

Cornell International Law Journal

Volume 33
Issue 2 2000

Article 3

Designing Health and Safety: Workplace Hazard Regulation in the United States and Canada

Randy S. Rabinowitz

Mark M. Hager

Follow this and additional works at: <http://scholarship.law.cornell.edu/cilj>



Part of the [Law Commons](#)

Recommended Citation

Rabinowitz, Randy S. and Hager, Mark M. (2000) "Designing Health and Safety: Workplace Hazard Regulation in the United States and Canada," *Cornell International Law Journal*: Vol. 33: Iss. 2, Article 3.
Available at: <http://scholarship.law.cornell.edu/cilj/vol33/iss2/3>

This Article is brought to you for free and open access by Scholarship@Cornell Law: A Digital Repository. It has been accepted for inclusion in Cornell International Law Journal by an authorized administrator of Scholarship@Cornell Law: A Digital Repository. For more information, please contact jmp8@cornell.edu.

Designing Health and Safety: Workplace Hazard Regulation in The United States and Canada

Randy S. Rabinowitz*

Mark M. Hager**

Introduction	374
I. The United States	375
A. Legal Framework	375
1. <i>Coverage of the OSH Act</i>	376
2. <i>Federal and State Functions under the OSH Act</i>	377
B. Standards Development	378
1. <i>Standard-Setting Procedures</i>	378
2. <i>Criteria for Standards</i>	381
3. <i>Restraints on Standard-Setting</i>	382
C. Ensuring Compliance	383
1. <i>Violations and Defenses</i>	383
2. <i>Inspections</i>	385
3. <i>Penalties</i>	386
4. <i>Alternative Compliance</i>	389
5. <i>Employee Rights</i>	390
D. Information Systems	391
E. Training	392
F. Workers' Compensation	392
II. Canada	396
A. Legal Framework	396
1. <i>Coverage</i>	397
2. <i>Federal and Provincial Functions</i>	398
B. Standards Development	398
C. Ensuring Compliance	401
1. <i>Employer Duties</i>	401
2. <i>Employee Duties</i>	402
3. <i>Inspections</i>	403

Copyright 2000 by the authors. All rights reserved.

* Adjunct Professor, Washington College of Law, American University, Washington D.C.

** Professor of Law, Washington College of Law, American University, Washington D.C. Portions of this article were prepared by the authors as consultants for the Occupational Safety and Health Administration (OSHA). The publication of this article is authorized by OSHA, but the authors are solely responsible for its contents. The authors would like to thank Jennifer Costello, Eden Polatnick, and Michelle Von Euw for their efforts.

4. Joint Committees	411
5. Right to Refuse Dangerous Work	413
D. Information Systems	417
E. Training	417
F. Workers' Compensation	418
III. Comparative Analysis.....	422
A. Coverage	422
B. Standard-Setting	424
C. Enforcement	427
D. Employee Rights	430
E. Workers' Compensation	432
IV. Conclusion	433

Introduction

Workplace safety and health policy has been the subject of intensified debate since the Republican party won majority control of the U.S. Congress in 1994. Much of this debate has focused on how the Occupational Safety and Health Administration (OSHA) can substitute consensus and cooperation in place of its perceived reliance on adversarial regulation and enforcement policies. Unlike adversarial methods, cooperative policies can be expected to result in a reduced emphasis on sanctions for noncompliance. Hence, it is important to examine the plausibility of the cooperation/consensus approach. Can cooperation increase compliance with safety and health rules in the United States, and can it reduce employee injuries and illnesses? If so, under what conditions?

Canadian workplace safety and health policy provides a useful counterpoint for addressing such concerns in the United States. Canada is widely regarded within both organized labor and business circles in the United States as having a progressive and protective occupational safety and health program. In contrast to OSHA, the Canadian program relies significantly more upon consensus and cooperation. It therefore seems timely to examine Canada's program during this debate regarding the direction of U.S. policy. In addition, the North American Free Trade Agreement (NAFTA) and its labor side agreement, the North American Agreement on Labor Cooperation (NAALC), have recently increased the cooperation and the exchange of technical information between the United States and Canada on labor issues. This too makes a comparative study both timely and potentially significant for emerging policy discussions.

This article describes and compares the main contours of U.S. and Canadian workplace safety and health policy. Part I describes structures and legal doctrines governing U.S. workplace safety and health.¹ While the scholarly literature debating the appropriate direction of safety and health policy is rich, few comprehensive summaries of OSHA law exist. Part II

1. The analysis focuses on legal doctrines and largely omits discussion of current OSHA policies. Because OSHA policies lack statutory mandate and may vary from administration to administration, they merely illustrate current trends.

describes the structures and legal doctrines governing safety and health policy in the Canadian provinces. We are aware of no other comprehensive review and analysis of provincial safety and health laws. Part III then compares U.S. and Canadian law and suggests several broad conclusions. In comparison to the United States, Canada provides employees substantially enhanced rights to participate in safety and health decision-making and to refuse unsafe work.² Part IV concludes that such enhanced employee rights are necessary adjuncts to cooperation and consensus in safety and health regulation and enforcement. Although a regime of cooperation and enhanced employee rights might rationally be expected to improve safety and health performance, empirical evidence to prove this assertion is weak at best. Additionally, without enhanced employee rights, a cooperation/consensus regime could weaken workplace health and safety protection.

I. The United States

A. Legal Framework

The Occupational Safety and Health (OSH) Act of 1970 (the OSH Act or the Act) is the preeminent federal law governing workplace safety and health in the United States. Before passage of the Act, states regulated occupational safety and health independently, some more stringently than others.³ Seeking to eliminate the economic competitive disadvantage of employers who invested in safety and health compared with those who did not, Congress mandated minimum national standards.⁴ It also created three federal health and safety agencies: the Occupational Safety and Health Administration, to set and enforce mandatory safety and health standards; the National Institute for Occupational Safety and Health, to conduct research on occupational hazards and their control; and the Occupational Safety and Health Review Commission, to review contested enforcement actions.⁵ Each of these agencies is discussed in turn below. Meanwhile, states continued to administer their own workers' compensation programs.⁶

2. In contrast, Congress has repeatedly refused to grant U.S. workers these enhanced rights. See generally H.R. REP. NO. 103-825 (1994); H. REP. NO. 102-663, pt. 1 (1992); S. REP. NO. 102-453 (1992).

3. Prior to 1970, state regulation of safety and health was variable with regard to enforcement and injury, and illness rates kept rising. Massachusetts passed the first factory inspection law in 1877; by 1890, 22 states had passed laws permitting safety inspectors into some workplaces. However, these early laws rarely were enforced. By 1968, only 20 states had occupational health programs. A survey taken that year found that most states had more game wardens than safety inspectors. See generally OFFICE OF TECHNOLOGY ASSESSMENT, PREVENTING ILLNESS AND INJURY IN THE WORKPLACE 209-211 (1985) [hereinafter PREVENTING ILLNESS]; NICHOLAS ASHFORD, CRISIS IN THE WORKPLACE 47-51 (1976).

4. See 29 U.S.C. § 651(b) ("The Congress declares it to be its purpose and policy . . . to assure so far as possible every working man and woman in the Nation safe and healthful working conditions . . . by authorizing the Secretary of Labor to set mandatory occupational safety and health standards . . ."); see also *infra* note 7.

5. See *infra* text accompanying notes 7-10.

6. See *infra* p. 104 and discussion *infra* Part I.F.

OSHA, which is situated within the Department of Labor, holds primary policy-making and enforcement responsibility.⁷ OSHA sets standards, conducts workplace inspections, and issues citations and proposed penalties for violations of workplace safety and health standards. It also funds education and training efforts and state consultation programs, monitors state OSHA performance, and coordinates voluntary compliance initiatives.

The National Institute for Occupational Safety and Health (NIOSH), a division of the Centers for Disease Control within the Department of Health and Human Services, is OSHA's research partner.⁸ Though NIOSH does not set or enforce safety and health standards, it has the same authority to enter workplaces to accomplish its research mission as OSHA has to conduct inspections.⁹ NIOSH also develops non-binding scientific criteria and recommendations for OSHA's use in standard-setting, conducts health hazard evaluations, and provides technical assistance to labor, management, and other government agencies.

The Occupational Safety and Health Review Commission (OSHRC) is an independent, quasi-adjudicatory agency which resolves challenges to OSHA citations, proposed penalties, and abatement deadlines.¹⁰ Its cases are usually initiated by employers who object to OSHA's citations.

Federal safety and health activities are funded from annual Congressional appropriations. Penalty assessments from citations are not credited to OSHA specifically. In contrast, workers' compensation, a state-run program, is funded from employer-paid insurance premiums or other employer assessments. Monies from workers' compensation are not used to fund federal safety and health activities, but may enhance state activities.

1. *Coverage of the OSH Act*

The Act applies to all employers with one or more employees, except state and local governments.¹¹ However, if a state administers an approved state plan, it must also protect local government employees.¹² The Act establishes a separate safety and health regime for federal employees.¹³

The Act's reach is subject to several important restrictions. OSHA may not regulate working conditions if another federal agency does so, even if

7. See *Martin v. Occupational Safety & Health Review Comm'n*, 499 U.S. 144, 147-8 (1991) (holding that reviewing courts should defer to Secretary of Labor when resolving ambiguous and conflicting regulatory interpretations).

8. See 29 U.S.C. § 669(e).

9. See *id.* § 669(b).

10. See *id.* §§ 659, 651(b)(3).

11. See *id.* § 652(5).

12. See *id.* § 667(c)(6). See 29 C.F.R. pt. 1960 (1999). Executive Order 866 imposes additional safety and health duties on federal agency heads. See Exec. Order No. 12,196, 3 C.F.R. 1-2 (1996). The Congressional Accountability Act, 2 U.S.C. § 1301 (1995), provides safety and health protection for employees of the legislative branch of the federal government; it incorporates the substantive requirements of the OSH Act, but provides an enforcement mechanism controlled entirely by Congress.

13. See 29 U.S.C. § 668.

workplace safety and health is only one of that agency's responsibilities.¹⁴ For example, because the Mine Safety and Health Act regulates working conditions in "coal or other mines," mine safety and health lies outside the Act.¹⁵ Likewise, because the Environmental Protection Agency mandates hazard warnings on pesticides, OSHA's authority to limit farmworker pesticide exposure is circumscribed.¹⁶ Similarly, OSHA's authority over vessels regulated by the Coast Guard and over government-owned, contractor-operated, nuclear facilities regulated by the Department of Energy is narrow.¹⁷ The preemption of OSHA also has been interpreted to limit enforcement of the Act in large segments of the railroad and airline industries.¹⁸

Congress further limits OSHA's coverage through its appropriations power. Since the 1970s, Congress has banned routine inspections of employers with fewer than ten employees or enforcement of the Act on small farms without temporary labor camps.¹⁹

2. Federal and State Functions under the OSH Act

The Act federalizes workplace safety and health regulation, but allows states to play a role by authorizing federally-approved state programs so long as they are as effective as the federal program.²⁰ OSHA provides up to fifty percent of the funding for approved state plans. Today, twenty-one states and two territories operate approved plans covering both public and private sector workers.²¹ Two additional states, New York and Connecticut, operate plans covering only public sector employees.

A state plan must meet several requirements to secure OSHA approval. It must designate a state agency responsible for occupational safety and health, assure that state inspectors can enter workplaces, provide adequate staff, and cover employees of the state and its subdivisions.²² In addition,

14. See *id.* § 653(b)(1).

15. See Federal Mine Safety and Health Act of 1977, 30 U.S.C. § 801 (1977).

16. See *Organized Migrants in Community Action v. Brennan*, 520 F.2d 1161, 1166 (D.C. Cir. 1975) (explaining that Federal Environmental Pesticide Control Act encompasses regulation of farm worker exposure to pesticides, thus preempting OSHA's power to act).

17. See H.R. REP. No. 103-825, pt. 1, at 62-63 (1994).

18. See, e.g., *Northwest Airlines*, 8 O.S.H. Cas. (BNA) 1982 (O.S.H.R.C. 1980) (holding that preemption applies to airline maintenance workers because they are within the class of persons intended to be protected under the Federal Aviation Act); *Southern Ry. v. Occupational Safety & Health Review Comm'n*, 539 F.2d 335 (4th Cir. 1976) (holding that, in absence of Federal Railroad Administration regulation of employee safety in rail-way shops and repair facilities, the Act applies to such functions).

19. See BENJAMIN MINTZ, *OSHA: HISTORY, LAW AND POLICY* 680-94 (1984). OSHA continues to conduct inspections, other than general schedule, at small facilities covered by the appropriations riders. See *id.* at 703.

20. See 29 U.S.C. § 667(b), (c).

21. States and territories operating approved plans include: Alaska, Arizona, California, Hawaii, Indiana, Iowa, Kentucky, Maryland, Michigan, Minnesota, Nevada, New Mexico, North Carolina, Oregon, South Carolina, Tennessee, Utah, Vermont, Virginia, Washington, Wyoming, Virgin Islands, Puerto Rico. See 29 C.F.R. pts. 1952.90-394 (2000).

22. See 29 U.S.C. § 667(c).

it must implement standards as effective as OSHA's.²³

Development of a state plan follows several stages. State law must authorize a program submission to OSHA.²⁴ OSHA then must review the program to ensure inclusion of those elements necessary to render the program effective and structurally complete.²⁵ If compliance is adequate, the plan is approved for a three-year developmental period.²⁶ During this time, while OSHA and the state may exercise concurrent jurisdiction, in practice OSHA suspends its jurisdiction.²⁷ To receive final approval, a state plan must demonstrate effective actual operations and adequate staffing levels. OSHA continues to monitor the performance of approved plans²⁸ and may withdraw its approval, but only after affording the state a hearing to defend its performance.²⁹

States may regulate any hazard not covered by an OSHA standard. Where an OSHA standard applies, state law is preempted³⁰ unless the state regulates the hazard under an approved plan.³¹ In such cases, the state's standard must be as effective as OSHA's. State plans may impose standards more stringent than OSHA's, provided they place no undue burden on interstate commerce and are justified by compelling local conditions.³²

B. Standards Development

1. Standard-Setting Procedures

There are three types of standards under the OSH Act: national consensus or established federal standards under section 6(a); emergency temporary standards under section 6(c); and permanent standards under section 6(b).

Section 6(a) initially granted OSHA the authority to adopt existing federal standards and privately-established voluntary consensus standards without notice and comment.³³ Before this authority expired in 1973, OSHA adopted hundreds of consensus rules as mandatory standards. These rules represent the vast majority of OSHA regulations in effect today.

23. See *id.*

24. See *id.* § 667(b).

25. See *id.* § 667(c).

26. See *id.* § 667(e).

27. See *id.* § 667(e); 29 C.F.R. 1954.3 (2000); GENERAL ACCOUNTING OFFICE, CHANGES NEEDED IN THE COMBINED FEDERAL STATE APPROACH (1994).

28. See 29 U.S.C. § 667(f).

29. See *id.* § 667(g).

30. See *Gade v. National Solid Waste Management Ass'n*, 505 U.S. 88 (1992).

31. See *Industrial Truck Ass'n v. Henry*, 125 F.3d 1305, 1311 (9th Cir 1997) (holding that OSHA standards preempt all state occupational and health regulations not submitted in state plans).

32. See 29 U.S.C. § 667(c)(2); Approval: California State Standard on Hazard Communication Incorporating Proposition 65, 62 Fed. Reg. 31,159 (1997) (observing that any condition of concern to state officials might justify local regulation).

33. See 29 U.S.C. § 655(a) (describing consensus standards).

Most have not been updated since 1971 and many are out of date.³⁴

Section 6(c) authorizes OSHA to issue emergency temporary standards (ETSs) without notice and comment rulemaking.³⁵ An ETS remains in effect for six months. When published, it serves as a proposed permanent standard.³⁶ The Act provides that a final standard replacing an ETS should be published within six months, but that timetable has proven unrealistic.³⁷ Courts regard ETSs with skepticism because they are promulgated without notice and comment. In fact, no ETS has ever withstood court challenge.³⁸ For this reason, OSHA rarely issues ETSs.

An ETS must be directed toward a “grave danger.”³⁹ Courts have interpreted “grave danger” to mean a life-threatening hazard⁴⁰ and have suggested it must be one likely to materialize within the six-month period an ETS is in effect.⁴¹ An ETS must also be *necessary* to protect workers from that grave danger. An ETS is not necessary unless current exposure threatens grave danger.⁴²

OSHA issues permanent standards under section 6(b).⁴³ Standard-setting may be initiated when OSHA or NIOSH finds a new rule warranted or when a private party petitions OSHA for rulemaking.⁴⁴ Hazards are typically identified for standard-setting after scientific research or experience indicates a need. OSHA then reviews the issue and meets with interested parties (e.g., labor, business, public health professionals) and with other federal agencies, such as the Environmental Protection Agency (EPA). It may circulate draft proposed standards or hold public meetings, and also may appoint an advisory committee to recommend a standard.⁴⁵

34. In 1989, OSHA completed a generic rulemaking aimed at updating the exposure limits for over 400 toxic substances first adopted in 1971. That effort was invalidated by the 11th Circuit. See AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir. 1992).

35. See 29 U.S.C. § 655(c)(1).

36. See *id.* § 655(c)(2).

37. See *id.* § 655(c)(3).

38. Several ETSs have become effective when no challenge was filed. For example, the Sixth Circuit has denied a motion to stay the effectiveness of an ETS regulating acrylonitrile. See MINTZ, *supra* note 19, at 126-129.

39. International Union v. Donovan, 590 F. Supp. 747 (D.D.C. 1984) (stating that an ETS must address grave danger, even though permanent standard may address merely significant risk). Courts have required that a consensus exist that the substance an ETS deals with poses a hazard to workers. See Dry Colors Mfrs. Ass'n v. Department of Labor, 486 F.2d 98 (3d Cir. 1973) (applying 29 U.S.C. § 655 to ETS regulations).

40. See Florida Peach Growers Ass'n v. Department of Labor, 489 F.2d 120, 132 (5th Cir. 1974) (defining “grave danger” as the potential for incurable, permanent or fatal consequences).

41. See Asbestos Info. Ass'n v. OSHA, 727 F.2d 415, 422 (5th Cir. 1984).

42. See International Union v. Donovan, 590 F. Supp. at 756.

43. See 29 U.S.C. § 655(b).

44. See *id.* § 655(b)(1).

45. An advisory committee recommends safety and health standards to OSHA. See *id.* Its membership must reflect interests described in the Act, such as labor, business, and state agencies. See *id.* § 656(a). The National Advisory Committee Act imposes additional procedural requirements, such as a published notice of meetings, open meetings, and transcribed proceedings. See *id.*

OSHA standards may be adopted under section 6(b) only after notice and comment. Prior to adoption, OSHA must publish the proposed standards in the Federal Register and allow at least thirty days for comments.⁴⁶ However, substantially longer comment periods are typical. Proposals describe anticipated benefits and anticipated economic and technological consequences to regulated firms. If a public hearing is sought, OSHA must hold one before an administrative law judge, allowing testimony by all requesting parties and providing the opportunity for cross-examination.⁴⁷ In practice, OSHA also accepts post-hearing comments and briefs. It then reviews the record and develops a final rule. OSHA must supplement the final rule with explanations, published in the Federal Register, of how any new standard that differs from an existing consensus standard better effectuates the Act's purposes.⁴⁸ The preamble must address significant issues raised during the rulemaking and OSHA's resolutions of those issues.⁴⁹ Rulemaking should conclude within six months,⁵⁰ but courts treat this deadline as precatory.⁵¹ In practice, the development of standards may span a decade.

Once issued, standards are subject to review in the federal appeals courts. Many standards are controversial and judicial review frequently is sought. Courts require substantial record evidence to support OSHA's factual findings, but allow more leeway for decisions based on policy inferences.⁵² Unless a court orders otherwise, standards go into effect while challenges are pending.⁵³

The Administrative Procedure Act (APA), the general statute governing agency procedures, requires prompt action by agencies on matters before them.⁵⁴ OSHA is sometimes challenged for failing to issue a standard in a

46. See 29 U.S.C. § 655(b)(2).

47. See 29 C.F.R. § 1911.15(a)(3) (2000). At least one court has suggested that these additional procedural safeguards are implicitly required by the hybrid rulemaking procedures established under the Act. See *Industrial Union Dep't v. Hodgson*, 499 F.2d 467 (D.C. Cir. 1974).

48. See 29 U.S.C. § 655(b)(8), (e).

49. The preamble must reveal the policy issues confronted by an agency during rulemaking and its reactions to them. See *Automotive Parts & Accessories Ass'n v. Boyd*, 407 F.2d 330, 338 (D.C. Cir. 1968). An agency must respond to comments it receives and explain its rule by reference to them. See *Rodway v. Department of Agric.*, 514 F.2d 809, 817 (D.C. Cir. 1975).

50. See 29 U.S.C. § 655(b)(4).

51. See *National Ass'n of Hispanic Am. Citizens v. Marshall*, 626 F.2d 882, 888 (D.C. Cir. 1979) (commenting that § 655(b) timetables "are not etched in stone").

52. See 29 U.S.C. § 655(f). The substantial evidence test imposes a higher burden on OSHA to justify its rules than the courts generally require of agencies engaged in informal rulemaking. See *Associated Indus. of N.Y. v. Department of Labor*, 487 F.2d 342 (2d Cir. 1973); *Industrial Union Dep't v. Hodgson*, 499 F.2d at 467 (concluding that OSHA policy decisions are not susceptible to factual verification and can be judged only by whether they are rationally related to the agency's goals). But see *AFL-CIO v. OSHA*, 965 F.2d 962 (11th Cir. 1992) (applying the more stringent substantial evidence test to all OSHA decisions).

53. See 29 U.S.C. § 655(f).

54. See 5 U.S.C. § 706(1). The APA authorizes courts to compel any agency action unlawfully withheld or unreasonably delayed. See *id.* In determining whether there has

timely fashion. Courts have hastened rulemaking in some cases and rejected efforts to speed regulation in others.⁵⁵

2. Criteria for Standards

Before issuing a permanent standard, OSHA must find that significant and ameliorable risks exist in the workplace.⁵⁶ To evaluate risk, OSHA generally relies on workplace studies or extrapolates from studies of effects observed in animals or from human exposures above workplace levels. When regulating toxic or other health hazards posing significant risks, OSHA must adopt the feasible standard that best protects employees.⁵⁷ For safety hazards, OSHA need not adopt the most protective standard.⁵⁸

Substance-specific health standards usually require engineering and work practice controls for compliance. Though personal protective equipment and biological monitoring may be cheaper, OSHA deems them less effective. In fact, courts have upheld OSHA's preference for engineering and work practice controls.⁵⁹

Standards must be both technologically and economically feasible.⁶⁰ A standard is technologically feasible if the most advanced plants usually

been unlawful withholding or unreasonable delay, a court should consider time elapsed since the duty to act arose, reasonableness of the delay, and consequences of the delay. See *Cutler v. Hayes*, 818 F.2d 879 (D.C. Cir. 1987). In their decisions, courts usually defer to an agency's rulemaking timetable. *See id.*

55. Courts have relied on the APA to speed OSHA's completion of standards governing formaldehyde, ethylene oxide, and cadmium, but have declined to intervene in cases involving chromium, benzene, and second-hand cigarette smoke. Compare *International Union v. Donovan*, 756 F.2d 162 (D.C. Cir. 1985) (implementing orders directing OSHA to speed consideration of formaldehyde regulation), and *Public Citizen Health Research Group v. Auchter*, 702 F.2d 1150 (D.C. Cir. 1983) (directing OSHA to publish a proposed ethylene oxide standard thirty days hence), and *Public Citizen Health Research Group v. Brock*, 823 F.2d 626 (D.C. Cir. 1987) (criticizing OSHA for failing to adopt a short-term exposure limit for ethylene oxide in a timely fashion), and *In re International Chem. Workers Union*, 958 F.2d 1144 (D.C. Cir. 1992) (ordering OSHA to publish a cadmium standard by a certain date), with *Oil, Chem. & Atomic Workers Union v. OSHA*, 145 F.3d 120 (3d Cir. 1998) (declining to compel chromium standard), and *Action for Smoking and Health v. OSHA*, 953 F.2d 687 (D.C. Cir. 1992) (refusing to direct OSHA to expedite consideration of environmental tobacco smoke regulations), and *United Steelworkers of Am. v. Rubber Mfrs. Ass'n*, 783 F.2d 1117 (D.C. Cir. 1986) (accepting OSHA's timetable for completion of benzene standard).

56. See *Industrial Union Dep't v. American Petroleum Inst.*, 448 U.S. 607, 639-40 (1980) (suggesting that risks of 1/1000 are plainly significant, and authorizing OSHA to err on the side of the worker).

57. See 29 U.S.C. § 655(b)(5); *American Textile Mfrs. Inst. v. Donovan*, 452 U.S. 490, 509, 540 (1981) (defining "feasible" as "capable of being done" instead of as requiring cost benefit analysis).

58. A safety standard usually addresses acute, accidental harms. See *International Union v. OSHA*, 938 F.2d 1310 (D.C. Cir. 1991).

59. See *American Textile Mfrs. Inst. v. Donovan*, 452 U.S. 490 (1981); *American Smelting & Refining Co. v. Occupational Safety & Health Review Comm'n*, 501 F.2d 504, 515 (8th Cir. 1974) (holding that it is reasonable for the Secretary of Labor to rely on effective and efficient air sampling, rather than sophisticated biological monitoring, when determining health hazards).

60. See *supra* note 57 and accompanying text.

could meet it.⁶¹ Standards thus can force an industry as a whole to develop and diffuse new technology.⁶² A standard is economically feasible provided it poses no long-term threat to an industry's profitability or competitive structure, even if it is otherwise financially burdensome. When determining feasibility, OSHA only considers the impact of compliance costs on consumer prices and industry profitability.⁶³

In deciding whether to regulate toxins, OSHA may not use cost-benefit analysis, which generally yields less protection than would feasibility analysis.⁶⁴ Accordingly, OSHA may not compare the dollar value of risks reduced (i.e., lives saved or injuries averted) to the dollar value of compliance costs; rather, it must reduce significant risk so long as such reductions are economically and technically feasible. In contrast, OSHA may use cost-benefit analysis for safety regulations, but is not required to do so.⁶⁵ Conclusions about significant risk and feasibility must rest on the "best available evidence."⁶⁶ However, because information about chronic hazards is often imperfect, OSHA may regulate in the face of scientific uncertainty.⁶⁷

3. Restraints on Standard-Setting

Administrative requirements outside the Act also affect OSHA rulemaking. The Regulatory Flexibility Act requires OSHA to assess the impact of its standards on "small entities" and to explain steps taken to minimize those effects.⁶⁸ These assessments are subject to judicial review.⁶⁹ The Small Business Regulatory Enforcement Fairness Act requires OSHA to solicit views from small businesses potentially affected

61. See *United Steelworkers of Am. v. Marshall*, 647 F.2d 1189, 1265 (D.C. Cir. 1980), *cert. denied*, 453 U.S. 913 (1981).

62. See *United Steelworkers of Am. v. Marshall*, 647 F.2d at 1264.

63. *See id.* at 1265.

64. See *American Textile Mfrs. Inst. v. Donovan*, 452 U.S. at 504-05. On the other hand, OSHA must select the most cost-effective method of achieving its employee-protective goal. See *Building & Constr. Trades Dep't v. Brock*, 838 F.2d 1258, 1269 (D.C. Cir. 1986) (finding rationale supporting cost-effectiveness analysis of regulations compelling).

65. See *International Union v. OSHA*, 938 F.2d 1310 (D.C. Cir. 1991) (concluding that the § 6(b)(5) requirement that OSHA maximize employee health does not apply to safety regulation). See also *Control of Hazardous Energy*, Supplemental Statement of Reasons, 58 Fed. Reg. 16612 (1993).

66. 29 U.S.C. § 655(b)(5).

67. See generally *Society of Plastics Indus. v. OSHA*, 509 F.2d 1301 (2nd Cir. 1975) (holding that OSHA should regulate when scientific evidence "points" in one direction, but is not conclusive); *United Steelworkers of Am. v. Marshall*, 647 F.2d at 1266 (holding that Congress did not expect OSHA to await the "Godot of scientific certainty").

68. See 5 U.S.C. § 601.

69. See *id.* § 609. Under the Regulatory Flexibility Act, the Secretary must assess the impact of alternative compliance approaches on small business and consider ways to reduce this impact. The Regulatory Flexibility Act neither overrides OSHA's duty to protect employee health, nor requires it to adopt different standards for small and large businesses. See *Associated Fisheries of Me. v. Daley*, 127 F.3d 104 (1st Cir. 1997).

by a standard and to modify it if appropriate.⁷⁰ The Paperwork Reduction Act requires OSHA to estimate and minimize record-keeping burdens. It also authorizes the Office of Management and Budget to determine whether record-keeping or reporting requirements have "practical utility."⁷¹ In addition, Congress may veto agency rules—including OSHA standards—through legislation. The agency may not readopt revoked rules.⁷² Furthermore, for any rule with a likely aggregate impact above \$100 million, OSHA is required by Executive Order to regulate cost effectively and to justify benefits against costs.⁷³

C. Ensuring Compliance

Employers must comply both with specific standards and the general duty that workplaces be "free from recognized hazards likely to cause death or serious physical injury."⁷⁴ Employer violations may be penalized. While employees are also required to comply with standards, no penalties may be imposed against them for noncompliance.⁷⁵

1. Violations and Defenses

A standard is violated when employees are exposed to a regulated hazard about which the employer knew or should have known.⁷⁶ An employer also is responsible for exposures of employees of other firms present on the site, if the employer either created or controlled access to the hazard.⁷⁷

An employer breaches the general duty clause when a firm's employees are exposed to hazards recognized as harmful by the firm or its industry that are likely to cause death or serious harm unless all feasible abatement steps have been taken.⁷⁸ Employers cannot be cited for general duty violations where a specific standard applies, unless they know the

70. See Pub. L. No. 104-121, 1996 U.S.C.C.A.N. (110 Stat.) 857 (codified as amended in scattered sections of 5 U.S.C., 15 U.S.C., and 28 U.S.C.).

71. 44 U.S.C. § 3501. A regulation may not be enforced unless OMB finds it has a practical utility. *See id.*

72. See 5 U.S.C. § 802.

73. See Exec. Order No. 12,866; *see also* American Textile Mfrs. Inst. v. Donovan, 452 U.S. 490, 540 (1981).

74. 29 U.S.C. § 654(a)(1).

75. *See id.* § 654(b).

76. See generally Brennan v. OSHRC (Alsa Lumber Co.), 511 F.2d 1139 (9th Cir. 1975). The Secretary's burden is fourfold: (1) a specific standard applies, (2) the employer fails to comply, (3) employees were exposed to the hazard, and (4) the employer knew or had constructive knowledge of the condition. *See id.*

77. See Anning-Johnson Co. v. Occupational Safety & Health Review Comm'n, 516 F.2d 1081, 1091 (1975); Grossman Steel & Aluminum Corp., 4 O.S.H. Cas. (BNA) 1185 (O.S.H.R.C. 1976). *See also* BOKAT & THOMPSON, OCCUPATIONAL SAFETY AND HEALTH LAW 411 (1988).

78. See National Realty & Constr. Co. v. Occupational Safety & Health Review Comm'n, 489 F.2d 1257, 1261 (D.C. Cir. 1973). The general duty clause applies only to recognized hazards, but feasible abatement is required without regard to whether another employer or the firm's industry recognize the utility of such measures. *See id.*

standard to be inadequate.⁷⁹

Certain employer defenses to violations have been recognized by the courts. For instance, courts excuse employer noncompliance where compliance would pose a greater hazard than noncompliance and a variance application has been filed or its filing would be futile.⁸⁰ The variance application requirement sharply curtails this defense.

The courts also excuse noncompliance if it is due to unpreventable employee misconduct. If the employer can show that employee misconduct breached safety rules that were effectively communicated and uniformly enforced, the courts will find no violation.⁸¹

The courts likewise have found that there is no violation if compliance is infeasible. Compliance is infeasible if it is impossible or impedes business performance. Additionally, to qualify for this defense, the employer either must provide alternative employee protections or those protections must be unavailable.⁸² The infeasibility defense does not apply where compliance would merely be difficult.

Finally, courts excuse noncompliance on multi-employer work sites for employers who neither create nor control a given hazard.⁸³ On such sites, it may be difficult to identify the employer capable of either abating a hazard or restricting employee access. Endemic to construction, this issue increasingly arises in manufacturing as firms subcontract tasks formerly performed in-house.⁸⁴ An employer who neither creates nor controls a hazard must nevertheless take steps to protect its employees from identifiable harm.⁸⁵ In addition, professionals such as architects or engineers violate the Act if they contractually have assumed responsibility for ensuring safety⁸⁶

79. See *International Union v. General Dynamics*, 815 F.2d 1570 (D.C. Cir. 1987) (holding that the Act requires application of the general duty clause to hazardous conditions not adequately controlled by a specific standard where the employer knows that employees remain in danger).

80. See *General Elec. Co. v. Secretary of Labor*, 576 F.2d 558 (2d Cir. 1978). An employer seeking a permanent variance must demonstrate to OSHA that its alternative compliance will provide protection "at least as effective" as would compliance. See 29 U.S.C. § 655(d). OSHA must notify affected employees of the variance application, may conduct on-site investigations and must hold a hearing, if requested, before granting a variance. See *id.* For purposes of the greater-hazard defense, an application for a variance is considered futile where the job will likely end before the application is considered, such as at a construction site. See *id.*

81. See *New York State Elec. & Gas Corp. v. Secretary of Labor*, 88 F.3d 98, 106 (2d Cir. 1996).

82. See *Dun-Par Engineered Form Co.*, 12 O.S.H. Cas. (BNA) 1949 (O.S.H.R.C. 1986). Initially, the courts excused noncompliance only for impossibility, but the standard is now infeasibility. See *id.* See also *United Steelworkers of Am. v. Marshall*, 647 F.2d at 1273.

83. See *supra* note 77 and accompanying text.

84. See *IBP, Inc. v. Herman*, 144 F.3d 861 (D.C. Cir. 1998) (refusing to apply multi-employer work site doctrine in the manufacturing context).

85. See *Anning-Johnson Co. v. Occupational Safety & Health Review Comm'n*, 516 F.2d at 1090-91.

86. See *CH2M Hill Central, Inc.*, 17 O.S.H. Cas. (BNA) 1961 (O.S.H.R.C. 1997), *rev'd*, 192 F.3d 711 (7th Cir. 1999) (holding an engineering firm in violation because it

2. Inspections

OSHA's main enforcement mechanism is work site inspections, of which there are five types: complaint, general schedule, "fatality/catastrophe," imminent danger, and follow-up inspections. Complaint inspections are generated by written complaints, filed by employees or their representatives, alleging job hazards.⁸⁷ General schedule inspections target high hazard sites. However, data limitations constrain OSHA's ability to target establishments based on actual injury experience. Fatality/catastrophe inspections follow incidents resulting in employee death or hospitalization of three or more employees. Imminent danger inspections follow upon notice from any party of such danger. Follow-up inspections monitor abatement of previously-cited violations.

OSHA conducts unannounced inspections.⁸⁸ The Supreme Court held that employers have reasonable expectations of workplace privacy. Therefore, the Constitution prohibits inspections without either employer consent or a warrant.⁸⁹ The Constitution further requires that employee complaint inspections be limited to issues raised in complaints.

Upon arrival at the work site, an inspector presents Department of Labor credentials. An inspection begins with an opening conference, in which the inspector explains the inspection's purpose and its scope. The inspector may request that the employer produce safety and health records. Employee representatives have a right to attend the opening conference with the employer or, if the employer insists, a separate one.

While on site, the inspector conducts a walkaround, which employer and employee representatives have the right to join.⁹⁰ If no employee repre-

had a contractual right to oversee safety); Simpson, Gumpertz, & Heger, Inc., 15 O.S.H. Cas. (BNA) 1851, 1867, 1869-70 (Rev. Comm. 1992), *aff'd*, 3 F.3d 1 (1st Cir. 1993) (holding an engineering firm not in violation when its work had little relationship to the hazards).

87. OSHA must initiate inspections in response to formal complaints. *See* 29 U.S.C. § 656(f). OSHA does not routinely initiate inspections in response to phone and other informal complaints or in response to complaints from non-employees. *See id.* But see L.R. Wilson & Sons, Inc., 17 O.S.H. Cas. (BNA) 2059 (O.S.H.D. 1997), *aff'd in part & rev'd in part, remanded*, 134 F.3d 1235 (4th Cir. 1998) (initiating inspection in response to the Assistant Secretary's observations).

88. OSHA may not give advance notice of an inspection, except in limited circumstances. *See* 29 U.S.C. § 666(f).

89. In *Marshall v. Barlow's Inc.*, 436 U.S. 307 (1978), the Supreme Court ruled that the Fourth Amendment's prohibition against unreasonable searches and seizures requires OSHA to seek a search warrant from a neutral magistrate before conducting a nonconsensual workplace inspection. To obtain a warrant, OSHA must demonstrate either that it has probable cause to believe a violation exists or that the workplace was selected for inspection on the basis of neutral criteria. *See id.* at 320. This form of "administrative" probable cause imposes less burden on OSHA than demonstrating probable cause for a criminal warrant. NIOSH too must obtain a warrant before entering a workplace over an employer's objection. *See BOKAT & THOMPSON, supra* note 77, at 704-05.

90. Most courts have interpreted an employee's walkaround rights as designed to assist the inspector and may be curtailed at the inspector's discretion. *But see Chamber of Commerce v. OSHA*, 636 F.2d 464 (D.C. Cir. 1980) (holding that the time spent

sentative is available for the walkaround, as is often the case in non-union facilities, the inspector is expected to conduct interviews with employees.

The inspection concludes with a closing conference, in which the inspector informs the employer of violations observed. The employer may explain noncompliance, urging against unwarranted citations. Employee representatives have a right to attend this conference as well, or a separate one if the employer insists.

3. Penalties

For observed violations, OSHA issues citations within six months. A citation must identify the standard violated, characterize the violation, propose a penalty, and set an abatement deadline. The Secretary must cite all observed violations, other than de minimis violations,⁹¹ or grant a variance for alternative compliance achieving full protection.⁹²

Each citation is classed by severity: de minimis, non-serious, serious, or willful. De minimis violations are those with no relationship to safety and health.⁹³ No penalty is assessed and there is no abatement duty. Non-serious violations are for hazards affecting health and safety but which are unlikely to cause death or serious injury. Penalties are discretionary and may reach \$7000 per violation, but average approximately \$800 per viola-

accompanying an OSHA inspector was for the employee's benefit and, therefore, should not be considered hours worked under the Fair Labor Standards Act).

91. Section (a) provides that "if, upon inspection or investigation, the Secretary or his authorized representative believes that an employer has violated a requirement of section 654 of this title, of any standard, rule or order promulgated pursuant to section 655 of this title, . . . he shall with reasonable promptness issue a citation to the employer." 29 U.S.C. § 658(a) (emphasis added). Other sections also indicate a mandatory duty to cite observed violations. First, section (f)(2) permits employees during inspections to notify inspectors, in writing, of violations and requires informal review of charges that inspectors failed to cite observed violations. See 29 U.S.C. § 657(f)(2). See also 29 C.F.R. § 1903.14(c). These required procedures make sense only if the obligation to cite observed violations is mandatory. Second, any workplace visit by the Secretary or the Secretary's representative constitutes an inspection under the Act, triggering the mandatory duty to issue citations and appropriate penalties. Section (a) authorizes the Secretary, upon presenting appropriate credentials, to enter a workplace "without delay" and "to inspect and investigate." 29 U.S.C. § 657(a).

92. Section 9(a) authorizes the Secretary to issue "notices in lieu of citations" only for de minimis violations: those with no direct relation to safety and health. For this category, no penalties or abatement duties may be imposed. See 29 U.S.C. § 658(a). See also 29 C.F.R. § 1903.14(a). Section 6(d) authorizes a permanent variance from a standard "after an opportunity for inspection where appropriate" if an employer demonstrates that alternative compliance approaches "will provide employment and places of employment to his employees which are as safe and healthful as those which would prevail if he complied with the standard." 29 U.S.C. § 655(d). An employer may receive a variance even where compliance has not been achieved. Compare 29 U.S.C. § 655(d) (authorizing the Secretary to issue a permanent variance, after an opportunity for inspection, if an employer demonstrates that alternative compliance means will provide employment as safe and healthful as that provided by the standard), with 29 U.S.C. § 655(b)(6)(a) (authorizing the Secretary to issue a temporary variance but not to conduct an inspection to verify employer's representations).

93. See 29 U.S.C. § 658(a).

tion.⁹⁴ Serious violations are for hazards likely to cause death or serious injury.⁹⁵ Penalties are mandatory and may reach \$7000 per violation. Willful violations denote intentional employer disregard for safety and health or indifference to the Act's requirements.⁹⁶ They carry a mandatory minimum penalty of \$5000 per violation, but penalties may reach as much as \$70,000.⁹⁷ OSHA may levy additional fines for repeat violations, which are substantially similar to violations in prior OSHRC orders. Daily penalties may lie for failure to abate within the time allowed.⁹⁸

The Secretary must consider four factors in proposing penalties: employer size, severity of violation, good faith, and prior violation history. The Act is silent on the weighing of these factors, affording the Secretary discretion in this area. For serious or willful violations, the Secretary may levy penalties for each episode of employee exposure. This raises permissible fines, augmenting deterrence.⁹⁹ OSHRC is the final arbiter of penalties proposed by OSHA.¹⁰⁰ The Secretary has unreviewable discretion to withdraw citations, reach settlements, characterize violations, and reduce or eliminate penalties.¹⁰¹ Though the Secretary must cite all violations and penalize serious or willful ones, cases can be settled on any terms.

Unless an employer contests a citation, it becomes a final OSHRC order, enforceable in federal court.¹⁰² To bring a contest, an employer must file a notice within 15 days of the citation.¹⁰³ Administrative law judges (ALJs) of OSHRC have authority to conduct administrative trials of contested cases. At the hearing, both sides may conduct discovery, introduce evidence, call witnesses, and cross-examine adverse witnesses. After the hearing, parties may file briefs amplifying their arguments. The Secretary bears the burden of proving employer violations. An ALJ decision becomes final thirty days after issuance, unless OSHRC grants review.¹⁰⁴

OSHRC has discretion to select cases for review. It may affirm, modify, or reverse ALJ decisions. While an OSHRC challenge is pending,

94. See AFL-CIO, DEPARTMENT OF OCCUPATIONAL SAFETY AND HEALTH, DEATH ON THE JOB: THE TOLL OF NEGLECT 17 (9th ed., April 2000).

95. See 29 U.S.C. § 666(k).

96. See United States v. Dye Construction Co., 510 F.2d 78, 82 (10th Cir. 1975) (holding "evil motive" not an essential element of willfulness).

97. See 29 U.S.C. § 666(a).

98. See 29 U.S.C. § 666(d). An employer that cannot timely abate has two extension options. It can seek a temporary variance if noncompliance stems from lack of materials or equipment. See 29 U.S.C. § 655(b)(6)(A). Alternatively, it can petition for modification of the abatement date. See 29 U.S.C. § 659(c).

99. Compare Caterpillar, Inc., 15 O.S.H. Cas. (BNA) 2153 (O.S.H.R.C. 1993) (authorizing separate penalties for each instance of violations requiring individualized abatement action), with Metzler v. Arcadian Corp., 1997 U.S. App. Lexis 12693 (5th Cir. 1997) (prohibiting separate penalties based on individual employee exposures under the general duty clause).

100. See 29 U.S.C. § 666(j); Reich v. Arcadian Corp., 110 F.3d 1192 (5th Cir. 1997).

101. See Sydney A. Shapiro & Randy S. Rabinowitz, *Punishment Versus Cooperation in Regulatory Enforcement: A Case Study of OSHA*, 49 ADMIN. L. REV. 713, 731 (1997).

102. See 29 U.S.C. § 659(a).

103. See id. § 659(c).

104. See id. § 661(j).

employer abatement obligations are tolled.¹⁰⁵ Final OSHRC decisions are reviewable in federal appeals courts, which must affirm decisions supported by substantial evidence.¹⁰⁶ Further, OSHRC and the courts are required to defer to OSHA's interpretation of safety and health regulations.¹⁰⁷

Employees may participate in employer-initiated OSHRC challenges by electing party status.¹⁰⁸ However, this does not alter the prerogatives of the Secretary and employer to settle matters on whatever terms they choose.¹⁰⁹ Employees may initiate challenges only to the reasonableness of abatement periods,¹¹⁰ and may not challenge an abatement that OSHA seeks.¹¹¹

Even when OSHA identifies an imminent danger, it cannot force immediate abatement or removal of employees from exposure. Most employers voluntarily correct perceived imminent dangers. If an employer refuses, the Secretary must obtain an injunction in federal court to change conditions which "could reasonably be expected to cause death or serious physical harm immediately or before the imminence of such danger can be eliminated."¹¹² OSHA must demonstrate real risk of injury or death to enjoin an imminent danger.¹¹³ While an imminent danger remains extant, employees have a protected right to refuse work.¹¹⁴

OSHA can seek criminal penalties when willful violations of specific standards result in employee deaths.¹¹⁵ General duty clause violations, even if willful or intentional, are not criminal. Criminal prosecution also may lie against someone who provides advance notice of an OSHA inspection or who falsely reports information to OSHA.¹¹⁶ Only firms, not individuals, are subject to criminal prosecution.¹¹⁷ Federal prosecutions under the Act are rare. However, State prosecutions for crimes like man-

105. See *id.* § 657(b).

106. See *id.* § 660(a).

107. See *Martin v. Occupational Safety & Health Review Comm'n*, 499 U.S. 144 (1991) (holding that the reviewing courts should defer to the Secretary of Labor when resolving ambiguous and conflicting regulatory interpretations).

108. See 29 U.S.C. § 659(c).

109. See *Cuyahoga Valley Ry. v. United Transp. Union*, 474 U.S. 3, 7-8 (1985) (holding that the Secretary has unreviewable discretion to withdraw citations).

110. See 29 U.S.C. § 659(c).

111. See *Local 588*, 4 O.S.H. Cas. (BNA) 1243, 1244 (O.S.H.R.C. 1976), *aff'd*, 557 F.2d 607 (7th Cir. 1977).

112. 29 U.S.C. § 663(a).

113. See *Secretary of Labor v. Dayton Tire*, 853 F. Supp. 376, 380 (W.D. Okl. 1994) (holding that OSHA must show that a reasonable person would conclude that a real risk of injury or death exists because of lookout/tagout violations).

114. See *Marshall v. Whirlpool Corp.*, 445 U.S. 1, 21 (1980).

115. See 29 U.S.C. § 666(e).

116. See generally Lynn K. Rhinehart, *Would Workers be Better Protected if They Were Declared an Endangered Species?: A Comparison of Criminal Enforcement under the Federal Workplace Safety and Environmental Laws*, 31 AM. CRIM. L. REV. 351 (1994).

117. See *United States. v. Doig*, 950 F.2d 411, 412-13 (7th Cir. 1991) (holding that Congress did not intend to subject employees to charges of aiding and abetting employers in criminal violations under § 666(e)).

slaughter and reckless endangerment may occur.¹¹⁸

4. Alternative Compliance

Because OSHA's limited resources leave most workplaces uninspected, OSHA, in recent years, has explored various cooperative enforcement alternatives. These leverage OSHA's limited resources, offering employers who invest in safety and health a partnership with OSHA.¹¹⁹ Four main alternative approaches have been explored. Of those, three have been implemented and one is subject to ongoing debate.

First, OSHA funds ninety percent of state programs consulting with firms of 250 or fewer employees regarding compliance obligations.¹²⁰ OSHA grants one-year random inspection exemptions to employers who correctly identify violations and voluntarily develop safety and health programs.¹²¹ Firms using a consultant receive reduced penalties in subsequent inspections.¹²² Congress has supported state consultation programs with steadily increased funding and recently codifying the consultation program.¹²³

Second, OSHA's Voluntary Protection Program (VPP) recognizes employers with exemplary safety and health programs. Employers participating in VPP receive exemptions from general schedule inspections.¹²⁴ Before employers can enjoy VPP benefits, their employees must consent to their company's VPP participation. Also, OSHA periodically reevaluates VPP eligibility.

Third, OSHA has tested a Cooperative Compliance Program (CCP). CCP encourages high-incidence firms to adopt programs meeting specified safety and health criteria. OSHA removes cooperating employers from priority inspection lists.¹²⁵ Conversely, non-cooperating employers are

118. See *Illinois v. Chicago Magnet Wire*, 534 N.E.2d 962, 966-70 (Ill. 1989).

119. See generally Shapiro & Rabinowitz, *supra* note 101.

120. See OSHA Instruction TED 3.5B (page V-3 item D, *Scope of Request*), Dec. 9, 1996, issued by the Office of Cooperative Programs [hereinafter OSHA Instruction TED 3.5B]. Consultants are not compliance inspectors, but they must refer to OSHA any imminent danger they observe and which an employer refuses immediately to abate. See 40 Fed. Reg. 21,935-36 (1975). Consultants must also seek elimination of serious hazards within a reasonable time or else report the refusals to abate. *See id.*

121. See 49 Fed. Reg. 25,082 (1984). OSHA refers to this as its Safety and Health Achievement Recognition Program. See OSHA Instruction TED 3.5B, *supra* note 120, at X-8 item D.

122. See 29 C.F.R. § 1908.7(c)(4) (1999).

123. See 112 Stat. 638, Pub. L. No. 105-197 (1998).

124. See 47 Fed. Reg. 29,025 (1982). Employers may be inspected in response to employee complaints or after fatalities or catastrophes. *See id.*

125. The initial pilot of the CCP Program relied on workers' compensation data rather than employer specific injury and illness data to target employers for participation. This targeting scheme was biased against of larger employers who likely would have higher claims incidence (but possibly not higher rates of illness and injury). Since OSHA began obtaining employer-specific injury and illness data from employers (1997), it has relied upon employer-specific data to identify high hazard employers. See RANDY S. RABINOWITZ, *OSH LAW* 72-73 (Cum. Supp. 1999).

inspected. This program has been invalidated by the courts.¹²⁶

Fourth, some advocate joint labor-management committees to enhance job safety and health. The National Labor Relations Act (NLRA) prohibits such committees if they are dominated by management or subject to employer interference.¹²⁷ However, where employer activity in support of a joint committee is mandated by law or established through collective bargaining, there is no NLRA violation.¹²⁸ Committees may exist in non-union workplaces if employees select their representatives. Many enterprises have established joint committees through collective bargaining. Moreover, thirteen states mandate joint committees for some or all employers.¹²⁹ For instance, Oregon's fatality and injury rates fell sharply after its 1990 requirement took effect, with worker compensation premiums falling by 12.2% in 1991, 11% in 1992, and 11.4% in 1993.¹³⁰ Whether this reduction can be attributed to the joint committee requirement is unclear.¹³¹

5. Employee Rights

Employees have many rights under the Act, but limited means to enforce them. Though they must comply with OSHA standards and regulations, OSHA may not cite or penalize them for violations.¹³² Employees enjoy a right to participate in inspections, exercised most vigorously at unionized sites. They may review relevant standards and the results of exposure monitoring.¹³³ If an employee files a formal complaint alleging

126. See *Chamber of Commerce v. Herman*, 174 F.3d 206 (D.C. Cir. 1999).

127. See 29 U.S.C. § 158(a)(2) (1994); see also *Electromation, Inc. and Int'l Bd. of Teamsters, Local Union No. 1049, AFL-CIO*, 309 N.L.R.B. No. 163 (Dec. 16, 1992); *Electromation, Inc. v. N.L.R.B.*, 35 F.3d 1148, 1158 (7th Cir. 1994); *E.I. DuPont de Nemours & Co.*, 311 N.L.R.B. No. 88 (May 28, 1993).

128. See N.L.R.B. General Counsel's Memorandum in *Vanalco, Inc.*, 1996 N.L.R.B. G.C.M. Lexis 24 (Aug. 21, 1996).

129. See generally Greg Watchman, *Safe and Sound: The Case for Safety and Health Committees under OSHA and NLRA*, 4 CORNELL J.L. & PUB. POL'Y (1994). See, e.g., Connecticut (Worker's Compensation Act 28(a), 1993 Conn. Acts 228, Pub. Act No. 93-228 (employers of 25 or more employees or a higher than average injury and illness rates)); Florida (Act of Nov. 24, 1993, 1994 Fla. Laws ch. 93-415 (employers of 10 or more and high hazard employers)); Minnesota (MINN. STAT. ANN. § 176.231 (West 1993) (employers of 25 or more and high hazard employers)); Montana (MONT. CODE ANN. §§ 39-71-1504 to 1505 (Supp. 1993) (employers of 5 or more)); Nevada (NEV. REV. STAT. ANN. 618.383(2)(b)(Michie Supp. 1993) (employers of 25 or more)); Nebraska (NEB. REV. STAT. 48-443 (Supp. 1993) (all employers)); North Carolina (NC GEN. STAT. 95-252 (1993) (employers of 11 or more and a higher than average workers compensation experience)); Oregon (OR. REV. STAT. § 654.176 (1991) (employers of 11 or more and high hazard employers)); Tennessee (TENN. CODE ANN. § 50-6-501(a) (Supp. 1994) (high hazard employers)); Washington (WASH. ADMIN. CODE 296-24-045(1) (1992) (employers of 11 or more)); West Virginia (W. VA. CODE § 23-2B-2 (1994) (Labor Commissioner authorized to require joint committees)).

130. See David Weil, *Implementing Employment Regulations: Insights on the Determinants of Regulatory Performance*, in GOVERNMENT REGULATION OF THE EMPLOYMENT RELATIONSHIP 429-474 (Bruce E. Kaufman ed., 1997).

131. See *id.*

132. See 29 U.S.C. § 654(b).

133. See 29 U.S.C. §§ 657(c)(1), (3).

violation of a standard, OSHA must inspect the site in question.¹³⁴ Employees may accompany inspectors during walkarounds and may participate in opening and closing conferences with the employer or separately. If a firm contests violations, its employees may join by electing party status.¹³⁵ Finally, employees may challenge the reasonableness of a citation's abatement date.¹³⁶

Section 11(c) bans discrimination against employees who exercise rights guaranteed by the Act.¹³⁷ However, employees cannot directly enforce this ban, but rather must petition the Secretary to file suit.¹³⁸ To prove a violation, the Secretary must show that exercise of protected rights was a substantial cause for an employee's adverse treatment. OSHA also has adopted regulations giving employees a right to refuse imminently hazardous work pursuant to section 11(c).¹³⁹ This right is similar to an employee's NLRA section 502 right to refuse work where there is objective evidence of abnormal danger.¹⁴⁰ Additional OSHA regulations grant employees a right to know about hazardous substances on the job and access exposure information and medical records.¹⁴¹ Many states also have such right-to-know laws. However, OSHA preempts state laws requiring that employees receive information about exposures.¹⁴²

D. Information Systems

Analyzing the causes of occupational injury and illness requires good data. OSHA therefore mandates that employers record and, in some cases, report work-related injuries and illnesses.¹⁴³ Employers may also be required to report injury and illness information to OSHA and the Bureau of Labor Statistics.

About 1.1 million of the 6.5 million employers in the United States are required to maintain work place injury and illness records. Employers sub-

134. See 29 U.S.C. § 657(f)(1). OSHA must keep the complaining employee's name secret from the employer and keep the employee advised of the status. OSHA regulations require inspections for charged violations of the general duty clause even though the Act does not mandate them. See 29 C.F.R. 1903.11(a).

135. See 29 U.S.C. § 659(c). Even if employees elect party status, the Secretary of Labor has unreviewable discretion to withdraw or settle citations. See *Cuyahoga Valley Ry. v. United Transp. Union*, 474 U.S. 3 (1985).

136. See 29 U.S.C. § 659(c); Local 588, 4 O.S.H. Cas. (BNA) 1243 (O.S.H.R.C.), aff'd, 557 F.2d 607 (7th Cir. 1977).

137. See 29 U.S.C. § 660(c).

138. See *Taylor v. Brighton*, 616 F.2d 256, 262-64 (6th Cir. 1980) (holding that the Act does not create a private cause of action for employees discharged in retaliation for reporting safety violations).

139. See generally *Marshall v. Whirlpool Corp.*, 445 U.S. 1 (1980).

140. See *Gateway Coal v. United Mineworkers of America*, 414 U.S. 368 (1974). Under such circumstances, a no strike clause in a collective bargaining agreement will not be enforced to prohibit an employee from engaging in concerted activity to avoid performing abnormally dangerous work.

141. See 29 C.F.R. § 1910.1200(a).

142. See *Industrial Truck Ass'n v. Henry*, 125 F.3d 1305 (9th Cir. 1997); *New Jersey State Chamber of Commerce v. Hughey*, 774 F.2d 587, 593 (3^d Cir. 1985).

143. See 29 U.S.C. § 656(c)(1); see generally 29 C.F.R. § 1904.

ject to record-keeping requirements must maintain a log of all work-related injuries and illnesses. That log must be posted in the workplace annually. Employers must record all injuries, even minor ones, unless these injuries did not result in any medical treatment or work restrictions. Furthermore, employers must report fatalities and accidents resulting in the hospitalization of three or more employees to OSHA within eight hours of their occurrence. However, employers with ten or fewer workers are exempt from these record-keeping requirements, as are most employers in retail trade, finance, insurance, and service industries.

NIOSH collects, analyzes, and disseminates data from various sources, including its surveillance programs¹⁴⁴ and laboratory and field research.¹⁴⁵ It disseminates information through its publications and a toll-free information number. NIOSH also maintains two pertinent databases: a bibliography of occupational safety and health literature (NIOSHTIC) and the Registry of Toxic Effects of Chemical Substances (RTECS).

State workers' compensation systems also maintain workplace injuries and illnesses data. Nonetheless, workers' compensation reporting, which captures only compensable injuries (such as those requiring medical treatment or lost wages), is narrower than OSHA's. OSHA requires recording of all injuries beyond first-aid cases occurring at the workplace, whereas workers' compensation reporting, which varies by state, usually requires reporting only after three to seven days' absence from work.

E. Training

OSHA operates a training institute for compliance officers and the public. It also supports training on designated hazards by grantees.¹⁴⁶ NIOSH funds training of safety and health professionals.¹⁴⁷

F. Workers' Compensation

Every state has enacted workers' compensation programs for employees injured on the job.¹⁴⁸ Coverage is no-fault; to obtain benefits, workers need not prove any party's negligence, but only need to show that the

144. NIOSH operates, with its state partners, a number of surveillance programs, including: Adult Blood Lead Epidemiology and Surveillance (ABLES), which identifies cases of elevated blood lead levels among U.S. adults; Sentinel Event Notification System for Occupational Risks (SENSOR), which provides surveillance for occupational lung diseases; and Fatality Assessment and Control Evaluation (FACE), which investigates work sites where fatalities have occurred. See generally PREVENTING ILLNESS, *supra* note 3, at 242-52.

145. Every year, NIOSH conducts hundreds of investigations at the request of workers, employers, and governmental agencies to evaluate concerns at specific work sites through its Health Hazard Evaluations, Intervention Studies, and Control Technology Studies. See *id.* at 245.

146. See ASHFORD, *supra* note 3, at 265, 448.

147. See *id.* at 280, 445-47.

148. Workers' compensation is mandatory in all states except Texas and South Carolina. See EDWARD M. WELCH, *EMPLOYERS' GUIDE TO WORKERS' COMPENSATION* 51 (1994). Wisconsin developed the first workers compensation program in 1911. To meet consti-

injury occurred in the scope of their employment. Compensation is made exclusive, so employers are immunized from tort liability for injuries to employees, except those inflicted intentionally.¹⁴⁹

States operate workers' compensation systems separately from each other. Benefit payors are state-managed funds, private underwriters, or both. Benefit payors receive premiums from employers. Premiums are experience-rated for larger employers; that is, the rates are higher for high-risk than for low-risk firms and industries.¹⁵⁰

Workers' compensation does not cover all workers. Excluded workers often include the self-employed; independent contractors; agricultural, casual or domestic workers; and small firm employees.¹⁵¹ In 1972, the Report of the National Commission on State Workmen's Compensation Laws recommended that states expand coverage to all employees disabled by their jobs.¹⁵² While many state programs have extended coverage in the last twenty years, coverage remains incomplete.

In theory, most workers' compensation systems compensate all injuries arising from employment. Nevertheless, claims may be barred by proof of an employee's willful misconduct, failure to use a safety device, and intoxication or drug use. Though early statutes usually provided benefits only for "accidental" injuries, coverage also theoretically has been expanded to occupational diseases.¹⁵³ Occupational diseases are employment-related when disease-causing exposures in the workplace exceed those of the general environment.¹⁵⁴ Chronic occupational diseases, such as those from dust exposure, noise, fumes, and repetitive motion, are covered in principle.¹⁵⁵ However, in practice, chronic occupational diseases may not be covered for a variety of reasons, including the uncertainty of disease causation; employees' failure to know that their diseases are work-related; difficulty in distinguishing work-caused diseases from everyday diseases; frequent insurer contests of disease claims; exclusion of claims for latent diseases in statutes of limitation; noncompensability of specific diseases; and state requirements for minimum exposure periods within the state before covering a disease.¹⁵⁶ Several states now exclude stress-related

tutional objections, these early programs were voluntary. See PREVENTING ILLNESS, *supra* note 3, at 208.

149. See Emily A. Spieler, *Perpetuating Risk: Workers Compensation and the Persistence of Occupational Injuries*, 31 Hous. L. Rev. 119 (1994).

150. See John F. Burton, Jr. & James R. Chelius, *Workplace Safety and Health Regulations: Rationale and Results*, in GOVERNMENT REGULATION OF THE EMPLOYMENT RELATIONSHIP 253, 264-67 (Bruce A. Kaufman ed., 1997).

151. See Welch, *supra* note 148, at 53-57 (1994).

152. See MICHAEL S. BARAM, *ALTERNATIVES TO REGULATION* 81 (1982).

153. See *id.*

154. See MARK A. ROTHSTEIN, ET AL., *EMPLOYMENT LAW* 429 (1994).

155. See Elinor P. Schroeder & Sidney A. Shapiro, *Responses to Occupational Disease: The Role of Markets, Regulation, and Information*, 72 GEO. L.J. 1231 (1984).

156. See *id.*

or psychological conditions not associated with physical injury.¹⁵⁷ For instance, Oregon limits compensation to injuries medically provable by "objective findings," arguably eliminating compensation for many soft tissue and psychological disabilities.

Workers' compensation benefits typically include medical expenses and rehabilitation, partial indemnity for wage loss, and fatality compensation to surviving dependents of workers killed by or on their jobs. Statutes or regulations set the benefits, which vary substantially from state to state. Impairment/wage loss indemnity for total disability is typically two-thirds the pre-injury wage, subject to a statutory minimum and maximum.¹⁵⁸ Temporary partial disability indemnity is two-thirds of the difference between the worker's pre-injury and post-injury wages, subject to prescribed maximums. Permanent partial disability indemnity is generally awarded according to statutory schedules for specified injuries, according to the degree of impairment or lost earning capacity for non-specified injuries. Some states terminate benefits after a fixed period, even for recipients still unable to work.¹⁵⁹

Workers (or their families, where applicable) do not receive compensation for non-economic losses like pain and suffering. They likewise receive no compensation for several types of economic losses, such as lost pensions, deferred compensation, health and other benefits, and costs of care by family members. These practices displace costs onto injury victims and other social systems.¹⁶⁰

Medical care and rehabilitation expenses are generally compensable, without charge to the injured worker,¹⁶¹ for as long as treatment is needed. Medical costs have increased rapidly through the years and now represent about fifty percent of total benefit costs.¹⁶² Insurers, regulators, and employers have proposed a variety of cost-containment strategies, including: eliminating certain benefits; expanding employer and insurer power over physician selection and over treatment and return-to-work decisions; developing fee schedules to restrict unnecessary treatment; and merging workers' compensation with employer-provided medical benefit plans.¹⁶³ Critics of such efforts contend they may undermine employee rehabilita-

157. See *Stratemeyer v. Lincoln County*, 915 P.2d 175 (Mont. 1996) (holding that where workers' compensation does not cover stress related claims, employee may file tort action).

158. See *Welch*, *supra* note 148, at 107. See also STEVEN L. WILLBORN ET AL., EMPLOYMENT LAW: CASES AND MATERIALS 957-58 (1998) [hereinafter WILLBORN, EMPLOYMENT LAW].

159. See *id.* at 109-111.

160. See H.R. REP. NO. 103-601, PT. 2, AT 625-27 (1994) (describing cost shifting between health care systems and workers' compensation).

161. See ARTHUR LARSON, WORKERS' COMPENSATION LAW: CASES, MATERIALS AND TEXT 445 (2d ed. 1992).

162. See LARSON, *supra* note 161, at 625-626.

163. See James Ellenberger, *Remarks on Medical Care for Injured Workers*, in REVIEW REGULATE OR REFORM? WHAT WORKS TO CONTROL WORKERS' COMPENSATION MEDICAL COSTS (Thomas W. Grannemann ed. 1994).

tion, medical confidentiality, and health care quality.¹⁶⁴

Under the employment-at-will doctrine, employers may discharge employees for any reason, including occupational disability. No requirement exists for reinstatement when an employee's work capacity returns. OSHA gives workers disabled by a handful of toxins limited job-retention.¹⁶⁵ By statute or case decision, several states now prohibit discharge in retaliation for filing workers' compensation claims.¹⁶⁶ The Family and Medical Leave Act prohibits discharge (in firms with fifty or more employees) for absence up to twelve weeks a year due to serious medical conditions, including compensable work-related conditions.¹⁶⁷ Some states extend protection for work-related absences and disabilities to employees at small companies.¹⁶⁸ Collective bargaining agreements frequently forbid discharge for absence due to occupational illness or injury. Moreover, the Americans with Disabilities Act requires employers to provide reasonable accommodation to employees with serious disabilities who nonetheless can perform essential job functions.¹⁶⁹

Workers' compensation addresses injury prevention in various ways. Experience rating on premiums theoretically induces employers to reduce hazards so as to cut insurance costs. However, studies present mixed results on whether these incentives substantially improve safety.¹⁷⁰ Other approaches in some workers' compensation systems include: safety audits; mandatory safety programs and labor-management joint safety committees; safety training programs; and workplace inspections and penalty assessments.¹⁷¹ Insurers sometimes consult with employers on loss prevention and safety engineering.

When workers' compensation applies, it is the exclusive remedy for employees injured on the job. Employees generally may not recover in tort for work-related harms.¹⁷² An important exception is that employers may

164. See generally National Health Policy Forum, *Workers' Compensation and Health Care Reform: Is There a Need for Federal Action?*, Issue Brief No. 650 (1994).

165. See, e.g., 29 C.F.R. 1910.1025(k).

166. See Spieler, *supra* note 149, at 220-27.

167. See 29 U.S.C. § 2601.

168. See generally ROBERT BURGDORF, JR., *DISABILITY DISCRIMINATION IN EMPLOYMENT LAW* 905 (1995).

169. See 42 U.S.C. § 12,101.

170. See Richard J. Butler, *Safety Incentives in Workers' Compensation*, in 1995 WORKERS' COMPENSATION YEAR BOOK I-82, I-87 (John F. Burton, Jr., & Timothy P. Schmidle eds., 1994); James R. Chelius & Robert S. Smith, *Experience-Rating and Injury Prevention*, in *SAFETY AND THE WORKFORCE* 128 (John D. Worrall ed., 1983). See also Leslie I. Boden, *Creating Economic Incentives: Lessons from Workers' Compensation Systems*, in *PROCEEDINGS OF THE FORTY-SEVENTH ANNUAL MEETING* 282 (Industrial Relations Research Association, 1995).

171. See Spieler, *supra* note 149, at 244-259. A worker's compensation related requirement for workplace inspections and penalty assessments may be preempted by OSH Act. See *Ben Robinson v. Texas Workers' Compensation Comm'n*, 934 S.W.2d 149 (Tx. Ct. App. 1996).

172. See Note, *Exceptions to the Exclusive Remedy Requirements of Workers Compensation Statutes*, 96 HARV. L. REV. 1641, 1643 (1983).

be liable in tort for intentional harms.¹⁷³ Moreover, workers' compensation does not bar suit for tort damages against third parties, such as the makers of defective products causing workplace injuries. In some states, the third party may seek contribution and indemnity from the employer.¹⁷⁴ In many, the payor of workers' compensation benefits may secure reimbursement from tort damages workers receive in third-party suits.¹⁷⁵ Finally, workers' compensation typically does not prevent employee redress for non-physical harms.¹⁷⁶

II. Canada

A. Legal Framework

In 1972, Saskatchewan enacted comprehensive occupational safety and health legislation.¹⁷⁷ Since then, every province with the exception of British Columbia has adopted laws based on the Saskatchewan model. Provincial laws aim to protect against job site hazards regardless of employment relationships. Compliance duties are usually imposed not just on employers, but also on employees and others whose conduct affects workplace safety: owners, suppliers, general contractors, architects, professional engineers, and supervisors.

Joint safety and health committees are Canada's key institutions for workplace safety and health. Government promotes private resolution of safety and health concerns through technical advice and support to employers and workers and, when private resolution fails, through inspec-

173. Many states allow worker tort actions for intentional harms. *See id.* *See also* Mark M. Hager, *Harassment as a Tort: Why Title VII Hostile Environment Liability Should Be Curtailed*, 30 CONN. L. REV. 375, 430 n.107 (1998). Often, the employer must be "substantially certain" of an effect before a tort action is permitted. *See Beauchamp v. Dow Chem. Co.*, 398 N.W. 2d 882, 893 (Mich. 1986) (holding tort liability lies if employer was substantially certain injury would result and intended the act which caused injury).

174. *See Dole v. Dow Chem. Co.*, 282 N.E. 2d 288 (1972). Few states allow for contribution and indemnity from employers. *See Note, supra* note 172, at 1653.

175. *See WILLBORN, EMPLOYMENT LAW*, *supra* note 158, at 981.

176. *See Olive v. City of Scottsdale*, No. 94-1028 PHX EHC, 1996 WL 435132, at *2-3 (D. Ariz. Mar. 28, 1996) (stating the general rule under the Workmen's Compensation Act that mental illness, injury or condition is not considered a personal injury compensable under the Act unless the injury fits into a narrow exception); *Meyers v. Arcudi*, 915 F. Supp. 522, 524 (D. Conn. 1996) (citing amendment to Worker's Compensation Act's exclusivity provision which states that the Worker's Compensation Act does not bar a tort claim for emotional distress where the distress did not arise from a physical injury); *Day v. NLO Inc.*, 811 F. Supp. 1271, 1279 (S.D. Ohio 1992) (holding that employees' mental claims are actionable in tort, as Ohio's exclusivity provision does not cover mental injury arising from a mental stimulus); *Kirk v. Smith*, 674 F. Supp. 803, 806-07 (D. Colo. 1987) (concluding that emotional injuries are not covered by the Colorado Workmen's Compensation Act).

177. Of course, many provinces had legislation addressing specific safety and health issues or hazards in specific industries, such as mining, prior to 1972. *See CANADIAN AUTO WORKERS, SUBMISSION TO ROYAL COMMISSION ON WORKER'S COMPENSATION IN BRITISH COLUMBIA* 6 (1997).

tions and prosecutions. Laws define the rights and duties of employers and employees.

In several provinces, two separate agencies address workplace safety and health: a labor ministry handling regulation and inspections; and a board handling worker's compensation for job injuries. In several provinces, one agency combines both functions.¹⁷⁸ Workers' compensation assessments may be used to fund governmental safety and health activities,¹⁷⁹ supplementing the Labor Ministry's appropriated budget.

1. Coverage

Provincial safety and health laws apply to all public and private employers.¹⁸⁰ These laws require employers to protect everyone at the job site, regardless of employment status. However, prison inmates, farm workers, university teachers, and owners or occupants working in private residences may be excluded from coverage.

Compliance duties bind all persons performing services for compensation. Suppliers must furnish materials and equipment safe for its intended use.¹⁸¹ Site owners bear responsibility for plant areas or activities not directly controlled by any employer.¹⁸² Contractors must ensure that activities not controlled by on-site employers are safe.¹⁸³ Supervisors must ensure that workers are aware of risks.¹⁸⁴ Professionals, such as engineers or architects, may also have compliance duties.¹⁸⁵

178. These provinces are Quebec, New Brunswick, and British Columbia. In Quebec, the *Commission de la Sante et de la Securite du Travail* (CSST) inspects work premises and provides compensation for employees who suffer a work related injury. See *An Act Respecting Occupational Health & Safety Act*, R.S.Q., c. S-2.1, ch. IX, div. II [hereinafter Quebec Safety Act]. See also *Occupational Health & Safety Act*, R.S.N.B, c. O-0.2, (1994) [hereinafter New Brunswick Safety Act]. In British Columbia one statute governs both workers' compensation and occupational safety and health. As a result, rights and duties detailed in law in other provinces may be guaranteed by regulation in British Columbia. See, e.g., *A Comparison of Occupational Health & Safety Statutes: A Briefing Paper 2* (last modified Apr. 25, 1999) <<http://www.worksafebc.com/policy/royalcommission/brief7.asp>> [hereinafter Briefing Paper].

179. See GENERAL ACCOUNTING OFFICE, B-250248, GAO/HRD-94-15FS, 13 (Dec. 6, 1993).

180. The compliance duties of self-employed persons may be separately described. See, e.g., Quebec Safety Act, ch. II, art. 7; The Occupational Safety & Health Act, S.S., c. O-1.1, pt. II, § 5 [hereinafter Saskatchewan Safety Act] (providing that self-employed persons are subject to the provisions of the Acts).

181. See Saskatchewan Safety Act, pt. II, § 8.

182. See *id.* pt. II, § 7.

183. See *id.* pt. II, § 6.

184. See, e.g., *An Act Respecting Occupational Health & Safety Act*, R.S.N.S., ch. 7, § 23 [hereinafter Nova Scotia Safety Act] (stating that duty requirements of the Act are imposed primarily on person with greatest degree of control over matters that are subject of duty).

185. See *id.* § 21.

Comparison of Coverage Between United States and Canada

	United States	Canada ¹⁸⁶
Federal Employees	Yes	Yes
Local Government Employees	In state plan jurisdictions	Yes
Self-employed	No	Yes
Building/project Owners	No	Yes
Supervisors	No	Yes
Professionals (Architects, Etc.)	Only if contractually assumed responsibility for safety	Yes
Equipment Suppliers	No	Yes

2. Federal and Provincial Functions

Provincial governments exclusively regulate occupational safety and health within their jurisdictions.¹⁸⁷ Each province establishes and operates its programs independently. Federal law governs federal employees, employees of approximately forty government corporations and agencies, and national industries.¹⁸⁸ Though the federal government may work with provinces on harmonized approaches to common issues, it does not provide official guidance to or promulgate rules binding on the provinces. Provincially-created rights exclude workers and establishments under federal jurisdiction.¹⁸⁹

Since 1988, an integrated Canadian approach to hazard communication has been implemented. Each province has adopted similar laws. Each requires employers to label hazardous products and provide material safety data sheets to chemical workers, according to uniform requirements.¹⁹⁰ Where one jurisdiction allows a trade secret exemption from risk disclosure requirements, other jurisdictions must recognize it.¹⁹¹

B. Standards Development

Though Canadian law imposes few procedural requirements for the adoption of safety and health standards, in practice both federal and provincial governments do obtain extensive public input. Standards usually represent bilateral recommendations of labor and employer associations.

186. Ontario and Alberta statutes do not apply to farming operations or domestic work; the Ontario Act does not apply to teachers or teaching assistants.

187. See GENERAL ACCOUNTING OFFICE, *supra* note 179, at 12 (Dec. 6, 1993).

188. See generally *An Overview to the Canada Labour Code*, An Overview of Part II of Canada Human Resources Development: Canada National Labour Code. National industries include rail, highway transport, telecommunications, pipelines, canals, ferries, tunnels and bridges, shipping, airports, banks, grain elevators and certain feed mills, and products, such as atomic energy, explosives and pesticides. See *id.*

189. See DOUGLAS G. GILBERT & GERALD P. HECKMAN, PRESENTATION TO THE ABA LABOR AND EMPLOYMENT LAW SECTION, OCCUPATIONAL SAFETY AND HEALTH IN CANADA AND THE UNITED STATES, at n.14 (August 1998) (on file with authors).

190. See MICHAEL GROSSMAN, THE LAW OF OCCUPATIONAL HEALTH AND SAFETY IN ONTARIO § 11.6 (2d ed. 1994).

191. See *id.*

A review of provincial exposure limits reveals that many requirements are based on threshold limits set by the American Conference of Government Industrial Hygienists (ACGIH) or exposure limits set by OSHA.

At the federal level, the Review Committee on Technical Revisions to the Canada Occupational Safety and Health Regulations (Review Committee), appointed by the labor ministry (Labour Canada), identifies regulations needing revision. A working group of the Review Committee (Working Group), with equal labor and management representation, is established to devise revisions. Both labor and management submit position statements. The Working Group then identifies areas of consensus. Labour Canada may fund research requested by labor and provide technical advice to the Working Group. Other parties may offer advice, but only through labor or management representatives. Where no consensus is reached, the Review Committee may try to resolve disputed issues. If it cannot, Labour Canada makes the final determination regarding regulations.¹⁹²

Once all groups involved agree on a proposed rule, Labour Canada drafts a regulatory impact analysis, with input from labor and management.¹⁹³ The Working Group facilitator then prepares a report and forwards consensus recommendations to the Review Committee. Labour Canada prepares a similar report for the Review Committee on non-consensus issues. The amended regulations are published for comment after Review Committee consideration. The Working Group considers comments and formulates amendments before sending them to the Review Committee. The law establishes no decisional criteria to guide the Working Group in designing standards. Final regulations are published in the Canada Gazette.

Like the federal government, provinces strive to regulate by consensus. In most provinces, consensus regulations are recommended by the Minister of Labour to the Lieutenant Governor in Council, the provincial head of government. In British Columbia and Quebec, the workers' compensation board has independent authority to issue regulations.¹⁹⁴ Panels recommending regulations usually comprise exclusively labor and management representatives in equal numbers.¹⁹⁵ Provincial staff select discussion participants and provide technical assistance, but do not dictate the out-

192. See generally DENNISON ASSOCIATES INC., COMPILATION OF CANADIAN HEALTH AND SAFETY STATUTES AND REGULATIONS, Guiding Principles of the Federal Regulatory Policy (prepared for the Occupational Safety and Health Administration, Office of ePolicy) (1998) (on file with authors).

193. See *id.* The Federal government has developed a statement of principles requiring that regulations be accompanied by an analysis of their social and economic impacts and promising that the government will ensure that benefits exceed cost before proceeding with new regulatory proposals. See *id.*

194. See KATHLEEN M. REST & NICHOLAS A. ASHFORD, OCCUPATIONAL HEALTH AND SAFETY IN BRITISH COLUMBIA: AN ADMINISTRATIVE INVENTORY OF THE PREVENTION ACTIVITIES OF THE WORKERS' COMPENSATION BOARD, 25-26, 28 (Ashford Assocs. ed. 1997) [hereinafter REST & ASHFORD].

195. In some provinces, such as British Columbia, panels to recommend regulations may also include public representatives. See *id.* at 15, 28 (discussing structure of British

comes.¹⁹⁶ Most provincial laws are silent on criteria for standards. In Prince Edward Island, for instance, the law does not authorize regulation of toxins, but instead requires employers to secure hazard information from suppliers and furnish it to exposed employees.¹⁹⁷ Labor-management panels may seek comments from interested parties and may hold public hearings.¹⁹⁸ Final revisions to regulations must be published in the provincial Gazette before they can take effect.¹⁹⁹ Judicial review is not available.²⁰⁰

Consensus approach has principally resulted in adoption of ACGIH limits. Aside from these exposure limits, few comprehensive standards include monitoring or other auxiliary requirements. On the other hand, the consensus approach has led to adoption of a repetitive motion standard in British Columbia as well as workplace violence, repetitive motion, and harassment standards in Saskatchewan.²⁰¹

Some provinces authorize more comprehensive regulation of “designated” toxins. For such rules, notice of an intent to regulate must be published in the provincial Gazette.²⁰² Consensus is more difficult to reach on comprehensive rules and, therefore, few are issued. While most provinces have authority to regulate the manufacture and properties of products, they rarely do. Provincial law generally allows compliance waivers for employers who meet or exceed standards without literal compliance.²⁰³ A tripar-

Columbia's Panel of Administrators). In Ontario, the government appoints a panel chair, otherwise membership on the panel is split between labor and management.

196. In some instances, bipartite decision-making is mandated by law; in others reliance on bipartite decision-making is merely the preferred approach of the government. See, e.g., REST & ASHFORD, *supra* note 194, at 65 (noting that British Columbia Board of Governors described that province's current Regulation Review process as bipartite model).

197. Occupational Health & Safety Act, R.S.P.E.I., ch. O-1, pt. IV, § 24 (1996) [hereinafter Prince Edward Safety Act].

198. In Ontario, separate procedures govern the “designated substance” regulations. See generally Ontario Safety Act §§ 33-43. These regulations, like comprehensive health standards, must be published for comment in draft form. See *id.* § 35(a)-(b). In British Columbia, the Workers' Compensation Board must give public notice of revisions to regulation and hold a public hearing before finalizing the revisions. See REST & ASHFORD, *supra* note 194, at 69.

199. See Ontario Safety Act § 35(a)-(b)(stating that regulations governing designated substances must be published in the Gazette); Quebec Safety Act, ch. XII, arts. 224-226; Workplace Safety & Health Act, R.S.M. ch. W210, § 19(2) [hereinafter Manitoba Safety Act]. See also Saskatchewan Safety Act, pt. VII, § 44(4) (providing that regulations are not enforced until at least sixty days after appearing in the *Saskatchewan Gazette*); REST & ASHFORD, *supra* note 194, at 67, 71 (referring to publishing of regulation revisions prior to finalizing).

200. See GENERAL ACCOUNTING OFFICE, *supra* note 179, at 22.

201. See The Occupational Safety & Health Regulations, 1996, pt. II, § 36-37, pt. VI, § 81 [hereinafter Saskatchewan Safety Regulations].

202. See GROSSMAN, *supra* note 190.

203. See Ontario Safety Act §70(2)(3) (providing that Lieutenant Governor may make regulations exempting workplaces or employers from provisions of Safety Act); Saskatchewan Safety Act, pt. VII, § 46 (providing that director may exempt any person from regulations if satisfied that standards of health and safety will not be materially affected); Manitoba Safety Act § 21 (stating that, upon application, director may choose to vary any provision or standard).

titute working group to help harmonize regulations across Canada was launched in 1992, but was discontinued in 1996 after labor and management each complained about the working group's direction.

Many provinces guarantee overexposed workers the option of alternate work, with no loss of pay or benefits, when temporary removal from a hazard will aid their return to work.²⁰⁴ Alternate work, if requested, may be required for pregnant and lactating women.²⁰⁵ Some provinces characterize such alternate assignments as disability protection. The government may shoulder some of the cost of maintaining wages associated with these transfers.²⁰⁶ Absent employee consent, employee medical information is generally shielded from disclosure to the employer.²⁰⁷

C. Ensuring Compliance

Compliance policy relies mainly on employer-employee joint committees and safety and health representatives to identify and correct hazards. Government facilitates voluntary compliance and pursues formal enforcement when such voluntary compliance fails. Despite government's limited enforcement role, Canada has three to seven times more inspectors per covered worker than does the United States.²⁰⁸

1. Employer Duties

Canadian jurisdictions impose on employers a general duty to protect against job site danger.²⁰⁹ Of course, employers must also comply with specific orders, rules, and laws.²¹⁰ Where rules are inadequately protec-

204. See Manitoba Safety Act § 52 (stating that the director may order temporary removal upon the advice of the chief occupational medical officer). See generally Ontario Safety Act § 43(10)(a)-(b); Prince Edward Safety Act, pt. III, § 21(3); An Act Respecting Occupational Health & Safety in the Province, NFLD. R.S. ch. O-3, § 45(2)-(3) [hereinafter Newfoundland Safety Act]; Saskatchewan Safety Act, pt. V, § 36. In British Columbia, protective reassignment is not guaranteed, but if it is provided, employee wages and benefits must be maintained. See Regulation 8.24(7). In Quebec, workers overexposed to toxins have a right, limited by available funding, to reassignment. See Quebec Safety Act, ch. III, div. I, art. 32-39.

205. See Quebec Safety Act, div. I, §4, art. 40-48 (1994).

206. See, e.g., Quebec Safety Act, ch. XV, arts. 249-250 (requiring that the government pay part of sums needed for application of the Act).

207. See Ontario Safety Act § 63(2); Quebec Safety Act, ch VIII, div. IV, art. 129; Saskatchewan Safety Act, pt. X, § 65; Manitoba Safety Act § 51(3). In Prince Edward Island, an employer is barred from altering an employee's status on the basis of a medical exam. See Prince Edward Safety Act, pt. 5, § 25(2).

208. GENERAL ACCOUNTING OFFICE, *supra* note 179, at 18.

209. The nature of this duty varies slightly. In Manitoba, employers must ensure safety "so far as is reasonably practicable." Manitoba Safety Act § 4(1)(a). In Ontario, employers must take "every precaution reasonable." Ontario Safety Act § 25(2)(h). This duty extends to independent contractors supervised by an employer. See *R. v. Wyssen*, (1992) 10 O.R.3d 193 (Ontario Court of Appeals); Quebec Safety Act, ch. III, div. II, § 2, art. 51(1)-(12) (providing general obligations of employers with respect to employees). See also New Brunswick Safety Act § 9; Prince Edward Safety Act, pt. III, § 13; Newfoundland Safety Act § 4; Saskatchewan Safety Act, pt. II, § 3(a).

210. See generally Ontario Safety Act § 25; Manitoba Safety Act § 4(1)(b); New Brunswick Safety Act § 9; Prince Edward Safety Act, pt. III, § 13; Saskatchewan Safety Act, pt.

tive, the general duty may require prevention beyond what specific standards require.

Provincial laws include detailed lists of employer duties. Employers must cooperate with government inspectors and with joint committees or representatives.²¹¹ Materials and equipment must be furnished, maintained, and used according to manufacturer instructions. Workplace structures, such as floors, scaffolds, walls, and so on, must be capable of withstanding expected loads.²¹² Employers must provide information to joint committees on likely risks and must report fatalities, injuries, and near misses to workers and the government.²¹³ Employers must provide safety training to all workers and ensure their competent supervision.²¹⁴

Several jurisdictions impose additional duties. In Alberta and Saskatchewan, employers must conduct regular inspections and correct identified hazards.²¹⁵ Employers in Ontario, Quebec, Newfoundland, and Saskatchewan must also provide occupational health services.²¹⁶

2. Employee Duties

Canadian laws impose enforceable duties on employees. Employees must: comply with laws, rules, and orders; report hazards; wear safety gear; protect themselves and others; and cooperate with inspectors and joint committees or representatives. Additionally, in Saskatchewan, employees must refrain from harassing others. Employees may be sanctioned for violations.

II. § 3(e). British Columbia law uniquely includes no specific employer compliance duties. Regulations issued by the Workers' Compensation Board, however, do impose such duties.

211. See generally Ontario Safety Act §§ 25-26; Quebec Safety Act, ch. III, div. II, §2, art. 51(14); New Brunswick Safety Act § 9(2)(e); Prince Edward Safety Act, pt. III, § 13(2)(e); Newfoundland Safety Act § 5(f); Saskatchewan Safety Act, pt. II, § 3(b); Manitoba Safety Act § 4(2)(e)-(f).

212. See, e.g., Ontario Safety Act § 25(1)(e).

213. See *id.* § 25(2)(l); Quebec Safety Act, ch. III, div. II, § 2, art. 52; Prince Edward Safety Act, pt. III, § 13(2)(b); Newfoundland Safety Act § 5(c).

214. Every province except Alberta and Saskatchewan imposes on an employer a duty to train. See Quebec Safety Act, ch. III, div. II, § 2, art. 51(9); New Brunswick Safety Act § 9(2)(c); Prince Edward Safety Act, pt. III, § 13(2)(c). See also Newfoundland Safety Act § 5(b) (requiring employers to provide training where "reasonably practicable"). In Ontario, an employer must appoint only competent supervisors. Ontario Safety Act § 25(c). Manitoba requires training of all employees of construction firms employing five or more. Manitoba Safety Act § 44(3).

215. See Occupational Health & Safety Act, R.S.A., c.O-2, § 20 (1994) (stating that a Director may require, by written order, regular inspection for occupational hazards) [hereinafter Alberta Safety Act]. In Ontario, the joint committee must conduct regular inspections. Ontario Safety Act §§ 8-9. The size of the investigation committee depends on the number of employees. See *id.*

216. See Ontario Safety Act § 26(1)(a). See also Newfoundland Safety Act § 53; Saskatchewan Safety Act, pt. II, § 12(1) (providing that ministers may designate a workplace or class of workers as requiring occupational health services). In Quebec, health programs are obligatory in designated industries. See Quebec Safety Act, ch. VIII. The joint committee selects the health services physician who may inspect the workplace and must visit regularly. See *id.*, ch. VIII, div. III, art. 118, 125.

Provincial law usually imposes additional duties on supervisors. They must ensure that workers use protective gear, advise workers of potential danger, provide written instructions on equipment use, and take reasonable precautions to protect employees. Supervisors may be prosecuted where they have failed to warn employees of violations.

3. Inspections

Provinces increasingly stress “internal responsibility” as the linchpin of enforcement. Laws define workplace parties’ rights and responsibilities and rely on joint committees to identify and correct hazards.²¹⁷ As much as possible, the government limits its own role to intervening when internal methods fail. While in-house resolution of issues is preferred, exhaustion of internal remedies is not required before government may intervene.²¹⁸

Inspectors consult, monitor compliance, and investigate fatalities, work refusals, and hazard complaints.²¹⁹ Decisions whether to inspect are discretionary, except for mandatory work refusal investigations.²²⁰ Because provincial government administers both safety and health law and workers’ compensation, it targets inspections using employer-specific injury and illness information.²²¹

Inspectors may enter workplaces without warrants or prior notice.²²²

217. See generally Nova Scotia Safety Act § 2 (detailing principles of internal responsibility system). See also GROSSMAN, *supra* at 190(explaining internal responsibility system; noting that participants in British Columbia Regulation Review process acknowledged need for it); REST & ASHFORD, *supra* note 194, at 75.

218. Nova Scotia Safety Act § 2(d) (stating that Department of Labour’s role is to assist parties in executing responsibilities and to “intervene appropriately when those responsibilities are not carried out”). See also LABOUR PRINCIPLE #9: PREVENTION OF OCCUPATIONAL INJURIES AND ILLNESSES 5 (draft on file with authors) [hereinafter LABOUR PRINCIPLE #9].

219. See generally Ontario Safety Act §§ 8(10)-(14), 9(18); Quebec Safety Act, ch. X, art. 180; Prince Edward Act, pt. II, § 7; New Brunswick Safety Act § 28; Newfoundland Safety Act §§ 26-31; Alberta Safety Act § 9; Saskatchewan Safety Act, pt. XI, § 72; Manitoba Safety Act §§ 22-24 (enumerating inspectors’ general powers). See also Briefing Paper, *supra* note 178, at 4 (describing typical inspection powers in British Columbia); Ontario Safety Act §§ 8(11)(b), 9(18)(f); REST & ASHFORD, *supra* note 194, at xiii (listing field officer consultation powers).

220. See Ontario Safety Act § 43(4)(a)-(c); Manitoba Safety Act § 43(6)-(7). In Quebec, the intervention of an inspector may be required after the job-site safety representative investigates a work refusal and fails to resolve the problem. See Quebec Safety Act, ch. III, div. I, § 1, art. 18. In Prince Edward Island, Newfoundland, and Alberta, a work refusal may be referred to an inspector by an employee, if the matter is not resolved by the joint committee or no committee exists. See Prince Edward Safety Act, pt. III, §20(9); Newfoundland Safety Act § 47; Saskatchewan Safety Act, pt. IV, § 24.

221. GENERAL ACCOUNTING OFFICE, *supra* note 179, at 19-20 tbl.II.4.

222. See Ontario Safety Act § 54(1)(a); Quebec Safety Act, ch. X, art. 179; New Brunswick Safety Act § 28(a); Prince Edward Safety Act, pt. II, § 7(1)(a); Newfoundland Safety Act § 26(1)(a); Alberta Safety Act § 6; Saskatchewan Safety Act, pt. XI, § 72; Manitoba Safety Act § 24(1)(a). In some provinces, an officer must advise the employer and employees of its purpose before beginning an inspection. See Quebec Safety Act, ch. X, art. 187 (stating that before commencing investigation, an inspector must take reasonable steps to advise the employer of inspections); REST & ASHFORD, *supra* note 194, at 114-

They may take samples, seize documents or things, and consult with outside experts and employees.²²³ Employee joint committee members and representatives may accompany inspectors and must be compensated for time spent with inspectors.²²⁴ Employer designees may also accompany the inspector.

Inspectors have discretion on how to handle violations. Where a violation causes death or serious injury, prosecution may be recommended. Otherwise, inspectors may issue appropriate orders.²²⁵ Alternatively, inspectors may take no action. Noncompliance with an order carries no penalty, but may lead to prosecution. Some, but not all, provinces require that orders be in writing.²²⁶ Although issuance of orders is generally discretionary, a province may have a policy of requiring sanctions when employees are exposed to certain hazards. Copies of orders must be provided to joint committees, or posted at the worksite if there is no committee.²²⁷

Inspectors may order equipment shut-down or that employees be removed from exposure to unabated hazards.²²⁸ In some provinces, inspectors may exercise their shut-down authority even if no imminent danger exists.²²⁹ In some, inspectors may order abatements.²³⁰ In some,

115 (stating that British Columbia inspectors must present credentials and inform both the employer and the workers' representative about the nature of the inspection).

223. See generally Ontario Safety Act §§ 54(1), 56; Quebec Safety Act, ch. X, art. 180(3); New Brunswick Safety Act § 28; Prince Edward Safety Act, pt. II, § 7; Newfoundland Safety Act § 26(b)-(e); Saskatchewan Safety Act, pt. XI, § 72(1)(b)-(h); Manitoba Safety Act § 24(b)-(m) (listing inspectors' powers). See also Alberta Safety Act § 6(1)(b)-(2) (providing that an officer may seize documents subject to certain requirements).

224. See Ontario Safety Act § 54(3), (5); Quebec Safety Act, ch. X, art. 180(7) (stating that inspectors may be accompanied by persons they select); New Brunswick Safety Act § 29; Newfoundland Safety Act § 26(2) (stating that inspectors may compel witnesses to attend investigations).

225. In Manitoba, for example, officers may issue improvement orders or stop work orders. See Manitoba Safety Act § 26. See also Ontario Safety Act § 57(1); Quebec Safety Act, ch. X, art. 182; New Brunswick Safety Act § 32; Prince Edward Safety Act, pt. II, § 8(1); Saskatchewan Safety Act, pt. V, §§ 30-33; REST & ASHFORD, *supra* note 194, at 116-119 (detailing actions inspectors may take against workplace violations).

226. Compare New Brunswick Safety Act § 32(1), and Newfoundland Safety Act §§ 27-29, and Alberta Safety Act § 7, and Saskatchewan Safety Act, pt. V, § 30(1) (stating that orders must be in writing), with Ontario Safety Act § 57(1), and Quebec Safety Act, ch. X, art. 182, and Prince Edward Safety Act, pt. II, § 8(1), and Nova Scotia Safety Act § 55 (authorizing verbal orders). See also REST & ASHFORD, *supra* note 194, at 115 (discussing verbal orders for minor violations).

227. See Ontario Safety Act § 57(10); Quebec Safety Act, ch. X, art. 183; New Brunswick Safety Act § 35; Prince Edward Safety Act, pt. II, § 8(6); Newfoundland Safety Act § 35; Saskatchewan Safety Act, pt. V. § 34; Manitoba Safety Act § 28(1). See also REST & ASHFORD, *supra* note 194, at 117, n.11 (stating that British Columbia law requires employers to post reports in conspicuous, accessible places).

228. See generally Ontario Safety Act § 57(6)(a)-(c); Quebec Safety Act, ch. X, art. 186; New Brunswick Safety Act § 32; Prince Edward Safety Act, pt. II, § 8(4); Newfoundland Safety Act §§ 27-30; Alberta Safety Act § 9; Saskatchewan Safety Act, pt. V. §§ 31-33. See also Section 74(1) of British Columbia's Workers' Compensation Act, cited in Briefing Paper, *supra* note 178, at 4).

229. Compare Newfoundland Safety Act § 27 (requiring immediate danger for stop work orders), and Saskatchewan Safety Act, pt. V, §§ 32-33 (requiring "serious" health

they may require compliance plans or removal of equipment from service until tested.²³¹ Orders are issued without a hearing.

Inspection Procedures²³²

	Worksite Access	Inspection by Joint Safety and Health Committee
United States	Inspector must obtain search warrant if employer refuses access. Employee representative has right to accompany inspector.	No requirement for joint safety and health committees.
Canada—Federal	Unlimited access.	Committees participate in identifying and inspecting hazards, as well as monitoring safety procedures & programs.
Alberta	Access at any reasonable hour.	Minister may require establishment of committee to identify unhealthy situations, make recommendations, or establish educational programs at any worksite.
British Columbia	Unlimited access.	Committee must ensure that employer is carrying out and will participate in regular inspections as required by the safety and health program.
Manitoba	Access at any reasonable hour.	Committee's duties include participating in the identification of risks to safety and health, developing measures to protect safety, and checking the effectiveness of such measures.
New Brunswick	Access at any reasonable hour.	Committee may participate in all investigations or inspections concerning health and safety.
Newfoundland	Access at any reasonable hour.	Minister may require establishment of committee at workplaces with 10 or more workers. Duties include identifying unsafe aspects of workplace.
Nova Scotia	Access at any reasonable hour. Employer shall give representative, committee member, or employee the opportunity to accompany the officer.	Committees participate in inspections and investigations of complaints.

risk), and Manitoba Safety Act § 36 (requiring imminent risk of serious physical or health injuries), with Quebec Safety Act, ch. X, art.186 (allowing shut-down if inspector “considers a worker’s health, safety, or physical well-being to be endangered”), and New Brunswick Safety Act § 32(1) (providing that if unsafe working conditions *may* exist, an inspector can suspend all work), and Prince Edward Safety Act, pt. II, § 8(4) (requiring only that inspector perceive a danger), and Alberta Safety Act §§ 7-9 (requiring only a finding of unsafe or unhealthy conditions). In Quebec, the legislature specifically rejected language limiting shut-down authority to imminent dangers. In British Columbia, shut-down orders are effective for 24 hours. In Ontario, certified joint safety committee members may shut down operations. See GROSSMAN, *supra* note 190, at §7.11 (detailing functions of certified committee members).

230. See Ontario Safety Act § 57(1); New Brunswick Safety Act § 32(1); Prince Edward Safety Act, pt. II, § 8(1); Newfoundland Safety Act § 28; Alberta Safety Act §§ 7-9 (stating that orders must be carried out within times specified).

231. See generally Ontario Safety Act § 57(4), (6)(a); New Brunswick Safety Act § 32; Prince Edward Safety Act, pt. II, § 4.

232. Portions of this table derived from GENERAL ACCOUNTING OFFICE, *supra* note 179, at 19 tbl.II.4.

	Worksite Access	Inspection by Joint Safety and Health Committee
Ontario	Unlimited access.	Specific worksite inspections required at least once a month & cover entire workplace at least once per year. In absence of a committee, the safety representative carries out inspections.
Quebec	Unlimited access.	No mandatory inspection requirements.
Prince Edward Island	Unlimited access. Employer must designate a representative to accompany the officer, and afford a committee member the opportunity to accompany.	Committee participates in all inspections.
Saskatchewan	Access at any reasonable hour.	Committees participate in the identification of health risks and investigate any work refusals.

Issuance or nonissuance of inspection orders may be administratively appealed by the employer.²³³ However, such appeals do not stay orders from taking effect.²³⁴ Typically, the employer appeals first to the safety and health division, then to an appointed adjudicator.²³⁵ Adjudicators are not bound by formal evidence rules and may consider any relevant materials.²³⁶ Appellants are entitled to be notified of hearings, appear with counsel, call witnesses, and receive responsive decisions.²³⁷ Adjudications can typically be appealed to provincial courts, but only on issues of jurisdiction or legal error.²³⁸ Judicial reversals are rare.²³⁹

Penalties may lie against any parties, including employees, who violate the law or regulations,²⁴⁰ but prosecutions of employees are rare. Federal prosecutions are also authorized, but are rarely initiated.²⁴¹ Violations

233. See generally Ontario Safety Act § 61(1); Quebec Safety Act, ch. X, art. 191.1; Prince Edward Safety Act, pt. II, § 11; Saskatchewan Safety Act, pt. VII, § 49(1); Alberta Safety Act § 11; New Brunswick Safety Act § 37(1); Newfoundland Safety Act § 32; Manitoba Safety Act § 37(2).

234. Quebec Safety Act, ch. X, art. 191; New Brunswick Safety Act § 37(2); Newfoundland Safety Act § 34; Alberta Safety Act § 11(7); Saskatchewan Safety Act, pt. VIII, § 54(1).

235. See generally Ontario Safety Act § 61(1); Prince Edward Safety Act, pt. II, §§ 11-12; Saskatchewan Safety Act, pt. VIII, §§ 49-51; Manitoba Safety Act § 39. In Quebec, a tripartite review panel considers challenges to orders or protective reassignments. A review panel's decision may be appealed to an independent tribunal. Judicial review is unusual. See CCST, ANNUAL REPORT OF ACTIVITIES, 52-55 (1995); see also Quebec Safety Act, ch. XVII.

236. See LABOUR PRINCIPLE #9, *supra* note 218, at 9-10 (describing procedural guarantees for an accused in an occupational safety and health violation, and noting that requirements are more formal before a court than before an administrative tribunal). See also Saskatchewan Safety Act, pt. VIII, § 52(3).

237. See, e.g., LABOUR PRINCIPLE #9, *supra* note 218, at 10. See also Quebec Safety Act, ch. XVII, div. II-V; Saskatchewan Safety Act, pt. VIII, §§ 52-53.

238. See, e.g., Saskatchewan Safety Act, pt. VIII, § 56.

239. See, e.g., LABOUR PRINCIPLE #9, *supra* note 218, at 11.

240. See *id.* at 6. See also Quebec Safety Act, ch. XIV; Prince Edward Safety Act, pt. VI, § 3; Newfoundland Safety Act §§ 67-68; Alberta Safety Act § 32; Saskatchewan Safety Act, pt. IX, §§ 58-59 (describing penalties).

241. See GROSSMAN, *supra* note 190, at § 13.1 (noting that occupational safety and health transgressions are usually addressed under administrative contexts); LABOUR PRINCIPLE #9, *supra* note 218, at 6.

may be prosecuted as "strict liability" offenses, for which criminal proof of wrongful intent need not be established.²⁴² Like other criminal breaches, strict liability violations must be proved beyond a reasonable doubt.²⁴³

Three defenses exist to strict liability offenses. The defense of due diligence applies when reasonable precautions were taken.²⁴⁴ The defense of officially induced error applies where an inspector's advice was followed, but hazards persisted.²⁴⁵ Finally, project transition may excuse noncompliance, such as when scaffolding is dismantled. For requirements that are applicable only if practicable, the burden of proving impracticability falls on the accused.²⁴⁶

Monetary penalties range from Can.\$2500 in Manitoba²⁴⁷ for an individual's first offense to Can.\$500,000 for corporate violations in Ontario.²⁴⁸ Jail sentences may also be imposed.²⁴⁹ Victim surcharges of twenty percent must be added to penalties above Can.\$1000.²⁵⁰ Nova Scotia authorizes non-financial penalties, such as payment for public education about hazards, community service, and steps to ensure against repeat offenses.²⁵¹

Quebec, Ontario, and Prince Edward Island assess administrative penalties against individual violators under authority derived from laws other than safety and health laws.²⁵² Moreover, in British Columbia and Prince Edward Island, the Workers' Compensation Board may increase an employer's workers' compensation assessment to penalize safety and health violations.²⁵³ Such assessments are not fines and may not be appealed.²⁵⁴

Provinces are also developing alternative compliance programs. For example, British Columbia's Diamond Project offers firms with excellent records a choice between partnership with the government and conventional compliance approaches.²⁵⁵ Alberta's Partners in Prevention program establishes incentives to reduce workers' compensation costs.²⁵⁶

242. See *Regina v. Sault Ste. Marie* [1978] 85 D.L.R. (3d) 161 (creating a strict liability offense for environmental and other regulatory violations).

243. See, e.g., LABOUR PRINCIPLE #9, *supra* note 218, at 9.

244. See *id.*

245. See *id.* (noting that accused may defend her actions by a showing that she established a proper system to prevent the commission of the offense). See Quebec Safety Act, ch. XIV, art. 240 (stating that a worker may defend by showing that an offense was committed as a result of formal instructions given by an employer).

246. See Saskatchewan Safety Act, pt. IX, § 62.

247. See Manitoba Safety Act § 55(2).

248. See, e.g., LABOUR PRINCIPLE #9, *supra* note 218, at 6.

249. See *id.* (noting a possible maximum individual penalty of 12 months prison). See also Quebec Safety Act, ch. XIV, art. 236-7; Newfoundland Safety Act § 67 (describing jail sentences).

250. See GILBERT & HECKMAN, *supra* note 189.

251. See Nova Scotia Safety Act § 75.

252. See, e.g., Briefing Paper, *supra* note 178, at 5. Nova Scotia law authorizes administrative penalties, but no regulations implementing this requirement have been published. See *id.*

253. See REST & ASHFORD, *supra* note 194, at xv, 122.

254. See *id.*

255. See *id.* at xvi, 130.

256. See LABOUR PRINCIPLE #9, *supra* note 218, at 5 n. 6.

Penalties and Enforcement Sanctions²⁵⁷

	Shutdown Authority	Administrative Penalties	Criminal Penalties
United States	Department of Labor must obtain a court order to halt operations in case of imminent danger.	Must be assessed for all serious, willful, or repeat violations. Fines of up to \$7000 for non-willful violations and up to \$70,000 for willful or repeat violations, minimum of \$5000 per willful violation.	Fines of up to \$10,000 and/or six months imprisonment if violation of standard is willful and results in death of a worker or employer makes false statements in reports filed; up to \$1000 and six months imprisonment for giving advance notice of inspection. .
Canada—Federal	Officer has the authority to shut down any place, thing, or machine consisting of a danger if that danger cannot otherwise be guarded or protected against immediately.	None.	1-For violation of an order by a safety and health officer: not more than \$25,000. 2-For an employer's failure to post the names of the safety & health reps. or failure to post officer's notices: not more than \$5000. 3-For a violation of any section respecting hazardous materials: a-fine up to \$100,000 and/or up to six months in prison. b-if convicted on indictment, a fine not more than \$1,000,000 and/or up to two years imprisonment. 4-For a violation resulting in death or injury is liable to a fine not exceeding \$100,000.
Alberta	Officer has the authority to shut down any place, tool, appliance, or equipment deemed to be a danger or health hazard.	None.	First offense: not more than \$50,000 & not more than \$10,000 for each day the offense continues. Second offense: not more than \$300,000 & not more than \$20,000 for each day the offense continues. Notwithstanding the previous fines, a person who fails to comply with a stop work order can be fined up to \$300,000 or imprisoned for up to twelve months or both. A person who knowingly makes a false statement or knowingly gives false information to an officer engaged in an inspection investigation is subject to a fine of not more than \$500 or imprisonment for six months or both.

257. Portions of this table derived from GENERAL ACCOUNTING OFFICE, *supra* note 179, at 21 tbl.II.5.

	Shutdown Authority	Administrative Penalties	Criminal Penalties
British Columbia	Inspector has authority to shut down for a 24-hour period any place, equipment, machine, device, article, thing or process deemed to be a danger or health hazard. Board may extend the order.	Fine of \$1500-\$30,000 for each violation depending on type of violation & size of payroll. Repeat/Multiple violations can lead to penalties in excess of \$30,000 with no maximum.	Fines of up to \$1000 for violation of health and safety regulation, up to \$5000 and/or three months' imprisonment for violations that cause an injury to or death of a worker. Fines of up to \$50,000 and/or six months' imprisonment for violating an inspector's closure order.
Manitoba	Officer has the authority to shut down any place or activities likely to involve an imminent risk of serious physical or health injury.	None.	For failure to carry out required duties, violation of regulations or continuation of stop work and important orders: \$5000, plus \$2500 for each day offense continues (first offense); for second offense, \$3000 and \$5000 for each day. Additional penalties: 1-where a person is convicted for an offense under the Act, he may be imprisoned for six months. 2-A person convicted of permitting a worker to perform an unusually dangerous task may not work in a supervisory capacity for six months. For a violation of any other provision of the Act: fine not exceeding \$2500.
New Brunswick	Officer has the authority to shut down any place, tool, equipment machine, or device deemed to be unsafe or unhealthy.	None.	None listed in statute.
Newfoundland	Assistant Deputy Minister or officer has authority to shut down any place, tool, appliance or equipment posing an immediate risk to health & safety.	None.	Fines not exceeding \$50,000 and/or imprisonment for up to six months and up to \$5000 a day for each day the violation continues.
Nova Scotia	Officer has authority to shut down any place, device, equipment, machine, material, or thing deemed to be a source of danger or health hazard.	None.	Fines up to \$250,000 and/or two years in prison or both. The court may impose an additional \$25,000 for each day the offense continues. Additionally, the court can impose non-financial penalties, such as community service and developing procedures for prevention of violations.

	Shutdown Authority	Administrative Penalties	Criminal Penalties
Ontario	Inspector has the authority to shut down any place, equipment, machine, device, article, thing, or process deemed to be a danger or health hazard.	Construction: maximum fine of \$300 for employers and employees. Manufacturing or Mining: none.	Maximum penalty for an individual is \$25,000 and/or up to one year imprisonment. Maximum penalty for a corporation is \$500,000.
Quebec	Inspector has the authority to shut down any place, equipment, machine, device, article, thing, or process deemed to be a danger or health hazard.	Fine of \$500-\$1000 for worker or employer and \$5000-\$20,000 for a company. Repeat offenses increase fines to \$1000-\$2000 for an individual and \$10,000-\$50,000 for a company.	No criminal penalties provided by law.
Prince Edward Island	Officer has the authority to shut down any place, equipment, machine, device, article, or thing deemed to be a danger or health hazard.	Information not available.	Fines of not more than \$50,000 or one month imprisonment or both. Additionally, the court may impose a fine of \$5000 for each day the offense continues.
Saskatchewan	Officer has the authority to require cessation of any work violating the Act or regulations if the work involves a serious risk to health or safety.	None.	1-For intentionally obstructing an occupational safety & health officer, intentionally making a false entry in any register or document, or failure to comply with an order: fine not exceeding \$2000. 2-For failure to comply with an order of a Director or Adjudicator: maximum fine of \$5000 for each day the offense continues. 3-For failure to comply with any requirement or notice, taking discriminatory actions against an employee, or contravening any other provisions of the Act: up to \$10,000, plus \$1000 for each day the offense continues (first offense); for second offense, up to \$20,000, plus \$2000 for each day offense continues. 4-If offense is likely to cause serious injury or death: up to \$50,000 & \$5000 per day (first offense); for second offense, up to \$100,000 and \$10,000 per day. 5-For any offense causing death or serious injury: up to \$300,000 and possible imprisonment up to two years.

4. Joint Committees

Joint committees are a signal feature of Canada's workplace health and safety policy.²⁵⁸ Composed of employer and employee representatives, joint committees are charged with promoting health and safety in the workplace. Some provinces mandate joint committees for all workplaces meeting designated criteria, whereas others mandate committee formation only in designated workplaces.

The structure, operation, and responsibilities of joint committees in all provinces are broadly similar. Typically, at least half the members must be employee representatives. Joint committee size varies by province and with the size of the enterprise. Employee representatives must be selected by a union (where one exists) or elected by co-workers. They must meet on a regular basis and keep minutes.

The functions and powers of joint committees include identifying hazards, advising employers, assisting inspectors, resolving disputes, aiding injured or endangered employees, and fostering training and compliance. These rights and responsibilities vary in detail by province. Several provinces itemize committee rights and functions, while others promulgate only general requirements.

For workplaces not required to have joint committees, several provinces mandate that health and safety representatives be selected by workers or appointed by unions. These representatives exercise functions, rights, powers, and duties comparable to those of joint committees. In some provinces, committee members also may be authorized to function independently as representatives, aside from their rights as committee members.

Although joint committees investigate and advise employers with limited decision making powers, they may promote health and safety in several key ways: by inducing employee-management cooperation, by giving employees a voice and forum for registering their knowledge and concerns, and by promoting union attention to and possible collective bargaining on health and safety issues.²⁵⁹

Many provinces require that employee members be paid for time spent

258. Committees are required, depending on the number of workers employed, in Ontario, Quebec, New Brunswick, Saskatchewan, Manitoba, and Nova Scotia. See Ontario Safety Act §§ 8-9; Quebec Safety Act, ch. XVI, art. 327; New Brunswick Safety Act § 14; Saskatchewan Safety Act, pt. III, §§ 15-16; Manitoba Safety Act § 40; Nova Scotia Safety Act § 29 (requiring committees and explaining their formation). See also Prince Edward Safety Act, pt. III, § 18(1) (stating that even if employers and employees have not agreed to a joint committee, Board may still require one); Newfoundland Safety Act § 37 (stating that "the minister may order establishment of committees at workplaces where 10 or more workers are employed"); Alberta Safety Act § 25 (providing that Minister may require committee by order).

259. See Quebec Safety Act, ch. VIII, div. III, art. 118 (stating that the health and safety committee shall choose the occupational physician); Saskatchewan Safety Act, pt. III, § 19(e) (requiring investigation of work refusals). See generally New Brunswick Safety Act § 15; Prince Edward Safety Act, pt. III, § 18(6); Newfoundland Safety Act § 39 (giving committees broad investigatory powers and duties).

on joint committee work.²⁶⁰ However, provinces usually do not specify: electoral and appointment procedures; terms of office; rules of protocol; subcommittee structures; degree of control over members by employers, employees, and unions; and the means of resolving contentious issues. These areas may be addressed by regulation, but are otherwise resolved by particular workplaces and committees or by collective bargaining. In addition, several provinces mandate employer cooperation with joint committee work and forbid discrimination against employees executing health and safety duties.²⁶¹

Summary of Joint Committee Requirements in Canada²⁶²

	Mandatory JHSCs	Number of employees for JHSCs to be required	Number of JHSC members required	Duty to perform workplace inspections	Required frequency of meetings	Duty to perform accident investigations	Duty to ensure training
Canada Federal	Yes	20	2 (Min.)	Yes	Once a month	Yes	No
Alberta	No (not mandatory in all workplaces)	N/A	3-12	Yes	Once a month	No	No
British Columbia	Yes	20-50	4 (Min.)	Yes	Once a month	Yes	No
Manitoba	Yes	20 (except construction)	4-12	Yes	Every 3 months (or monthly if required by Director)	No	Yes

260. See Ontario Safety Act § 8(15); New Brunswick Safety Act § 14(7); Prince Edward Safety Act, pt. III, § 18(8). See also Newfoundland Safety Act § 40 (stating that workers are not to suffer pay loss while engaged in committee meetings).

261. See Manitoba Safety Act § 4(e) (requiring employer cooperation with joint committee or health and safety representative), § 32(1) (prohibiting discrimination against employees seeking to enforce the Act or execute duties under it); New Brunswick Safety Act § 9(2)(e) (requiring employer cooperation with joint committee or representative), § 24 (prohibiting discrimination against employees seeking to enforce the Act or execute duties under it); Nova Scotia Safety Act § 13(2)(a) (requiring employer cooperation with joint committee or representative), § 45 (prohibiting discrimination against employees seeking to enforce the Act or execute duties under it); Ontario Safety Act § 25(2)(e) (requiring employers to cooperate with joint committee or representative), § 50 (prohibiting discrimination against employees seeking to enforce the Act or execute duties under it); Prince Edward Safety Act § 13(2)(e) (requiring employer cooperation with joint committee or representative), § 22 (prohibiting discrimination against employees seeking to enforce the Act or execute duties under it); Quebec Safety Act § 51(14) (requiring employer cooperation with joint committee or "person responsible for the application of this act"), § 31(97) (prohibiting discrimination against representatives executing duties under the Act); Saskatchewan Safety Act § 3(b) (requiring employer cooperation with joint committee or representative), § 27 (prohibiting discrimination against employees seeking to enforce the Act or execute duties under it).

262. *Briefing Paper*, *supra* note 179, at tbl.3.

	Mandatory JHSCs	Number of employees for JHSCs to be required	Number of JHSC members required	Duty to perform workplace inspections	Required frequency of meetings	Duty to perform accident investigations	Duty to ensure training
New Brunswick	Yes	20	N/A	No (Committee may undertake these activities)	Once a month (except for low hazard sites)	No (JHSC may undertake these activities)	Yes (Employer must grant leave)
Newfoundland	No (May be required by Minister)	10	2-12	Yes	Once every 3 months	No (But JHSC must have access to results)	No
Nova Scotia	Yes	20	N/A	Yes	No time line	Yes	Yes
Ontario	Yes	20	2 or 4 (Min.) depending on size of workplace	Yes	Once a month	Yes	Yes (At least one employer and one worker must be certified)
Prince Edward Island	No	N/A	N/A	No (Participation in Ministry of Labour inspections)	N/A	No	No
Quebec	Yes If establishment is an industry categorized as requiring committees	20	3-22	Yes	No time line	Yes	Yes
Saskatchewan	Yes	10	2-12	Yes	Every 3 months	Yes	No

5. Right to Refuse Dangerous Work

Provincial law provides strong protection for the right to refuse dangerous work. Employees who properly exercise this right are protected from employer discharge, discipline, or discrimination. Generally, an employee may refuse work provided there are reasonable grounds for considering the work dangerous. In most provinces, employees may exercise the right to refuse when an unusual danger is present, even if no imminent risk exists.²⁶³ However, the employee right may not be exercised to the danger of other workers. In some provinces, employees also may refuse work that endangers others.²⁶⁴ Unionized workers exercise the right to

263. See generally Quebec Safety Act, ch. III, div. I, § 2, art. 12; New Brunswick Safety Act §§ 19-23; Prince Edward Safety Act, pt. III, §§ 20-21; Newfoundland Safety Act §§ 45(1), 48; Saskatchewan Safety Act, pt. IV, § 23; Manitoba Safety Act § 43 (stating that workers must have reasonable grounds to refuse work). See also Ontario Safety Act § 43 (3)(a)-(c) (stating that a worker must have reason to believe that work will "likely" endanger herself or another worker). But see Alberta Safety Act § 27 (requiring existence of imminent danger before right of refusal may be exercised).

264. See Ontario Safety Act § 43(3)(a)-(c); Quebec Safety Act, ch. III, div. I, § 2, art. 12; New Brunswick Safety Act § 19; Prince Edward Safety Act, pt. III, § 20(1); New-

refuse work more than non-union workers.

A work refusal is followed by inquiry into the seriousness of the asserted danger.²⁶⁵ The objective is abatement of serious dangers so work may resume. The employer or a supervisor has initial responsibility to decide whether a hazard requires abatement. No employer judgement is final if it orders back to work an employee with unalleviated apprehensions. If the employer takes no abatement action, the joint committee or the health and safety representative investigates. The joint committee, health and safety representative, or a government inspector may judge the situation safe and advise resumption of work. Once work resumption has been authorized, continued refusal may subject an employee to discharge or other discipline. Government inspectors normally have final authority. However, employees discharged or disciplined for continued work refusal may seek judicial review. Because an employee's work refusal is protected, wages and benefits must be maintained until the matter is resolved.²⁶⁶

Usually, employees may not be assigned work refused by others as dangerous, although in some provinces they may be so assigned if they are notified of the refusal, the reasons for it, and their own right of refusal.²⁶⁷ In other provinces, whether another employee may be assigned refused work turns on whether a danger exists or not.²⁶⁸ If there is real, unabated danger, the work cannot be performed, even with employee notice and employee choice.

Employees who complain of discipline for reporting safety violations, refusing dangerous work, or exercising other health and safety rights may generally initiate grievance procedures.²⁶⁹ Employees must first exhaust any arbitral remedies specified in a collective bargaining agreement. In the

foundland Safety Act § 45(1); Alberta Safety Act § 27(b) ("imminent" danger); Saskatchewan Safety Act, pt. IV, § 23; Manitoba Safety Act § 43.

265. See generally Ontario Safety Act §§ 43-49; Quebec Safety Act, ch. III, div. I, § 2; Prince Edward Safety Act, pt. III, §§ 20-23.

266. See Ontario Safety Act § 43(13); New Brunswick Safety Act §§ 22-23; Newfoundland Safety Act § 45. See also Quebec Safety Act, ch. III, div. I, § 2, art. 19 (stating that an inspector's decision governs when an employee returns to work); Prince Edward Safety Act, pt. III, § 21 (listing when an employees' right to refuse work is protected).

267. See Ontario Safety Act § 43(11) (requiring only that the employee be notified of the former employee's refusal and the reasons for it, but not that the employee be notified of his own right of refusal); Quebec Safety Act, ch. III, div. I, § 2, art. 17 (requiring only that the employee be notified of the former employee's refusal and the reasons for it, but not that the employee be notified of his own right of refusal); New Brunswick Safety Act § 21(2); Prince Edward Safety Act, pt. III, § 21(2); Saskatchewan Safety Act, pt. IV, § 26; Alberta Safety Act § 27(4) (stating that a worker cannot be assigned to do the work previously refused unless (i) the new worker will not be exposed to imminent danger or (ii) the imminent danger has been eliminated).

268. Quebec Safety Act, ch. III, div. I, § 2, art. 17 (stating that the safety representative must believe there is no danger, but that replacement employee must still be informed of previous refusal to work); Alberta Safety Act § 27(4)(b) (providing that no reassignment shall occur unless imminent danger has been eliminated).

269. See generally Ontario Safety Act § 50; Prince Edward Safety Act, pt. III, § 23; Newfoundland Safety Act § 51; Alberta Safety Act § 28.1; Saskatchewan Safety Act, pt. IV, § 28. The British Columbia Act has no prohibition against work reprisal. See *Briefing Paper*, *supra* note 178, at 7.

absence of such remedies, labor tribunals decide whether the employer levied illegal discipline.²⁷⁰ A rebuttable presumption of illegal discipline exists when adverse action occurs within a short time after an employee exercises protected rights.²⁷¹ If illegal discipline is found, the employer may be ordered to reinstate the employee, cancel or stay any penalties or reprisals and records of them, and pay wages or benefits withheld.²⁷²

Right to Refuse Work²⁷³

	Scope of Right	Effect on Pay	Investigation of Claim	Presumption if Retaliation Occurs
United States	Right to refuse when faced with imminent danger that cannot be corrected through inspection.	No right to be paid while refusing to work.	Investigated by OSHA.	OSHA must bring claim and bears burden of proof.
Canada—Federal	Right to refuse work reasonably believed to be dangerous unless such danger is a normal part of job or refusal would endanger the life, health, or safety of another.	Statute silent.	Immediate investigation by employer in presence of worker and at least one member of the safety and health committee, if any exists. If matter is not resolved to employee's satisfaction, the employee shall notify a safety officer.	Burden on employer to prove action not discriminatory.
Alberta	Right to refuse work when an imminent danger exists, unless such a danger is a normal part of job.	Must be paid until hazard is abated.	Employer must investigate and eliminate the hazard; if employee feels danger still exists, may complain to an officer.	A worker who has reasonable cause to believe that she has been dismissed or subject to disciplinary action may file a complaint with an officer.
British Columbia	Right to refuse work believed to be dangerous, unless such danger is a normal part of the job or refusal would endanger the life, health, or safety of another.	Must be paid until hazard is abated.	Immediate investigation by employer in presence of worker and member of the committee. If not resolved, worker must immediately notify an officer.	Burden of proof on employer to prove actions not discriminatory.

270. See, e.g., Ontario Safety Act § 50(2)-(7); LABOUR PRINCIPLE #9, *supra* note 218, at 7; GILBERT & HECKMAN, *supra* note 189, at n.254.

271. See Ontario Safety Act § 50(5); Quebec Safety Act, Ch. III, div. I, §2, art. 30; Newfoundland Safety Act § 50; Saskatchewan Safety Act, pt. IV, § 28(4).

272. See Prince Edward Safety Act, pt. III, § 23(4); Newfoundland Safety Act § 52; Alberta Safety Act § 28.1(4); Saskatchewan Safety Act, pt. IV, § 29.

273. Table compiled by authors.

	Scope of Right	Effect on Pay	Investigation of Claim	Presumption if Retaliation Occurs
Manitoba	Right to refuse work reasonably believed to endanger health and safety.	Must be paid until hazard is abated or matter is resolved.	Immediate investigation by employer in presence of worker and member of the committee. If not resolved, worker must immediately notify an officer.	Burden of proof on employer to prove actions not discriminatory.
New Brunswick	Right to refuse work reasonably believed to be dangerous to health and safety.	Must be paid until hazard is abated or matter is resolved.	Immediate investigation by supervisor. If the matter is not resolved to employee's satisfaction, the matter is referred to a committee or officer.	If employee feels discriminatory action has been taken, employee may have the matter dealt with by arbitration or file a complaint with commission.
Newfoundland	Right to refuse work reasonably believed to endanger health or safety.	Must be paid until hazard is abated or matter is resolved.	Immediate investigation by supervisor. If the matter is not resolved to employee's satisfaction, report it to officer.	Burden on employer to prove actions not discriminatory.
Nova Scotia	Right to refuse work reasonably believed to be dangerous to health and safety, unless such danger is a normal part of job or refusal endangers life of another.	Must be paid until hazard is abated or matter is resolved.	Immediate investigation by supervisor. If the matter is not resolved to employee's satisfaction, report to committee or representative.	Burden on employer to prove actions not discriminatory.
Ontario	Right to refuse work believed dangerous, unless such danger is a normal part of job or refusal would endanger the life, health or safety of another.	Must be paid until hazard is abated.	Inspector investigates refusal in the presence of the employer or her representative, the worker and a committee member.	Burden of proof on employer.
Quebec	Right to refuse work believed to be dangerous, unless such danger is a normal part of job or refusal would endanger the life, health or safety of another.	Must be paid until hazard is abated.	Safety representative must be notified and examine the claim; intervention of inspector may be required if refusal continues or if employer requests.	No employer may dismiss, suspend or transfer a worker who has exercised the right to refuse. However, employer may, within 10 days following an inspector's decision, dismiss a worker who has abused this right.

	Scope of Right	Effect on Pay	Investigation of Claim	Presumption if Retaliation Occurs
Prince Edward Island	Right to refuse work reasonably believed to endanger health and safety.	Must be paid until hazard is abated or matter is resolved. However, if it is determined that the refusal was frivolous, the employee shall not be entitled to wages and benefits.	Immediate investigation by supervisor. If the matter is not resolved to the satisfaction of the employee, he may report the matter to an officer.	If employer feels discriminatory action has been taken, he may have the matter dealt with by arbitration or file a complaint with the Board.
Saskatchewan	Right to refuse work believed to be unusually dangerous to health and safety.	Statute silent.	Immediate investigation by committee. If no committee or worker not satisfied, the worker may request an investigation by an officer.	Burden on employer to prove actions not discriminatory.

D. Information Systems

Because provinces administer both safety and health laws and workers' compensation programs, government inspectors have access to comprehensive information, including accident and injury reports and investigation reports filed by employers.²⁷⁴ In most provinces, inspectors receive employer reports of injuries and potentially injurious incidents, e.g., near misses, explosions, fires, and chemical releases.²⁷⁵ In addition, inspectors may access information from local law enforcement investigations of reported fatalities.²⁷⁶ Finally, several provinces require owners, contractors, and employers to provide inspectors advance notice of hazardous activities, like construction, trench excavation, tunneling, and asbestos projects.²⁷⁷ Joint committees and health and safety representatives also have access to information available to inspectors.

E. Training

Employers are typically required to train employees on health and safety.²⁷⁸ Training obligations generally apply when an employee begins work and when job duties change. Employers may also be required to ensure competent supervision. This implies that supervisors must also be

274. See REST & ASHFORD, *supra* note 194, at 100-107, Table 5.1. See Quebec Safety Act, ch. X, art. 179; New Brunswick Safety Act § 15(j); Newfoundland Safety Act § 26(b) (granting inspectors access to employer records "that relate to the health and safety of workers").

275. See generally Ontario Safety Act §§ 51-53; Quebec Safety Act, ch. III, div. II, § 4, art. 62; Newfoundland Safety Act § 54 (detailing steps for reporting accidents).

276. See, e.g., LABOUR PRINCIPLE #9, *supra* note 218, at 8.

277. See, e.g., Quebec Safety Act, ch. III, div. II, § 2, art. 52 (providing that employers must register risks associated with employment).

278. See, e.g., Ontario Safety Act § 25(2)(a); Quebec Safety Act, ch. III, div. II, § 2, art. 51(9); New Brunswick Safety Act § 9(2)(c); Manitoba Safety Act § 4(2)(b).

trained.²⁷⁹ Many provinces fund such training.²⁸⁰ Some provinces also require special training for joint committee members. For instance, Saskatchewan requires that committee members receive five days training;²⁸¹ Manitoba requires two.²⁸² Ontario requires that one management and one labor committee member be certified as trained.²⁸³

F. Workers' Compensation

Each Canadian province has enacted workers' compensation laws. Injured or ill workers receive medical care and wage replacement benefits and, in fatality cases, dependents receive survivor's benefits. Coverage is no-fault. Claimants need not prove employer negligence, but only injury or illness arising within the scope of their employment.²⁸⁴ Where it applies, workers' compensation is exclusive, meaning that covered employers are immunized from tort liability for workplace injuries.²⁸⁵ Unlike tort suits, workers' compensation typically does not provide non-economic damages such as pain and suffering or emotional distress. Ontario, however, is an exception, and provides standardized non-economic compensation in cases of permanent impairment.²⁸⁶

For computing assessments, employers are grouped into industries and categories, based mainly on injury levels.²⁸⁷ Premiums may vary further for employers with especially poor or excellent safety records.²⁸⁸

279. See, e.g., Ontario Safety Act § 25(2)(c); New Brunswick Safety Act § 9(2)(c).

280. See generally Canadian Auto Workers, Submission to Royal Commission on Workers' Compensation in British Columbia (July 3-5, 1997).

281. See Saskatchewan Safety Regulations § 46.

282. See Manitoba Safety Act § 44.

283. See Ontario Safety Act § 9(12).

284. See Workers' Compensation Act, R.S.N.S., ch. 10, § 10 (1994) [hereinafter Nova Scotia Compensation Act]; Workers' Compensation Act, R.S.P.E.I., ch. W-7, § 6(1) (1995) [hereinafter Prince Edward Island Compensation Act]; Workers' Insurance Act, R.S.O., ch. W.11, § 1 (1994) [hereinafter Ontario Insurance Act]; Workers Compensation Act, R.S.B.C., ch. 492, § 5(1) (1995) [hereinafter British Columbia Compensation Act]; Workers' Compensation Act, R.S.A., ch. W-16, § 19(4) (1996) [hereinafter Alberta Compensation Act]; The Worker's Compensation Act, 1979, S.S., ch. W-17.1, §§ 28-9 [hereinafter Saskatchewan Compensation Act]; Worker's Compensation Act, R.S.N.B., ch. W-13, §§ 7, 85 (1996) [hereinafter New Brunswick Compensation Act].

285. See, e.g., Prince Edward Island Compensation Act § 13(1); British Columbia Compensation Act § 10; Alberta Compensation Act § 16(2); Saskatchewan Compensation Act § 167; Workers Compensation Act, R.S.M., ch. W200, § 13 (1993) [hereinafter Manitoba Compensation Act].

286. See Ontario Insurance Act § 46.

287. Procedures for calculating premiums vary within each province. See generally Nova Scotia Compensation Act §§ 100-06; Workmen's Compensation Act, R.S.Q., ch. A-3, § 95 [hereinafter Quebec Compensation Act]; Prince Edward Island Compensation Act §§ 59-63; British Columbia Compensation Act §§ 39-40; Alberta Compensation Act §§ 96-105; Saskatchewan Compensation Act § 135; An Act Respecting Compensation to Workers for Injuries Suffered in the Course of Their Employment, Nfld. R.S., ch. W-11, § 97-108 (1994) [hereinafter Newfoundland Compensation Act]; Manitoba Compensation Act §§ 80-81.

288. See Prince Edward Island Compensation Act 63; Nova Scotia Compensation Act § 99(2); Quebec Compensation Act § 84(4); Ontario Insurance Act § 83; British Columbia Compensation Act § 42; Alberta Compensation Act § 110; Saskatchewan Compen-

Varying a firm's assessment according to its safety performance creates a link between workers' compensation cost and safety and health performance. At least one province tightens that link by specifying compliance with health and safety regulations as an explicit criterion for individualized assessments.²⁸⁹

The central institutions in each province are a fund (Fund) from which payments are drawn and a board or commission (Board) for administering it.²⁹⁰ Curiously, Quebec excludes some covered employers from the Fund system, leaving them individually responsible for workers' compensation payments.²⁹¹ Fund systems are financed by periodic assessments upon covered employers at amounts established by the Board to support Fund obligations.²⁹² Private insurers play no role. In this respect, Canada's workers' compensation system differs significantly from the prevailing U.S. model. Typically, the provincial Board is empowered to invest Fund monies and to borrow to generate additional assets.²⁹³ Often, Fund monies support provincial safety and health activities. The Board also establishes compensation eligibility and benefit levels.²⁹⁴ Usually, a specialized tribunal has authority to review Board decisions.²⁹⁵ Appeals to the court system are restricted.²⁹⁶

Most provinces cover work-related injuries even when they stem from willful misconduct by the employer or a co-employee. To minimize rewards for bad behavior, most provinces provide no coverage where a worker's

sation Act § 138; Newfoundland Compensation Act § 95(2); Manitoba Compensation Act § 82(2)-(3).

289. See Prince Edward Island Compensation Act § 74(4).

290. See, e.g., Prince Edward Island Compensation Act § 6(1); Manitoba Compensation Act § 4(1); British Columbia Compensation Act § 5(1); Alberta Compensation Act §§ 19(1), 85; Saskatchewan Compensation Act § 28; Newfoundland Compensation Act §§ 5, 93. See also Workplace Health, Safety & Compensation Commission Act, S.N.B., ch. W-14 (1994) [hereinafter New Brunswick Workplace Commission Act] (detailing procedures of the Commission).

291. See Quebec Compensation Act § 3(3).

292. See Nova Scotia Compensation Act § 100(2); Prince Edward Island Compensation Act § 63; British Columbia Compensation Act §§ 39-40; Alberta Compensation Act §§ 91-97; Saskatchewan Compensation Act § 135; Newfoundland Safety Act § 97-8.

293. See British Columbia Compensation Act § 67(2) (stating that Board must invest funds subject to direction of Minister of Finance); Alberta Compensation Act § 86; Saskatchewan Compensation Act §§ 120, 151; New Brunswick Workplace Commission Act § 24; Newfoundland Compensation Act § 10; Manitoba Compensation Act § 97.

294. See, e.g., Nova Scotia Compensation Act § 148, 150; Prince Edward Island Compensation Act §§ 19-31, 32(2)(3); British Columbia Compensation Act § 96(1); Alberta Compensation Act § 3.1; Saskatchewan Compensation Act § 117; Newfoundland Compensation Act § 5.

295. See Nova Scotia Compensation Act § 176-178; Prince Edward Island Compensation Act § 56; Alberta Compensation Act § 8(1); New Brunswick Workplace Commission Act § 20; Newfoundland Compensation Act § 21; Manitoba Compensation Act §§ 60.2-60.8.

296. See Prince Edward Island Compensation Act § 32(1), 32(4); Ontario Insurance Act § 26-31; Nova Scotia Compensation Act § 183; British Columbia Compensation Act §§ 85, 90-91, 96; Alberta Compensation Act §§ 7-8; New Brunswick Workplace Commission Act §§ 21-23; Newfoundland Compensation Act §§ 26-36. See also Saskatchewan Compensation Act § 166 (abolishing all court actions).

serious fault causes self-inflicted minor injury.²⁹⁷ Workers' compensation nevertheless applies in cases of death or serious impairment regardless of employee fault.²⁹⁸

Most provinces exclude certain employers and employees from workers' compensation.²⁹⁹ The particular exclusions vary by province, and there are no stated statutory criteria. Common categories of excluded employees are casual workers, outworkers, farm workers, domestics, and municipal employees.³⁰⁰ Excluded employers are not subject to Fund assessments. Injuries to excluded employees or at excluded enterprises are not compensated from the Fund.

All employers who contribute to the Fund are immunized from tort liability arising from job injuries or illnesses of covered employees. Most provinces, however, allow tort suits against parties other than the claimant's employer.³⁰¹ Such third-party suits lie, for example, against makers of defective products causing injury. Moreover, in several provinces, claimants who receive tort damages below what workers' compensation would have provided are entitled to recover the shortfall from workers' compensation.³⁰²

The Fund may recoup any workers' compensation payments made from judgments workers receive in third-party suits. It may also sue third parties in place of the claimant, transferring to the claimant damages above what it keeps to recoup its expenses and any workers' compensation benefits paid.³⁰³

297. See British Columbia Compensation Act § 5(3); Alberta Compensation Act § 19(1)(a); Saskatchewan Compensation Act § 31. There is some variation in this exclusion. Manitoba and Prince Edward Island impose only a three-week waiting period. See Manitoba Compensation Act § 4(3); Prince Edward Island Compensation Act § 6(3)(a). New Brunswick bars benefits for injuries stemming from intoxication. See New Brunswick Compensation Act § 7(1).

298. See, e.g., Newfoundland Compensation Act § 34; British Columbia Compensation Act § 5(3); Alberta Compensation Act § 19(2); Saskatchewan Compensation Act § 31.

299. See Quebec Compensation Act § 7; Nova Scotia Compensation Act §§ 4-8; Prince Edward Island Compensation Act § 2(1)-(3); Saskatchewan Compensation Act § 10. See also British Columbia Compensation Act § 2; Alberta Compensation Act § 9(1); Newfoundland Compensation Act § 38 (all applying Acts to employers and workers unless exempted in regulations).

300. See Nova Scotia Compensation Act § 4(2); Saskatchewan Compensation Act § 10(a)-(e); Manitoba Compensation Act § 3 (excluding farm laborers).

301. See, e.g., Nova Scotia Compensation Act § 17; British Columbia Compensation Act § 10(2); Alberta Compensation Act § 17(1); Saskatchewan Compensation Act § 39; Newfoundland Compensation Act § 45(1); Prince Edward Island Compensation Act § 11(1); Quebec Compensation Act § 7(1).

302. See, e.g., Nova Scotia Compensation Act § 17; Quebec Compensation Act § 7(2); Prince Edward Island Compensation Act § 11(3); British Columbia Compensation Act § 10(5); New Brunswick Compensation Act § 10(8).

303. See, e.g., Prince Edward Island Compensation Act § 11(3)-(4); New Brunswick Compensation Act § 10(10)-(12); Ontario Insurance Act § 30(12); Alberta Compensation Act § 17(5)(d); Saskatchewan Compensation Act §§ 40, 41(2); Newfoundland Compensation Act § 45(10).

In most provinces, tort claimants recover only those damages attributable to third-party defendants, not those damages attributable to their own employer. For deterrence and equity, the Fund may attribute injuries wholly or partly to the third-party and assess Fund charges accordingly.³⁰⁴ Precluding recovery of damages attributable to employers protects tort immunity under workers' compensation, and prevents cost-shifting to other parties except (implicitly) the claimant.

Several provinces superfluously authorize workplace tort suits against employers excluded from workers' compensation.³⁰⁵ Employers generally may not claim the defenses of assumption of risk or the fellow servant rule.³⁰⁶ Contributory negligence also does not apply to defeat liability, but may be considered to reduce damages.³⁰⁷

Full medical and rehabilitation expenses lie for all job-related injuries and job-caused diseases.³⁰⁸ Compensation also goes to surviving dependents for occupational fatalities. Dependent survivor benefits vary by province and, within any given province, they are gauged to the circumstances and relationships with the deceased.³⁰⁹

All provinces indemnify income loss.³¹⁰ Indemnity equals a fixed percentage of lost income or lost earning capacity.³¹¹ The percentage varies among provinces and changes over time. Some provinces specify limits on income loss indemnities. These limits may be on the minimum amount of

304. See, e.g., Ontario Insurance Act § 29; Alberta Compensation Act § 18(2); Prince Edward Island Compensation Act §§ 12(2), 63(5)-(6); New Brunswick Compensation Act § 11; Nova Scotia Compensation Act § 18; Saskatchewan Compensation Act §§ 39-41; Manitoba Compensation Act § 9; British Columbia Compensation Act § 10(7)-(8).

305. See Nova Scotia Compensation Act § 188; Prince Edward Island Compensation Act § 88(1); British Columbia Compensation Act § 103(1); Manitoba Compensation Act §§ 110-13.

306. See Prince Edward Island Compensation Act §§ 88(4), 89; Nova Scotia Compensation Act §§ 188(4)-189; British Columbia Compensation Act § 103(4).

307. See Prince Edward Island Compensation Act § 90; Nova Scotia Compensation Act § 190. See also British Columbia Compensation Act § 105; Manitoba Compensation Act § 113.

308. See, e.g., Nova Scotia Compensation Act §§ 71-73, 84; Quebec Compensation Act §§ 53, 56, 111; Prince Edward Island Compensation Act §§ 18, 84; British Columbia Compensation Act §§ 5(1), 6, 21; Alberta Compensation Act §§ 19(1), 73-81; Saskatchewan Compensation Act §§ 32, 106-115; Newfoundland Compensation Act §§ 84-89.

309. See generally Prince Edward Island Compensation Act §§ 37-39; Quebec Compensation Act § 35; Nova Scotia Compensation Act §§ 33-34; British Columbia Compensation Act §§ 17-20; Alberta Compensation Act §§ 64-72; Saskatchewan Compensation Act §§ 82-98; New Brunswick Compensation Act § 38.6-8; Newfoundland Compensation Act §§ 65-74; Manitoba Compensation Act §§ 28-37.

310. See, e.g., Prince Edward Island Compensation Act § 6(2); British Columbia Compensation Act §§ 5(2), 6; Alberta Compensation Act § 51(2); Saskatchewan Compensation Act § 32(2).

311. See generally Quebec Compensation Act §§ 38-43; Nova Scotia Compensation Act §§ 37-40; British Columbia Compensation Act §§ 22-27; Alberta Compensation Act §§ 51-63; Saskatchewan Compensation Act §§ 67-80; New Brunswick Compensation Act §§ 37-38; Newfoundland Compensation Act §§ 73-83; Manitoba Compensation Act §§ 38-45.

indemnity, maximum amount of indemnity, or both.³¹² No time limit exists for receipt of lost income benefits. At age 65, however, benefits are replaced by indemnity for pension benefits lost due to the disability.³¹³

Victims of workplace harm usually lack job retention or reinstatement rights. However, in both Ontario and Prince Edward Island, employers must offer suitable jobs to injured workers with at least one year of continuous, pre-injury employment.³¹⁴ Prince Edward Island also protects claimants from discharge during the Board's claim evaluation period,³¹⁵ but limits the re-employment obligation to one year.³¹⁶

III. Comparative Analysis

A. Coverage

Canadian and U.S. law both impose compliance duties on employers. Canadian laws impose broad, performance-oriented duties, such as providing training, competent supervision, and properly maintained equipment,³¹⁷ in addition to compliance duties under specific safety and health standards. Moreover, Canadian law often obliges various workplace parties to protect workers without regard to whether an employment relationship exists.³¹⁸ Other worksite parties, such as suppliers, the self-employed, and independent contractors, are obligated to protect employees other than their own under Canadian law.³¹⁹ Except for employers who create or control access to hazards, U.S. law restricts compliance duties more narrowly to a party's employees.³²⁰

Efforts to expand U.S. requirements to parallel the Canadian model have met with mixed results. OSHA, OSHRC, and the courts require construction contractors to protect another employer's employees from standards violations.³²¹ Building owners also may have limited duties to all workers on their property.³²² Chemical manufacturers are required to pro-

312. See, e.g., Prince Edward Island Compensation Act §§ 46-47; Quebec Compensation Act § 45; Ontario Insurance Act § 54; Nova Scotia Compensation Act §§ 41-43; British Columbia Compensation Act § 31; Saskatchewan Compensation Act §§ 76, 77.01-79; Newfoundland Compensation Act § 78.

313. See Prince Edward Island Compensation Act § 43; Ontario Insurance Act § 44; British Columbia Compensation Act § 24(4); Newfoundland Compensation Act § 75.

314. See Prince Edward Island Compensation Act § 86; Ontario Compensation Act § 54.

315. See Prince Edward Island Compensation Act § 86(1)(a).

316. See *id.* § 86(5).

317. See discussion *supra* Parts III.C.1, III.E.

318. See discussion *supra* Part III.C.3-4.

319. See discussion *supra* Part III.A.

320. See 29 U.S.C. §652(5) (defining employer subject to the act as one having employees); see also discussion *supra* Part II.C-II.C.1.

321. See BOKAT, *supra* note 77, at 411-17.

322. See *Building & Construction Trades v. Brock*, 838 F.2d 1258, 1267-69 (D.C. Cir. 1988) (suggesting OSH Act liability may be imposed on building owners); 59 Fed. Reg. 40,971-72 (1994) (OSHA's final Asbestos Standard concludes that building owners may be regulated under the Act); 59 Fed. Reg. 15,968, 16,024 (1994) (proposing compliance duties under Indoor Air Quality standard for building owners who are statutory employers).

vide product users with notice of hazards.³²³ Construction professionals such as architects or engineers, however, have compliance responsibilities at sites where they perform services only if they contractually assume them.³²⁴ Legislative initiatives to expand compliance duties to general contractors, subcontractors, property owners, and construction professionals have failed.³²⁵ Recently, the D.C. Circuit refused to impose liability on a manufacturer for violations committed by its subcontractor.³²⁶

Canadian law allows adaptation of compliance obligations to contemporary work arrangements other than traditional employer and employee relationships.³²⁷ U.S. law is less adaptable.³²⁸ It is therefore more likely to leave protection gaps: some employers bear compliance duties, while others bear none.

Canadian law also covers classes of employees that U.S. law excludes. Under Canadian law, public and private sector workers enjoy equal protections from hazards.³²⁹ U.S. law provides no protection to local government employees.³³⁰ Federal agencies must obey an Executive Order incorporating many of the Act's requirements, but no enforcement mechanism is provided.³³¹ Some states protect local government employees, but non-complying public employers are often not penalized.³³² Other exceptions from OSH Act coverage have no counterparts in Canadian law.³³³

Canadian law defines protection more broadly than does U.S. law. Employers have broad duties to train workers in hazard recognition and to ensure safety of structures and equipment.³³⁴ U.S. law imposes no comparable duties.³³⁵ Provincial laws may regulate sexual harassment or disabil-

323. See 29 C.F.R. §1910.1200 (stating that the hazard communication standard requires manufacturers of chemicals to include material safety data sheets with chemicals shipped in interstate commerce). It is generally assumed that only employers who are also manufacturers are governed by these requirements.

324. See *supra* note 89 and accompanying text.

325. See H.R. REP. No. 103-825, pt. I, at 116 (1994); S. REP. No. 102-453, pt. I, at 88 (1992) [hereinafter H.R. REP. No. 103-825].

326. See *IBP v. Herman*, 144 F.3d 861 (D.C. Cir. 1998) (refusing to hold plant operator responsible for violations of a subcontractor).

327. See generally Clyde W. Summers, *Contingent Employment in the United States*, 18 COMP. LAB. L.J. 503 (1997) (describing non-traditional work relationships which have increased in prominence in the past twenty years).

328. The D.C. Circuit's decision in *IBP v. Herman* suggests it may be difficult to impose OSH Act liability on prime contractors outside construction.

329. See discussion *supra* Part III.A.1.

330. See 29 U.S.C. § 652(5) (excluding governments from definition of employers subject to the OSH Act).

331. See *supra* note 15 and accompanying text.

332. See discussion *supra* Part II.A.2.; See also H.R. REP. No. 103-825, pt. I, *supra* note 325, at 33-4 (1994).

333. See discussion *supra* Part I.

334. See discussion *supra* Parts III.C.1, III.E.

335. Many OSHA standards include hazard-specific training requirements. See, e.g., 29 C.F.R. § 1910.109 (g)(3)(iii)(a) (stating that a vehicle operator transporting explosives must be trained); 29 C.F.R. § 1910.119(g) (stating that employees involved in processes governed by process safety management standards must receive training); 29 C.F.R. § 1910.134(b) (stating that employees must receive training in respirator work); 29 C.F.R. § 1910.147(e) (stating that employees must receive training in lockout proce-

ity discrimination as safety and health concerns.³³⁶ In the United States, these are employment discrimination issues.³³⁷ Quebec requires alternate work assignments to pregnant and lactating women;³³⁸ OSHA requires alternate work only for employees overexposed to select toxins.³³⁹ Canadian law also authorizes regulation of products and equipment, though such authority is rarely exercised. OSHA lacks this authority.³⁴⁰

B. Standard-Setting

Standard-setting differs substantially between the United States and Canada. In the United States, Congress delegates to agencies discretion to regulate within defined boundaries.³⁴¹ Procedures assume that agencies, after providing notice and considering comments, will rationally resolve contested issues.³⁴² Courts review rules to ensure that procedures are followed, that factual findings have evidentiary support, and that policy resolutions are rational and within delegated authority.³⁴³

In contrast, Canada de-emphasizes the administrative processes. Laws specify no criteria for setting standards.³⁴⁴ Canadian standards usually emerge from bilateral negotiations between labor and employer associations, in which government facilitates consensus.³⁴⁵ Public notice of rules is provided after an agreement is reached,³⁴⁶ and judicial review is not

dures); 29 C.F.R. § 1910.1025(l) (stating that employees exposed to lead above the action level must receive training); 29 C.F.R. § 1910.1028(j)(iii) (stating that employees exposed to benzene above the action level must receive training).

336. See, e.g., Saskatchewan Safety Regulations, §§ 36-7, 81.

337. See generally *Faragher v. Boca Raton*, 118 S.Ct. 2275 (1998) (analyzing harassment as sex discrimination); *Burlington Indus., Inc. v. Ellerth*, 118 S.Ct. 2257 (1998) (analyzing harassment as sex discrimination).

338. See Quebec Safety Act § 4.

339. See, e.g., *UAW v. Pendergrass*, 878 F.2d 389 (1989) (describing OSHA's medical removal protection policy); 57 Fed. Reg. 22,290 (1992); 43 Fed. Reg. 52, 972 (1978); 29 C.F.R. 1910.1025(k) (adopting MRP under lead standard); 50 Fed. Reg. 51, 154 (1985) (adopting MRP for cotton dust standard); 52 Fed. Reg. 34,460 (1987) (adopting MRP under benzene standard); 57 Fed. Reg. 22,290 (1992) (adopting MRP under formaldehyde standard); 57 Fed. Reg. 42,102 (adopting MRP under cadmium standard).

340. The Toxic Substance Control Act authorizes the EPA to regulate products and equipment. See 15 U.S.C. § 2601.

341. See *Industrial Union Dep't v. American Petroleum Inst.*, 448 U.S. 607 (1980) (noting that the delegation doctrine requires a court to find constraints on OSHA regulatory discretion). See also *id.* at 672-6 (Rehnquist, J., concurring) (discussing the delegation doctrine); *American Textile Mfrs. Inst., Inc. v. Donovan*, 452 U.S. at 543-7 (Rehnquist, J., dissenting); *UAW v. OSHA*, 938 F.2d 1310 (D.C. Cir. 1991) (requiring OSHA to articulate decision making criteria for setting safety standards).

342. See *AFL-CIO v. Marshall*, 617 F.2d 636, 662 (D.C. Cir. 1979).

343. See *Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402 (1971); *AFL-CIO v. Marshall* 617 F.2d 636 (D.C. Cir. 1979); *Synthetic Organic Chem. Mfrs. Ass'n v. Brennan*, 503 F.2d 1155, 1158 (3d Cir. 1974) (describing questions court must answer during judicial review).

344. Canadian law includes nothing comparable to the delegation doctrine because rulemaking is an exercise of legislative not executive function under a parliamentary system of government.

345. See discussion *supra* Part III.A. In some provinces, trilateral negotiations produce consensus rules. See *Ontario Safety Act* § 13(2).

346. See *supra* note 199 and accompanying text.

available.³⁴⁷ Canadian law implicitly assumes that neither labor nor management will agree to rules adverse to their interests. Negotiated rules substitute for administrative procedures to ensure rationality.

Scholars have criticized the procedural formalism of the U.S. approach, preferring Canada's consensus approach.³⁴⁸ The Canadian approach has limits, however. For example, Canada narrowly restricts participation in rule development, excluding many parties whose interests are recognized in U.S. rulemaking procedures. Moreover, Canadian standards are officially established through labor-management negotiation, which impedes rule development. Consequently, the pace of regulation in Canada is as slow as in the United States, even though Canada imposes fewer procedural hurdles. While U.S. law mandates regulation in some instances, Canadian law imposes no mandatory duty to regulate, so formal pressure to hasten regulation is absent.³⁴⁹ Also, the Canadian negotiation-based standards usually adopt consensus rules agreed to elsewhere—a process that would be unacceptable in U.S. rulemaking.³⁵⁰ Finally, Canadian law does not define when regulations adequately protect employees, but presumes that bargaining protects employee interests; in contrast, U.S. law mandates employee protective standards.³⁵¹ In some instances, the Canadian consensus approach provides greater protection for employees,³⁵² in others, less.³⁵³

347. See *supra* note 200 and accompanying text.

348. See generally EUGENE BARDACH & ROBERT A. KAGAN, GOING BY THE BOOK: THE PROBLEM OF REGULATORY UNREASONABLENESS (1982); Jody Freeman, *Collaborative Governance in the Administrative State*, 45 UCLA L. REV. 1 (1992); Philip Harter, *Negotiating Regulations: A Cure for Malaise*, 71 GEO. L.J. 1 (1982); John T. Scholz, *Cooperative Regulatory Enforcement and the Politics of Administrative Effectiveness*, 85 AM. POL. SCI. REV. 115 (1991).

349. For example, in 1995 Ontario disbanded the chemical exposure limit reevaluation process and has failed to reestablish an alternative. See *Occupational Disease; Union Will Push Ontario Government to Bolster Workplace Exposure Protections*, 28 O.S.H. REP. (BNA) 935 (Dec. 23, 1998).

350. In AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir. 1992), the Eleventh Circuit rejected OSHA's efforts to adopt private consensus standards without completing rulemaking for each regulated toxin.

351. See American Textile Mfrs. Inst., Inc. v. Donovan, 452 U.S. at 541 (requiring OSHA to place preeminent value on protecting employee safety). See also Public Citizen Health Research Group v. Auchter, 702 F.2d 1150 (1983).

352. For example, in 1971, OSHA adopted then current ACGIH exposure limits as OSHA standards. See generally AFL-CIO v. OSHA, 965 F.2d at 968-69. OSHA has been generally unable to revise these exposure limits, although limits for individual substances have been superceded by comprehensive 6(b) standards. See Sidney A. Shapiro & Thomas O. McGarity, *Reorienting OSHA: Regulatory Alternatives and Legislative Reform*, 6 YALE J. ON REG. 1, 24 (1989). Canada's consensus approach makes possible periodic updates of exposure limits to conform to current ACGIH recommendations. In many cases, reliance on current ACGIH exposure limits provides increased protection to employees than does reliance on OSHA exposure limits. See generally 54 Fed. Reg. 2332 (Jan. 19, 1989) (Preamble to the final rule on Air Contaminants). In addition, consensus has permitted adoption of ergonomics standards in British Columbia and Saskatchewan, but politics has stalled development of U.S. ergonomic rules. See, e.g., 28 O.S.H. REP. (BNA) 85, 139 (July 1, 1998).

353. The United States has more comprehensive standards regulating toxic hazards than do Canadian provinces and tends to lead, rather than follow, Canadian regulation.

Negotiated rules should produce reasonable regulations when parties have comparable bargaining strength, equal access to information, and mutual interests in protective regulation. In Canada, union density is higher than in the United States,³⁵⁴ and there is greater acceptance of labor's involvement in policy-making.³⁵⁵ Further, the Canadian government may fund research efforts at labor's request, further supporting its bargaining role.³⁵⁶ Also, labor and management regularly negotiate other terms of employment at the provincial level. All of these factors enhance labor's bargaining strength and information, fostering its ability to obtain mutually beneficial agreements.

In the United States, unions are weaker. Unions negotiating OSHA standards may have no on-going bargaining relationship with employee associations involved in rulemaking.³⁵⁷ Neither labor nor management can veto regulation by avoiding consensus. Conversely, agreement between labor and management does not assure promulgation of negotiated rules. In the absence of bargaining strength, the employee protective mandate in law may provide U.S. labor with leverage to obtain strong standards that Canadian law presumes will flow from comparable bargaining strength.

Regulation may be easier to implement in Canada than in the United States for several additional reasons. Under Canada's parliamentary government, regulations are issued by the legislative branch and are not judicially reviewable. This minimizes the prospect that analytic hurdles imposed on agencies by Congress and the courts will delay regulation.³⁵⁸ In the United States, possible regulatory review by the courts or Congress means the results of negotiation may not produce the final rule.³⁵⁹

For example, although the pace of OSHA standard-setting has been criticized, it has adopted over thirty comprehensive toxic standards. Canadian provinces have fewer substance-specific, comprehensive regulations.

354. See Gilbert & Heckman, *supra* note 194.

355. See *id.* at 4-5.

356. See discussion *supra* Part III.A.

357. Usually, unions collectively bargain with individual employers. Industry-wide collective bargaining is rare. Trade associations representing groups of employers dominate OSHA rulemaking. These trade associations have little involvement with collective bargaining, but represent members on legislative and regulatory issues. Individual employers may comment during rulemaking, but rarely take the lead in advocating industry-wide regulatory positions.

358. Administrative law scholarship refers to this process as "ossification." See generally Thomas O. McGarity, *Some Thoughts on "Deossifying" the Rulemaking Process*, 41 DUKE L.J. 1315 (1992); Mark Seidenfeld, *Demystifying Deossification: Rethinking Recent Proposals to Modify Judicial Review of Notice and Comment Rulemaking*, 75 TEXAS L.R. 483 (1997) ("The term 'ossification' refers to the inefficiencies that plague regulatory programs because of analytic hurdles that agencies must clear in order to adopt new rules"). Heightened standards of judicial review exaggerate this problem. See Shapiro & McGarity, *supra* note 352; see also notes 267, 305 and accompanying text.

359. See Patricia Wald, *Negotiation of Environmental Disputes: A New Role for the Courts*, 10 COLUM. J. ENVT'L. L. 1, 1-3, 11-35 (1985) (describing potential problems with consensus when judicial review is sought); William Funk, *When Smoke Gets In Your Eyes: Regulatory Negotiation and the Public Interest - EPA's Woodstove Standard*, 18 ENVTL.

Regulation also may be easier to finalize in Canada because rule violations often go unpunished. Employers may acquiesce in enactment of rules which serve only as "points of departure" for negotiating compliance duties with inspectors.³⁶⁰ By contrast, U.S. employers may be penalized for each violation.³⁶¹ Many U.S. employers believe exceeding requirements is needed to avoid citation.³⁶² Their acquiescence to the establishment of rules may therefore involve greater risk.

U.S. notions of procedural due process and the availability of judicial review explain the greater reliance on specific, legalistic rules compared with Canada's greater reliance on performance standards.³⁶³ Compared with U.S. regulations, Canada's regulations are less technically detailed but may impose duties comparable to those of U.S. specification rules. Canadian labor ministries may finally interpret rules, enabling them to add specifics to general requirements. In contrast, OSHA has limited ability to supplement, clarify, or interpret performance-oriented rules without initiating new rulemaking because its interpretations may be reviewed by OSHRC and the courts.³⁶⁴ OSHA therefore prefers more detailed, legalistic rules to minimize differing interpretations by courts or OSHRC.³⁶⁵

L. 55, 89-98 (1987) (arguing that regulatory negotiation substitutes resolution of private rights for public values).

360. See Kathryn Harrison, *Is Cooperation the Answer? Canadian Environmental Enforcement in Comparative Context*, 14 J. POL'Y ANALYSIS & MGMT. 221, 225 (1995) (citing ANDREW THOMPSON, ENVIRONMENTAL REGULATION IN CANADA: AN ASSESSMENT OF THE PROCESS 30 (1980)).

361. See, e.g., United States v. Ladish Malting Co., 1998 WL 35167, at 6 (7th Cir.) ("complying with the law 99.99% of the time is not a defense to disobedience the other 0.01%").

362. See American Iron & Steel Inst. v. OSHA, 939 F.2d 975 (D.C.Cir. 1991). See generally Harrison, *supra* note 360.

363. A rule is performance-oriented where it states a goal, but permits discretion in choosing the means to achieve the goal. The range of permitted discretion varies from the very broad, i.e., an employer must adequately train employees, to the very narrow, i.e., an employer must meet 1 ppm exposure limit through sole reliance on engineering controls. Specification standards, in contrast, state the required form of compliance, leaving employers little discretion, for instance that guardrails must be 42 inches high. By legalistic, we mean rules written with an expectation of judicial review by an outside agency or a court.

364. See, e.g., Union Tank Car Co., 1997 WL 26611 (O.S.H.R.C.) (discussing OSHRC's disagreement with Secretary's interpretation of whether employer must provide personal protective equipment without charge to employees); Reich v General Motors Corp., 89 F.3d 313 (6th Cir. 1996) (affirming OSHRC decision that Secretary's interpretation of standard is not consistent with its general terms).

365. When OSHA adopts general, performance-oriented standards, enforcement often requires further interpretation. Where OSHA and OSHRC share responsibility for OSH Act enforcement, OSHA does not control subsequent interpretations of its rules. To avoid having OSHRC interpret performance standards differently than OSHA prefers, the Agency adopts more detailed, specification-based standards. These minimize interpretive inconsistencies between OSHA and OSHRC, but create more complicated, legalistic standards. Professors Shapiro and McGarity have criticized Congress' choice of the split enforcement model for resolving citations under OSH Act for these and other reasons. See Shapiro & McGarity, *supra* note 352, at 59-62.

C. Enforcement

U.S. law relies on adversarial enforcement: the imposition of mandatory citations and penalties for each observed violation.³⁶⁶ Canada grants inspectors discretion to decide whether to cite violations.³⁶⁷ In Canada, even if issued, citations carry no penalty³⁶⁸ and compliance schedules are negotiated. Bills to abolish U.S. first-instance sanctions and substitute cooperative enforcement have been reported in both houses of Congress.³⁶⁹ The advantages and disadvantages of Canada's system are worth listing for that reason alone.

Canadian cooperative enforcement absorbs substantially more resources than does the U.S. adversarial approach. Depending on the province, Canada has three to seven times more inspectors than OSHA.³⁷⁰ Canadian inspectors visit workplaces more frequently than their U.S. counterparts. Ontario, for example, conducts approximately the same number of total inspections as does OSHA, though it has only one-tenth as many workplaces to cover.³⁷¹ Canadian inspectors may visit a higher proportion of covered employers, suggesting greater deterrent effect from the threat of enforcement. OSHA has resources to visit high hazard U.S. workplaces only once every 13 years and normal workplaces only once every 87 years.³⁷² In contrast, Canadian inspectors regularly revisit establishments to gauge whether uncited hazards are abated and may also renegotiate compliance schedules.³⁷³

In most Canadian provinces, employers bear the costs of increased governmental presence at worksites.³⁷⁴ Employer-paid workers' compensation premiums fund safety and health regulation, leaving provincial budgets unaffected. In the United States, no equivalent link exists between private workers' compensation premiums and safety and health enforcement.³⁷⁵ In the United States, iterative inspections characteristic of coop-

366. See Shapiro & Rabinowitz, *supra* note 101, at 729-37.

367. See discussion *supra* Part III.C.3.

368. See discussion *supra* Part III.C.3.

369. See SAFE Act, S. 1237, 105th Cong. (1997); H.R. 1834, 104th Cong. (1995).

370. GENERAL ACCOUNTING OFFICE, OCCUPATIONAL SAFETY & HEALTH: PENALTIES FOR VIOLATIONS ARE WELL BELOW MAXIMUM ALLOWABLE PENALTIES (1992) [hereinafter GAO PENALTIES]. In Ontario, for example, 50,000 inspectors are responsible for 287,000 workplaces. See GILBERT & HECKMAN, *supra* note 189, at 49. In the United States, only 1,113 inspectors oversee 6 million workplaces. See OSHA FACTS (last modified Oct. 9, 1998) <<http://www.osha-slc.gov/OshDoc/OSHFacts/OSHAFACTS.html>>.

371. See GILBERT & HECKMAN, *supra* note 189, at 49.

372. See H.R. REP. NO. 103-825, *supra* note 325, pt. I, at 33-4 (1994); Clyde Summers, *Effective Remedies for Employment Rights: Preliminary Guidelines and Proposals*, 141 U. PA. L. REV. 457, 504-5 (1992).

373. See generally Richard Brown, *Theory and Practice of Regulatory Enforcement: Occupational Health and Safety Regulation in British Columbia*, 16 LAW & POL'Y 63 (1994).

374. See discussion *supra* Parts II.F, III.F.

375. In all but six states, workers' compensation insurance is provided by private companies. In Washington, West Virginia, Nevada, Ohio, North Dakota, and Wyoming, workers' compensation insurance is provided by the state. Effective July 1999, private insurers will have access to Nevada's workers' compensation market. In Washington,

erative enforcement would require increased federal funding. Congress, however, has shown little enthusiasm for increasing OSHA's enforcement budget.³⁷⁶

In addition to its more intrusive inspection presence, Canadian cooperative enforcement features greater employee participation rights. Employees stand in for government inspectors as compliance overseers. Government inspectors facilitate the exercise of worker rights, intervening only when internal resolution fails.³⁷⁷ Canada refers to this approach as "internal responsibility."

Cooperative enforcement programs in the United States usually have curtailed government inspections without increasing employee participation. OSHA's VPP program, for example, eliminates employee walkaround rights,³⁷⁸ and OSHA's consultation program has excluded workers from participation.³⁷⁹ Congress appears unlikely to increase employee involvement requirements. Democrat proposals to mandate joint safety and health committees have met stiff resistance,³⁸⁰ while Republican bills to abolish first instance sanctions restrict employee participation, rather than expand it.³⁸¹

Canadian cooperative enforcement may delay compliance and reduce compliance obligations. First instance sanctions should encourage prompt compliance.³⁸² Conversely, delayed penalties encourage delayed compliance. OSHA's frequent citations carry little stigma. Penalties are low and publicity is rare.³⁸³ OSHA's recent cooperative programs may further weaken deterrence by limiting citations or reducing penalties. However, in Canada, where violations are less frequently penalized,³⁸⁴ prosecutions, when initiated, carry substantial penalties and may match or exceed the deterrence obtained through weak U.S. civil fines.³⁸⁵ Employers subject to quasi-criminal prosecutions may fear stigma and, in addition, both employees and supervisors may be prosecuted.³⁸⁶

Cooperative enforcement may weaken employer incentives to comply fully with the rules. Canadian inspectors renegotiate compliance duties

Wyoming, and Nevada safety and health regulation is also a state function. 29 C.F.R. 1952.120, .290, .340.

376. See generally Summers, *supra* note 372.

377. See generally Part III.C.4-5 (detailing joint committee functions and employee rights to refuse work).

378. See Shapiro & Rabinowitz, *supra* note 101, at 737.

379. See *id.* at 744. OSHA considered and rejected a requirement that employers benefiting from consultation allow workers to participate in the process. See 42 Fed. Reg. 41,386 (1977). In 1998, Congress passed legislation codifying the consultation program, which guarantees worker participation. See Occupational Safety and Health Administration Compliance Assistance Authorization Act of 1998, Pub. L. No. 105-197, 112 Stat. 638 (1998).

380. See Watchman, *supra* note 129, at 121-6.

381. See *supra* note 373; See also Shapiro & Rabinowitz, *supra* note 101, at 757.

382. See Shapiro & Rabinowitz, *supra* note 101, at 732-4.

383. See generally GAO PENALTIES, *supra* note 374.

384. See Brown, *supra* note 377, at 66, 83.

385. See *supra* pp.70-74 (detailing provincial penalties).

386. See *id.*; cf. *United States v. Doig*, 950 F.2d at 411.

with each inspection visit. Rules are the starting point for negotiations.³⁸⁷ Uniformity of compliance is sacrificed when employers obtain varied compliance schedules.³⁸⁸ No records are kept of uncited violations.³⁸⁹ Few records exist of what alternative compliance inspectors accept.³⁹⁰ In the United States, renegotiation of compliance duties is rare, other than in settlement of citations. Uniformity in compliance is prized, and first instance sanctions ensure the documentation of inspection activities.

Proponents of cooperative enforcement suggest that inspectors should not cite or assess penalties against "good employers" or for insignificant violations.³⁹¹ Citations or orders and fines would be reserved for repeat violators or serious violations.³⁹² Where cooperation is prized, however, inspectors may be reluctant to initiate enforcement.³⁹³ They may repeatedly lower compliance expectations to avoid enforcement.³⁹⁴

There is little empirical evidence that cooperative enforcement works well at all, although it is often praised.³⁹⁵ An environmental study of Canadian cooperative enforcement and American adversarial enforcement was skeptical of the benefits of cooperation.³⁹⁶ British Columbia's cooperative enforcement of safety and health rules has also been evaluated skeptically.³⁹⁷

D. Employee Rights

Compared with U.S. law, Canadian law provides employees greater rights to participate in workplace safety and health through joint committees. Canadian employees exercising these and other health and safety rights also enjoy greater protection against retaliation than do American workers. These enhanced rights can be seen as proper accessories to

387. See Harrison, *supra* note 364, at 225-6 (citing ANDREW THOMPSON, ENVIRONMENTAL REGULATION IN CANADA: AN ASSESSMENT OF THE PROCESS 33 (1980)).

388. See generally Brown, *supra* note 377.

389. See *id.* at 73-6.

390. See *id.* at 71-6.

391. See generally BARDACH & KAGAN, *supra* note 352; Shapiro & Rabinowitz, *supra* note 101.

392. See Harrison, *supra* note 364, at 223 (citing George Hoberg, *Technology, Political Structure, and Social Regulation: A Cross-National Analysis*, 18 Comp. Pol. 357, 357-376 (1986) (noting that little empirical evidence supports this view of cooperative enforcement)).

393. See generally Bridget M. Hutter, *Regulation in Regulatory Enforcement Styles*, 11 LAW & POLY 153 (1989).

394. See Harrison, *supra* note 364, at 236; see generally Brown, *supra* note 377.

395. See generally Harrison, *supra* note 364.

396. See *id.* at 236. The author concludes her results cast "doubt on the relatively untested assumption that cooperative enforcement is equally if not more effective than the adversarial approach." *Id.*

397. See Brown, *supra* note 373, at 80. Brown evaluated whether employers were penalized if subsequent inspections revealed non-abatement of cited violations. He concluded "many employers consistently fail to comply with regulatory requirements, but relatively few are penalized." *Id.* In British Columbia, the percentage of inspections resulting in penalties is approximately one percent. Penalties were assessed against less than 20% of employers whose performance was so poor they received an average of five or more orders per inspection. See *id.*

"internal responsibility," a regime substituting employees for government inspectors in first-line enforcement. Employee rights are accompanied by compliance duties.³⁹⁸ Employees must engage in self-protection and report hazards, and may be punished for the failure to do so.

Unions have collectively bargained for joint committees in some U.S. workplaces.³⁹⁹ Legislation pending in Congress between 1991 and 1994 would have mandated joint committees in U.S. workplaces.⁴⁰⁰ These proposals did not substitute enhanced employee participation for governmental enforcement along Canadian lines. Rather, the committees were viewed as adding a new compliance burden. The requirements were strongly opposed by the business community.⁴⁰¹

Committees may augment employee involvement in safety and health,⁴⁰² which may in turn improve safety and health performance.⁴⁰³ They may also foster problem-solving skills.⁴⁰⁴ Committees may enhance the effectiveness of inspections,⁴⁰⁵ increase awareness of hazards, and encourage abatement activity. Limited evidence suggests that workers' compensation committees leads to reduced injuries and illnesses.⁴⁰⁶

Committee effectiveness probably depends on a combination of employer commitment, union presence, and enforcement pressure.⁴⁰⁷ Employer commitment may facilitate operations and responsiveness to recommendations.⁴⁰⁸ Unions may help gather information, augment protection against discharge, communicate key rights,⁴⁰⁹ and negotiate disputes. Enforcement pressure may sharpen incentives to use committees to identify hazards, so they can be corrected prior to the infliction of penalties. Without employer commitment, union presence, or enforcement pressure, committees may not lead to improved safety and health performance. In Canada, for example, Lewchuck found committees established before they were legally mandated more effective than those established belatedly in

398. See discussion *supra* Part III.C.2.

399. See generally RUTH RUTTENBERG, U.S. DEP'T OF LABOR, THE ROLE OF LABOR MANAGEMENT COMMITTEES IN SAFEGUARDING WORKER SAFETY AND HEALTH (1990).

400. See H.R. 3160, 102d Cong. (1991); H.R. 1280, 103d Cong. (1994).

401. See Watchman, *supra* note 129, at 89.

402. See *id.* at 74-75.

403. See *id.* See also Barry Reilly et al., *Unions, Safety Committees and Workplace Injuries*, 33 BRITISH J. IND. REL. 275 (1995) (finding safety committees have a statistically significant positive effect on workplace injuries).

404. See GILBERT & HECKMAN, *supra* note 189, at 29-31 (quoting Carolyn Tuohy & Marcel Simard, *The Impact of Joint Health and Safety Committees in Ontario and Quebec* (1993)); Watchman, *supra* note 129, at 83.

405. See Weil, *supra* note 130, at 17-20.

406. See GILBERT & HECKMAN, *supra* note 189, at 31 (quoting W. Lewchuck et al., *The Effectiveness of Bill 70 and Joint Health and Safety Committees in Reducing Injuries in the Workplace: The Case of Ontario*, XXII:3 CANADIAN PUBLIC POLICY 225 (1996)); Watchman, *supra* note 129, at 71-72. But see Spieler, *supra* note 149, at 254-56 (stating that committees are ineffective without enforcement).

407. See generally THOMAS A. KOCHAN ET AL., THE EFFECTIVENESS OF UNION MANAGEMENT SAFETY AND HEALTH COMMITTEES (1977); RUTTENBERG, *supra* note 399.

408. See OSHA Guidelines on Workplace Safety and Health Program Management, 54 Fed. Reg. 3904 (Jan. 26, 1989).

409. See Weil, *supra* note 130, at 31.

response to mandates.⁴¹⁰

Employee participation is enhanced by protection against retaliatory discharge. In Canada, employees disciplined for exercising safety and health rights may turn to Labor Boards or the courts for assistance.⁴¹¹ Retaliation is presumed when discipline follows close in time after exercise of safety-related rights.⁴¹² By contrast, U.S. anti-retaliation protection may be vindicated only by the Secretary of Labor. In the rare suits filed, no presumption of retaliation exists. Not surprisingly, such protections are often deemed ineffective.⁴¹³

Canadian and U.S. employees alike may refuse hazardous work. In Canada, they may refuse most work posing a danger without loss of pay.⁴¹⁴ U.S. employees enjoy only a far more limited right to refuse imminently hazardous work,⁴¹⁵ with protection against discharge, but not against wage loss. OSHA must secure a court order to stop imminently hazardous work.

Canadian employees may seek hazard correction with minimal fear of reprisal. Work refusals require employer response and inspectors may order work stoppages and abatements, even when hazards are not imminent. These features reward prompt hazard reporting. On the other hand, Canadian law may overprotect work refusals for trivial or ulterior reasons. In contrast, U.S. law underprotects employees. They may forfeit wages by stopping work, their protection against discharge may be weak, and work stoppages often may not effectively abate the hazards.⁴¹⁶

E. Workers' Compensation

In the absence of workers' compensation, the remedy for negligently inflicted work-related injuries in both Canada and the United States would be tort suits allowing recovery of pain and suffering damages. In the United States, employer defenses of contributory negligence, assumption of risk, and fellow servant principles might limit liabilities. This is less true in Canada, especially with respect to assumption of risk and fellow servant doctrines. In both countries, workers' compensation supplants tort remedies against employers. No-fault compensation is provided for work-related harms.

Canada provides broader protection against tort liability for firms participating in workers' compensation programs. Employers who pay premiums to provincially-administered insurance funds gain protection against tort suits for work-related harms from all workers.⁴¹⁷ In contrast, the

410. See GILBERT & HECKMAN, *supra* note 189, at 31 (quoting W. Lewchuck et al., *The Effectiveness of Bill 70 and Joint Health and Safety Committees in Reducing Injuries in the Workplace: The Case of Ontario*, XXII:3 CANADIAN PUBLIC POLICY 225 (1996)).

411. See *supra* notes 259, 263.

412. See *supra* note 260 and accompanying text.

413. See *supra* note 133 and accompanying text.

414. See *supra* notes 251-255 and accompanying text.

415. See *supra* notes 109, 134, 135 and accompanying text.

416. See GENERAL ACCOUNTING OFFICE, OCCUPATIONAL SAFETY AND HEALTH: INSPECTORS' OPINIONS ON IMPROVING OSHA EFFECTIVENESS 41 (1990).

417. See discussion *supra* Part III.F.

exclusivity of workers' compensation in the United States immunizes employers from tort suits only by their own employees.⁴¹⁸

Canada may be more generous in compensating serious injury stemming from willful employee misconduct. Canada also more uniformly reimburses workers' compensation benefit payors for third-party damages. Finally, Canada may be superior in coordinating workers' compensation and safety and health concerns. Each province administers a monopoly Fund to provide employers with workers' compensation insurance.⁴¹⁹ This monopoly Fund provides the most significant difference from the prevailing U.S. model. Safety and health enforcement is largely funded by the workers' compensation premiums.⁴²⁰ Hence, when enforcement requires increased resources, they can be secured through hiked workers' compensation premiums, leaving no impact on provincial budgets.⁴²¹

IV. Conclusion

Canadian law reaches more broadly than U.S. law—both as to what is regulated and who must comply. In Canada, employers have fewer defenses to putative violations and fewer forums in which to contest violations. Further, when violations are found, penalties are more substantial than under U.S. law.

Canada treats safety and health policy as a bargain between labor and management, with government facilitating negotiation. In standard-setting, this bargaining allows only limited participation by other parties and forecloses opportunities to challenge consensus rules. In enforcement, labor and management have primary responsibility for identifying hazards. Reliance on this bargaining paradigm may be reasonable in light of Canada's increased union density and greater acceptance of labor's role in workplace policymaking.

Canada provides a series of rights which empower employees to protect themselves. These employee rights may be crucial to credible enforcement in a regime where government's enforcement role is weak. Joint committees, the right to refuse hazardous work, and a prohibition on retaliation allow employees confidently to engage in worksite self-help. With these rights, assuming the capacity to assert them is meaningful, Canadian workers substitute for government inspectors as the first-line of safety and health oversight.

Congress has repeatedly declined to require joint committees, guarantee the right to refuse hazardous work, or adopt a ban on retaliation enforceable by employees. Unless employees receive rights comparable to those provided to Canadian workers, a shift toward cooperative safety and health withdraws government oversight and leaves no other overseer. Hence, without a substantial increase in employee rights, cooperative

418. See discussion *supra* Part II.D.

419. See discussion *supra* Part III.E.

420. See *supra* notes 279-283.

421. See discussion *supra* Part III.E.

enforcement is likely to be less effective in the United States than in Canada. Since empirical evidence provides little support for the superior effectiveness of cooperation in Canada, adopting cooperative enforcement policies in the United States is likely to weaken employer compliance incentives.

Equally important, meaningful cooperative enforcement would probably require a substantial increase in OSHA's budget. Repeated visits to negotiate compliance with employers or to mediate disputes between labor and management are more time-intensive than adversarial inspections. OSHA's current resources permit inspection of each high hazard workplace every fifteen years. Resource demands of cooperative enforcement would further weaken OSHA's deterrent effect, unless Congress were to increase OSHA's budget substantially. As discussed earlier, there are no signs that such an increase is likely.

Cooperative enforcement requires more money and greater employee rights to supplement reduced government presence at the work site. Current U.S. political climate suggests that neither will be available in the near future. Without increased worker rights to self-help and greater resources, the rubric of cooperation may mask government's abandonment of worker protection.