world. Stress on loss prevention through insurance devices might indicate as well that more public forms of loss prevention, such as direct regulation and the promulgation of mandatory safety standards, had failed to live up to their promise.
\end{quote}

\textsuperscript{273} Abraham, supra note 269, at 218. This underlying tension between acceptance of the inevitability of risk (which Abraham characterizes in a positive light) and prevention are, of course, precisely what underlie workers' compensation discussions. Of course, there is always a middle ground which acknowledges both the imperfectability of our world and our ability to achieve reductions in risks.

\textsuperscript{274} The brevity of this summary requires some generalizations. The process described is that used by the National Council on Compensation Insurance (NCCI), a national rate-making bureau, that prepares rate analyses for the insurance industry in 32 states. A similar, but not identical, rate-making methodology is utilized in every state, whether the insurance is provided through a monopolistic state fund, a competitive state fund, a private insurance carrier, or from a separate high risk
a. Rate setting methodology. Employers' workers' compensation insurance requirements can be met in most states either by purchasing insurance or by self insuring.275 Employers who self insure pay all of their own costs associated with the mandated workers' compensation benefits, as well as the costs of litigating any claims which they may choose to contest.276 These employers may also be required to contribute to various administrative costs of the state agency which oversees the workers' compensation program.277 Self insurance results in the purest form of experience rating: self insured employers' costs are tied absolutely to their incurred costs. As the number of employers who self insure has grown,278 the number of employers and employees who operate in an environment in which payment reflects true workers' compensation cost has risen.279 It is, in fact, these employers who are most often credited with aggressive safety or, at least, claims-reducing programs.280

Employers who purchase insurance have their individual premium rates determined through a three-step process of rate-making.281 First, the average premium rate for a state is calculated. Second, rates are calculated for separate industrial classes into which all employers are grouped.282 Based upon pool. It is important to remember that rate-making methodologies are developed by actuaries with concern for adequacy and equity of rates based upon the predictive value of past experience; actuaries are not, in general, concerned about the efficacy of insurance rate-making in achieving other goals, including safety. The summary provided here does not attempt to explain the precise justification for the resulting rate methodologies. For more information regarding rate-making methodologies, see generally WORKERS' COMPENSATION INSURANCE PRICING: CURRENT PROGRAMS AND PROPOSED REFORMS, supra note 132; Beckwith, supra note 7, at 58-60; C. Arthur Williams, Jr., Workers' Compensation Insurance Rates: Their Determination and Regulation, in CURRENT ISSUES IN WORKERS' COMPENSATION 209 (James Chelius ed., 1986).

275. Beckwith, supra note 7, at 52.
276. Id. at 59.
278. Refer to note 30 supra.
279. Workers' compensation costs are limited in a variety of ways. Not only are all injuries and illnesses not compensated, but the level of compensation itself results in externalization of costs from the system. The issue of this externalization is discussed below. Refer to part III.B.2 infra.
280. See, e.g., Beckwith, supra note 7, at 59 (stating that self-insurance provides the greatest incentive to the employer to provide a safe working environment for employees).
282. Id. NCCI uses more than 600 industrial classifications in calculating rates, although only about 300-400 of these may be in active use in any particular state. Id. Telephone Interview with Robert Finger, supra note 271. Other rate making entities may use fewer. For example, the West Virginia Workers' Compensation Fund, a
the aggregate claims experience in that class, generally over the preceding three year period, the size of payroll in that class, and the insurer's administrative and related expenses, the insurer calculates a base or manual rate for the entire class. This manual rate, expressed as an amount per $100 of payroll, reflects the total predicted costs that the insurer anticipates employers in that class will incur during the subsequent policy year. Third, the insurer may adjust the employer's premium from the manual rate based upon that employer's claims loss experience.

Manual rates vary widely from one industry to another, reflecting the variation of the experience of different groups of employers. The highest rate in a state "will routinely exceed the minimum by a factor of 100, and in extreme cases can exceed the minimum by a factor of 1000." This grouping of employers lessens or eliminates cross-subsidization between industries as long as rates are adequate to cover the incurred costs in any policy year. Obviously, manual rates rise as the average experience of an industrial group worsens, and fall as the average experience improves. In the majority of states, changes in these rates must be approved annually by the state insurance department or an equivalent oversight agency.

Small employers who pay below a certain amount of monopolistic state fund, uses 91 such classifications. These classes are established based upon the level of risk in an industry, not upon the product that is produced; they therefore do not coincide with the Standard Industrial Code (SIC) classifications utilized for other employment data-gathering. This further complicates the data problems discussed in Part I of this Article.

284. In theory, the manual rate should represent a true average. Because of some aberrations in the rate-making processes, however, the manual rate in some instances deviates from the actual average of employers' calculated rates. This is the result of the distribution of employers after the application of the experience rating formula and is referred to as the "off balance." The precise nature of aberrations like this in the rate-making process are beyond the scope of this discussion.

286. Workers' compensation rates must be adequate to cover the expected losses which are allocable to the particular industry. "The failure to adhere to this principle can cause unintended interjurisdictional, interindustry and interfirm cross-subsidization, which can have far-reaching and adverse implications." Id. When inadequate rates are charged, the resulting deficit may require cross-subsidization between industries in subsequent years. See Robert Finger & Robert Briscoe, Workers' Compensation Insurance Arrangements in West Virginia, JOHN BURTON'S WORKERS' COMPENSATION MONITOR, May-June 1991, at 3. To the extent that the payroll in high risk industries declines, the funding is likely to be drawn from other industries. Id.

287. Historically, most states had administered pricing systems in which changes in manual rates for industries were subject to review and approval by a state regulatory body. Klein, supra note 52, at 7-8. Since 1982, sixteen states have instituted competitive (rather than regulated or "administered pricing") rating for workers' compensation. Id.
premium per year are required to pay the base or manual rate, irrespective of their own claims experience. The size of these non-rated employers varies depending upon the base rate in their industry; in an industry with a $10 per $100 base rate, the minimum amount will be reached with fewer employees and less payroll than in an industry in which the base rate is $0.50 per $100.288 Because of the small pool of employees, and the resulting low frequency and small numbers of claims, the injury experience of these employers is generally viewed by actuaries as too random to have any predictive value; prospective adjustments to rates would therefore not make sense. Any effort by these employers to improve their own safety records will therefore not be recognized by the workers’ compensation rate-making process.

In contrast, larger employers’ rates are individualized and therefore deviate from the manual rates of their industries. The merit rating process is designed to create rates which better reflect the individual employer’s experience in relation to the entire class. Three different methods are used for merit rating purposes: schedule rating, retrospective rating and dividend plans, and, most commonly, experience rating.289 Schedule rating involves the prospective adjustment of the manual rate at the beginning of the policy year in order to reflect the employer’s internal practices. Individual employer’s rates are based, at least in part, on a prediction about anticipated future claims, but this prediction is not based on the actual past claims experience of the employer. For example, in the early years of workers’ compensation, this prediction might have been based on safety audits of the enterprise’s operations.290 This approach to rate-making was common until 1934, at which time it was largely, although temporarily, abandoned as the industry came to view it as actuarially unsound.291 Schedule rating has recently reappeared in some

288. The minimum premium amount for merit rating is currently set at $5000 per year in a typical state. Telephone Interview with Robert Finger, supra note 271. This means that employers paying $10 per $100 will be experience rated when their payroll reaches $55,000 (or about two to three employees earning $15,000 to $20,000 per year). In contrast, employers paying $0.50 per $100 will need a payroll of $1,100,000 or 55 employees earning $20,000 in order to be experience rated. The minimum amount of premium which triggers experience rating has, of course, increased over time. Williams, supra note 274, at 211. In 1983, it was $2500. Id. 289. Id. 290. SOMERS & SOMERS, supra note 34, at 106. 291. Id. at 106-07 (noting that in this early form, [d]ebits or credits were given to the insured employer, in advance of actual experience, on the basis of plant safety inspection [sic] . . . . Gradually, however, the inherent limitations of the [schedule rating] plan determined
states in the form of legislatively-mandated prospective premium discounting, which is designed to provide an inducement for employers to engage in cost-cutting or injury preventing practices."\(^{292}\)

Retrospective rating, introduced in 1936 after schedule rating was abandoned, adjusts the employer's premium at the end of the rating period based upon that employer's actual experience during the policy year.\(^{293}\) In general, retrospective rating is a device used by insurers to market insurance to larger employers who might otherwise self insure. In essence, the insurance carrier agrees, within formal negotiated boundaries, to rebate premium to employers who perform better than anticipated during the policy year.\(^{294}\) Dividend plans similarly rebate premium at the end of the policy year;\(^{295}\) these plans, although actuarially similar to retrospective rating, do not guarantee the end-of-year return and are more clearly driven by market factors.\(^{296}\) Retrospective plans offer to employers an intermediate solution between simple experience rating, which operates on a prospective basis only, and self insurance, which requires the employer to bear the entire risk.\(^{297}\)

Prospective experience rating is the most common form of merit rating in workers' compensation. Experience rating formulas generally look at an individual employer's claims costs over the preceding three years in comparison to the average claims costs in the industrial classification. The insurer then calculates an "experience modification rate" or "modification factor," based upon the employer's relative experience. For low claims employers, this modification factor will be less than one; for high claims employers, it will be greater than one. The individual employer's rate is adjusted prospectively by

\(^{292}\) See, e.g., MASS. GEN. LAWS ANN. ch. 152, § 53A (West 1989); MO. ANN. STAT. § 287.125 (Vernon 1986); W. VA. CODE § 23-2B-3 (Supp. 1993). For a full discussion of this recent development, refer to Part IV infra.

\(^{293}\) SOMERS & SOMERS, supra note 34, at 107.

\(^{294}\) Id.

\(^{295}\) Id.

\(^{296}\) Telephone Interview with Robert Finger, supra note 271. Dividend plans are less highly regulated and generally do not have to be filed with state insurance departments. Appel & Borba, supra note 273, at 8.

\(^{297}\) On the other hand, this rating system may decrease the insurer's incentive to provide loss control services to an employer-client, because the partial transfer of risk to the employer decreases any potential gain for the insurer in providing loss management services.
multiplying the industry's base rate by the specific calculated modification factor. Thus, employers with better than average claims experience pay less than the manual rate; employers with worse than average experience pay more than the manual rate.

All merit rating schemes serve several purposes. First, they are a device for correcting rate inequities through modifying manual rates. Second, schedule-rating and dividend plans provide a weapon of competition for different insurance carriers in a largely regulated environment. Third, merit rating is viewed, by some, as an important stimulus for injury prevention.

b. Rate setting and safety incentives. The merit rating system is the cornerstone to arguments that workers' compensation costs create safety incentives. In theory, the rate-setting characteristics of workers' compensation should increase safety effects in two ways. First, by increasing the overall unit cost of labor relative to capital in hazardous industries, the rate setting process should contribute to an economy-wide reduction in injuries by reallocating labor from more dangerous to safer industries. This reallocation from more hazardous goods-producing employment has, of course, occurred. Needless to say, it is difficult to attribute this change to workers' compensation costs, nor is there any evidence that the most risky operations within an industry are the ones that close. Second, the experience rate setting system should increase the costs for more hazardous firms within an industry, relative to safer ones. The incentive for the more dangerous firms to

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298. The insurance industry "has always viewed the [experience rating] program as one primarily intended to produce equity, by more closely tying an individual risk's price to expected costs." Appel & Borba, supra note 273, at 13.

299. Smith, supra note 7, at 571.

300. The relative decline in manufacturing and mining jobs over the past two decades has been substantial. In 1972, goods-producing jobs constituted 39% of private employment; by 1992, they had fallen to 26% of private employment. See BUREAU OF LABOR STATISTICS, DEPT OF LABOR, EMPLOYMENT AND EARNINGS 47 tbl. B-1 (1993) [hereinafter EMPLOYMENT AND EARNINGS 1993].

301. In fact, the high risk residual market in workers' compensation may be rescuing some of these excessively hazardous enterprises from extinction. Refer to part III.B.1.c. infra.

reduce claims costs, and hopefully injuries, is thereby increased.\footnote{Richard B. Victor et al., Workers' Compensation and Workplace Safety: Some Lessons from Economic Theory (Rand Report) x-xi (1982) [hereinafter Victor, Workers' Compensation and Workplace Safety] (concluding, based on a simulated model, that the experience rating system may increase safety incentives for large firms and decrease it for small firms. Firms with as few as 25 employees in hazardous industries may, however, have significant financial incentives to reduce claims costs); Smith, supra note 7, at 571. But see the various experience rating studies, supra note 258, which have failed to find any relationship between safety and experience rating.}

Employers' rates within the same industrial classifications can indeed vary tremendously based upon experience rating calculations. The Upjohn Study\footnote{Refer to note 7 supra.} was in part instigated by the existence of variations in intrastate rates paid by employers in the same industry. In West Virginia, employers' rates in the same industry vary by a factor of six or more.\footnote{The following are examples of rates, modification factors, and calculated rates per $100 of payroll for West Virginia employers with high and low modification factors (1989 data, information drawn from files of the author). "A" and "B" in each industry represent different employers with substantially different claims experience. The base rates in West Virginia during this period were artificially depressed and therefore, although the relationships among classes and employers are instructive, the actual amounts are not actuarially sound. See Spieler, supra note 252, at 347.}

<table>
<thead>
<tr>
<th>Industry</th>
<th>Base Rate</th>
<th>Mod Factor</th>
<th>Assigned Rate</th>
</tr>
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<tbody>
<tr>
<td>Hospitals</td>
<td>0.83</td>
<td>A. 0.66</td>
<td>0.55</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B. 3.38</td>
<td>2.81</td>
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<tr>
<td>Coal</td>
<td>16.80</td>
<td>A. 0.35</td>
<td>5.88</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B. 3.76</td>
<td>63.17</td>
</tr>
<tr>
<td>General Construction</td>
<td>6.71</td>
<td>A. 0.66</td>
<td>4.43</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B. 2.47</td>
<td>16.57</td>
</tr>
<tr>
<td>Clerical</td>
<td>0.38</td>
<td>A. 0.68</td>
<td>0.26</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B. 6.64</td>
<td>2.52</td>
</tr>
</tbody>
</table>

The very high modification factors on this chart may, however, represent errors in the ratemaking process. According to Robert Finger, consulting actuary to the West Virginia Workers' Compensation Fund, modification factors should rarely rise above 2.0. Telephone Interview with Robert Finger, supra note 271. Higher modifications may, therefore, reflect the fact that an employer has been classified into the wrong industrial class.\footnote{The Business Roundtable's publication for the construction industry gives the following example: Consider two contractors with different EMRs [experience modification ratings] bidding a job with $10,000,000 direct labor costs and a manual rate of $15.00.}
which have led to a call to employers to pay attention to safety in order to control their costs.307

The actual experience rating methodology dampens the incentive effects, however; the relationship between claims costs and experience is not as simple as the general contours of the rate-making process would make it appear. First, the calculation of an individual employer’s modification factor does not include any adjustment for the relative wages paid to employees in the same industry; the total workers’ compensation premium for an employer is the product of total payroll multiplied by that employer’s calculated rate.308 This has the troubling consequence of penalizing high wage, safe enterprises and rewarding low wage enterprises in the same industry. Thus, if relatively safe employers pay wages that are higher than average, their total premium paid for each full time worker may be higher than in firms with higher injury rates but lower wage rates. In some industries, particularly construction, the failure to correct for wage differentials may also encourage the hiring of less skilled, lower paid, workers.

Second, the use of a three year average for the calculation of individual employers’ rates results in a significant lag time before improvements in injury rates yield substantial reductions in workers’ compensation premiums.309 A single year reduction in claims costs is generally not viewed as actuarially credible for rate making purposes. Employers who have achieved claims cost reductions may, however, have a difficult time understanding this delay.

Third, and perhaps most importantly, not all of an employer’s experience “counts” in the calculation of modification

Contractor A has an EMR of 0.60
His workers’ compensation insurance premium is:
$10,000,000/$100 x $15.00 x 0.60 = $900,000
Contractor B has an EMR of 1.40
His workers’ compensation insurance premium is:
$10,000,000/$100 x $15.00 x 1.40 = $2,100,000
The safety dividend to Contractor A is $1,200,000 ($2,100,000 less $900,000)—12 percent of direct labor cost!


307. See generally Welch, supra note 7 (citing empirical studies showing that employers with aggressive safety programs tend to exhibit lower workers’ compensation costs).


factors. The extent to which an employer is rated as a result of its own experience depends on the credibility or predictive value of that employer's experience.\(^{310}\) As employers' total premium amounts grow, reflecting both larger payroll and the level of general hazard in the industry, the credibility of their past experience also grows. About ten to fifteen percent of firms, in which ninety percent of employees work, are experience rated.\(^{311}\) Because experience rating cutoffs rely on size of total premium, not on size of payroll, the more hazardous the industry, the more that experience rating reaches smaller firms.

The degree of experience rating varies, however. Workers' compensation insurance rate-making assumes that the severity of an injury is less predictable than injury frequency.\(^{312}\) The most important factor is therefore the frequency, not the size, of claims; an employer's rate may be affected more by two relatively minor injuries (e.g., sprains) than by one injury resulting in permanent total disability or death.\(^{313}\)

\(^{310}\) Although the incentive value of experience rating appears to indicate that more is better, insurance industry researchers argue that "it would be unfair to insureds to charge back losses that were random and essentially unpredictable." Gary Venter, Experience Rating—Equity and Predictive Accuracy, II NCCI DIGEST, Apr. 1987, at 27, 28.

\(^{311}\) Appel & Borba, supra note 273, at 6 (discussing the impact of experience rating in NCCI jurisdictions). This distribution is reasonably consistent with the general distribution of workers by employer size, which shows that 15% of employees work in firms with nine or fewer employees. Small firms constitute 76% of total establishments. BUREAU OF LABOR STATISTICS, U.S. DEPT OF LABOR, BULL. 2419, EMPLOYMENT AND WAGES, ANNUAL AVERAGES 532-33 (1993).

\(^{312}\) This assumption is based on historical experience. Telephone Interview with Robert Finger, supra note 271. Injury frequency is apparently viewed as a reflection of underlying conditions in the workplace, while severity is tied more to the behavior and characteristics of the individual worker who is injured. The particular individual's reflexes, age, overall conditioning, level of work motivation, access to quality to medical care, etc. may affect the size (i.e., the severity) of the claim. Id.

\(^{313}\) In other words, the employer with a single claim of $150,000 is presumed to be a better risk for an insurer than an employer with ten claims of $2000 per claim. This may in part explain the energy with which some relatively knowledgeable employers seek to deter the filing of smaller claims through a variety of strategies, including having injured workers report for work (and pay) without assigning them work. This particular strategy may benefit workers in the short run, since they will collect full wages during the period of temporary disability, but may disadvantage them in the long run, as they lose both permanent partial and medical benefits related to the injury.

This weighting toward frequency is accomplished by dividing each actual loss into primary and excess components. Victor, Experience Rating & Workplace Safety, supra note 309, at 75. Although both losses are adjusted based upon the credibility of an individual employer's experience, the primary loss (currently set at $5000) is given greater weight for all individually rated employers, irrespective of size. Venter, supra note 310, at 33. This figure also has changed periodically. Victor, Experience Rating and Workplace Safety, supra note 309, at 75 ($2000 was previously the pri-
As employers' size, hazardousness, and wage scale, and therefore annual premium, grow, the credibility of that employer's experience with more severe claims is also presumed to grow (reflecting increasing levels of actuarial certainty that past experience will be replicated in the future). The rate therefore becomes more sensitive to the employer's actual experience.\textsuperscript{314} Although manufacturing firms with as few as three to four employees may be experience rated, the size of the firm's workforce would have to be 1000 or more before the firm is fully experience rated.\textsuperscript{316} The result of this process is that relatively smaller employers' premium rates cluster around the manual rate; their rates can only change significantly as the experience of the entire class changes.\textsuperscript{316}

\textsuperscript{314} For example:

\begin{quote}
Employer A has a poor experience rating, with losses double the industry average, yet its credibility factor is only 25 percent. Employer B has a better injury record, 50 percent lower than the industry average, with the same 25 percent credibility factor. With no credibility factor used, experience rating would double Employer A's premium, and give a 50 percent discount to Employer B. With the credibility factor, Employer A is charged only 25 percent above the industry average, and Employer B receives a discount of just 12 !/2 percent . . . . [T]he effect of the credibility factor is to reduce financial incentives for injury prevention, and to blunt financial disincentives for firms that accrue poor industrial accident records.
\end{quote}

\textsuperscript{Beckwith, supra note 7, at 59.}

\textsuperscript{315} Worrall & Butler, Experience Rating Matters, supra note 12, at 85. Thus, a continuum exists along which employers can be experience rated. The weight given a firm's own experience increases with the firm's size. Smith, supra note 7, at 571-72. For example, a 50% reduction in injury costs would result in no decline in premiums for a firm of seven employees. \textit{Id.} at 591-92. However, the same 50% reduction in a firm of 10 employees would result in a 5% drop in premiums; the reduction would equal a 17% decline for a firm of 75, a 36% decline for a firm of 750, and a full 50% decline only for firms with 1750 or more employees. \textit{Id.} at 572.

\textsuperscript{316} In reviewing the experience modification of employers with risks of $20,000 to $50,000 expected losses, employers with no losses had modification factors in one state between 0.70 and 0.80; employers with a single loss or a small number of minor losses had modification factors of 0.80 to 1.10. See Gillam, supra note 302, at 51, 53. In contrast, larger employers, with expected losses between $200,000 and $500,000, end up with a distribution of modification factors which looks like a bell-shaped curve. \textit{Id.} at 57.
Several other problems result from this experience rating process. Relatively high risk smaller employers tend not to pay for the full cost of their individual experience, thereby attenuating any incentive effects to increase worker safety. The clustering of rates around the manual rate appears to result in a subsidy of high claims employers by low claims employers. In addition, low claims employers may not be fully rewarded for their superior experience; their rates will remain close to the manual rate even after years without any injuries or claims.

Not surprisingly, many employers do not understand the rate-making system. Because of its approach to limiting the full impact of losses, the experience rating system can yield higher modification factors, and consequently higher insurance rates, for employers with relatively lower claims costs. A Business Roundtable publication provides the following example. A very small contractor, with minimum expected losses, cannot have a modification rate of less than 0.90 in one state's workers' compensation system. A larger contractor with a worse overall safety record may have a modification factor of 0.6, because the larger employer's past experience is seen as having greater predictive value; the larger payroll therefore provides this employer with the potential for a lower rating. The larger contractor will therefore pay a substantially lower insurance rate than the smaller employer, despite the smaller employer's better experience. Even with complete information, employers would have a difficult time understanding this result; although this process may be actuarially justifiable, the result certainly appears illogical.

These problems are compounded by certain anomalies in the rate-making process which, until recently, tended to reward certain employers excessively. In some instances, these rate-making quirks may have resulted in providing very strong

317. In fact, this is not a true subsidy. Small employers' rates cannot drop because their prior experience lacks sufficient predictive value. Id. at 56. They therefore remain in a pool of insureds who may have worse experience in the coming policy year. Since rates are established prospectively, the rates of these employers remain relatively high. This can happen year after year. This effect extends to employers with risks (i.e., annual premiums) in the $200,000 to $500,000 range. Id. at 57. The fundamental question is whether the experience of these smaller employers is as uncertain as NCCI rating methodology would appear to indicate.


319. Id. at 11.
incentives for loss prevention for some employers. While these quirks appeared to provide substantial safety incentives to employers, they also contributed to the level of confusion and resulting hostility engendered by the complexity of the rate-making process. Thus, the relationship between prevention and cost savings may be confusing, even when it in fact offers maximal safety incentives.

Finally, experience rating and the rate-making process in general can only effectively reflect the incidence of injuries and illnesses for which compensation is actually paid or approved. As a result, the process fails to reflect any injuries which have occurred but which have not appeared in the compensation system. In particular, occupational diseases, as a class, tend to be inadequately reflected in insurance rates. Because of long latency periods, uncertainty in diagnosis, and obstructions to eligibility found in many compensation systems, they may never be compensated at all. Moreover, because of their latency periods, the costs of many diseases cannot be charged against an employer in the period in which the exposure to the disease-causing agents occurred; if these diseases are ever reflected in the rates, their impact generally does not occur contemporaneously with the existence of hazard.

Therefore, the experience rating process fails in three ways to send a clear message to employers regarding the benefits of improved safety. First and perhaps most obviously, the process does not reflect any of the externalized costs associated with occupational morbidity and mortality which are not included in the workers' compensation system. Second, for many employers, it fails to respond to true underlying injury and illness costs.

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320. See generally Victor, Workers' Compensation and Workplace Safety, supra note 303; Victor, Experience Rating and Workplace Safety, supra note 309, at 79. According to Victor, NCCI's prior rating plan produced both debits and credits that were too high for large accounts and too low for smaller insureds, although it worked well for risks whose expected losses fell in the middle range. As a result of these anomalies, some employers actually made more than $1 for each $1 saved in claims costs through the experience rating process. At the same time, "[f]irms with greater than expected losses are penalized with premium increases that exceed the additional losses. This world is quite symmetric." Id.

The NCCI has recently revised the rate setting methodology to correct for these aberrations. See Venter, supra note 310, at 31-35 (noting that the new plan "builds in a little less sensitivity to actual loss experience" for the group for whom the rating system had previously shown excess sensitivity). The new methodology was adopted by NCCI in July 1990. See Hager, supra note 13, at 44.

321. The ratemaking process thus provides employers significant incentive to reduce the number of claims that are filed or paid, either through pressuring injured employees not to file claims or through challenging the eligibility of claims once they are filed. This problem is the focus of the discussion in part III.C infra.

322. Refer to note 101 supra.
Third, to the extent that it does reflect these costs, the rate-making process tends to obscure this message, making it difficult to discern the relationship between costs and injury and illness rates.

There is good reason to believe that many employers have no idea of the interrelationship between their workers' compensation premium rates and their underlying rates of injury. The findings in the Upjohn Report were particularly troubling on this subject. The survey asked the 124 respondent employers to report their current cost level and to indicate the trend in these costs over the preceding three years. Only 17 employers actually provided an estimate of their costs, and, according to the report, "many of these were not credible responses." The conclusion reached was unavoidable: "[M]any if not most employers did not know their current WC [sic] cost level." Employer ignorance of both the amount paid and the reasons for it, may explain one of the report's accompanying observations: that high claims employers are likely to blame either workers or the workers' compensation system for their high costs.

This level of ignorance also helps to explain the results of studies which have investigated the effectiveness of the experience rating process in promoting safety. In general, these studies have failed to demonstrate a clear relationship between experience rating and increased safety efforts. Those

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323. Refer to note 7 supra.
324. Upjohn Report, supra note 7, at III-13 (emphasis added).
325. Id. This conclusion is certainly consistent with my own experience as West Virginia Workers' Compensation Commissioner. Between 1985 and 1989 manual rates in West Virginia were frozen. Many employers nevertheless continued to approach legislators to complain about increases in workers' compensation costs. During this period, an individual employer's rate could only have gone up if that employer's modification factor had increased; an increase in the modification factor could only have occurred if the particular employer's experience had worsened in comparison to that of the other employers in that industrial classification. That is, increases in cost during this period were all attributable to relatively worsening claims experience. These employers not only had no idea that this was true; many of them would not believe it was true after being shown documentation.
327. Refer to note 258 supra. The findings of these studies are somewhat blurred by the fact that several of them conclude that any "real" safety effects may be obscured by the observed phenomenon that workers file more claims when benefits rise. See Smith, supra note 7, at 581 (noting "[e]vidence that OSHA and workers' compensation have reduced injuries in the workplace is minimal . . . . In the case of workers' compensation, real safety effects are clearly swamped by reporting effects."). The specter is therefore raised that if claims increase with benefit increases, and efforts at safety fail to offset these increased costs, then "marginal benefit of safety provision falls and the number of injuries could rise." Worrall & Butler, Experience Rating Matters, supra note 12, at 83. This further stimulates charges that the
investigators who have concluded that experience rating "matters" have primarily found an association between larger firms and better safety records. Because larger employers' premium rates more closely reflect their true experience, these studies have concluded that experience rating is the cause of improved safety. Given the wide number of variables which may cause a larger employer with greater financial and personnel resources to achieve better safety, the drawing of this causal link may be fallacious. It is nevertheless interesting to note that experience rating studies confirm information collected elsewhere: larger firms do tend to have, or to report, fewer injuries.

c. The effect of special funds and the residual market. The evidence is, therefore, not strong that the distribution of costs through the experience rating process is an effective stimulant for safety. To the extent that smaller high risk employers have their experience discounted through the rate-making process (or do not understand that process), the likelihood that workers' compensation costs will encourage them to improve workplace safety inevitably declines. Moreover, high risk employers have the effects of their own experience further dampened as a result of two other components of workers' compensation cost distribution: special funds and the rate structure in the residual high risk insurance market.

Special funds in workers' compensation are explicitly designed to create a large, non-merit-rated insurance pool for certain risks. Most commonly, second injury funds subsidize injuries that occur to employees who have preexisting disabilities. These funds have a laudable goal: to encourage the continued employment of previously injured workers by

328. See, e.g., Worrall & Butler, Experience Rating Matters, supra note 12, at 91-92 (noting an association between firm size and safety and concluding that larger firms' comparatively better safety record is derived from the workers' compensation experience rating system). This conclusion is consistent with the simulation model developed by Richard Victor which projected greater incentives for larger insured firms. VICTOR, WORKERS' COMPENSATION AND WORKPLACE SAFETY, supra note 303, at 51-54.


330. Some states require these preexisting disabilities to be of a particular type or to be work-related; others do not. Most states require that the combined injuries result in permanent total disability. See Larson & Burton, supra note 329, at 123-25.
removing any direct liability for reinjury from the individual employer. The funding for these injuries is usually drawn from all employers without regard to claims which are made against the fund and without regard to where the original injury occurred.\footnote{331} The result is that the costs of claims paid by these funds are not internalized by individual employers; instead, they are paid through the fund without any effect on the employer's premium rates.\footnote{332} An unintended consequence of this is that both experience-rated and self-insured employers, as well as insurers, have an incentive to "dump" claims into a second injury fund to avoid any financial responsibility for the costs of the claim.\footnote{333} This dumping results in further expansion of administrative review of claims to weed out those which are improperly filed against the special funds.\footnote{334}

The functioning of the residual market in workers' compensation further subsidizes high risk employers. As costs rise at a rate greater than payroll, manual rates should increase. If rates are prevented from rising as experience worsens by either market or regulatory forces, insurers will only write private voluntary insurance for those potential customers who have better than average experience. In systems which do not require an enterprise or individual to purchase insurance, high risk individuals will often forego buying insurance if the merit rating system makes the insurance prohibitively expensive. This phenomenon has, for example, been observed in the health insurance market and is a contributing element to the current reform attempts.\footnote{335}

On the other hand, if insurance is mandatory and

\footnotetext{331}{The basis for the funding can be a surcharge on benefits, premium, or a flat amount. \textit{Id.} at 127-28.}

\footnotetext{332}{\textit{Id.} at 127 (listing the various ways in which the funds are financed).}

\footnotetext{333}{Experience with dumping was particularly acute in West Virginia, where the second injury funds premiums were grossly inadequate to cover the incurred costs for permanent total disability claims, particularly those claims which arose from declining hazardous industries like coal mining. See \textit{Spieler, supra} note 252, at 354-55.}

\footnotetext{334}{Often, this is accomplished by requiring employers to notify the workers' compensation administrative agency regarding the disabled status of individual employees when they are hired. Needless to say, this in turn led to a rather complex discussion regarding the interrelationship of this process to the hiring procedures under the Americans with Disabilities Act. See \textit{EEOC TECHNICAL ASSISTANCE MANUAL, A TECHNICAL ASSISTANCE MANUAL ON THE EMPLOYMENT PROVISIONS (TITLE I) OF THE AMERICANS WITH DISABILITIES ACT} § 9.5 (1992) [hereinafter \textit{EEOC TECHNICAL ASSISTANCE MANUAL}] (suggesting that an employer may make the necessary inquiries and require a medical examination after a conditional offer of employment).}

individuals cannot obtain insurance in the private voluntary market, the government may be forced to establish a high risk pool. As insurers perceive rate adequacy to decline, the need for governmental intervention grows. In the case of workers' compensation, the National Council on Compensation Insurance (NCCI) has alleged that state regulators, who must approve increases in manual rates, are inappropriately suppressing rates for political reasons. Finding that workers' compensation is a less profitable line of insurance, insurers have either withdrawn from states entirely or have limited their voluntary market share to those employers who are good risks.

Since employers must carry this insurance, states have mandated the creation of high risk nonvoluntary or "residual" pools (often administered by NCCI) or have legislatively created state funds to serve the residual high risk market. As insurance carriers have become increasingly unwilling to provide insurance to relatively high risk firms in the voluntary market, the residual market has grown from 5.5 percent of the workers' compensation market in 1984 to 24.1 percent in 1990. NCCI estimates that operating losses for the residual market have grown from $223 million in 1983 to $4.2 billion in 1990. The insurance industry blames rate inadequacy, resulting from denial of rate increases by regulatory bodies, for this growth in the residual pool.

336. Ronald C. Retterath, Regulation, Competition, and Profitability in Workers' Compensation Insurance: A Response, JOHN BURTON’S WORKERS’ COMPENSATION MONITOR, Mar.-Apr. 1992, at 21-22 (Retterath was Senior Vice President and Actuary for the NCCI at the time this article was written). In 1991, regulators approved less than the requested increase in 24 out of 28 states in which increases were sought. NCCI had filed for an overall 16.4% increase in the 32 states in which it acts as an advisory body; only a 7.6% increase was approved. Klein, supra note 52, at 10. Notably, the original rate requests ranged from a decrease of 12.2% in Oregon to an increase of 44.6% in Alabama. Id. at 11-12 tbl. 2. Refer to Part IV infra for more on the Oregon story.


340. Klein, supra note 52, at 15-16 (for states administered by the NCCI). In 1989, 38 states had a residual market loss, led by Texas, whose $551 million loss represented 22% of the total countrywide loss, followed by Massachusetts, Florida, Maine, Louisiana, and Rhode Island. These six states accounted for 69% of the total residual market loss in 1989. Huff, supra note 335, at 24.

341. Klein, supra note 52, at 15.

342. Freedman, supra note 56, at 22.
The problem is not the existence of this residual pool per se, but the fact that the premium rates charged to the employers in this pool are not adequate to insure the covered risks. In those states without state-run funds which insure the high risk market, these underwriting losses in the residual markets are passed to insurers participating in the voluntary market through assessments based upon their share of the voluntary market. 344 Employers who have obtained insurance in the voluntary market pay for the underwriting losses in the form of a surcharge on rates. 345 The extent of this problem varies considerably from one state to another. 346 According to the insurance industry, a "death spiral" results as insurers pull out of voluntary markets; in Maine, it led to the collapse of the voluntary market. 347

This system means that lower risk employers in the voluntary market are forced to subsidize the costs of high risk employers in the residual market; this hardly makes sense if one believes that deterrent effects are enhanced by appropriate internalization of enterprise-specific costs. In fact, no employer appears to be forced from the market entirely as a result of

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344. According to one source, there is a lack of price differential between the voluntary and involuntary markets despite the fact that the experience of the employers in the involuntary market is "wildly different." Id. Thus, "if both groups are paying the same price, the voluntary market inevitably is paying part of the cost of the involuntary market." Id. This phenomenon of depressed rates in the residual market may, however, be changing. Telephone Interview with Robert Finger, supra note 271.

345. According to the NCCI, this residual market "burden" has grown from 4.3% of voluntary premiums written in 1983 to 16.8% in 1990. Klein, supra note 52, at 16; see also Burton (1993), supra note 2, at 10-11 (noting the same trend).

346. "In 1990, the residual market share ranged from 3.1 percent in Arizona to 87.1 percent in Maine. Similarly, the residual market burden for policy year 1990, as calculated by NCCI, ranged from 1.3 percent in Arizona to 304.8 percent in Rhode Island." Klein, supra note 52, at 16.

347. Independent Panel Issues Plan for Rescuing State Comp System Workers' Compensation Report, in EMERGING TRENDS IN WORKERS' COMPENSATION AND SAFETY 21 (1992) (noting that in Maine, the major insurers in the voluntary market withdrew; the residual market has a $547 million deficit; self insurance and the high risk pool comprise 90% of workers' compensation insurance in the state; and Maine leads the nation in the number and duration of workplace injuries). The situation in Maine spawned aggressive litigation by the insurance industry. First, insurers unsuccessfully challenged the refusal of the insurance department to approve rate increases. National Council on Compensation Ins. v. Superintendent of Ins., 481 A.2d 775 (Me. 1984). After the legislature passed a new rate statute in 1985, which mandated reduction in insurance rates, required participation in an assigned risk pool, and placed a limit on future rate increases, insurers again went to court, arguing that the revised statute was unconstitutional and confiscatory. They did not prevail. National Council on Compensation Ins. v. Superintendent of Ins., 538 A.2d 759 (Me. 1988) (holding that appeal of adverse lower court judgment was moot as a result of the legislative repeal of the law which was the subject of the complaint).
engaging in excessively risky activity; no state is willing to close an enterprise because of its high risk status. Nor have most states, in the past, required safety inspections or other loss prevention measures by employers in order to obtain insurance in the residual market. Imperial Foods in Hamlet, North Carolina, was in the residual market at the time of its fire that killed twenty-five people; it was, therefore, receiving a subsidy from safer employers for its reprehensible, and ultimately deadly, activities.

2. Externalization of Costs. The underlying workers' compensation paradigm never intended that workers be fully compensated for the cost of their injuries. Because all occupational injuries are supposed to be compensated in this system—not only those that are the result of a wrong committed by the employer—workers simply have no fundamental legal claim to full compensation. Therefore, injured workers themselves, their families, and the public are expected to contribute to the costs of workplace injuries.

This sharing of costs occurs in numerous ways. First, many occupational injuries and illnesses are simply never compensated at all. As noted above, workers do not receive compensation for many occupational illnesses. In addition, to the extent that injured workers are discouraged from filing claims for eligible injuries, or choose not to file them, they are, in effect, choosing to absorb directly the costs associated with

348. In this kind of mandatory market, when the primary goal is to assure compensation to victims, "denying coverage for losses caused by breach of safety standards could be viewed as undesirable." ABRAHAM, supra note 269, at 60. As a result, the residual market provides the insurance coverage; once insured, the enterprise's right to continue operating is also assured.

349. In 1990, Texas adopted workers' compensation reform that allows the cancellation of policies of employers in the residual pool if they fail to carry out safety recommendations of the assigned carrier's safety engineer. Huff, supra note 335, at 25. Note, however, that Texas is one of the few states in which workers' compensation insurance is not mandatory.

350. William Hager, Time to Act: Examining Workers' Compensation, 93 BEST'S REV., Nov. 1992, at 47, 48 (noting also that the chicken-processing company apparently had little interest in employee safety: It had no fire-prevention equipment, conducted no fire drills and lacked an evacuation plan. Moreover, the company was in the residual workers' compensation market—it was unable to find an insurer willing to underwrite its coverage. By being in the residual market, this unsafe employer got the insurance industry and, indirectly, other employers to subsidize its risk.)

351. Refer to notes 89-93 supra and accompanying text.
the injury themselves.\textsuperscript{352} Obviously, costs associated with uncompensated occurrences are entirely externalized; workers or other social benefit programs absorb these costs.

Second, even for those injuries and illnesses which are compensated, a worker's full pecuniary losses are not replaced by compensation benefits.\textsuperscript{353} To the extent that compensation is inadequate, and higher wages have not already provided compensation for the risk of injury at work, injured workers themselves absorb the costs of injuries.\textsuperscript{354} Although wage

\begin{footnotesize}
\begin{enumerate}
\item\textsuperscript{352} Refer to note 101 supra. The general issue of underreporting of claims is discussed in part III.C infra.
\item\textsuperscript{353} Workers' compensation provides partial wage replacement plus medical costs. Lost income itself only constitutes slightly over half of a worker's pecuniary losses. Priest, supra note 12, at 1554.
\item\textsuperscript{354} To the extent that workers' wages are reduced when employers assume the costs of compensation, workers always pay, indirectly, for the cost of workers' compensation benefits; therefore, employers only nominally pay for the system. The theoretical basis for the argument that workers actually benefit only minimally (if at all) from compensation benefits lies in an analysis of market equilibrium. To the extent that wage levels reflect hazards and costs of injuries, then compensation for injuries may have been provided on an \textit{ex ante} basis to workers. In the perfect world, alteration of the liability scheme should cause a renegotiation, in this case of wage rates, which will yield an equivalent equilibrium without an increase in costs to either participant in the bargain. \textit{See} Ronald H. Coase, \textit{The Problem of Social Cost}, 3 J.L. \& ECON. 1, 8 (1960) (stating Coase's original theorem that, in the absence of transaction costs, changes in liability schemes should not result in a change in the underlying bargain). However, transactional costs generally overwhelm this equilibrium; the task then becomes to identify and analyze these costs. \textit{See generally} Robert C. Ellickson, \textit{The Case for Coase and Against "Coaseanism"}, 99 YALE L.J. 611 (1989) (noting the operation of transaction costs in the context of employment).

In the context of workers' compensation costs, the role of compensating wage differentials which may be paid for hazardous work becomes a central concern. \textit{See} MOORE \& VISCUSI, supra note 258, at 60-68, 162 (concluding that a substantial wage offset is generated by the provision of benefits and that wage offsets exceed premium costs so that the workers' compensation system "does not place a financial burden on firms"); Smith, supra note 7, at 572 (noting studies which question whether \textit{ex ante} payments fully compensate for \textit{ex post} losses). "For purposes of analysis, an employee's wages in a particular job can be thought of as the sum of the wage that would prevail for that job if there was no danger and a premium which compensates for the danger associated with the job." James R. Chelius, \textit{Liability for Industrial Accidents: A Comparison of Negligence and Strict Liability Systems}, 5 J. LEGAL STUDIES 293, 295 (1976). To the extent that the wage differential is assumed to compensate adequately for the level of hazard, and other forces do not interfere, the provision of compensation should result in a reduction of the hazardous work premium in the wages; therefore, the employer's costs should be unchanged. Workers then will be financing the system through reduced wages since the availability of benefits eliminates the need for the wage premium. Professor Weiler has noted this same phenomenon in another way when he points out that workers' compensation benefits are largely financed by workers, whose wages and benefits are reduced in order to finance increasing payroll-based premium costs. Weiler, supra note 234, at 848 n.62.

On the other hand, the economic model which concludes that wage premiums compensate workers adequately for the performance of hazardous work is subject to considerable criticism; there is a substantial question as to whether compensating wage differentials are set at the appropriate level. \textit{See, e.g.}, Susan Rose-Ackerman,
replacement for temporarily disabled low wage workers may approach net wages in many states, the adequacy of wage replacement as a percent of pre-injury earnings declines as wage rates rise. In the most common benefit structure, workers receive two-thirds of their pre-injury gross earnings up to a maximum of 100% of the state average weekly wage; as a result, workers who earn more than 150% of the state's average wage will collect less than two-thirds of their own wage. The level of wage replacement is therefore least adequate for the highest wage workers, who may work in the most dangerous jobs. The traditional high risk construction and mining jobs are all in this category. For example, in 1992, construction workers earned, on average, $537.70 per week and miners earned $638.31 per week; these workers would have collected a maximum of $400 in weekly temporary total disability benefits in Alabama, $328 in Arizona, $252 in Arkansas, $250 in Georgia, $336 in Idaho, and so on. Thus, the degree of adequacy of compensation for an injury declines as the overall wage—and often the level of hazard of the industry—increases.

Moreover, despite the fact that the aggregate amount spent on permanent disability is high, permanent partial disability payments rarely approximate the full amount of loss.

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Progressive Law & Economics—And the New Administrative Law, 98 YALE L.J. 341, 355-57 (1988) (arguing that the differential is inadequate and that other forms of regulation of workplace hazards are needed). Certain highly hazardous industries, particularly in the agricultural sector, exhibit low wage scales despite the high level of risks for workers. Job scarcity and worker ignorance regarding hazards are primary factors which decrease the likelihood that adequate wage premiums will fully compensate for hazardous work. To the extent that combined wage premiums and workers' compensation costs fail to provide full compensation, then costs are externalized.

355. According to one study, 75% of all temporarily disabled claimants retain 80% to 100% of their regular after-tax income. Hylton & Laymon, supra note 255, at 175 n.276 (citing KAREN R. DEVOL, INCOME REPLACEMENT FOR SHORT-TERM DISABILITY: THE ROLE OF WORKERS' COMPENSATION xi-xiii (1985)).

356. U.S. CHAMBER OF COMMERCE, supra note 121, at 20-23 (showing that the maximum temporary total disability benefit ranges from 70% of the state average weekly wage in Arkansas and Oklahoma to 200% in Iowa; the majority of states cap these benefits at 100% of the state average weekly wage).

357. EMPLOYMENT AND EARNINGS 1993, supra note 300, at 91-93 tbl. C-1.

358. Id. at 91 (average weekly earnings for all construction workers nationally).

359. Id. (average weekly earnings for miners nationally).

360. These weekly benefit amounts have been calculated based upon information regarding percent of wages and weekly benefits limits provided in U.S. CHAMBER OF COMMERCE, supra note 121, at 20-23. In a few states, benefits would have been substantially higher. For example, in Iowa, the most generous state for this category, the maximum benefit is 80% of spendable (net) pre-injury wage up to a maximum of 200% of the state average weekly wage, or $755 in 1992.

361. Refer to note 67 supra.
in future wages.\textsuperscript{362} Permanent total disability benefits do not come close, in some states, to compensating for a family's loss of income.\textsuperscript{363} Fatalities are sometimes compensated least adequately.\textsuperscript{364} In essence, this means that more serious injuries and illnesses may be compensated less adequately than less serious ones.

Thus, the level of benefits provided to injured workers, and particularly seriously injured workers in dangerous, high wage industries, does not approach the full economic loss suffered by these workers and their families. This problem is exacerbated by the fact that most states do not allow the rate of benefits in any particular award to escalate with inflationary trends;\textsuperscript{365} in the majority of jurisdictions the benefit rate set at the time of the award applies for the duration of the award. The adequacy of compensation for more severe injuries therefore declines over time. Again, this affects high wage workers in hazardous industries most adversely. Although the National Commission in 1972 strongly recommended some escalation of

\textsuperscript{362} The permanent partial disability amount for scheduled injuries, for which statutes set a specified level of compensation, varies a great deal among states. For example, loss of a hand is "worth" $18,472 in Massachusetts but pays $193,788 in Connecticut. In contrast, the more liberal federal compensation system for federal employees pays $304,727 for loss of a hand. U.S. CHAMBER OF COMMERCE, supra note 121, at 24. In some states, but not others, loss of a hand may lead to a permanent total disability award if the injured worker then becomes unable to work. In many states, the amount of compensation for permanent disabilities is also tied to an individual's wage rate; statutory maximum benefit levels apply to this category of benefits as well. Therefore, high wage workers receive less adequate benefits for permanent disabilities as well as for temporary ones.

\textsuperscript{363} Permanent total disability awards are limited to amounts as low as $164,000 in Indiana; $125,000 in Kansas; $102,000 in Mississippi; $196,530 in South Carolina; $127,296 in Tennessee. Id. at 22-23. The majority of states do not set an absolute cap on these awards, however.

\textsuperscript{364} Fatality benefits are paid to surviving spouses and children and generally cease upon remarriage. The benefit amounts are limited to a maximum number of weeks in some states. The total benefit is also capped in many states; the amount limits range from $95,000 (spouse only) in California to $228,500 (spouse and children) in Michigan. Id. at 26-27.

\textsuperscript{365} Id. at 20-23. Although most states now tie the maximum benefit to the state average weekly wage, in order to avoid the need for legislative approval for increases, individual benefit awards themselves do not escalate in most states. States which do make at least some provision for inflation within awards include: California, Connecticut, Hawaii, Idaho, Illinois, Maine (for injuries before January 1, 1993), Maryland, Minnesota, Montana, New Hampshire, Rhode Island, South Dakota, Texas (three percent annually only for benefits given for life), Vermont, Virginia, and Washington. Id. Even these states limit escalation in a number of ways. For example, in some, inflation adjustment does not begin until two or more years after eligibility for benefits commences. West Virginia, which is not listed as a state with escalation in the U.S. Chamber of Commerce publication, allows benefits to escalate only after they become capped by the maximum benefit; at that point, they can move upward as the cap itself escalates.
benefits, most states have resisted this proposal because of the enormous increase in actuarially calculated incurred losses when benefits escalate annually. 366

Third, nonpecuniary losses are never compensated by workers' compensation programs. Benefits are plainly limited to wage-loss protection, loss of earning capacity, 357 and rehabilitation costs and medical treatment. 368 Pain and suffering is noncompensable in this system. Furthermore, family members are not compensated for any of their economic or other losses associated with a worker's injuries. 369

Fourth, workers' compensation benefits are often reduced by receipt of benefits from other sources, including both social insurance programs and private disability and sickness plans. 370 Rules of assignment and subrogation also lead to reductions in benefits when injured workers obtain recovery in civil actions. 371 Irrespective of the employer's contribution to

366. Hylton & Laymon, supra note 255, at 178 n.293.
367. Permanent partial disability benefits, which are calculated in a variety of different ways, are generally intended to compensate for future loss of earning capacity or loss of mobility in the labor market resulting from the injury and the ensuing permanent disability. In some states, the benefit is calculated based on loss of future earnings; in others, it is based on a quantification of functional loss (generally referred to as whole man impairment). The theoretical justification for paying this benefit, which is unrelated to actual time off work, is the same. See 1C Larson, supra note 65, § 57.14, at 10-69.
368. Somers & Somers, supra note 34, at 59.
369. 2A Larson, supra note 65, § 66.20, at 12-89, 12-92, 12-98, 12-103; Weiler, supra note 259, at 831. Moreover, until the Family and Medical Leave Act (FMLA) became effective in mid-1993, family members who cared for injured workers could be terminated from employment. The Family and Medical Leave Act now provides a right to a 12 week unpaid leave for individuals who work for employers with 50 or more employees and who must miss work in order to care for an injured or ill family member. 29 U.S.C.A. §§ 2611-2612 (West Supp. 1994). This minimal level of job security does not, however, resolve the issue of uncompensated costs for occupational injuries and illnesses.
370. For example, to the extent that injured workers become unemployed or unemployable as the result of permanent disabilities, other social insurance and social welfare systems provide alternative sources of non-wage income. These benefits may be offset against a workers' compensation award, if one was received, resulting in a lower benefit to the injured worker. See, e.g., W. Va. Code § 23-4-23(b) (Supp. 1993) (reducing workers' compensation permanent total disability benefits when Social Security old-age benefits, wage continuation, or private disability benefits are received); Ga. Code Ann. § 34-9-243 (Michie 1992) (reducing workers' compensation benefits by the employer funded portion of a disability or other wage contribution plan); Mich. Comp. Laws Ann. § 418.354 (West 1993) (reducing workers' compensation benefits by employer funded portion of a self-insurance, wage contribution, or disability plan, and one-half of old age social security benefits); Or. Rev. Stat. § 656.240 (1991) (deduction for sick leave payments only).
371. Rules governing recovery in third party civil actions brought by workers, most commonly against manufacturers of equipment or toxic substances used in the workplace, almost universally provide for subrogation. Except in Ohio, Georgia, and West Virginia, the employer or insurer is given a statutory lien against the
the harm, the employer's costs are thus reduced by the injured
worker's ability to obtain alternative sources of income or
damages.372

To the extent that full internalization of costs increases any
incentive effects of compensation systems, workers' compensation plainly does not maximize this effect. The process
of cost spreading in workers' compensation is a fundamental
reflection of the underlying workers' compensation paradigm,
which presumes that employers are not to blame for
occupational injuries. The goal in designing the distribution of
costs in workers' compensation is to create an efficient system
which limits, but does not obliterate, the adverse impact of the
injuries on any of those involved. The decision to have
employers pay for the cost of compensation, but to limit the
amount of that compensation, serves this function. Within this
framework, workers' compensation has been successful in meet-
ing its goals.

The substantial increase in aggregate costs paid by
employers has resulted in increases in cost for individual
employers and engendered a concern which tends to focus on
the distribution of costs. When employers argue that benefits
should be decreased, they are in effect arguing in favor of a
system which would decrease their internalization of costs and,
symmetrically, increase workers' contribution. This argument is
bolstered by the view that workers are responsible for
increasing costs.

employee's tort rights to secure reimbursement of worker's compensation benefits.
Weiler, supra note 259, at 836. As a result of these subrogation rights, the self-insured employer or the workers' compensation insurer will recoup their costs associated with the workplace injury from the worker's recovery in the third party litiga-
tion, irrespective of the employer's contribution to the harm. This is true despite the fact that a federal study of product liability in the mid-seventies found that employer negligence was present in one quarter of all product liability suits brought by injured workers. Id. at 837 (citing Jonathan M. Weisgall, Product Liability in the Workplace: The Effect of Workers' Compensation on the Rights and Liabilities of Third Parties, 1977 Wis. L. Rev. 1035, 1039; W. Kip Viscusi, The Interaction Be-
tween Product Liability and Workers' Compensation as Ex Post Remedies for Workplace Injuries, 5 J.L. ECON. & Org. 185 (1989)). These rules are designed to prevent double recovery by the worker but may, instead, prevent full recovery. Workers, having been inadequately compensated by workers' compensation, are often also not fully compensated for losses in this third party litigation; this may be par-
ticularly true when these suits are settled prior to trial. The absolute right of subro-
gation that prevails in most states therefore prevents full recovery by workers.

372. As Professor Paul Weiler has noted, these subrogation rules "make little
sense" when they effectively insulate an employer who is culpable of grossly negligent or reckless behavior. Id. at 854. Furthermore, the success of third party litiga-
tion has taken pressure off employers and the workers' compensation exclusivity
document. Id. at 828-29.
C. The Effect of the Employment Relationship

The no-fault workers' compensation system, which insulates employers from recognition of their responsibility for workplace safety, also engenders claims that worker behavior is the primary cause of skyrocketing costs. The resulting worker-at-fault paradigm further confounds any discussion of the relationship between costs and prevention of injuries, as prevention becomes equated with cost containment and cost containment efforts focus on worker, rather than employer, actions. 373

Injured workers are not victims of torts committed by strangers; instead, workers are caught within an unequal employment relationship which influences their decisions regarding when, or whether, to file workers' compensation claims. The nature of the employment relationship itself therefore has a significant influence on the ability of workers' compensation costs to encourage primary prevention of injuries.

1. Roots of the Worker-at-Fault Paradigm. The argument that worker, rather than employer, behavior is the primary cause of cost escalation has its roots in the idea that the occurrence of injuries, the filing of claims, and the persistence of disability all lie within the independent control of workers. Several studies which have found a correlation between increases in claims filing activity and increases in mandated benefit levels have provided support for this view. 374

373. We tend to assume that deterrence depends upon the internalization of cost and an accompanying understanding that primary deterrence will efficiently reduce costs. If employers can successfully force reduction in costs, by legislative action or by influencing filing of claims, then the likelihood they will pursue primary prevention of injury and disease declines. This is particularly true because claims-reducing activity may be less expensive than injury-reducing activity in many instances, especially if no economic value is placed upon the animosity that grows between employers and employees as a result of aggressive scrutiny of claims by employers.

374. Refer to note 18 supra for a list of these studies. All of these studies show that increases in filing of claims occur when benefits are increased. The studies conclude, based on this evidence, that increased benefits cause increases in claims filing. This conclusion regarding causation is not directly supported by the evidence in the studies.

As noted above, several studies also conclude that, although incentives to reduce injury rates do exist in the system, any actual reduction in injuries is obliterated by the increases in claims filing. See, e.g., Ehrenberg, supra note 18, at 71, 95 (noting "[t]hat a positive relationship between frequency and benefits is observed implies that employees' responses to higher benefits dominate, on balance, over employers' responses"); Butler & Worrall, Moral Hazard, supra note 15, at 201-02 (concluding that real injuries do not increase but that the moral hazard effect is predominant).
Commentators have proposed two different explanations for this apparent relationship: that increased benefit levels lead to decreased attentiveness to safety and therefore increased rates of injury; and that increased benefit levels simply encourage the filing of more claims.

a. Workers-at-fault I: Unsafe worker behavior. The first explanation (that increases in benefits lead to increases in injury rates) assumes that higher disability payment levels tend to remove workers’ economic incentive to prevent injuries. According to this view, workers suffer more injuries (and more severe injuries) because higher benefits diminish the economic risk associated with injury and result in lowered vigilance against injury. There are, therefore, more true injuries due to relaxation of worker attentiveness as a result of benefit increases. This conclusion, drawn from the observed increases in compensation claims associated with increasing benefits levels in the 1970s, led the authors of the 1987 Economic Report of the President to conclude that “workers’ compensation benefits have unfavorable effects on safety.”

Thus, in this model, investigators (and employers) point to worker carelessness or lack of risk aversion as a primary cause of injuries and, therefore, claims. These investigators therefore

375. See, e.g., Butler, supra note 18, at 61, 86 (concluding “accident rates do appear responsive . . . to changes in the structure of benefits”); Chelius, Incentive to Prevent Injuries, supra note 18, at 154, 158-60 (observing that claims rise as benefits rise and concluding that higher benefits are associated with higher injury rates); Ehrenberg, supra note 18, at 86 (summarizing other studies as “strongly suggesting] that increases in workers’ compensation benefits are associated with higher injury and claim rates, with at least some fraction of the increase being a pure ‘reporting’ or ‘classification’ effect”); Worrall, supra note 18, at 11 (noting that the “message of a growing body of research is that higher benefits will bring not only greater costs for the cases already being compensated but also more claimants and, perhaps, more work injuries . . . ”). Chelius states that “[w]hile it is obviously a value judgment as to how much weight to place on the prevention goal as opposed to the income security goal of workers’ compensation, it is important to recognize that there is a conflict between them.” Chelius, Incentive to Prevent Injuries, supra note 18, at 154, 158-60. In other words, Chelius is arguing that workers may be better off with lower levels of benefits because they will injure themselves less frequently. At least one recent study indicates that real injury rates do not rise. Butler & Worrall, Moral Hazard, supra note 15, at 201.

The investigators who conclude that injury rates (as opposed to claims filing rates) rise in this situation ignore the strong economic disincentives for workers to incur injuries, in view of the lack of complete compensation, including inadequacy of weekly benefits for high wage workers. They also ignore the non-economic disincentives for all workers to be injured or disabled. People in general, I think, dislike being hurt, dislike staying home when they are accustomed to going out, and dislike the psychological stress that temporary or permanent disability imposes on the family.

376. ECONOMIC REPORT OF THE PRESIDENT, supra note 18, at 197.
lend support to the view that improvements in occupational safety hinge upon changes in worker behavior.

This focus on worker-causation of injuries has interesting historical roots. Although the safety movement which emerged early in this century initially targeted changes in industrial process, by the late 1940s this approach was overtaken by the view that further cost effective engineering improvements were not possible. This change in prevention strategies is, of course, inconsistent with the views of most modern safety experts; it nevertheless haunts current discussions of workers' compensation cost containment, which often focus on worker rather than the employer behavior in the prevention of injuries. Successful loss control firms direct their attention to "unsafe acts rather than unsafe conditions." The frequently expressed frustration of managers that workers are inadequately safe, and the continuous exhortations in industrial workplaces for workers to act safely, are a reflection of this

377. Refer to part III.A supra.
378. SOMERS & SOMERS, supra note 34, at 202-05 (concluding that the possibilities of improving prevention through engineering change had been exhausted by the 1940s).
379. Refer to notes 9-10 supra. Notably, in contrast with the Somers' assessment of prevention opportunities, in 1949 Dr. John E. Gordon suggested that injuries behaved like classic infectious diseases and were therefore amenable to primary prevention strategies. NAT'L COMM. FOR INJURY PREVENTION AND CONTROL, INJURY PREVENTION: MEETING THE CHALLENGE 7 (1989). His contribution and that of others shifted injury prevention away from an "early, naive preoccupation with distributing educational pamphlets and posters and toward modifying the environments in which injuries occur." Id. "The last folklore subscribed to by rational men is the belief that injuries are accidents." Id. at 12. As noted in Part II supra, modern public health approaches attempt to remove human error as a factor in causation. This approach is also consistent with the findings of the Upjohn Report, supra note 7, at 9, 14, and the California Insurance Study, supra note 7, at 97, 100-02, both of which indicate that a considerable number of serious hazards which result in costly workers' compensation claims can be eliminated through engineering controls on a cost effective basis.
380. According to the CDC's Occupational Injury Panel, "[T]here has been much emphasis on workers' behavior as the cause of injury and a corresponding tendency to blame the worker, often incorrectly." CDC Injury Report, supra note 9, at 344.
381. These firms offer consultative services to employers and insurers which are designed to reduce the number and size of an insureds' claims. In the workers' compensation context, loss prevention or loss management firms offer services relating to primary prevention or to claims cost containment (such as medical cost containment or early return to work programs), or both. The goal of these services is a reduction in claims costs; this is not necessarily associated with a reduction in injuries. Thus, "because the workers' compensation market is a nightmare for many insurers, anything an agency can do to improve the risk profile of clients helps." Novak, supra note 53, at 32.
382. Id.
view.\textsuperscript{383} According to one industry representative, "Unsafe acts carried on by employees statistically cause 96\% of all industrial accidents."\textsuperscript{384} Thus, in this paradigm, the workers' compensation crisis could be solved, if only workers would be more careful.

b. Workers-at-fault II: Claims filing behavior. The second explanation offered for the correlation between increased benefits and increased claims filing activity is simply that the number of claims (i.e., reports of injuries) rises when benefits rise: that is, the number of claims filed may be dependent on the number which workers choose to file (a reporting effect), not

\begin{quote}
383. Psychological theory provides a partial explanation for this. In exploring "irrational" behavior in safety and health, William T. Dickens identified several psychological sources for apparent irrational behavior. William T. Dickens, Occupational Safety and Health and "Irrational" Behavior: A Preliminary Analysis, in WORKERS' COMPENSATION BENEFITS: ADEQUACY, EQUITY, AND EFFICIENCY, supra note 29, at 20-21. Dickens observes that people have both a tendency to attribute more control over a particular event to other people involved than they see themselves as having ("the fundamental attribution error") and a tendency to interpret events as having a single cause. \textit{Id.} at 27. He then notes, "[t]ogether, these two tendencies may lead individuals to see accidents as being primarily the fault of the person who has the accident, rather than being, at least in part, a result of the working conditions at a plant." \textit{Id.}

384. Novak, supra note 53, at 35. Needless to say, this statistic is pure fantasy; there is no way this fact can be statistically proven. The quotation is simply offered here as an example of rhetorical hyperbole. The quote is attributed to Robert Seltzer, president and chief executive officer of Cohen-Seltzer, a loss prevention agency with more than $3 million in annual revenues.

This is not a new idea. The Somers relied on similar numbers to reach their conclusion that the possibilities for engineering controls had been exhausted. SOMERS & SOMERS, supra note 34, at 202. "H.W. Heinrich, one of the most prominent safety engineers in the country, maintained as early as 1931 that 88 per cent [sic] of all accidents were caused primarily by the unsafe acts of persons. . . ." \textit{Id.} at 203. Heinrich's research was based on an analysis of 75,000 cases but "is still a point of heated debate among safety experts." \textit{Id.} at 203 n.12. The same research is referred to in a congressional report issued in 1985. OFFICE OF TECHNOLOGY ASSESSMENT, supra note 19, at 7. "In the 1920s, a researcher concluded that nearly 90 percent of injuries were due to workers' 'unsafe acts' and 10 percent to 'unsafe conditions.' Although this ratio of 'unsafe acts' to 'unsafe conditions' is often referred to, it is not supported by other research." \textit{Id.}

In contrast to this view, the current systems approach to management focuses on workplace conditions, not individual acts. A "systems approach has gained renewed emphasis with companies looking to emulate the success of many Japanese companies by adopting a Total Quality Improvement system based on the principles of Dr. W. Edwards Deming." California Insurance Study, supra note 7, at 99. "Dr. Deming noted that 'approximately 94 percent of incidents can be related to deficiencies in the overall working environment, which is the responsibility of management.'" \textit{Id.} This statement is also impossible to prove. The question is, of course, one of emphasis; although worker error certainly may contribute to the occurrence of some injuries, the systemic approach would create an environment in which human error is less likely to result in injury.
on the number of injuries which actually occur. This flexibility in the filing of claims tends to be viewed in one of two ways.

First, political critics of workers' compensation programs often argue that increases in benefit levels simply encourage worker to file fraudulent or frivolous claims. Some commentators therefore suggest that benefit adequacy should be tempered to avoid this moral hazard. To the extent that an increase in claims filing is viewed as a reflection of an increase in the filing of unnecessary claims, employers are encouraged to reduce costs by discouraging their employees from filing these claims or by challenging them through aggressive litigation once they are filed.

Of course, allegations of fraud are "long on anecdotes but

385. In this view, workers are simply more likely to seek benefits when the benefits are larger. See, e.g., Butler & Worrall, Moral Hazard, supra note 15, at 201 (concluding that "rising benefits may lead to more claims at the same time that they lead to fewer injuries"); Ehrenberg, supra note 18, at 82-84 tbl. 4.1 (summarizing prior studies and noting that it is impossible to separate out a reflection of increase in injury rates and how much is merely a reporting effect); Smith, supra note 7, at 573-79 (summarizing various studies that show a relationship between increases in benefits and in numbers of claims filed and noting the elasticity in employee claims for benefits).

386. Fraud in this context means the filing of claims which involve lies. See Burton (1993), supra note 2, at 9 (stating that fraud involves schemes whereby uninjured workers collect workers' compensation benefits by concocting evidence or by fabricating medical evidence). For example, workers may claim they have disabilities that in fact do not exist, or that their disabilities were caused by injuries at work when in fact the injuries occurred at home. This is different from claims involving real injuries and real disabilities for which a worker may choose whether or not to file for benefits, depending on the circumstances.

387. See Chelius, Control of Industrial Accidents, supra note 18, at 700, 717; Ehrenberg, supra note 18, at 95 (suggesting that employer incentives can be improved without increasing moral hazard by increasing employer costs but not the level of benefits, and using the excess revenue to fund safety and health programs). These commentators do not focus primarily on the adequacy of benefits for injured workers, of course.

388. In keeping with the studies that regard the increased frequency of claims filing as a manifestation of moral hazard (which is presumptively to be avoided), claims that appear ambiguous are unwelcome in the system. To the extent that a worker is, in truth, eligible but not "needy"—at least in the eyes of the insurer or employer—any claim filed may be viewed as a reflection of moral hazard which needs to be corrected. Of course, need in the context of disability is often ambiguous. When the need for a job outweighs the need for benefits, workers may fail to file legitimate claims. As benefits rise, workers may assess these risks differently. These claims are not fraudulent: they do not involve the manufacturing of disability where none exists or the inappropriate linkage of disability to occupational etiology. These "excessive" numbers of claims may involve workers' assessments that it is worth filing claims for disabilities which are legitimately eligible for compensation.
It is certainly possible that improved levels of current benefits, and the availability of medical benefits without deductible or co-insurance costs, may increase some fraudulent behavior. It is unlikely, however, that truly fraudulent behavior is sufficiently epidemic, or that it has increased so substantially in recent years, that it can provide a primary explanation for rising levels of compensation costs. Unfortunately, the fact that charges of fraud often dominate public discussions about workers' compensation tends to antagonize injured workers and their representatives and to shift the focus of employers and legislators away from underlying problems and toward creation of fraud units and benefit reduction strategies.

The alternative explanation for increases in claims filing activity is that workers with compensable injuries are filing claims which they may have previously chosen not to file, particularly when benefits were low and other risks were perceived to be high. The number of claims actually filed

389. Burton (1993), supra note 2, at 9. Arguments that fraud is ruining the system seem to have a particular attraction within the framework of workers' compensation political debates, just as they do in debates regarding social welfare programs. Attacks on benefit levels or eligibility criteria for social programs are easier to countenance if the people who are excluded from the programs are perceived to be malingerers and cheats.

390. In fact, workers' compensation experts who do not credit fraud as a primary explanation for current behavior feel compelled to offer a disclaimer: It is, of course, understood that fraudulent claims are likely to represent some component of claims. See id. at 8-9. I offer the same disclaimer. Nevertheless, the extent to which unquantifiable fraudulent behavior is the focus of social policy discussions about workers' compensation is, in my opinion, unjustifiable.

391. Refer to note 495 infra and accompanying text for a discussion of recent legislation on these issues.

392. In other words, workers who are injured have a right to benefits which they forego in certain circumstances. Obviously, the issue of entitlement is a problematic one. Entitlement programs provide certain benefits to people who have the prescribed status necessary for eligibility; eligibility does not end because budgeted funds are inadequate to provide benefits to all of those who are eligible. Welfare programs, for example, may provide benefits to people simply on the basis of need (food stamps, for example) or on the basis of need plus membership in a targeted class (such as single parent with young child to qualify for Aid to Families with Dependent Children). Workers' compensation is an entitlement program in the sense that it guarantees benefits to anyone who meets the eligibility requirements. Just as with other entitlement programs, many people publicly denounce those who meet eligibility requirements and who exercise their right to the benefits; this is largely a reflection of our societal commitment to work as the primary mechanism for redistribution of wealth and a general societal antipathy for redistribution based upon other factors, particularly need. See Stone, supra note 230, at 15-28. Stone discusses the preference for work-based redistribution modalities and notes that "[a]ll societies have at least two distributive systems, one based on work and one on need, whose coexistence is a thorny problem in social policy and political theory." Id. at 15. "The tension between the two systems based on work and need is the fundamental dis-
for benefits may never be wholly representative of the underlying universe of true injuries: injuries and illnesses can simply go unreported. If illnesses and injuries go unreported at one benefit level, the result of an increase in benefits may be that previously unreported injuries are reported, not that more injuries occur.  

2. Factors Affecting Workers' Decisions to File Claims. It seems clear that workers themselves do make decisions regarding whether or not to file claims when they suffer compensable injuries. Reluctance to file claims may, of course, decline as benefits increase. Workers' decisions are unlikely,
however, to be based exclusively on an assessment of the economic worth of benefits. Other characteristics of the workers’ compensation system also influence this decision-making process. For example, both the complexity of paper work involved in filing claims\textsuperscript{395} and the potential for not receiving benefits\textsuperscript{396} contribute to workers’ reluctance to file claims.

Ultimately, a worker’s decision will be affected by that individual worker’s knowledge of the availability of benefits, the severity of the injury and resulting disability, his or her assessment of the likelihood of success in litigation, and an evaluation of the additional risk entailed in filing a claim. Factors extrinsic to the workers’ compensation system itself will therefore play an important role in influencing workers’ claims filing behavior. Post-injury risks are not limited to the possibility of future reinjury or of losing the claim: for those individuals who hope to return to work, a primary risk is that of loss of respect at work, of actual job loss, or of other retaliation by the employer. Somewhat remarkably, discussions of the elasticity in claims activity have generally failed to explore the impact of the employment relationship, in particular the real or perceived risk of employer retaliation for seeking benefits, on the decision by workers to file claims. These discussions also rarely address the level of worker ignorance regarding benefit entitlement or the impact of changes in work organization on the ability of older workers to continue to work after an injury.\textsuperscript{397}

Whether workers choose to take time off from work and for how long depends on a variety of both objective and subjective factors; disability is, to some extent, both a flexible and socioeconomic phenomenon.\textsuperscript{398} To the extent that workers are capable of continuing to work, and to the extent that they fear adverse consequences at work, they may choose not to file

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\textsuperscript{395} Smith, supra note 7, at 576.
\textsuperscript{396} Yelin, supra note 8, at 637.
\textsuperscript{397} But see Edward H. Yelin, Disability and the Displaced Worker (1992) [hereinafter Yelin 1992] (concluding that the growth in the work disability rate and decline in labor force participation are tied to changes in the industrial structure of the advanced economies; these changes make it increasingly difficult for disabled older workers to find new jobs).
\textsuperscript{398} See generally Stone, supra note 230; Richard V. Burkhauser & Robert Haveman, Disability and Work (1982); Robert Haveman et al., Public Policy Toward Disabled Workers (1984).
claims when they are injured at work. In addition, claims for permanent partial disability benefits may not always involve periods of inability to perform work; many impairments, particularly those resulting from occupational illnesses, may involve progressive development of a disability without a temporary acute stage in which the worker is totally unable to work. Because these claims are intended as compensation for impairment or loss of potential future earnings, workers can often easily forego these benefits in the interests of maintaining a "good" relationship with management. "Good" workers become those employees who do not file claims, even when they meet the eligibility requirements for benefits.

The law and dynamics of the specific employment relationship itself, as well as the law of workers' compensation or the levels of statutory benefits, thus directly influence the costs of workers' compensation programs. If risk of retaliation is high (or perceived to be high), and benefits are low, claims will not be filed and true injuries will not be reported. Underreporting becomes a primary characteristic of such a system.

The implications of this are three-fold. First, the economic and political equilibrium of the workers' compensation system prior to the 1970s may have been built on the chronic underreporting of claims. This means, of course, that

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399. This is, indeed, rational behavior on the part of workers. Similarly, when unemployed workers in Illinois were offered bonuses as an incentive to return to the workforce, many of those who were eligible never claimed them. Donohue, supra note 393, at 554. Despite noting that a bilateral monopoly relationship may be created by the employment relationship, Donohue nevertheless fails to recognize the inherent level of transaction cost in any "negotiation" between worker and potential employer. Id. at 555-56. In a reply, Robert Ellickson explored the problems for a worker called upon to tell a potential employer about the offer of the bonus, noting that the transaction costs in such an arrangement are high. Ellickson, supra note 236, at 617-18. Participants in the experiment identified stigma as the primary reason for failing to participate; the employees did not want to be identified by their employers as participants in the program. See id. at 625. "That many bonuses went uncollected may indicate not irrationality and inefficiency but that workers and employers responded intelligently to the reality of transaction costs." Id.

400. This characterization appears to be adopted in the Upjohn Report, which describes low claims employers as being "much more successful in avoiding injuries that extend into compensable claims," suggesting that these employers "manage work-related disability factors" more effectively. Upjohn Report, supra note 7, at III-15.

401. As noted above, underreporting is a common characteristic of liability and social welfare systems. Refer to notes 101 & 254 supra. Most systems which provide benefits or compensation to the injured, the disabled, or the poor appear to achieve economic equilibrium based upon an underfiling of claims. The financial equilibrium maintained prior to the 1970s in workers' compensation systems may very well have been a reflection of this underreporting phenomenon. In contrast, the current crisis
current costs may be a truer, albeit more expensive, reflection of underlying injury rates.

Second, to the extent that workers perceive the threat of retaliation to be reduced and the worth of the benefits to be increased, they will file greater numbers of claims although injury rates may remain constant or even decline. The nature of the distribution of power within the employment relationship, and the perception of this distribution of power, are therefore a secondary and inadequately evaluated variable within any discussion of workers' compensation costs. The result of increasing employee rights within the employment relationship is likely to be an increase in the filing of claims.

Third, to the extent that employers are motivated by workers' compensation costs to change their behavior, they can decrease aggregate and enterprise-specific costs by discouraging the filing of claims without improving the underlying conditions in the workplace. The employer's ability to affect claims filing behavior is directly tied to the inequality of the employment relationship. The "culture" of the workplace, as discussed in the Upjohn report, and not safety, therefore becomes the primary, rather than a secondary, cause of workers' compensation claims and costs. As a result, employers may direct their efforts toward claims management rather than primary prevention of injuries.

3. The Influence of Employment Law on Workers' Claims Filing Activity. The history of the law governing the employment relationship gives credibility to the notion that the risk of filing workers' compensation claims has declined over the past twenty years. As noted above, the original workers' compensation compromise made no pretense of amending the legal terms of the employment relationship. The employment-at-will doctrine—that peculiarly Anglo-American application of individual freedom to the contract of

in workers' compensation is similar to the crisis in medical malpractice, which is, in part, a reflection of an increase in claims filed; in the past, injured individuals did not pursue their remedies. The fiscal component of the welfare crisis is likewise partially a reflection of the pervasiveness of poverty and the willingness of those who meet eligibility criteria to file for benefits. The cost crisis in workers' compensation may thus be a result of increasing numbers of injured workers filing for benefits to which they are entitled as the result of occupational illness and injury.

403. Refer to notes 228-30 supra and accompanying text.
employment—remained in full force after the enactment of the compensation laws. The equal right of either the employer or the employee to terminate the contract resulted in the well known formulation which better mirrors the underlying power relationship: the employer was free to fire an employee for a good reason, a bad reason, or no reason at all. The employee was, of course, free to quit. The employment-at-will doctrine accorded employers full autonomy over decisions regarding terms, conditions, and continuation of employment, unless explicitly limited by individual contract.

The passage of workers' compensation laws did not impinge upon the employer's control over the workplace; the obligation of the employer to the injured employee was fully discharged by the provision of social insurance. Workers who received workers' compensation benefits had no legal claim to retain their jobs. Employers retained the right to determine when

404. Wood's Rule is the basis for the employment-at-will doctrine:

With us the rule is inflexible, that a general or indefinite hiring is prima facie a hiring at will, and if the servant seeks to make it a yearly hiring, the burden is upon him to establish by proof. A hiring at so much a day, week, month or year, no time being specified, is an indefinite hiring, and no presumption attaches that it was for a day even, but only at the rate fixed for whatever time the party may serve.

H.G. WOOD, A TREATISE ON THE LAW OF MASTER AND SERVANT § 134, at 272 (1877).

Or, as stated by the judiciary, "men must be left, without interference . . . to discharge or retain employees at will for good cause or for no cause, or even for bad cause . . . ." Payne v. Atlantic R.R., 81 Tenn. 507, 518 (1884).

Much has been written regarding Woods' rule and whether it was properly rooted in preexisting employment law. Except as an academic exercise and a study of legal creativity, this hardly matters. What is remarkable, of course, is the rapidity and zeal with which Woods' rule was adopted by the judiciary.

405. As Professor Fran Ansley recently noted, this symmetry brings immediately to mind Anatole France's memorable aphorism: "The law, in its majestic equality, forbids the rich as well as the poor to sleep under bridges, to beg in the streets, and to steal bread." Ansley, supra note 242, at 1786 n.91.

406. One famous labor law case, United Steelworkers v. American Manufacturing Co., 363 U.S. 564 (1960), illustrates this point well. Larry Sparks was injured at work and settled his workers' compensation claim against his employer's insurer for a 20% award for permanent partial disability. Id. at 566. He then sought to return to work, relying on the seniority he had accrued under a labor agreement between his employer and the United Steelworkers of America. Id. The company refused to rehire him and refused to arbitrate its decision with the local union. Id. American Manufacturing's position, in a nutshell, was that Sparks had collected compensation and was due nothing further. Id. at 564. The District Court held that Sparks, having accepted the settlement on the basis of permanent partial disability, was estopped from claiming any seniority or employment rights and granted the employer's motion for summary judgment. Id. at 566. The Court of Appeals affirmed, holding "the grievance is a frivolous, patently baseless one, not subject to arbitration under the collective bargaining agreement." Id. The Supreme Court, in reversing and ordering arbitration (and thus establishing the fundamental commitment to labor arbitration in American labor law), nevertheless viewed Sparks' quest for employment in this context as frivolous. Id. at 567. No record can be found of the final outcome of
an absence would lead to discharge, irrespective of the cause of the absence. This lack of obligation to the injured worker as worker was consistently applied: irrespective of the length of the period of absence resulting from the disability, whether the injured employee had recovered from the injury and could perform the functions of the job, or whether the job was vacant. No public or judicial sanctions awaited employers who terminated any worker thought to be medically unfit, irrespective of the etiology of the disability. Workers could be terminated because they were injured at work or filed claims for workers’ compensation. If the injury resulted in any significant permanent level of disability, workers were almost certainly excluded from the workforce. Employees’ rights were exclusively limited to those benefits available from compensation programs.

Some change came with the passage of the National Labor Relations Act, but the employment-at-will doctrine remained largely intact for the majority of workers. Federal employment legislation has tended to provide specific protection to categories of workers or to address particular problems;
these laws do not fundamentally alter the at-will relationship. In 1973, the year after the National Commission on State Workmen's Compensation Laws issued its report, a state court for the first time endorsed the creation of a public policy against retaliatory discharge for the filing of workers' compensation claims. In carving out this exception to the traditional employment at will doctrine, the Indiana court in Frampton v. Central Indiana Gas Co. said:


In the sixties, Congress confronted the specific issues of discrimination in the workplace in the Equal Pay Act, 29 U.S.C. § 206 (1988), and Title VII of the Civil Rights Act of 1964, 42 U.S.C. § 2000-e to 2000e-17 (1988 & Supp. IV 1992). While these statutes demonstrated signs of a new legislative willingness to intervene directly into the employment relationship, they were also limited in scope.


412. 297 N.E.2d 425 (Ind. 1973). Dorothy Frampton had injured her arm while working. According to the court's summary of the underlying facts, her employer, Central Indiana Gas Co., and its workers' compensation insurer paid her hospital and medical expenses, as well as her full salary, during the four months she was unable to work. It is interesting to note that Indiana workers' compensation law does not require the payment of full salary. IND. CODE ANN. § 22-3-3-22 (Burns 1992). It appears from the facts that these benefits were paid to Frampton in lieu of
In order for the goals of the [Workers' Compensation] Act to be realized and for public policy to be effectuated, the employee must be able to exercise his right in an unfettered fashion without being subject to reprisal. If employers are permitted to penalize employees for filing workmen's compensation claims, a most important public policy will be undermined. The fear of being discharged would have a deleterious effect on the exercise of a statutory right. Employees will not file claims for justly deserved compensation—opting, instead, to continue their employment without incident. The end result, of course, is that the employer is effectively relieved of his obligation.\footnote{Frampton was followed by a flood of retaliatory discharge cases involving allegations of retaliation for filing workers' compensation claims. Currently, virtually every state has workers' compensation, perhaps to dissuade her from filing a workers' compensation claim. The court notes that neither employer nor the insurer informed her that further benefits might have been available. 297 N.E.2d at 426. When Frampton did return to the job, she performed capably. Id. Approximately 19 months after the injury, her employer and its insurer were notified of a 30% loss in the use of Frampton's arm which entitled her to permanent partial disability benefits. Id. "Although hesitant to file a claim for fear of losing her job she did so, and received a settlement for her injury. About one month later she was discharged from her employment without reason being given." Id. In other words, it was the fact that she pursued a claim for permanent partial benefits that apparently precipitated her discharge. 413. 297 N.E.2d at 427 (emphasis added). It appears the motivation of the Indiana court, and the many courts that followed its lead, was not to establish vested rights to employment, but rather to defend workers' statutory rights to apply for compensation benefits. Thus, although restricting employers' control over termination of the employment relationship, the underlying principle was to guard the integrity of the compensation program. 414. E.g., Gonzales v. City of Mesa, 779 F. Supp. 1050 (D. Ariz. 1991) (applying Arizona state law); Wal-Mart Stores, Inc. v. Baysinger, 812 S.W.2d 463 (Ark. 1991); Springer v. Weeks & Leo Co., 475 N.W.2d 630 (Iowa 1991); Lathrop v. Entemann's, Inc., 770 P.2d 1367 (Colo. Ct. App. 1989); Smith v. Piezo Tech. & Professional Adm'r, 427 So. 2d 182 (Fla. 1983); Kelsay v. Motorola, Inc., 384 N.E.2d 353 (Ill. 1978); Wolcowicz v. Intercoast Indus. Corp., 478 N.E.2d 1039 (Ill. App. Ct. 1985); Peru Daily Tribune v. Shuler, 544 N.E.2d 560 (Ind. Ct. App. 1989); Murphy v. City of Topeka-Shawnee County Dept of Labor Servs., 630 P.2d 186 (Kan. Ct. App. 1981); Sventko v. Kroger Co., 245 N.W.2d 151 (Mich. Ct. App. 1976); Lally v. Copygraphics, 428 A.2d 1317 (N.J. 1981); Hansen v. Harrah's, 675 P.2d 394 (Nev. 1984); Brown v. Transcon Lines, 588 P.2d 1087 (Or. 1978) (en banc); Clanton v. Cain-Sloan Co., 677 S.W.2d 441 (Tenn. 1984); Shanholtz v. Monongahela Power Co., 270 S.E.2d 178 (W. Va. 1980); see Theresa L. Kruk, Annotation, Recovery for Discharge from Employment in Retaliation for Filing Workers' Compensation Claims, 32 A.L.R.4TH 1221 (1984) (providing a summary of state law cases in this area). In addition, 22 states enacted statutes which made it explicitly unlawful to dismiss an employee in retaliation for filing a workers' compensation claim. Van Wezel Stone, supra note 410, at 592; see also Mark A. Rothstein, Wrongful Refusal to Hire: Attacking the Other Half of the Employment-at-Will Rule, 24 Conn. L. Rev. 97, 112 (1992) (noting that the most common state anti-retaliation statutory provisions pro-
endorsed a public policy against retaliatory discharge involving workers' compensation in either case law or a specific statute. These cases involve plaintiffs who want to continue to work after filing or litigating a workers' compensation claim, but who were terminated after filing claims for compensation. The courts in these cases have explicitly endorsed the idea that workers should not be forced to choose between filing for benefits and retaining their jobs. In many of these cases, plaintiffs sought to return to work while they were still receiving workers' compensation benefits; this litigation belies the notion that workers prefer to choose not to work when benefits are available.

Other rights for injured or physically impaired workers have followed. After many years of political agitation by and on behalf of disabled people, the Americans with Disabilities Act (ADA) substantially expanded the rights to employment and reemployment of people injured at work. Now, people with serious work-induced disabilities, who are often able to

hhibit retaliation against or discharge of employees who file workers' compensation claims); Theodore J. St. Antoine, The Twilight of Employment at Will? An Update, in FIRST ANNUAL LABOR AND EMPLOYMENT LAW INSTITUTE (William F. Dolson ed., 1985) (stating "[t]he most frequent situation in which employees have been discharged for exercising legal rights involves the filing of workers' compensation claims."

Given the volume of this litigation, it was not surprising that it was in a workers' compensation wrongful discharge case that the Supreme Court held that retaliatory discharge claims arising under state law are not preempted under the labor laws if they do not involve rights which arise out of a collective bargaining agreement. Lingle v. Norge Div. of Magic Chef, Inc., 486 U.S. 399, 412-13 (1988). Under the Lingle decision, terminated employees who were covered by collective bargaining agreements may proceed both with arbitration under their labor agreements and with their tort claims; the tort claim is not preempted. Id. Notably, discharge claims involving other factual patterns are often held to be preempted. See Van Wezel Stone, supra note 410, at 607-09.

Wrongful discharge claims involving workers' compensation often involve complex facts in which the claimant raises issues of disability discrimination or the employer alleges that the discharge arose from enforcement of a facially neutral absence policy which treated workers' compensation absences in a manner no different from other absences. Plaintiffs often lose these latter claims. See Dana S. Connell & Frederick L. Schwartz, Effective Handling of Health-Related Leaves of Absence, 18 EMPLOYEE REL. LJ. 103 (1992) (listing the holdings in a variety of states regarding terminations for filing workers' compensation claims or for absences related to work-related injuries).

415. See Rothstein, supra note 414, at 103; Van Wezel Stone, supra note 410, at 591-93.
418. See generally id. § 12101(a)-(b).
perform the essential functions of their jobs, may not legally be
denied reemployment because of their disabilities. The ADA
and other disability discrimination laws prohibit the exclusion
of individuals from work opportunities because they have filed
prior workers' compensation claims,\textsuperscript{419} or because of
speculative concerns about future risk of reinjury\textsuperscript{420} or
increased workers' compensation costs.\textsuperscript{421} The Family and
Medical Leave Act of 1993\textsuperscript{422} further expands the right of
injured workers to reinstatement following a temporary period
of disability.\textsuperscript{423}

Increases in the filing of compensation claims appear to
track the documented and publicized increases in the em-
ployment rights of work-injured people.\textsuperscript{424} The new legal
protections for injured workers, including common law public
policy claims, disability discrimination laws, and expanded
workers' compensation statutory protection against discharge,
provide significantly increased protection for disabled workers.
These legal developments remove decisions regarding medical
fitness of previously injured workers from complete managerial
discretion. They also expand the scope of judicial and public
inquiry into management decision-making.

The thesis seems obvious, once stated: levels of filing of
compensation claims reflect, at least to some significant extent,

\textsuperscript{419} An employer may not inquire into an applicant's workers' compensation his-
tory before making a conditional offer of employment. EEOC TECHNICAL ASSISTANCE
MANUAL, supra note 334, § 9.1. After an offer is made, an employer may ask about
this history in the context of a medical examination which is designed to determine
whether the individual is capable of performing the essential functions of the job
without posing a significant risk of substantial harm to the safety of himself or her-
self or others. Id. §§ 6.2, 6.4, 9.1.

\textsuperscript{420} 29 C.F.R. § 1630.2(r) (1993) (stating that exclusion of an individual "shall be
based on an individualized assessment of the individual's present ability to safely
perform the essential functions of the job").

\textsuperscript{421} EEOC TECHNICAL ASSISTANCE MANUAL, supra note 334, § 9.1 (stating that
"[a]n employer may not base an employment decision on the speculation that an
applicant may cause increased workers' compensation costs in the future").

1994).

\textsuperscript{423} Although the primary purpose of the Family and Medical Leave Act was to
protect the right of workers to take time off from work to care for others, the Act
also extends the right to a twelve week unpaid leave to workers who are themselves
suffering from a serious health condition which incapacitates them from performing

\textsuperscript{424} In 1983, Professor Clyde Summers reviewed the changes in the employment-at-will doctrine over the preceding ten years and declared, "[t]he forgotten men and
women are no longer forgotten." Clyde Summers, \textit{Individual Rights in the Workplace:
It seems, however, that the rapid erosion of the employment-at-will doctrine has
slowed considerably after this initial decade of change.
actual or perceived levels of job security for injured workers. If benefits are low and job security is minimal, workers are unlikely to file for benefits. As employees perceive both job security and benefit levels to increase, claims are likely to increase and more closely reflect the true injury rate.

This thesis is supported by evidence that more compensation claims are filed in unionized than in similar non-union workplaces.\textsuperscript{425} Some commentators believe this phenomenon is due to the fact that more dangerous companies may be more likely to be unionized.\textsuperscript{426} This explanation ignores two essential differences between unionized and non-union workplaces. Unionized workers are likely to have a knowledgeable representative who can advise them on their rights to compensation, reducing worker ignorance.\textsuperscript{427} Perhaps more importantly, unionized workers have substantial job security under enforceable provisions against unjust dismissal which appear almost universally in collective bargaining agreements.\textsuperscript{428} Unionized workers can therefore file compensation claims with significantly less fear of retaliation.

Despite expansion in legal protection, however, non-union at-will employees continue to be subject to retaliatory actions by employers. Inequalities of power in the employment relationship continue to discourage workers from reporting safety hazards or injuries.\textsuperscript{429} Workers continue to work in

\begin{itemize}
  \item \textsuperscript{425} See, e.g., Butler & Worrall, \textit{Workers' Compensation: Benefit and Injury Claims Rates in the Seventies}, supra note 18, at 586-87.
  \item \textsuperscript{426} Evidence indicates that there is greater activity around safety in unionized workplaces. David Weil, \textit{Enforcing OSHA: The Role of Labor Unions}, 30 INDUS. REL. 20, 26-27 (1991) (noting that unionized workplaces are more likely to receive safety and health inspections by agencies such as OSHA). Weil concludes that "implementation of OSHA therefore seems highly dependent upon the presence of a union at the workplace." \textit{Id.} at 20. On the other hand, a business executive from Michigan has noted that outside regulatory agency activity is a measure of employees' attitudes . . . . If you have a lot of employees calling MIOSH [Michigan OSHA], the Department of Health, the Bureau of Workers' Disability Compensation, and the civil rights agencies, or you have a lot of inspections other than routine walkarounds, I think you can assume there is something wrong, there is some attitude problem out there. Most organizations, whether they are union or non-union, are going to set up a system to prevent outside intervention.
  \item \textsuperscript{427} See Weil, \textit{supra} note 426, at 22 for a discussion on the more highly informed nature of workers in unionized job settings.
  \item \textsuperscript{428} Refer to note 414 \textit{supra}.
  \item \textsuperscript{429} The story surrounding the fire at the Imperial Foods chicken processing plant in Hamlet, North Carolina, although perhaps an extreme case, provides a troubling illustration of this phenomenon. The fire that swept through the Imperial plant on September 3, 1991, left 25 dead and 56 injured and the remaining 164 employees without jobs after the plant closed. Kilborn, \textit{supra} note 76, at A1. The
\end{itemize}
dangerous jobs, often because they lack options. Despite specific legal protections available to at-will employees, employers can still legally discharge injured workers who are unable to perform their jobs because of a work-related illness or injury. Courts have upheld the right of employers to

deads and injuries were directly related to the fact that the doors to the plant were kept locked; the workers could not get out as the fire spread. *Chicken Plant Owner Gets Jail for Fatal Blaze*, L.A. TIMES, Sept. 15, 1992, at A16.

Imperial, an Atlanta-based firm, was Hamlet's largest industrial employer. The workers knew that the jobs were dirty, dangerous, and low paid; the wage was $5.50 per hour. Kilborn, *supra* note 76, at D11. Nevertheless, no complaints about conditions at the plant were made by the workers. *Id.* "Workers said they did not raise complaints about safety because they wanted to keep working. 'People kept quiet for fear of their jobs,' said the Rev. Harold C. Miller, pastor of the First Baptist Church in Hamlet and president of the ministerial alliance." *Id.* Despite two previous fires, the plant was never inspected by any agency responsible for the workers' safety. *Id.*

According to government inspectors who investigated, the fire was the result of the plain failure of the company to provide a reasonably safe working environment for its employees. *Chicken Plant Owner Gets Jail for Fatal Blaze*, *supra*, at A16 (noting the plant manager's mandate that several plant doors and exits be padlocked or blocked shut). An investigation by the U.S. House of Representatives Labor Committee found that the company was preoccupied with profits and productivity and "appears to have recklessly violated a host of OSHA regulations."

Nevertheless, workers were publicly blamed for their own deaths. One state safety official, Bradford Barringer, member of the North Carolina Occupational Safety and Health Advisory Council said, "I imagine they stole chickens just as fast as they could go. . . . If there had been more honest employees, those doors probably wouldn't have been locked." *Official Accuses Workers in Doomed Plant of Theft, ORLANDO SENTINEL TRIB.*, Nov. 22, 1992, at A10.

Ultimately, the plant was shut down. *Owner of Chicken Plant That Burned Bails at Fine, ORLANDO SENTINEL TRIB.*, Jan. 24, 1990, at A10. Following the imposition of fines in excess of $800,000, Imperial filed for bankruptcy. *Id.* The company's president denounced the imposition of the 59 willful health and safety violations that resulted in these fines as "simply absurd." *Id.* The workers and their families did ultimately settle with Imperial's three insurers for $16.1 million. *Tentative Plant Fire Settlement, WASH. POST*, Nov. 7, 1992, at A2. Just six weeks after the fire, the North Carolina Supreme Court expanded the availability of civil damages for intentional torts to situations in which the outcome is "substantially certain" to have occurred. Woodson v. Rowland, 407 S.E.2d 222, 228-30 (N.C. 1991); refer to note 247 *supra*. The plant owner, Emmett Roe, ultimately pleaded guilty to 25 counts of involuntary manslaughter and was sentenced to a 19 year, 11 month prison term. This post-catastrophe legal outcome is significantly different from the result reached in the case involving Fyffèn Thermometer. Refer to note 216 *supra*.

Increasingly few options exist for industrial and mine workers in the face of global competition. Cf. Ansley, *supra* note 242; *Yelin 1992, supra* note 397. As Nicholas Ashford notes, "[w]orkers often do not know of the hazards they face, or are too weakly organized to take action, or are afraid of losing their jobs in a world of high unemployment." *Ashford, supra* note 9, at 391.

Neither state retaliatory discharge law nor disability discrimination law at the federal or state level provides a universal prohibition on discharge of injured employees. For example, in most states, absence associated with a work-related injury can lead to discharge if the employer is utilizing a "neutral" absence control policy in making the termination decision. See, e.g., *Chiaia v. Pepperidge Farm, Inc.*, 588 A.2d 652, 656 (Conn. App. Ct. 1991); *Pericich v. Climatrol, Inc.*, 523 So. 2d 684,
relocate or close a plant, or threaten to do, in order to avoid workers’ compensation costs. Moreover, cases involving


The legal protection provided to injured workers under the Americans with Disabilities (ADA) is also limited. Those workers with serious injuries resulting in disabilities which require more accommodation than is deemed ‘reasonable’ may receive no protection under the disability discrimination laws. See 29 C.F.R. § 1630.2(o) (1993) (defining “reasonable accommodation”). Workers whose injuries are not sufficiently severe may also not receive any protection: an employee must have an impairment which “substantially limits” his or her ability to perform a “major life activity,” or be regarded as having such an impairment, in order to be considered disabled within the meaning of the ADA. 29 C.F.R. § 1630.2(g)-(j) (1993). A worker who is off work due to an occupational injury for a short period of time is not disabled within the meaning of the Act. See id. § 1630.2(m). Injuries or illnesses which result in an inability to perform the worker’s own job, but not a broad class of jobs, also may not be considered disabilities. Id. § 1630.2(j). In its Interpretive Guidance to this rule, the Equal Employment Opportunity Commission notes:

For example, an individual who has a back condition that prevents the individual from performing any heavy labor job would be substantially limited in the major life activity of working because the individual’s impairment eliminates his or her ability to perform a class of jobs. This would be so even if the individual were able to perform jobs in another class, e.g., the class of semi-skilled jobs.

EEOC Interpretive Guidance on Title I of the ADA, 29 C.F.R. § 1630.2(j), at 404 (1993).

Before the passage of the disability discrimination laws, employers were also free to deny employment to applicants upon learning of past or pending workers’ compensation claims. See, e.g., Stoker v. Furr’s, Inc., 813 S.W.2d 719, 723-24 (Tex. App.—El Paso 1991, writ denied) (holding that neither a wrongful discharge suit nor an employment discrimination suit can be brought under the Texas Workers’ compensation statute in the absence of an existing employer/employee relationship); Rothstein, supra note 414, at 112 (noting that most states’ proscriptions against retaliation against employees for filing workers’ compensation claims apply only to current employers and do not extend to subsequent employers).

432. Unida v. Levi Strauss & Co., 986 F.2d 970 (5th Cir. 1993). According to the court, the plaintiffs in this case argued:

Levi Strauss’ decision to close the plant was partly motivated by high workers’ compensation costs at the San Antonio plant. They argue that this evidence, if it had been properly considered by the district court, raises a genuine issue of material fact. Again, we disagree. Levi Strauss concedes that its decision to close the San Antonio plant was due to high costs that included high workers’ compensation costs. This undisputed fact, however, is immaterial to the question of whether the subclass of terminated employees who had engaged in workers compensation activities was somehow discriminated against by Levi Strauss’ decision to close the entire plant and dis-
individual claims of discriminatory or retaliatory action are difficult to prove. Workers, as plaintiffs, have the burden of proof; proof of intent, even if derived inferentially, is not always easy to obtain.\textsuperscript{433}

Legal protection for individual non-union workers is, therefore, still limited in scope. Despite the increases in compensation claims filed in recent years, workers are still vulnerable to pressure not to file claims for compensable injuries and diseases.\textsuperscript{434} Prospects for successful reinstatement in unorganized workplaces, even with expanded employee rights, are notoriously bleak.\textsuperscript{435} Retaliatory discharge lawsuits are a useful tool primarily for professionals, managerial, and other upper income workers.\textsuperscript{436} Thus, common law procedures and charge all employees. At most, the Plaintiffs have demonstrated that they were treated differently because they worked at the San Antonio plant.

\textit{Id.} at 979 n.6. The court also states:

\[ \text{[A]n employer cannot, in our view, engage in discrimination \ldots merely by closing an entire plant and discharging all employees—including those who have not engaged in any of the activities protected by [the workers' compensation discriminatory discharge statute]. After all, the word "discrimination" denotes a "failure to treat all persons equally where no reasonable distinction can be found between those favored and those not favored." BLACK'S LAW DICTIONARY 467 (6th ed. 1990). We fail to see how an employer is discriminating against, or treating unequally, employees who have engaged in workers' compensation activities when the employer is similarly discharging employees who have not engaged in such activities.}\]

\textit{Id.} at 978-79.

\textsuperscript{433} See, e.g., Powell v. Wyoming Cablevision, Inc., 403 S.E.2d 717, 721 (W. Va. 1991) (applying inferential proof pattern developed in cases arising under laws prohibiting discrimination based on race and gender to workers' compensation discriminatory discharge claim).

\textsuperscript{434} See, e.g., Slover v. Brown, 488 N.E.2d 1103, 1104 (Ill. App. Ct. 1986) (reiterating testimony by an employee that her employer terminated her upon finding out she had filed a workers' compensation claim); Willoughby v. Gencorp., Inc., 809 S.W.2d 858, 859-60 (Ky. Ct. App. 1990) (noting a threatening conversation between an employee who had filed a workers' compensation claim and that employee's boss).

\textsuperscript{435} PAUL C. WEILER, GOVERNING THE WORKPLACE: THE FUTURE OF LABOR AND EMPLOYMENT LAW 86-87 (1990). Statistics indicate that workers who have been discharged rarely achieve successful reinstatement as a result of litigation. Summers (1992), supra note 411, at 477-78. Summers notes two factors which deprive reinstatement of practical value for employees. First, there is excessive delay in resolution of claims, during which most discharged employees will find alternative employment. \textit{Id.} Second, employees fear retaliation by their employer. \textit{Id.} at 478. "The employer perception is that returning to the old job will not work out and the employer will find or manufacture some nondiscriminatory reason for dismissal or will make life on the job intolerable". \textit{Id.} As a result, only 5% of those offered reinstatement through NLRB proceedings after six months returned to their old jobs. \textit{Id.} at 477.

\textsuperscript{436} Summers (1992), supra note 411, at 467-68 (noting with regard to wrongful discharge cases that, "[b]ecause of litigation costs, all but middle and upper income employees are largely foreclosed from any access to a remedy for wrongful dismissal. This is apparent from the reported cases. Relatively few plaintiffs are hourly wage or clerical workers; the large majority are professional employees or are in middle
remedies rarely establish on-going job security for non-union workers in hazardous jobs.

The continuing flood of wrongful discharge litigation involving termination of people who have been injured at work reinforces the suspicion that retaliatory action against employees who file workers' compensation claims continues to be commonplace. Perhaps in reaction to the sheer quantity of retaliation suits, recent amendments to state workers' compensation laws have focused on improving the job security of injured workers.\textsuperscript{437} Anecdotal evidence of retaliatory actions by employers also supports the view that employers still view the filing of claims or reporting of injuries as disloyal behavior by employees. \textit{Workers, therefore, must evaluate the hazards of claims filing as well as the hazards of working.} Given the fundamental inequality of the relationship between employers and employees, workers cannot look only at the potential economic benefits of filing a workers' compensation claim in order function as rational economic beings within this relationship.\textsuperscript{438} pursuit of short-term economic gain may result in long term economic and other loss.\textsuperscript{439}

\textbf{4. The Ability of Employers to Influence Workers' Decisions.} It is no secret that employers want to reduce the costs associated with the provision of both mandated and voluntary insurance to workers. Inexpensive cost containment and upper management. Middle income employees with contract claims or modest tort claims who cannot make a substantial payment in advance will be discouraged by lawyers from pursuing their claims. Lower income employees without substantial tort claims will have difficulty finding a lawyer.\textsuperscript{437}).

\textsuperscript{437} For example, statutes requiring the rehiring of occupationally injured workers have been passed in Connecticut, CONN. GEN. STAT. ANN. § 31-313 (1997); Hawaii, HAW. REV. STAT. ANN. § 388-142 (1988); Montana, MONT. CODE ANN. § 39-2-901 to -914 (1993); Oregon, OR. REV. STAT. ANN. § 659.415, .420 (Supp. 1992); Wisconsin, WIS. STAT. ANN. § 102.35 (West 1991); and West Virginia, W. VA. CODE § 23-5A-3 (Supp. 1993). These legislative actions reflect underlying concern by groups who represent injured workers in the political process that job security has proven to be inadequate.

\textsuperscript{438} For an example of the description of this theoretically rational worker, see Butler & Worrall, \textit{Workers' Compensation: Benefits and Injury Claim Rates in the Seventies}, supra note 18, at 586-89 (arguing that we can capture the essence of the employees' behavioral response by looking at a utility maximizing model in which employees weigh the utility of income received when they have an accident with the utility of income when they do not). As benefits increase or as wages decrease, the relative utility of being injured increases and the number of reported injuries should rise in this model of employee behavior. \textit{Id.}

\textsuperscript{439} Workers may, therefore, be making perfectly rational decisions regarding both preferred economic and psychological outcomes. See Ellickson, \textit{supra} note 236, at 621-24 (noting, with regard to the Illinois study, that the rejection of a cash bonus by soon-to-be-employed unemployed workers may have been a rational act).
(or, in insurance parlance, loss prevention) efforts often focus on the elimination of claims costs, not on injury prevention. Employers’ ability to influence claims costs, independent of primary prevention, is dually rooted in the nature of the employment relationship and in the basic workers’ compensation paradigm.

In this paradigm, the price that workers have paid for the availability of compensation is the loss of the right to bring common law suit. This price is unvarying, cannot be quantified, and tends to be invisible. Workers are therefore generally viewed as having paid nothing for their compensation. The price paid by the employer, on the other hand, is contingent not upon the occurrence of injuries but rather upon the filing and resolution of claims; that is, it is determined by the activity of the employees in that enterprise and of the employees in similarly situated firms. The benefit which the employer derives from this arrangement is immunity from suit. The employer, therefore, does not benefit from the increased costs which may result from increasing numbers of claims filed by its workers: that is, the employer does not buy more for the higher price.

The employer’s quest for decreased costs is therefore not tempered by the potential loss of some benefit. Because workers’ filing of claims exhibits some elasticity, employers can save money by discouraging claims as opposed to preventing injuries. Costs would generally not increase without the occurrence of injuries; but cost escalation can be avoided without avoiding injuries. Prevention becomes equated with the prevention of claims (or the reduction of costs associated with claims) rather than the prevention of injuries. To the extent that workers are perceived to file excessive numbers of claims, it appears appropriate to discourage this behavior. Employers are therefore encouraged to defeat workers’ compensation costs

440. Refer to part III.A.4 supra.
441. Refer to part III.B. supra for a discussion of the specific mechanisms for the distribution of price and cost in workers’ compensation.
442. One caveat must be offered here. To the extent that any compensating wage differential resulting from hazardous work is reduced by the improved availability of compensation, employers’ costs will decrease with improved availability of compensation benefits. I find this argument unpersuasive. The evidence regarding compensating wage differentials is by no means conclusive; there is no strong evidence that such differentials adequately compensate for increased risk in hazardous industries or jobs. Refer to note 354 supra.
by challenging all ambiguous or frivolous claims. The inequality of the underlying employment relationship enhances the ability of employers to influence claims filing activity. Employees rarely pursue litigation (other than union grievances) against employers while they remain employed. The intimacy of the relationship and the necessity for the appearance of trust, as well as the possibility of arbitrary exercise of power by the employer, tend to discourage the bringing of lawsuits. Workers' compensation forces the pursuit of litigation during the existence of this relationship; it is perhaps not surprising that claims for compensation often result in a breakdown of trust and an increase in suspicion between the parties. The more workers perceive loss of trust or of job as one possible outcome of pursuing compensation claims, the lower the likelihood they will pursue claims for compensation before they are terminated.

In view of this, employers can utilize a variety of means to discourage the filing of claims. These include, but are certainly not limited to, overt intimidation. Professor Terence Ison has pointed out that the more closely an employer's cost reflects its own experience, the more likely the employer will have an incentive to discourage claims. Ison believes the rate-making process primarily encourages employers to oppose and

443. As a former workers' compensation administrator and a teacher of labor and employment law, I receive many solicitations for workers' compensation publications. A recent and typical one began as follows:

Dear Colleague:

The only way to control runaway workers' compensation is to challenge—and defeat—all claims that are

* not work-related
* frivolous
* fraudulent

Just letting one minor claim get through will result in an increase in insurance premiums that will cost you thousands of dollars.

Flyer from Quinlan Publishing Co. promoting WORKERS' COMPENSATION LAW BULLETIN to "business executives like yourself" received by the author September 26, 1993 (on file with author).

Professor Terence Ison notes that the workers' compensation insurance system often leads employers to challenge claims on the legally irrelevant basis that the disability resulted from the fault of the worker or that it resulted from circumstances outside the control of the employer. Ison, supra note 20, at 736. His views are echoed in the strategies proposed by loss control consultants.

444. Ison, supra note 20, at 727 ("It is assumed and asserted that the variation of assessment rates by reference to the safety performance of the firms concerned will create an incentive to improve the safety performance. Of course if the rates really were being varied by reference to safety performance the conclusion would follow; but . . . that is not the case. Rates are varied by reference to claims cost experience and other claims data, and variations in these figures will commonly have nothing to do with safety performance.").
discourage claims, rather than to promote safety. He lists a variety of unintended and "nefarious" consequences he believes will result from attempts to use the rate-making process to promote safety:

1. Discouraging workers from reporting claims.
2. Refusing to complete [the employer’s report of injury] when requested to do so . . .
3. Adopting a gimmick type of safety program which creates incentives for lower levels of management, or perhaps even for workers, to reduce recorded claims, possibly by creating peer group influence not to make a claim.
4. Delaying the completion of forms or omitting relevant information, thereby causing delays in the processing of a claim, perhaps causing the worker to turn to other sources of income . . .

This is not an exhaustive list. Other strategies include deliberately withholding information regarding a diagnosis of an occupational disease, or otherwise hindering the diagnosis of these diseases; the subcontracting out of hazardous work

445. Id. at 736 ("If an experience rating plan has any downward influence on costs, it is likely to be through the discouragement of claims, opposition to claims, and the confinement of benefits.").
446. Id. at 726.
447. Id. Professor Ison also notes: "Of course the monitoring of claims by employers is not always injurious. Like so many things in life, a certain amount of it can be beneficial while too much of it can be damaging. The problem with current systems of experience rating is that they promote the monitoring of claims by employers without creating any incentive to stop at the right amount." Id. at 725-26. But, he points out, "there is no way of measuring the harm that is done by experience rating." Id. at 738.
448. At least three states have removed the mantle of immunity from employers who have engaged in the fraudulent practice of hiding occupational disease diagnoses from workers whose disease is aggravated by continued exposure. Johns-Manville Products Corp. v. Contra Costa Superior Court, 612 P.2d 948, 950 (Cal. 1990) (holding that employee whose employer intentionally concealed the fact that he had contracted an industrial disease did have a cause of action for aggravation of his disease, although workers' compensation laws bar his common-law claim as to his initial injury); Millison v. E.I. duPont De Nemours & Co., 501 A.2d 505, 507 (N.J. 1985) (allowing an employee to recover for work-related injuries aggravated by continued exposure to asbestos when the employer deliberately concealed the risks of asbestos exposure from its employees); Martin v. Lancaster Battery Co., 606 A.2d 444, 446 (Pa. 1992) (holding that an employee of a battery manufacturer, whose blood test results were intentionally altered by his employer, resulting in more severe injuries to the worker due to continued exposure and lack of treatment, was not limited to a workers’ compensation claim against his employer).
449. Employers have considerable control over information regarding occupational diseases. "[E]mployers have traditionally had almost exclusive access to medical and scientific data. In order to recognize that a certain disease is occupationally related, one must know both the medical histories of workers and the hazards they face. Without both sets of facts, it is generally impossible to draw conclusions about the etiology of disease. Employers have been in the best position to detect and publicize
to "independent contractors"; employee leasing schemes in which an employer's own employees may be converted into employees of legitimate, or fraudulent, external entities; institution of programs which give bonuses either to individual workers who remain "accident-free" or to departments or plant managers which "charge back" savings from reduced many disease problems. However, such publicity might well leave the employer open to substantial workmen's compensation claims and to new demands by labor. Thus, the employer's liability may lead to the suppression of information crucial to the detection and prevention of disease." ASHFORD, supra note 9, at 408.

Workers currently have the right to information regarding occupational hazards under the OSHA Hazard Communication Rule. 29 C.F.R. 1910.1200 (1993). The effectiveness of this rule is limited by several factors, however. Nonunion workers often lack the technical assistance necessary to interpret environmental studies. Data generated in large plants are voluminous and difficult for local unions to interpret without substantial professional assistance (which is rarely available at a price they can afford). Employers are only required to create relevant information which is required by OSHA standards. Workers' access is guaranteed only to information that is generated as a result of compliance with these rules or information which is voluntarily produced.

450. Isom, supra note 20, at 728-29. In West Virginia, many petrochemical plants subcontract a substantial amount of dangerous work. A story will best illustrate the result of this process. Some years ago, when I was teaching an evening class on occupational safety and health to industrial relations students at a state college in Southern West Virginia, I assigned groups of students to research a number of the large petrochemical plants in the Kanawha Valley of West Virginia. One group, which was assigned to the local DuPont facility (a company which is nationally renowned for its successful safety program), interviewed the plant manager who, proud of his safety record, reported that no serious lost time injuries had occurred there in a substantial period of time. Their report was challenged in class by an older student who was a member of the Laborers Union and who worked at the DuPont facility for a subcontractor. He said that a worker had been killed at the plant and that other serious injuries had occurred, all within the prior year. These injured workers were, however, employees of the subcontractor, not of DuPont. The death and injuries therefore did not appear in DuPont's statistics. This practice of subcontracting is commonplace. It is generally justified on the basis that the subcontracted jobs require special expertise which the company lacks. DuPont itself maintains that subcontractors are informed regarding DuPont's health and safety practices and are told to conform to them.

451. In some cases, employee leasing firms seem to have been designed solely to exploit rate-making rules. For example, "an employer forms an employee leasing firm, assigns all his employees to it and then leases them back again. This usually occurs when the experience modification of the principal firm soars well above unity. Through this accounting maneuver, the experience modification drops back to 1.0, even though nothing else has changed." Hager, supra note 13, at 122. This occurs because new firms are always assigned a modification factor of 1.0. Id.; see also Barry Meier, Some 'Worker Leasing' Programs Defraud Insurers and Employers, N.Y. TIMES, Mar. 20, 1992, at A1 (describing how a number of employee leasing firms have become defunct, owing injured workers millions in compensation benefits).

452. This practice is becoming more commonplace. One example is given in the California Department of Insurance report: "Western Parcel Express places drivers on a bonus system to receive $125 for each month they are accident free." California Insurance Study, supra note 7, at 60. The report suggests this as a positive approach to safety. Id.
compensation costs to specific departments or operations within corporations; disciplinary programs for workers who are involved in accidents; threats to close a plant if workers' compensation claims costs do not decline, or closing a plant for this reason, or simply increasing the level of litigation in challenging the filing of claims. Many of these approaches

453. For example, charge-back programs are used in grocery store chains to allocate to stores or divisions the costs of occupational injuries. "Grocery store executives claim this has been effective in focusing attention on safety considerations and perhaps in reducing the number of accidents. At Safeway Stores, the 'charge-back' program is credited with reducing the incidence rate of injuries by 40% between 1987 and 1991." Id. at 90.

454. For example, in 1988, Consolidation Coal Co., a major U.S. coal producer, established a "safety program" which informed workers that, if they were involved in repeated accidents, they would be subject to discipline. Consolidation Coal Co., Internal Memorandum, Safety Approach to Accident Prevention for High Experience Employees (on file with author). Employees with two or more recordable accidents during an 18 month period would be counseled:

A meeting will be held with the Mine Communication Committee to advise them of the following:

E. We will advise them [high experience individual workers] that their continued poor safety performance will not be tolerated . . . .
F. We will be looking very closely at each new accident with all employees.
G. Based on circumstances of each subsequent accident after counseling the high experienced people, action ranging from 2-4 hours of retraining to suspension and/or discharge may occur.

I. This is a new approach to safety and preventing accidents by making high experienced employees more aware of working safely . . . . Our intent and purpose is to help correct poor safety performance, not to punish. Id. In the introduction to another related memorandum, the Senior Vice President wrote, "Today I want to share my concern and take a close look at the accidents you have suffered. While there may be some things that we can do, I want you to review your own accidents to see what you could have done to prevent your accident. Also, what you are going to do to prevent a recurrence." Consolidation Coal Co., Internal Memorandum, Training for High Experience Employees (on file with author). In the enclosed counseling session guidelines, the supervisor was instructed to ask the following questions: "Do you think you will beat the odds? What are your odds of being killed? Do you want to be killed? What can you do about it?" Id. This particular policy was ultimately withdrawn after a legal challenge which argued that it would subject the employees to discipline for reporting safety problems or filing workers' compensation claims, in violation of West Virginia law. UMWA Dist. 31 v. Consolidation Coal Co., Civ. No. 88-C-391 (Cir. Ct. Mon. Co., W. Va. 1988).

455. A plant closure blamed on excessive workers' compensation costs was unsuccessfully challenged by the workers in Unida v. Levi Strauss & Co., 986 F.2d 970, 977 (5th Cir. 1993) (holding that an employer who closes a plant because of high costs, including workers' compensation costs does not violate article 8307c of the Texas Workers' Compensation Act, which provides that an employer may not discharge an employee simply because that worker has filed a good faith workers' compensation claim).

456. This reaction is commonplace and the growth of litigation on claims is discussed in Part II. As Nicholas Ashford observed, "High benefits mean high costs to employers, and thus incentives to find ways to reduce these costs. One way to reduce costs is, of course, to provide a less hazardous workplace. But, unfortunately,
to cost containment are undoubtedly introduced with the intention of stimulating greater worker vigilance regarding safety; if this is the case, their unintended consequences are that they also increase the likelihood that injuries will not be reported. All of these strategies, whether they involve inducements to safety or threats of retaliation, reflect the employer’s ability to control the workplace in order to manipulate claims filing activity.

With the exception of wrongful discharge litigation and the occasional lawsuit involving an employer’s grossly negligent or intentional misconduct, there is remarkably little litigation which challenges employer (mis)behavior in discouraging claims. Current commentary draws little distinction between efforts to prevent hazardous conditions and efforts to reduce costs through discouraging claims. In fact, it is often impossible, from the outside, to discern the difference between the two. Of course, looked at from the vantage point of injured workers, there is a world of difference.

The fact that employers can exert managerial pressure in order to affect workers’ compensation costs without decreasing underlying rates of injury and illness has a tendency to confuse our understanding of prevention. If the goal is simply to decrease workers’ compensation costs to employers, this behavior is laudable. If there is genuine interest in achieving decreases in occupational morbidity and mortality (whether as a public health goal or out of concern for total costs), these apparent decreases in costs serve only to obscure the picture. It is the injured worker and other social insurance programs that in fact absorb the costs of uncompensated occupational injuries. Determining the true injury rate and the true degree of workers’ suffering becomes difficult within the framework of such elasticity.

there are others. When claims are likely to be high, litigation becomes more profitable,” ASHFORD, supra note 9, at 417.

457. It is true that many genuine and aggressive safety programs have an economic incentive component which is, I believe, designed to get the attention of both hourly and managerial employees and involve them in safety efforts.

458. Professor Sugarman notes the same phenomenon with regard to small automobile accident claims and concludes that “perverse” actions, which involve the concealing of bad conduct or fighting of claims, appear to predominate. Sugarman, supra note 19, at 585. “This concern about higher rates does cause nonreporting and private settlement of small accident claims once crashes occur. But this is hardly the same thing as driving safer in the first place.” Id. at 578.

459. Refer to note 247 supra.

460. In the Upjohn study, no distinction was made between cost containment based upon successful discouraging of the filing of claims and cost containment achieved through hazard reduction. See Upjohn Report, supra note 7, at III-5.
D. Ignorance, Doctors, Lawyers, and Other Transaction Costs

An employer can respond to rising workers' compensation costs in three enterprise-specific ways: by doing nothing to change internal practices; by reducing costs through cost containment on claims without directly addressing the need for prevention of injuries and illnesses; or by engaging in primary prevention. The likelihood that employers will work actively to prevent injuries is diminished both by the availability of the apparently efficient response of claims cost containment and by the substantial transaction costs inherent in the workers' compensation system.

Economists refer to those factors which tend to prevent individuals or firms from acting in an economically efficient manner as transaction costs. In the workers' compensation context, transactions costs create considerable friction. In fact, it is difficult to imagine a system which is less likely to generate the level of information and understanding that would be necessary to encourage economically and socially efficient behavior. Ignorance, psychological factors, fundamental inequality of the employee-employer relationship, distribution of costs, and the underlying structure of the workers' compensation system all generate transaction costs which obstruct an optimal outcome.

As an initial problem, as discussed above, costs are not distributed among employers in a manner likely to promote aggressive safety practices. Moreover, employer ignorance regarding the methodology used for experience rating is itself a significant impediment to achieving this outcome; the distribution of costs is irrelevant if those who pay them have no comprehension as to the manner of their distribution. The

461. This approach may result in an economically efficient outcome from the standpoint of the employer; the resulting bargain, which transfers the costs of injuries directly to workers or other social insurance programs, may not be optimally efficient from a social point of view, however.

462. See Coase, supra note 354, at 15 (pointing out that economic theories which assume away transaction costs fail to predict accurately how rational persons will behave because transaction costs, including information, negotiation, and inspection costs, are often very costly and thus prevent people from entering into many arrangements that would seem profitable in a no-transaction-costs world). To the extent that transaction costs impede efficient results, economic incentives become irrelevant and the bargain that is ultimately struck may not be the optimal one.

463. "One fly in the Coase ointment is the existence of an imperfectly experience-rated system of no-fault insurance, mandated by the government." Butler & Worrall, Workers' Compensation: Benefits and Injury Rates in the Seventies, supra note 18, at 587.

464. Refer to notes 323-28 supra and accompanying text.
rate-making system is particularly confusing for small and medium-size employers, whose injury rates tend to be worse than large employers. Even in companies large enough to have both risk managers and engineering design departments, there is surprisingly poor communication between the two.\textsuperscript{465} The lack of information which is readily available to both employers and workers,\textsuperscript{466} and the high costs of obtaining better information, exacerbate the problem. The costs of information transfer are a separate impediment to economic efficiency.\textsuperscript{467}

As a result, despite evidence that enterprise-specific behavior generates significant cost savings, the public debate over workers' compensation has often been framed around secondary issues which reflect these impediments. Employers publicly blame the cost of workers' compensation on a raft of problems all of which are outside the direct control of the enterprise, while perceiving themselves as victims of a system which they have no capacity to influence. They tend to see the causes of high costs in the actions of workers (who file unnecessary claims), outsiders (such as doctors and lawyers who benefit financially from the system), the state legislature (which perpetuates a program which is somehow always more expensive than that in a neighboring state), or state administrative bodies (which are perceived as agencies which delay resolution of claims and find marginal claims to be compensable).

People tend to pay a lot of attention to anecdotal information, to ignore data when forming opinions, to take

\textsuperscript{465} See GEORGE EADS & PETER REUTER, DESIGNING SAFER PRODUCTS: CORPORATE RESPONSES TO PRODUCT LIABILITY LAW AND REGULATION (Rand Report) 60 (1983) (noting that there was poor communication between in-house risk managers and engineering design departments with regard to product safety issues).

\textsuperscript{466} See ASHFORD, supra note 9, at 19.

The imperfections in the market approach are inherent and severe:

\ldots The deficiencies in the knowledge of the nature and severity of health hazards are the most serious imperfections.\ldots

\ldots There are serious reasons for questioning the notion that the existing level of workplace hazards represents working people's free market choice regarding the assumption of job-related risk. Beyond important informational problems, a wide variety of other forces—including social, cultural, psychological, and environmental factors—influence workers' decisions regarding the assumption of job-related risks. An inability to assess or relate to low-probability, large-harm contingencies is a behavioral trait common to many, if not most, individuals. Further, many workers are socialized to accept the hazardous nature of certain jobs and are convinced of the necessity of performing them . . . .

\textsuperscript{467} See Coase, supra note 354, at 15 (including the cost of gathering and analyzing information among transaction costs).
extreme outcomes as being representative, and to attribute more control over a particular event to the people involved than they see themselves as having. These psychological attributes inhibit "rational" behavior as well as contributing to the underlying tension between employees and employers. They also cause employers to generalize from isolated experiences of worker abuse of the workers' compensation system to a general belief that fraud and abuse cause workers' compensation cost escalation; they encourage a belief in the worker-at-fault paradigm.

These psychological tendencies are reinforced both by the underlying workers' compensation compromise, which appears to eliminate employer fault and blame as a factor, and by the general state of labor-management relations. The bilateral monopoly relationship between workers and employers vastly increases transactional costs. Neither the currently popular "total quality management," a process of involving workers in decision-making in order to achieve continual improvements in quality, nor more traditional collective bargaining, have extinguished the fundamental distrust that pervades worker-employer interactions. Because of this suspicion, workers' compensation claims filed by individual employees are subject to significant and suspicious scrutiny by employers. Both the fundamental legitimacy of the claim and the costs which are incurred after the claim is found to be compensable come under attack.

Because employers often perceive themselves as having less influence over the occurrence of injuries than they in fact have, they concentrate on discouraging the filing of claims or on post-injury claims management instead of on injury prevention. Insurers and employers often focus particular attention on the behavior of health care providers and lawyers who provide services to injured workers and on the length of time that an injured worker remains off work.

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468. Dickens, supra note 383, at 26-27.
469. See Ellickson, supra note 236, at 40 (noting that people often ignore or otherwise fail to respond to law or misconstrue legal signals).
470. The Coase theorem assumes equality of bargaining power, which is patently lacking in the employment relationship. "[I]f the parties are locked in a bilateral monopoly, where neither party has alternatives to dealing with the other, transaction costs will be sharply elevated." Donohue, supra note 393, at 556.
472. Employers sometimes respond to escalating costs by attempts to improve return-to-work and rehabilitative programs. While many of these programs are laudatory both in their goal and function, others shortsightedly force workers to return
There is no question that doctors and lawyers can manipulate workers' compensation to their own advantage. As the state-appointed gatekeepers to most disability programs, doctors in particular have a profound influence on the cost of both medical treatment and workers' benefits. As a result, physicians are painted (sometimes accurately) as professionals who tend to overtreat, overcharge, and offer opinions which are influenced more by the source of the payment than by the actual condition of the patient. Some employers and insurers now view medical costs as the primary cause of workers' compensation problems and therefore put considerable energy into health care cost containment strategies. The alarming escalation of the medical component of workers' compensation costs makes this a legitimate concern; it nevertheless also draws attention toward a component of cost and away from the underlying cause of the cost.

Concern has also mounted regarding the activities of claimants' lawyers who advocate expansion of benefits and encourage the filing of claims by their individual clients. The self interest of these attorneys, whose fees rise with increases in benefits, tends to tarnish their image. Employers view them as a cause of the escalation of costs. They are believed to instigate the filing of fraudulent, weak, or unnecessary claims and to organize inappropriate screenings to locate workers with claims which might not otherwise be filed. This view has recently led to the exclusion of attorneys to work prematurely. There is, nevertheless, a need for aggressive programs which enable workers to return to work after an injury. See Spieler, supra note 252, at 465 n.452.

473. See Stone, supra note 230, at 108 (noting that "all disability benefits rely to a greater or lesser extent on the medical evaluation of impairment" giving doctors a very significant role in the program).

474. See Tramposh, supra note 120, at 53 ("[T]here are physicians that have 'sold out' to employers. They may care about the workers, but they know which side their bread is buttered on, and they do not want to alienate their customers: the employers.").

475. See generally Greenwood & Taricco, supra note 68.

476. See David O. Weber, The Comp Crisis, INS. REV., Oct. 1990, at 30 (stating that employers often point to lawyers as one of the major abusers of the workers' compensation system).

477. Medical screenings of workers who have been exposed to occupational disease-causing agents became commonplace during the 1980s. Often, these were sponsored by labor unions; sometimes claimants' attorneys or occupational health physicians were the initiators. Claimants' attorneys, physicians, and labor union representatives maintain that these screenings merely identify individual workers who suffer from compensable diseases and assist them in receiving benefits for which they are eligible. But for these screenings, it is likely that many of these workers would never seek compensation. Not surprisingly, this process is viewed with hostility and suspicion by employers and insurers. Again, this is an example of the fact that the
from discussions regarding reform of state workers' compensation systems as well as to legislated restrictions on the activities of lawyers in the system.\textsuperscript{478}

Further, interstate variability in costs encourages the belief that the root cause of escalating and excessive costs is the legislative design of the program in each state. Employers insistently point to neighboring states in which they allege workers' compensation costs less for equivalent employers.\textsuperscript{479} In fact, interstate variability has grown over the past two decades, despite the efforts of the National Commission on State Workmen's Compensation Programs to establish greater uniformity.\textsuperscript{480} As a result, employers often launch political

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\textsuperscript{478} Ken Myers, Less Workers' Comp Work Ahead, NAT'L L.J., June 7, 1993, at 1 ("In [legislative] reform packages, one of the first proposals is usually the elimination of lawyers.").

\textsuperscript{479} Spieler, supra note 252, at 359 & n.89.

\textsuperscript{480} Differences among states (when costs were measured both as a percent of payroll and as insurance premium per worker and were corrected for interstate variations in wages and industrial mix) grew significantly between 1972 and 1983. John F. Burton, Jr., Interstate Variations in the Employers' Costs of Workers' Compensation, with Particular Reference to Connecticut, New Jersey, and New York, in \textit{Current Issues in Workers' Compensation}, supra note 274, at 111, 112-13. Differences among states continued to widen in subsequent years, although a state's relative position is not immutable. For example, while California has been a consistently high cost state and Indiana a consistently low cost state, rankings of other states, including Michigan, have varied substantially. Burton & Schmidie, supra note 25, at 11. Burton and Schmidie go on to observe, "Data on interstate differences in workers' compensation costs may also be used to assess the need for national workers' compensation standards .... The widening difference among states in their costs of workers' compensation . . . . appear [sic] to increase the threat of runaway employers and thus strengthens the case for federal standards. Id. at 13.

In addition to comparisons based upon premium rates charged to employers, interstate comparisons are also drawn from the dollar amount of workers' compensation benefits paid per 100,000 active workers. John F. Burton, Jr & James W. Gasaway, Workers' Compensation Benefits Paid to Workers: Interstate Differences Substantial, National Averages Accelerate, JOHN BURTON'S WORKERS' COMPENSATION MONITOR, Sept.-Oct. 1992, at 1. Again, the variation among states is substantial. The highest cost state, Maine, paid $121.1 million in benefits per 100,000 workers in 1992. Id. Fig. A. The lowest, Indiana, paid $16.2 million per 100,000 workers in the same year. Id. The average for 43 states was $43.0 million per 100,000 workers. Id. The use of this particular comparison is somewhat misleading, however. These figures appear to represent benefits paid, not incurred, during the year in question. See \textit{id.} at 2. Current payments on claims reflect payments on both new as well as old claims involving more severe injuries. Therefore, states with hazardous industries (and therefore larger numbers of severe claims) and declining employment (and therefore a declining number of active workers) will show high costs in this comparison even if their workers' compensation system is not comparatively generous. The comparison is, however, useful in demonstrating the large differences among states in the liability to injured workers.
assaults against state programs under the banner of "economic development." During the ensuing battles, employers point to the possible demise or relocation of a particular firm or enterprise as proof that workers' compensation costs are, or will become, excessive.\(^{481}\) In the course of these confrontations, it is often implied that legislators in the home state are more profligate, that home state workers are greater abusers, or that the state's administrative body is particularly lax in the granting of claims. This occurs even in those states in which employers' insurance premium rates are relatively low.\(^{482}\)

Thus, the impediments to effective deterrence that have been noted by other commentators with regard to tort liability systems are magnified in the workers' compensation program. The general design of workers' compensation has not historically encouraged many employers to believe that their own efforts at safety would yield significant cost savings within their own enterprises. The combination of civil immunity, no-fault payments, limitations on benefits, and insurability of the risk all contribute to this overall view.

Employers' failure to perceive safety as connected with costs is further fed by their ability to focus on worker behavior and to reduce costs by discouraging the filing of claims or limiting costs incurred within claims. The ability to blame workers as well as other parties who are external to the employment relationship for increasing costs discourages employer self scrutiny, even when such scrutiny might yield economically advantageous decisions for the firm. Thus, both ignorance regarding the actual relationship between cost and safety and objective aspects of the system which do not reward safety have reduced the likelihood that primary preventive activities will result from increasing compensation costs. As long as costs are not, or are not perceived to be, related to internal firm choices, the ability of workers' compensation to provide effective leverage to make employers improve underlying safety practices is

\(^{481}\) See Commission Report, supra note 32, at 125 (noting that "legislators likely will hear claims from some employers that the increase in costs will force a business exodus. It will be virtually impossible for the legislators to know how genuine are these claims." The Report terms this "the spectre of the vanishing employer.").

\(^{482}\) For example, between 1985 and 1989, premium rates in West Virginia were artificially depressed to a very low level as a result of political manipulation. The articulated reason for the depressed rates was that the Governor at that time wanted to promote economic development. This development did not occur. At the same time, during this period, employer groups approached the legislature to complain about what they perceived to be excessively high rates. See Spieler, supra note 252, at 345-48.
limited.

IV. SOLVING THE PARADOX? THE NEW SAFETY RHETORIC

Costs, not injury rates, drive the workers' compensation political debate. The explosion of costs over the past twenty years has heightened the chronic tension that characterizes the program. On the one hand, workers are accused of taxing the system through excessive filing of claims; as is often the case when the expansion of an entitlement program results in unanticipated levels of costs, applicants for benefits are blamed for ensuing financial woes. On the other hand, workers charge that the system still fails to provide adequate compensation to many injured workers. The three way tug-of-war among insurers (seeking rate adequacy), employers (seeking cost reductions), and workers and unions (seeking benefit adequacy) has made workers' compensation into the politicians' most insoluble political conundrum.

483. This is, of course, not a new phenomenon. For example, failure to provide compensation for occupational disease was, in part, a result of concerns about costs. Refer to note 101 supra.

484. STONE, supra note 230, at 170. Stone notes that when costs rise:

[t]he explanations are always the same: the program encourages abuse because of the structure of its incentives, and the administration of the program is in need of coordination and better management to curb individual abuses.

... Analyses of these programs are usually permeated with a deep belief that the individual citizen is first and foremost a 'welfare maximizer'.

... Inevitably, the critics of the program in crisis do attach a moral judgment. The explanation based on rational motivation becomes inextricably bound up with one based on laziness and fraud. It is assumed that many users of the program do not really need it, and that they are receiving benefits they do not deserve.

Thus, rapid growth in the disability insurance program is attributed primarily to an increase in use of the program, and the main reason for that increase is thought to be that benefits are too generous.

Id.

485. The problem of the failure of workers' compensation to provide the hoped-for deterrence, so that safety and prevention would produce systemic savings, has led commentators to propose a variety of solutions. The question is, in essence, how should the system be changed in order to increase its deterrent capabilities? For example, Deborah Stone has proposed that the no fault model be abandoned in favor of tort liability, arguing that "[t]he physical conditions of work that contribute to injury are eminently changeable" and, therefore, employers should not be allowed to hide behind the no-fault shield. STONE, supra note 230, at 191. On the other hand, fearing that any increase in compensation to workers will result in a proliferation of unjustified claims, Ronald Ehrenberg has suggested that the payroll tax be increased but that compensation remain static; he has recommended that any resulting increase in revenue be used to fund other safety and health activities. Ehrenberg, supra note 18, at 94-95. Focusing on the design of insurance coverage, Kenneth Abraham has suggested that we "invalidate policy exclusions as between the insurer..."
“reform” is an annual exercise in political frustration in many states.\footnote{486}

There is some sign of change, however. The political realities of workers’ compensation require that its fundamental characteristic of compromise be maintained. Organized labor, as the putative voice of injured workers, therefore finds itself at the bargaining table when legislators debate mechanisms for decreasing cost. But political realities constrain labor’s usual bargaining stance: the apparent consensus that costs are excessive has made the expansion of benefits in most states a politically untenable proposition.\footnote{487} Faced with persistently high rates of injury despite rising costs, organized labor has therefore shifted its focus to prevention within the workers’ compensation debates.\footnote{488}

and its insured’s victims, but allow such exclusions to be effective as between the insurer and the insured. In effect, when the insured has violated safety standards that are conditions of coverage, the insurer would serve only as a guarantor of its insured’s liability rather than as an indemnifier.” ABRAHAM, supra note 269, at 61. Each of these proposals assumes, perhaps incorrectly, that increased costs to employers will yield increased attention to safety. Sugarman, in contrast, favors limiting compensation to its distributional role, and increasing other enforcement efforts in order to promote safety. Sugarman, supra note 19, at 590-91, 664.

486. James Chelius, of Rutgers’ Institute of Management and Labor Relations, has noted that each year virtually every state amends its workers’ compensation law. “The difference between reform and tinkering seems to depend on whether one is for or against the changes.” James R. Chelius, The Status and Direction of Workers’ Compensation: An Introduction to Current Issues, in CURRENT ISSUES IN WORKERS’ COMPENSATION, supra note 274, at 1, 3-4.

The Insurance Information Institute has estimated that between 1982 and 1988 legislators nationwide enacted at least 1050 amendments to state workers compensation laws. David O. Weber, The Comp Crisis: A Special Report, Ins. Rev., Oct. 1990, at 27, 34 [hereinafter Comp Crisis]. Former general counsel for the National Commission, John Lewis has warned that “no reform effort works as intended. You're lucky if the result is even close to the intention.” Id.

487. Fearing that reforms designed to reduce system costs would mean a reduction in benefits as well, unions have traditionally opposed such changes. Discussing the Minnesota experience, however, Michael Staten has asserted that reform “does not have to be a zero-sum game which precludes everyone from gaining.” Michael Staten, Discussion of Papers on Recent State Reforms, in CURRENT ISSUES IN WORKERS’ COMPENSATION, supra note 274, at 105, 106 (reviewing Steve Keefe, The Minnesota Experience with Workers’ Compensation Reform).

488. James Ellenberger, Assistant Director, Occupational Safety and Health, AFL-CIO, summarizes the labor position this way:


The response to these horrible statistics, regrettably, has not been a renewed effort by policymakers, employers and insurers to reduce accidents and injuries on the job.

The victim of the job injury or illness frequently becomes the target of those concerned with runaway costs. Instead of focusing corrective action aimed at stopping accidents and creating safer work sites, all too often efforts are made to lower workers’ compensation benefits or to change the
A. Legislative Responses to Rising Workers' Compensation Costs

Confronted with high costs and unwieldy administrative structures, and mindful of the need to maintain the compromise nature of these programs, state legislatures are responding to the workers' compensation dilemma in a number of ways. Confronted with high costs and unwieldy administrative structures, and mindful of the need to maintain the compromise nature of these programs, state legislatures are responding to the workers' compensation dilemma in a number of ways.499 First, in apparent exasperation at the continual and high pitched level of political confrontation over these issues, new legislation pulls the workers' compensation debate away from the open political arena by establishing labor-management groups to provide guidance in the administration of the state system or in the development of new legislation or standards.490 These groups are governing, not advisory, commissions or boards which are generally comprised of

definition of injuries or illnesses . . . .

The workers' compensation 'crisis' is likely to continue until we drastically reduce the needless human suffering and economic costs of job injuries, illnesses and death. This will require . . . making safe and healthy workplaces our top priority.

James N. Ellenberger, Troubling Trends in Workplace Injuries, Comp Crisis, supra note 486, at 32 (sidebar).

499. The examples given in this section are limited in several ways. First, the primary health and safety enforcement activities of the twenty-three states with approved state plans for enforcement of OSHA standards are not the focus of this discussion. Many of these states have substantially expanded and improved their safety initiatives. Although some of these efforts have been in reaction to concerns regarding workers' compensation costs, they are mentioned only tangentially here; the safety initiatives discussed here are those which have been undertaken as part of workers' compensation reform. Second, a number of states have enacted provisions governing imminent danger situations; these are not included in this summary. Third, workers' compensation reform legislation is so widespread that it is impossible to include every example of change here. The following discussion provides only a brief overview.

490. See, e.g., ME. REV. STAT. ANN. tit. 39-A, § 151 (West Supp. 1993) (establishing, as part of the Maine Workers' Compensation Act of 1992, a Workers' Compensation Board composed of four representatives of management chosen by the Governor from a list provided by a bona fide employers organization and four representatives of labor chosen from a list provided by a bona fide labor organization representing at least 10% of the Maine work force; members of the board select the chair, which must alternate annually between labor and management representatives); OR. REV. STAT. ANN. § 656.712 (1989 & Supp. 1992) (providing as of 1990 for an impartial three member workers' compensation board; "inasmuch as the duties to be performed by the members vitally concern the employers, the employees, as well as the whole people, of the state, persons shall be appointed as members who fairly represent the interests of all concerned."); W. VA. CODE §§ 21A-3-1, -3, -7, 23-1-1 (Supp. 1993) (establishing in 1993, a compensation programs performance council, composed of four labor and four business representatives plus the Commissioner as ex officio chairperson; the Council is charged with development and approval of vocational standards for permanent total disability and all rule-making authority under the Workers' Compensation Act). Many other states have enacted similar provisions.
representatives of employers and employees or unions; they are intended to remove much of the rancorous disagreement from the legislative arena, to allow the development of expertise by the participants, and to encourage the growth of consensus without the threat of continuous public scrutiny.

Second, state legislatures are attempting to reduce the amount of delay and friction in the adjudicative system, to increase the speed with which injured workers with legitimate claims receive benefits, and to reduce the role of attorneys in the litigation of claims. Improved administration of claims has been a goal since before it was advanced by the National Commission on State Workmen's Compensation Laws over twenty years ago. Of course, there is not always consensus regarding the appropriate way to achieve administrative efficiency.

Administrative streamlining and improved labor-management cooperation are, at least theoretically, consensus goals which promise to reinforce the atmosphere of political compromise. Although laudable, however, neither of these strategies directly addresses the critical problem of high workers' compensation costs and persistent rates of occupational injuries. States are responding to high costs in two ways. First, in reaction to employers' demands, legislatures have tightened the availability of benefits, heightened the consequences for

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491. These provisions all address very specific shortcomings in each state's administrative processing of claims and are quite state-specific. Examples of such changes include: Oregon established penalties for unreasonable delays in payment of benefits, OR. REV. STAT. ANN. § 656.262(10) (Supp. 1992); the Texas Labor Code eliminated de novo trials in court after administrative processing of workers' compensation claims, TEX. LAB. CODE ANN. §§ 410.301-.308 (Vernon Supp. 1994); Kansas set new limitations on attorneys fees to be charged claimants, limiting fees to a reasonable amount or a maximum of 25% of any compensation up to $10,000, 20% of any award from $10,001 to $20,000, and 15% for any amount over $20,000, and prohibiting attorneys fees on medical and rehabilitation benefits, KAN. STAT. ANN. § 44-514 (1993).

492. COMMISSION REPORT, supra note 32, at 99-114.

493. For example, the Texas Workers' Compensation Reform Act of 1989, which limited de novo jury trials after administrative resolution of claims, has been challenged successfully by claimants and unions as an unconstitutional abridgement of access to the courts under the Texas constitution. Texas Workers' Compensation Commission v. Garcia, 862 S.W.2d 61, 103-04 (Tex. App.—San Antonio 1993, n.w.h.) (holding the entire workers' compensation reform legislation, passed in 1989, unconstitutional because the unconstitutional portions could not be severed from the Act in its entirety).

494. For example:

- The burden of proof to establish work-relatedness has been increased for claimants in some states. Oregon provides a good illustration of this. See OR. REV. STAT. ANN. § 656.266 (1989 & Supp. 1992) (1987 revision requiring that worker carry burden of proof to show an injury or occupational disease is compensable by do-
fraud,495 and addressed the post-injury costs of claims.496 In

ing more than merely disproving other possible explanations); OR. REV. STAT. ANN. § 656.273 (Supp. 1992) (limiting compensation for aggravations of prior injuries, “if the major contributing cause of the worsened condition is an injury not occurring within the course and scope of employment”); OR. REV. STAT. ANN. § 656.006(7)(a)(A) (Supp. 1992) (“No injury or disease is compensable as a consequence of a compensable injury unless the compensable injury is the major contributing cause of the consequential condition”; administrators interpret this to mean that the claimant has to prove that the condition is more than 50% caused by work). Oregon has also excluded all claims in which the claimant cannot produce “medical evidence supported by objective findings.” OR. REV. STAT. ANN. § 656.006(7)(a) (Supp. 1992). This arguably excludes soft tissue back injuries which cannot be detected on radiologic or physical examination. The exclusion of back injuries is currently under litigation. Telephone interview with Larry Niswender, Medical Issues Coordinator, Oregon Workers’ Compensation Division (Oct. 29, 1993).

* States have restricted claimants’ access to physicians of their own choice for purposes of determining compensability. For example, in Massachusetts claimants must now seek medical reports from physicians chosen by the Industrial Accident Board; many of these physicians are untrained in occupational medicine and are unable to draw connections between health problems and their occupational etiology. Telephone Interview with Emily Novick, claimants’ attorney in Boston, Mass. (Oct. 27, 1993).

* Psychological claims unrelated to a physical injury are now noncompensable in a growing number of states, irrespective of the extent or etiology of the disability. See, e.g., W. VA. CODE § 23-4-1(f) (Supp. 1993); U.S. CHAMBER OF COMMERCE, supra note 121, at 5 (Arkansas); Ruth A. Brown, Workers’ Compensation: State Enactments in 1992, 116 MONTHLY LAB. REV., Jan. 1993, at 50, 53-54 (Missouri, Oklahoma).

495 In 1992 alone, Connecticut, Minnesota, and Oklahoma established fraud units and Alabama, Missouri, and Rhode Island stiffened their fraud penalty provisions. Brown, supra note 494, at 50-54.

496 Three particular efforts are appearing in reform legislation:

First, states have enacted provisions which reduce benefit levels. Some states have increased offsets against weekly benefits when the injured worker has other sources of income. See, e.g., ME. REV. STAT. ANN. tit. 39-A, § 220(1) (West Supp. 1993) (reducing workers’ compensation by amount of unemployment benefits received); W. VA. CODE § 23-4-23(b) (Supp. 1993) (reducing workers’ compensation benefits when claimants receive insurance or social security payments). Other states have reduced available benefits directly. For example, in 1993 Connecticut decreased the maximum weekly benefit from 150% to 100% of the state average weekly wage. CONN. GEN. STAT. § 31-309 (1993); see also U.S. CHAMBER OF COMMERCE, supra note 121, at 5. Georgia and Minnesota set new limitations on the maximum number of weeks certain categories of benefits may be collected. Brown, supra note 450, at 52-53.

Second, a large number of states are attempting to reduce medical cost inflation through a variety of cost containment strategies. See, e.g., Neb. Legislative Bill 757, §§ 2, 3, 7 (1993) (amending NEB. REV. STAT. §§ 48-120, -120.02, -121) (authorizing the compensation court to establish medical fee schedules, restricting the right of employees to change treating physicians, establishing informal dispute resolution of medical issues, authorizing managed care options, and creating an independent medical examiner system); OR. REV. STAT. ANN. § 656.245(1), (3) (Supp. 1992) (restricting availability of medical treatment for palliative care after the injured worker’s health status has become stationary, restricting right of claimant to change physicians, and encouraging participation in managed health care); OR. REV. STAT. ANN. § 656.248 (Supp. 1992) (authorizing Director of Department of Insurance and Finance to set medical fee schedules). Similarly, Florida enacted of “24 hour” coverage in 1990, which allows employers to combine general health insurance with
many instances, this recent legislation has attempted to turn back the clock, making claims noncompensable which had become compensable within the last twenty years.

This type of legislative response assumes that the critical goal is reduction in costs, not reduction in injuries. Undoubtedly, costs will fall as a result of more aggressive claims management or reduction in the numbers of claims that are viewed as compensable. This approach will not, however, change the underlying health and safety conditions for working people or reduce the number of injuries. Instead, it simply changes the number of injuries which are recognized by the system or the costs of those injuries which are compensated.

Second, mindful of the concerns voiced by organized labor and others, state legislatures are adopting more proactive approaches to occupational safety and health as a component of workers' compensation reform. This approach has significant political appeal: a successful campaign for safety will presumably result in reductions in costs without antagonizing workers through removal of benefits. Investment in safety represents an increasingly rational economic response to the high costs of workers' compensation. In other words, because compensation costs are now so high, it has become more apparent that "safety pays." As a result, safety has become both a viable political solution and, increasingly, a solution accepted by the employer community.497

Safety rhetoric is now ubiquitous. Not only unions, but

workers' compensation medical benefits and utilize existing methods of medical cost containment on the combined health costs. See Keith T. Bateman, Twenty-Four Hour Coverage: An Update, JOHN BURTON'S WORKERS' COMPENSATION MONITOR, Jan.-Feb. 1993, at 6-7.

* Third, efforts at rehabilitation and return-to-work programs are being amplified. See, e.g., W. VA. CODE § 23-4-9 (Supp. 1993) (identifying injured employee's return to work as the goal of rehabilitation and elaborating on previous guidelines); Neb. Legislative Bill 757, § 17 (1993) (amending NEB. REV. STAT. § 48-162.01) (revising the provision of rehabilitation services and establishing priorities for the development of a rehabilitation plan which focus on return to work with the same employer).

497. A May 1993 report released by the W.E. Upjohn Institute for Employment Research concludes that "[m]any employers have realized that disability incidence and costs are, at least to some degree, within their control. . . . Employers who have not yet begun to pursue disability prevention and management strategies in a systematic and diligent way will find that this is an increasing source of competitive disadvantage." Roger Thompson, Taking Charge of Workers' Comp; Controlling Costs through Accident Prevention Programs, NATION'S BUS., Oct. 1993, at 18, 19 (quoting the new Upjohn Report). Similarly, in discussing the trucking industry, the California Insurance Department concluded that "[a]s workers' compensation premiums have grown, protecting employees has begun to receive more attention." California Insurance Study, supra note 7, at 58.
workers' compensation insurers,498 state insurance departments,499 workers' compensation administrators,500 academic commentators,501 and employers' organizations502 are all beating the safety drum. Safety legislation has emerged as a primary political focus of workers' compensation reform in the 1990s; it has become the language of political compromise. The current state legislative reforms reflect this new consensus.503

Given this growing acceptance of safety initiatives as a legitimate political response to the problem of high workers' compensation costs, we see the stress on the system being alleviated if the injury rate simply fell back to the earlier, lower levels. A concerted effort of employers, state and federal governments, insurers, and labor to attack the causes of high accident rates must be a fundamental part of a larger program of workers' compensation reform. . . . [T]he American workplace should have been growing progressively safer over the last 20 years. The fact that the opposite has happened is an indictment of our entire society. Safety on the job has been given far too low a priority. . . . To a degree, the insurance industry has been subsidizing such practices by absorbing the losses that the combination of inadequate safety measures and inadequate rates have brought on. One way or another, this unmerited subsidy must end.

498. For example, Bill Hager, president of NCCI, wrote:

Over the last decade, we have witnessed a marked deterioration in the safety of the American workplace. That must be not only checked, but reversed. . . . Many of the stresses on the system would be alleviated if the injury rate simply fell back to the earlier, lower levels. A concerted effort of employers, state and federal governments, insurers, and labor to attack the causes of high accident rates must be a fundamental part of a larger program of workers' compensation reform. . . . [T]he American workplace should have been growing progressively safer over the last 20 years. The fact that the opposite has happened is an indictment of our entire society. Safety on the job has been given far too low a priority. . . . To a degree, the insurance industry has been subsidizing such practices by absorbing the losses that the combination of inadequate safety measures and inadequate rates have brought on. One way or another, this unmerited subsidy must end.

499. For example, in its 1993 report, the California Department of Insurance strongly advocates worksite safety practices as a mechanism for workers' compensation cost reduction. California Insurance Study, supra note 7, at vi (noting that organizations with proactive safety programs have lower workers' compensation costs).

500. For example, Tony Skiff, Director of Workers' Education for the Connecticut Compensation Commission, recently wrote, "Safety is the most direct, effective method of reducing workers' compensation caseloads and costs. This is true at both the worksite and the jurisdictional level." Anthony W. Skiff, How Safety Reduces Workers' Compensation and Why It's Rarely Used (1993) (on file with author).

501. See, e.g., Raiborn & Payne, supra note 2, at 559 (stating that "[i]t is patently obvious that the first action a company with any level of workers' compensation claims should take is to improve workplace safety and employee awareness about safety").

502. For example, in responding to the recommendation that health costs for work-related injuries and illnesses be merged into the new health care plans, the National Association of Manufacturers responded with "Guidelines by which the NAM would judge any proposal that would include the medical portion of workers' compensation in the health care reform proposal." First on the list was the following:

Safety in the Workplace

Good safety practices protect employees. Injury prevention should be a primary focus of employers. Employees must recognize their personal responsibilities to ensure their own safety.

503. The Occupational Safety and Health Department of the AFL-CIO is tracking this state legislation. Refer to note 511 infra.
compensation costs, the critical question obviously becomes: will it work? That is, will the use of workers’ compensation as a tool for the promotion of increased safety result in reduced numbers of injuries and decreased costs? In order to assess this, it is essential to determine whether these new laws confront the problems described in the preceding sections of this Article.\textsuperscript{504}

B. State Workers’ Compensation Safety and Health Reforms

The new safety and health provisions fall into four categories: premium discounts; safety and health training and consultative services; safety and health committees; and enforcement and penalty provisions which require worksite safety programs. Each of these has somewhat different potential for achieving the goal of primary prevention of injuries.

1. Premium Discounts. Statutory provisions which are designed to entice employers to adopt safety or loss management programs through providing a prospective premium discount appear to be the most common form of workers’ compensation “safety” legislation.\textsuperscript{505} The popularity of these provisions undoubtedly reflects the lack of political opposition to them. Unlike the other approaches discussed below, premium discounts make no pretense of expanding regulation or worker participation in safety; they offer only a carrot, and a small one at that, to employers willing to engage in loss management.

Some of these new provisions require employers to contract

\textsuperscript{504} These problems can be summarized as follows. First, although employer action can reduce both injuries and workers' compensation costs, employers often have not responded as if this is true; a variety of transaction costs have inhibited an economically efficient result. When, in an effort to overcome this resistance, costs have been made more responsive to individual employers' own claims experience, employers have responded in one of three ways: they have continued to fail to perceive themselves as able to influence costs, irrespective of the level of responsiveness of costs; or, in a minority, but growing number, of instances, they have introduced successful safety campaigns; or, even in situations in which they have understood their ability to control costs, they have responded in “nefarious” ways, utilizing their managerial control to establish inappropriate mechanisms to reduce the filing or duration of claims rather than to reduce injuries. Refer to part III.C.2 supra.

\textsuperscript{505} See, e.g., MASS. GEN. LAWS ANN. ch. 152, § 53A (West 1993) (authorizing the Commissioner of Insurance to order a specific prospective decrease in premium rate); MO. ANN. STAT. § 287.125 (Vernon 1993) (outlining requirements for compliance with certified safety program entitling employer to credit against standard premium); W. VA. CODE § 23-2B-3 (Supp. 1993) (authorizing prospective premium rate credit for employer subscribing to qualified loss management program that has demonstrated ability to “significantly reduce workers’ compensation losses”). These programs are similar to the schedule rating systems which workers' compensation insurers utilized earlier in this century.
with loss management firms with demonstrated success in reducing workers' compensation claims costs;\textsuperscript{506} not surprisingly, these provisions have been criticized for focusing more on cost reduction than on injury prevention. Other similar provisions appear to require employers to conduct safety audits or to demonstrate actual reductions in injuries.\textsuperscript{507}

Premium discount provisions generally fail to solve the problem that financial incentives tend to encourage many employers to circumvent rather than reduce injuries.\textsuperscript{508} If these discounts are awarded to employers based upon real, not sham, safety programs, they could increase the likelihood that

\textsuperscript{506} The Massachusetts Qualified Loss Management Program “applies a prospective credit to the premium of an assigned risk insured who subscribes to a qualified loss management program. . . . A loss management firm must have a structured approach in place which focuses top level management of the employer, as well as other personnel, on the issue of safety.” THE WORKERS’ COMPENSATION RATING & INSPECTION BUREAU OF MASS., FILING MEMORANDUM FOR THE QUALIFIED LOSS MANAGEMENT PROGRAM, REVISED 4/93, at 1-5 (on file with author). In general, however, a loss management firm must demonstrate an overall “ability to reduce losses for its client employers.” Id.; see also Beckwith, supra note 7, at 70 (describing the Massachusetts Qualified Loss Management Program which began in 1991: “[T]he initiative’s primary focus is on business practices after injuries occur. . . . In order to qualify for the full 10 percent credit, employers must hire an appropriate certified consulting firm, implement a comprehensive loss management program, and reduce their losses by 20 percent in the first year.”); Sara Marley, Loss Control Pays Dividends in Colorado, BUS. INS., Jan. 11, 1993, at 3, 27 (describing the Colorado Premium Cost Containment Program and quoting John M. Berger, manager of the insurance compliance unit of the Colorado Department of Labor and Employment’s Division of Workers’ Compensation, as follows: “Our focus is on safety education and claims management and less on the hazards that fall under the jurisdiction of OSHA.”).

\textsuperscript{507} For example, Montana’s law, initially passed in 1987, authorizes insurers to “provide financial incentives to an employer who implements a formal safety program. An insurer may provide to an employer a premium discount that reflects the degree of risk diminished by the implemented safety program.” MONT. CODE ANN. § 39-71-421 (1992 & Supp. 1993). Similarly, Missouri’s law requires the department of labor and industrial relations to establish standards for certified safety programs under which certified employers receive premium credits for reduction in the number of work-related injuries, illnesses, and lost workdays. MO. ANN. STAT. § 287.125 (Vernon 1993); see also OKLA. STAT. ANN. tit. 36, § 924.2 (West Supp. 1994) (basing premium reductions on successful participation in safety and health consultation, education and training program administered by the Department of Labor, which includes undergoing a worksite hazard survey, correction of all hazards, establishing a workplace safety and health program, and reducing lost workday case rate); N.D. CENT. CODE § 65-04-19.1 (1993) (providing for a 5% premium discount for any employer who implements or maintains an approved risk management program).

\textsuperscript{508} See, e.g., Marley, supra note 506, at 27 (quoting the Regional Vice President of Transamerica Insurance Group, Tom Glock, complaining that under the Colorado program “[s]ome of the most unattractive businesses are getting [loss control] certificates . . . [companies that] have no genuine interest in the welfare of their employees”).
real injury reductions will be achieved. Workers’ compensation administrators are unlikely, however, to have adequate resources to perform on-site evaluations of such programs; the only alternative is to reward employers based upon successful reduction in claims costs. There is, moreover, no evidence to date that these provisions have achieved any significant success. Notably, the AFL-CIO Department of Safety and Health does not include premium reduction programs in its enumeration of safety initiatives.

2. Safety and Health Training and Consultative Programs. Employer and worker ignorance contributes to the failure to reduce workplace hazards. Acknowledging this, states have developed safety education and training programs which are often financed through a surcharge on workers’ compensation premiums. Voluntary consultative services are also provided to employers in many states; these programs generally receive federal funding. Purely consultative programs, particularly in states that lack OSHA enforcement powers, are generally

509. In his article on experience rating, Terence Ison has noted the difference between token safety audits which indicate only “nominal gestures” and real safety audits that

might include a scrutiny of the design of plant, the choices and uses of machinery and equipment, the existence and control of toxic substances, and a testing of emergency procedures . . . . It is not practicable, however, for safety audits of this type to be undertaken by a workers’ compensation board among the general range of employers.

Ison, supra note 20, at 740.

510. There are no studies on the success of these programs. Some reports allege that employers have received significant premium reductions. See Marley, supra note 506 (reporting that since January 1991 Colorado businesses have saved $10.5 million in premiums through the cost containment program). On the other hand, the California report noted that “in Delaware, beginning in 1989, small employers (less than $60,000 in premiums) became eligible for a discount on their workers’ compensation premium, up to 20 percent, if they submit to an independent inspection service and subsequently pass an unannounced safety inspection . . . . As of January 1992, less than 3 percent of eligible employers had signed up.” California Insurance Study, supra note 7, at 110.


512. See, e.g., MICH. STAT. ANN. § 17.50(55) (Callaghan Supp. 1993-1994) (requiring the director of the labor department to assess a surcharge against insurance carriers, self-insured employers, and the state accident fund on total indemnity benefits paid by each and to deposit these funds in a safety and education training fund to be appropriated by the legislature); MICH. STAT. ANN. § 17.50(56) (Callaghan 1988) (requiring the state department of public health to conduct occupational health education and training). Connecticut and New York have similar provisions which fund training efforts through workers’ compensation surcharges; in New York funding is also provided to occupational health clinics which provide occupational medicine services to workers. AFL-CIO MEMORANDUM, supra note 511, at 4-5.
3. Safety and Health Committees. There is increasingly general acceptance of the idea that workers can be a source of significant and useful information regarding worksite hazards and that their education regarding hazards is a critical component of improving occupational safety. Over the objection of industry representatives, a number of states have therefore adopted amendments to their workers' compensation laws which require employers to establish safety and health committees composed of representatives of both management and workers.  

513. This is reported anecdotally by state officials who operate these programs. Telephone Interview with Roy Smith, West Virginia Commissioner of Labor (Aug. 9, 1992); Telephone Interview with Jack Pompeii, Director, Oregon Occupational Safety and Health Division (OR/OSHA) (Oct. 29, 1993).

514. These provisions vary. In some states, the requirement for the creation of these committees applied to all employers. For example, in Nebraska every employer subject to the workers’ compensation law must establish a safety committee by January 1, 1994. In unionized workplaces, the committee is to be established through the collective bargaining process; in nonunion workplaces, the statute specifies that the “committee shall be composed of an equal number of members representing employees and employer” and the “employer shall compensate employee member of the safety committee at their regular hourly wage plus their regular benefits while the employees are attending committee meeting or otherwise engaged in committee duties.” Neb. Legislative Bill 757, § 32 (1993) (amending Neb. Rev. Stat. § 48-612 (1988)).

In other states, the safety committee requirement is imposed only on specified groups of employers. For example, the following states only require employers over a certain size to establish committees: Minnesota (employers with 25 employees), Montana (five or more employees), and Nevada (20 or more employees). AFL-CIO MEMORANDUM, supra note 511, at 3; see also ALA. CODE § 25-5-15 (1984) (providing that every employer subject to Alabama’s workers’ compensation law must appoint a safety committee of at least three members at the request of any employee).

Other states require safety committees in workplaces with relatively high claims loss experience. For example, Connecticut recently adopted a provision which requires “each employer of twenty-five or more employees . . . and each employer whose rate of work related injury and illness exceeds the average incidence rate of all industries in the state” to establish a safety and health committee in accordance with regulations to be drawn by the chairman of the workers’ compensation commission in consultation with the labor commissioner. 1993 Conn. Legis. Serv. P.A. 93-228 § 28 (West). West Virginia's 1993 workers' compensation legislation provides that the commissioner of workers' compensation may require any employer whose experience modification factor exceeds the criteria established by the new labor-management council “to establish a safety committee composed of representatives of the employer and the employees.” W. VA. CODE § 23-2B-2(b) (Supp. 1993). Tennessee’s 1992 legislation requires that a safety committee be established by every public or private employer with “an experience modification factor (or rate) applied to the premium in the top twenty-five percent (25%) of all covered employers’ modification factors (or rates) applied to the premium.” TENN. CODE. ANN. § 50-6-501 (Supp. 1993). Oregon requires employers in high hazard industries, or employers with more 11 or more employees, to have committees. AFL-CIO MEMORANDUM, supra note 511, at 4. Similarly, North Carolina enacted a provision in 1991 which requires employers...
Legislative mandates for worker participation in safety and health committees are undoubtedly rooted in sincere attempts to strengthen the voice of workers in the prevention of occupational injuries; there is no question that workers may be more aware of (and concerned about) hazards than many managers have proven themselves to be. Successful and active participation by hourly workers in these committees is nevertheless unlikely to occur in many nonunion workplaces. As the Upjohn Report has shown, toleration of workplace hazards, frequent injuries and claims, and negative attitudes toward workers go hand-in-hand in many enterprises; it is likely that it is in the workplaces most in need of labor-management cooperation that employers are most likely to retaliate against workers who exercise statutory rights. Although some of these new provisions establishing safety and health committees include specific protection for employees who participate, this is unlikely to overcome employees' rational perception that participation may yield more trouble than safety.

Only anecdotal evidence supports the claim that these legislatively mandated safety and health committees are effective in nonunion workplaces. Unless states establish clear

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with 11 or more employees and an "experience rate modifier" of 1.5 or more to establish safety committees and safety programs; civil penalties can be assessed for violations of these provisions. N.C. GEN. STAT. ANN. § 95-250 to -256 (1993).

Some of these provisions exempt workplaces in which collective bargaining agreements have previously established joint labor-management committees for this purpose. West Virginia, for example, excludes any "employer that is a member of a multi-employer group operating under a collective bargaining agreement that contains provisions regulating the formation and operation of a safety committee that meets or exceeds the minimum requirements of this section . . . ." W. VA. CODE § 23-2B-2(d) (Supp. 1993).

Generally, these provisions require that the committee meet regularly and maintain written minutes of the meetings. Many of the statutes set penalties if an employer fails to comply with the specifications for the joint committees.

515. Upjohn Report, supra note 7, at 10 (noting that "companies who treat employees as stakeholders and valued participants in the organization's activities" are likely to experience fewer workers' compensation claims).

516. For example, the 1993 Nebraska legislation provides:

An employee shall not be discharged or discriminated against by his or her employer because he or she makes any oral or written complaint to the safety committee or any governmental agency having regulatory responsibility for occupational safety and health, and any employee so discharged or discriminated against shall be reinstated and shall receive reimbursement for lost wages and work benefits caused by the employer's action.


517. Representatives of the AFL-CIO indicate that several success stories have emerged during the inquiry into models for labor-management cooperation and total quality improvement programs by the Commission on the Future of Worker-Management Relations (commonly referred to as the Dunlop Commission). Telephone Interview with Lynn Rhinehart, Assistant Director, Occupational Safety and Health Dep't,
strategies for enforcement of these provisions, they are likely to be ineffective. \footnote{518}{Unfortunately, workers' compensation programs which are designated to enforce these provisions may lack both the expertise and the financial resources necessary to achieve more than token compliance. \footnote{519}}

4. Safety and Health Enforcement Activities. Several states have adopted provisions which require employers to develop safety programs \footnote{520}{or authorize the workers' compensation program director to conduct workplace inspections, with \footnote{521}{or without advance notice to employers. Employers are then}} or authorize the workers' compensation program director to conduct workplace inspections, with \footnote{522}{advance notice to employers. Employers are then}}

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\footnote{518}{AFL-CIO (Oct. 15, 1993). As indicated in the Upjohn Report, however, it appears that most of these success stories involve enterprises which have made a general commitment to change corporate culture and expand worker involvement. Upjohn Report, supra note 7, at 15 (concluding that the employers expected to have good experiences with workers' compensation are those who are committed to the “well-being, productivity, participation, and accountability” of their employees).}

\footnote{519}{According to Jim Ellenberger, the State of Washington has had a provision for safety and health committees on its books “forever, but nobody ever enforced it.” Therefore, nothing came of it. Telephone Interview with James Ellenberger, Assistant Director, Occupational Safety & Health Dep't, AFL-CIO (Sept. 15, 1993); see WASH. REV. CODE § 296.24.020 (1992) (requiring, since 1980, that employers develop “a formal accident-prevention program, tailored to the needs of the particular plant or operation and to the type of hazards involved” including, for all employers of eleven or more employees, a safety and health committee “composed of employer-selected and employee-elected members”).}

\footnote{520}{For example, in West Virginia, the Workers' Compensation Fund, as of the time of this writing, has no employees who specialize in health and safety or who have any expertise in health and safety; no budgetary allotment for health and safety activities was included when the 1993 amendments to the workers' compensation statute expanded the commissioner's authority over employers' safety and health programs.}

\footnote{521}{Alaska, California, Montana, Nebraska, Nevada, and Washington require all employers to develop safety and health plans; Hawaii, Michigan, Minnesota, North Carolina and Oregon impose the same requirement on employers in specified groups, which are either designated by industrial class or by relatively high claims filing experience. AFL-CIO MEMORANDUM, supra note 511, at 2-3. Beginning in 1992, Utah has also required safety programs. Brown, supra note 494, at 55.}

\footnote{522}{See, e.g., 28 TEX. ADMIN. CODE §§ 164.1-.6 (West 1992). The Extra-Hazardous Employer Program allows the Texas Workers' Compensation Commission (TWCC) to identify extra-hazardous employers based on high rates of injury in the employer's workforce and industry. Id. § 164.1. TWCC then must notify the employer of its extra-hazardous employer status. Id. § 164.2. The employer has thirty days to obtain a professional safety consultation by an inspector who will make a written hazard survey that includes both hazardous practices and conditions. Id. § 164.3. The employer has another thirty days to develop an accident prevention plan that complies with federal and state safety standards. Id. § 164.4. TWCC then will conduct a follow-up inspection of the premises six months after the employer files the report. Id. § 164.5. That inspection will be with full notification and during normal working hours. Id. § 164.5.}

\footnote{523}{See, e.g., W. VA. CODE § 23-2B-2(a) (Supp. 1993) (authorizing the workers' compensation commissioner “to conduct special inspections or investigations focused on specific problems or hazards in the work place with or without the agreement of}
subject to penalties for failure to adopt safety programs or to correct hazards identified as a result of safety audits.\textsuperscript{523} States with federally approved safety and health plans assess penalties as part of the state labor department's health and safety enforcement activities.\textsuperscript{524} Some of these states are achieving better coordination of regulatory and compensation activities through reorganization of the state administration, placing both the state OSHA and workers' compensation programs into one department.\textsuperscript{525} States without approved plans have adopted two different strategies for imposing penalties. In the first, penalties or fines are assessed when an employer fails to comply with provisions of the workers' compensation laws.\textsuperscript{526} The second turns the employer over to federal OSHA
for purpose of enforcement. The coordination of these state enforcement efforts in states without state OSHA plans can be perplexing. In cases in which penalties are assessed locally, several states have utilized the monies generated by enforcement activities to fund other safety and health activities. These plans endorse the idea that compensation and regulatory activities should be coordinated and abandon the idea that increased compensation costs alone will yield improved attention to safety. The motivation is to create an environment in which compensation costs will decline as a result of injury prevention, and to encourage injury prevention through the combined efforts of workers' compensation and regulatory programs. Unfortunately, states without approved

527. See, e.g., Neb. Legislative Bill 757, § 36 (1993). The bill creates the Workplace Safety Consultation Program which authorizes the Department of Labor to conduct workplace inspections and consultations to determine whether employers are complying with federal OSHA standards. Id. § 36(1)-(2). The bill provides that Nebraska will inspect the worksite if the employer meets a number of criteria. Id. § 36(3). Those criteria include: the amount of premium paid by the employer; the employer's experience modification produced by the experience rating system; the employer's risk of injuries as evidenced by insurance rates or loss costs; and the nature, type or frequency of accidents. Id. § 36(3). An employer who refuses to eliminate workplace hazards in compliance with an inspection shall be referred to federal OSHA for enforcement. Id. § 36(5).

528. See, e.g., W. Va. CODE § 23-2B-2(e) (Supp. 1993). The West Virginia safety provisions state that "[i]t is not the purpose of this article to either supersede the federal Occupational Safety and Health Act program, federal Mine Safety and Health Act program or to create a state counterpart to this program." Id. The U.S. Supreme Court has ruled that the federal Occupational Safety and Health Act preempts the right of states without approved state plans to enact occupational safety and health standards in areas in which a federal standard has been promulgated. Gade v. National Solid Waste Management Ass'n, 112 S. Ct. 2374, 2383 (1992). The OSH Act specifically does not preempt state workers' compensation provisions, however. 29 U.S.C. § 653(b)(4) (1988). Other courts have applied this savings clause so that workers' compensation penalties which increase workers' compensation benefits have been held not to be preempted. See, e.g., Kroger Co. v. Industrial Comm'n, 402 N.E.2d 528, 530 (Ohio 1980) (per curium). State courts have also held that the states are not preempted from creating additional penalties for health and safety violations, particularly criminal penalties. See, e.g., Illinois v. Chicago Magnet Wire Co., 534 N.E.2d 962, 966 (Ill. 1989). The court's ruling in Gade makes challenges to penalties for safety violations that are imposed through workers' compensation statutes more likely. Gade, 112 S. Ct. at 2383.

529. See, e.g., MINN. STAT. ANN. § 176.129 (West 1994) (creating an assigned risk safety fund from fines and penalties); OR. REV. STAT. § 654.191 (1991) (using fines generated by the state OSHA program for health and safety training programs). Interestingly, these efforts bear some similarity to Ehrenberg's recommendation that increased costs to employers not be linked directly to increased compensation for workers, see Ehrenberg, supra note 16, at 81-86, 95-96, as well as to Sugarman's prediction that "accident law will eventually become a combination of social insurance (the extreme distributional method) and criminal sanction (the extreme method of deterrence)," Sugarman, supra note 19, at 637 (quoting Izhak Englard, The System Builders: A Critical Appraisal of Modern Tort Theory, 9 J. LEGAL STUD. 27, 49 (1980)).
state OSHA plans often lack the resources and the expertise to enforce these provisions adequately.

C. The Implication of Safety and Health Reforms for Injury Prevention

It is undoubtedly too early to reach a final conclusion as to whether any of these strategies will be effective in reducing injuries and costs. Evaluating the results of this legislation is further complicated by the fact that states have simultaneously enacted measures which make significant changes in administration of claims and reduce the availability of compensation for known disabilities. It will therefore be difficult to tell the extent to which injury prevention is the cause of any reductions in cost.

Nevertheless, it is safe to make three observations. First, the current level of workers' compensation costs finally appears to be sufficiently high to spark interest in primary prevention; the fact that the effort is being made at all is a positive change. Second, given the past history of workers' compensation, efforts that are simply designed to entice high claims employers into changed behavior are unlikely to be effective; premium discounts and consultative services, standing alone, will not generate substantial improvements. Third, states that enact legislation without addressing the need for increased funding for safety activities are only engaging in token efforts to reduce the hazards at worksites.

At this point, reforms appear to have produced reductions in employers' premium costs only in Oregon and Texas. Texas' reforms, which have been successfully challenged in court, have been in place for too short a time to evaluate.

530. See Klein, supra note 52, at 12 (showing NCCI sought rate reductions in Oregon starting in 1990).

531. Media reports indicate that Texas premium rates stabilized after years of dramatic increases. See, e.g., James M. Burcke, Texas Comp Reforms Working: Study, BUS. INS., Sept. 28, 1992, at 23 (indicating that half of 139 Texas risk managers responding to Business Insurance survey indicated that their workers' compensation costs dropped after Texas reform legislation went into effect in 1991); State Briefs, NAT'L UNDERWRITER, Sept. 16, 1991, at 12. During the first six months of 1991, the Texas Workers' Compensation Commission reported that lost-time claims went down 9.1%, while litigation and administrative costs were reduced by 44.3%. The legislation was also widely criticized, however, including by Texas Governor Ann Richards. Id. at 13.

532. The court in Texas Workers' Compensation Comm'n v. Garcia, 862 S.W.2d 61, 103-04 (Tex. App.—San Antonio 1993, n.w.h), held the Texas Workers' Compensation Act of 1993 to be unconstitutional. Responses to this decision, rendered after rehearing on October 1, 1993, did not appear to be fully formulated at the time of this writing.
At this point, Oregon stands alone as a state in which there have been a consistent pattern of falling employer premium rates over a period of years, demonstrating that there have been successful cost reductions in the workers' compensation system. Prior to these reductions, Oregon's insurance rates had been increasing rapidly, and injury rates and claims costs were among the highest in the country. Recent reductions in rates have been accompanied by drops in other key indicators: the incidence rate of reported injuries fell by twenty-one percent from 1989 to 1991; fatality rates dropped from 7.1 to 4.9 per 100,000, showing a reduction in every year from 1987 to 1992, during a period when the workforce grew by ten percent; the number of accepted disabling claims decreased by over thirty-three percent.

Three other critical changes occurred in Oregon during this period of remarkable decline in costs and reported injury rates. First, the enforcement of the Oregon OSHA (OR/OSHA) plan was substantially strengthened. The number of employees assigned to enforcement grew from about 90 to 243 and the visibility of OSHA enforcement was vastly increased. Jack Pompeii, administrator of the OR/OSHA program, says that employers now practice safety because there are a sufficient number of inspectors to "encourage" them not to ignore safety standards; the inspectors are, he asserts, "hanging over the state like a giant condor." The OR/OSHA program changed its focus from "happy worker posters and gimmicks" to "ergonomics and engineering controls" during this period. Meanwhile, assessed penalties rose from $1.0 million in 1987 to $3.0 million in 1992 and the legislature increased the penalty per violation. Some of these fines are now being used in a grant program to fund innovative safety and health training.


534. OREGON DEP'T OF INS. & FINANCE, OREGON WORKERS' COMPENSATION: MONITORING THE KEY COMPONENTS OF LEGISLATIVE REFORM 1 (1993) [hereinafter OREGON REPORT] (noting that in 1986, Oregon ranked sixth highest in average workers' compensation rates paid by employers and had one of the nation's highest occupational injury and illness rates).

535. See id. at 2.

536. Telephone Interview with Jack Pompeii, supra note 513; see also OREGON REPORT, supra note 534, at 4.

537. Telephone Interview with Jack Pompeii, supra note 513.

538. Id.

539. OREGON REPORT, supra note 534, at 4.
and related efforts.\textsuperscript{540} Inspections are now triggered by high claims experience;\textsuperscript{541} the compensation program generates quarterly reports which are utilized to set priorities to target employers for regulatory inspections. Employers must voluntarily seek consultative services; these services are not offered after an enterprise is targeted for enforcement.\textsuperscript{542}

As the enforcement capabilities of OR/OSHA have increased, so have the employer requests for voluntary consultative services to assist them in promoting safety without risk of penalties; consultations increased from 502 in 1988 to 2,430 in 1992.\textsuperscript{543} According to Pompeii, “Enforcement drives the whole system. If you’ve got weak enforcement, no one’s going to use consultation services.”\textsuperscript{544} Thus, the fact that Oregon employers were saddled with comparatively high workers’ compensation costs did not lead them to change their internal practices. Enforcement activities may, however, have had this result.

Finally, with regard to health and safety, requirements in the 1990 legislation for establishing safety committees are, according to Jack Pompeii, a success.\textsuperscript{545} OR/OSHA monitors compliance with safety committee requirements by, among other things, inspecting minutes of meetings; if hazards discussed at these meeting are not corrected, employers will subsequently be cited for willful violations.\textsuperscript{546} Citations for failure to comply with the requirements to establish these committees grew from 131 in 1990 to 1014 in 1992.\textsuperscript{547}

Second, workers’ compensation reform legislation enacted in 1987 and 1990 in Oregon made it more difficult for workers to obtain benefits in certain instances. Many injuries and diseases that were previously compensable are no longer compensated.\textsuperscript{548} In particular, compensability of diseases resulting from cumulative effects is more difficult to prove; diseases caused by a combination of work and non-work-related hazards are no longer compensable; and a new requirement for objective

\begin{thebibliography}{9}
\bibitem{540} Telephone Interview with Jack Pompeii, supra note 513.
\bibitem{541} Id.
\bibitem{542} Id.
\bibitem{543} \textit{OREGON REPORT}, supra note 534, at 4.
\bibitem{544} Telephone Interview with Jack Pompeii, supra note 513.
\bibitem{545} Id. Pompeii acknowledges that these committees do not “work as well in nonunion facilities; but it’s moving health and safety up a notch or two . . . empowering people to do more than they did before . . . every little bit helps.” Id.
\bibitem{546} Id.
\bibitem{547} \textit{OREGON REPORT}, supra note 534, at 5.
\bibitem{548} Refer to note 494 supra. Oregon now excludes many claims which have traditionally been compensated on the theory that employers must “take employees as they find them.” \textit{OREGON REPORT}, supra note 534, at 5.
\end{thebibliography}
medical evidence is likely to exclude considerable numbers of cases involving disabling back pain. In addition, severe restrictions on palliative care and medical cost containment efforts yielded significant savings after 1990. As one Oregon administrator noted, the political "pendulum swung hard" in 1990 toward "giving insurers more tools to contain costs." From 1988 to 1992, the total number of claims filed dropped from 153,000 to 108,000, it is difficult to assess how much of this represents a decline in injury rates and how much shows worker discouragement as a result of the compensability changes in rules governing compensability of claims.

Third, the state fund, SAIF, administratively reduced the number of claims it paid and increased the number it denied. SAIF now insures about one-third of the employers in Oregon. While the head of SAIF credited most of the costs reductions "to legislative redefining of what is a compensable injury," others think that SAIF artificially, but effectively, forced costs down by the simple approach of refusing to approve claims. An investigation of SAIF's practices has led to a higher approval rate.

Officials in Oregon acknowledge that sinking workers' compensation premium costs are a reflection of several, interlocking variables. Nevertheless, it appears that premium rates began to drop before both the SAIF administrative reduction in claims approval and the 1990 workers' compensation reform legislation reduced the availability of medical benefits and narrowed the compensability of claims. The Oregon effort differs materially from efforts to improve safety and

549. Oregon Report, supra note 534, at 5.
550. Telephone Interview with Larry Niswender, supra note 494. SAIF, the state insurance fund, reported that its medical payments declined from $80 million in 1990 to $64 million in 1991. Id.
551. Id.
552. Id.
553. See, e.g., Meg Fletcher, Oregon Probes State Comp Fund, Bus. Ins., Apr. 20, 1992, at 3 (stating that SAIF's denial rate on claims was, for a period of time, double that of commercial insurers active in the Oregon market).
554. Telephone Interview with Larry Niswender, supra note 494.
557. Telephone interview with Larry Niswender, supra note 494.
558. Id.; Telephone Interview with Mary Dora, Division of Workers' Compensation (Oct. 28, 1993).
559. Telephone Interview with Mary Dora, supra note 558. Dora suggests that the initial premium drops reflect aggressive safety enforcement, while the more recent ones may be the result of benefit reductions. Id.
reduce costs solely through manipulation of the compensation system; it acknowledges that employers are not adequately motivated by workers' compensation incentives alone. The intertwining of compensation and regulation, together with the allocation of significant state resources to preventive activities, appears to create a profoundly different—and more positive—effect on real injury rates.

V. CONCLUSION

When the Commission on State Workmen's Compensation Programs issued its report in 1972, concern for benefit adequacy shaped the political debates about workers' compensation reform. Now, anxiety about costs controls these discussions. Existing evidence unequivocally supports the conclusion that more effective prevention of occupational injury and disease would yield both cost savings for employers and less disability for workers. If our goal is to reduce costs without penalizing injured workers, we must confront the failure of exploding costs to spur efforts at primary prevention.

It is tempting to conclude that the optimal solution to this problem is to boost employers' economic incentives by increasing and clarifying the internalization of these costs. But this approach creates an inescapable tension: expanding incentives in order to encourage prevention is likely to result in employers' use of managerial authority to discourage the filing of legitimate claims or to engage in other problematic cost reduction strategies. The use of this escape valve by knowledgeable employers may be an economically rational response; it fails, however, to meet the dual goals of cost containment and injury prevention.

In contrast, the Oregon experience provides strong evidence that the coordination of regulation and compensation yields both improved safety and decreased compensation costs. This may, in fact, be the only approach which can meet these dual goals. Its success requires the forging of a new political compromise: expansion of safety regulation in exchange for decreased escalation of workers' compensation costs. The legislation passed in the last few years in many states indicates that a national consensus is in fact emerging around these principles.

Unfortunately, the current combination of state and federal compensation and regulatory programs makes this coordination difficult in many states. Those states with state OSHA plans can emulate Oregon's model. As long as compensation programs
remain state-based, jurisdictions without state-approved OSHA plans will be forced to develop expertise in workplace safety issues, to consider the creation of additional penalties in their workers' compensation statutes, and to argue that these activities, when linked to workers' compensation programs, are not preempted by federal law. It is not clear, however, that this duplicative approach to regulation is the best mechanism for promoting either employer cooperation or effective and efficient enforcement.

A second National Commission may soon be convened to study state workers' compensation programs. Any new Commission will be forced to explore such politically difficult problems as exploding costs, increasing interstate variability, persistent high injury rates, and the political quagmire of federal-state relations. The ultimate challenge to the Commission, however, will be to support the transformation of safety rhetoric into real reductions in occupational disability and death—thereby reducing workers' compensation costs without increasing workers' suffering.