



2023

## Regulating Health and Safety in Capitalist Workplaces: History, Practices and Prospects

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### Repository Citation

Tucker, Eric, "Regulating Health and Safety in Capitalist Workplaces: History, Practices and Prospects" (2023). *All Papers*. 364.

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Regulating Health and Safety in Capitalist Workplaces: History, Practices and Prospects  
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## I. Introduction

The World Health Organization and the International Labour Organization jointly estimated that in 2016 the global burden of work-related injuries and illnesses was 1.88 million deaths and the loss of 89.72 million disability-adjusted life years.<sup>1</sup> These numbers, horrific as they are, paradoxically may be too easily dismissible, too large and abstract for us to comprehend. As Arthur Koestler observed, “Statistics don’t bleed; it is the detail which counts...we can only focus on little lumps of reality.” More recently Nate Holdren commented, “every employee injury happens to a human being with a name and a face and a life. ... We often move too quickly away from that fact.”<sup>2</sup> Thus, while we start with a statistic about the numbers of workers killed and disabled by their jobs and will move on to discuss systems of regulation that aim to reduce these work-related harms, it is important that we do not allow these abstractions to blind us to the enormous suffering experienced by injured workers, their families and their communities as a result of work-related disabilities and deaths.<sup>3</sup>

While space does not allow us to tell individual stories of suffering,<sup>4</sup> we can partly reduce the level of statistical abstraction by recognizing that the burden of occupational disability and death is unevenly distributed geographically and by occupation, class, gender, type of work contract, immigration status and racialization among other factors. For example, the WHO/ILO estimates indicate that the South-East Asia and Western Pacific Regions had death rates higher than the global rate, whereas the Americas and Europe had lower rates, and that a disproportionately large work-related burden of disease is observed in the African, South-East Asian and Western Pacific WHO regions. Working-aged men have higher death and disability rates than women and the two greatest risk factors for occupational deaths are exposure to long working hours and particulate matter, gases and fumes.<sup>5</sup>

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<sup>1</sup> WHO/ILO, ‘Joint Estimate of the Work-Related Burden of Disease and Injury, 2000-2016: Global Monitoring Report (Geneva: World Health Organization and the International Labour Organization, 2021) <<https://apps.who.int/iris/rest/bitstreams/1370920/retrieve>, accessed 9 June 2022 (hereinafter WHO/ILO ‘Joint Estimate’) (hereinafter WHO/ILO, ‘Joint Estimate’). A “disability adjusted life year” represents the loss of the equivalent of one year of full health calculated as the sum of the year of life lost due to premature mortality and the years lived with disability due, in this case, to a work-related injury or illness.

<sup>2</sup> Arthur Koestler, *The Commissar and the Yogi* (Johnathan Cape, 1945), 97; Nate Holdren, *Injury Impoverished: Workplace Accidents, Capitalism, and Law in the Progressive Era* (Cambridge University Press, 2020), 2.

<sup>3</sup> Allard Dembe, ‘The Social Consequences of Occupational Illnesses and Diseases’ (2001) 40:4 *American Journal of Industrial Medicine* 403; Lynda R. Matthews, Michael G. Quinlan and Philip Bohle, ‘Posttraumatic Stress Disorder, Depression, and Prolonged Grief Disorder in Families Bereaved by a Traumatic Workplace Death: The Need for Satisfactory Information and Support’ (2019) *Frontiers in Psychiatry* <https://doi.org/10.3389/fpsy.2019.00609>.

<sup>4</sup> For a compelling set of transcribed interviews with disabled fluorspar miners and their families, see Elliot Leyton, *Dying Hard: The Ravages of Industrial Carnage* (McClelland and Stewart, 1975). Also, see Dorothy Nelkin and Michael S. Brown, *Workers at Risk: Voices from the Workplace* (University of Chicago Press, 1984).

<sup>5</sup> WHO/ILO, ‘Joint Estimate’, 11, 39, & 41. The literature on the distribution of OHS risks is enormous. For a few examples, see Karen Messing, *Bent Out of Shape: Shame, Solidarity, and Women’s Bodies at Work* (Between the Lines, 2021); D. Loomis and D. Richardson, ‘Race and the Risk of Fatal Injury and Work’ (1998) 88 *American Journal of Public Health* 40; Peter M. Smith and Cameron A. Mustard, ‘The Unequal Distribution of Occupational Health and Safety Risks among Immigrants to Canada Compared to Canadian-Born Labour Market Participants,

The skewed distribution of risks is not random but rather is, to a great extent, determined by processes of capital accumulation and uneven development that often result in hazardous working conditions being imposed on the most vulnerable populations, globally and within nations. Occupational health and safety regulation sits atop these structures of risk creation and distribution and historically has been shaped by the struggles of working people to limit the harm that unbridled capitalism would have otherwise inflicted upon them.<sup>6</sup> The results, which are the subject of this chapter, have varied over time and place, and have secured real improvements for some workers.<sup>7</sup>

Given space limitations, the remainder of this chapter focuses on OHS regulation in advanced capitalist countries, with a concentration on the English-speaking world. The next section outlines the broad lines of the historical development of OHS regulation, beginning from the rise of industrial capitalism in the early nineteenth century through to the last decades of the twentieth century and the creation of a new mode of regulation, variously called regulated self-regulation or mandated partial self-regulation. The following section considers various debates over the performance of that regime, including the relation between self-regulation and state enforcement, the practice of state enforcement and the efficacy of worker participation rights. Finally, the last section of the chapter examines emerging OHS challenges to the regulatory regime.

## II. The History of OHS Regulation in Three Waves

We can roughly date the rise of industrial capitalism to the early nineteenth century although it was decades before most people became fully dependent on wage labour to access the resources necessary for their subsistence and social reproduction. It was the experience of wage labourers who were killed or suffered disabling injuries and illnesses arising out of employment that was the crucible in which OHS regulation was produced.

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1993-2005 (2010) 48 *Safety Science* 1296-1303; Michael Quinlan, Claire Mayhew and Philip Bohle, 'The Global Expansion of Precarious Employment, Work Disorganization, and Consequences for Occupational Health: A Review of Recent Research' (2001) 31 *International Journal of Health Services* 335;

<sup>6</sup> Ted Schrecker, 'Globalization and Health: Political Grand Challenges' (2020) 27 *Review of International Political Economy* 26, <https://doi.org/10.1080/09692290.2019.1607768>; Bob Barnetson, *The Political Economy of Workplace Injury in Canada* (AU Press, 2010); John Wooding and Charles Levenstein, *The Point of Production: Work and Environment in Advanced Industrial Societies* (Guilford Press, 1999; Carson; Ray H. Elling, *The Struggle for Workers' Health, A Study of Six Industrialized Countries* (Baywood, 1986) and 'Industrialization and Occupational Health in Underdeveloped Countries' (1977) 7 *International Journal of Health Services* 209; Richard M. Locke, *The Promise and Limits of Private Power: Promoting Labor Standards in a Global Economy* (2013); Intan Suwandi, *Value Chains: The New Economic Imperialism* (Monthly Review Press 2019). Needless to say, the perspective taken here is not universally shared and, as discussed infra., much public policy is premised on the view that workers and employers' interests in OHS are largely overlapping, making OHS issues amenable to technical and educational solutions.

<sup>7</sup> There is widespread agreement that workplace hazards have been reduced, but some are more skeptical that OHS regulation can claim credit. For example, see Jason Foster, Susan Cake and Bob Barnetson, 'Profits First, Safety Second: Canada's Occupational Health and Safety System at 50' (2022) 90 *Labour/Le Travail* 179-202.

The first wave of regulation, market regulation, was effectively created by the judiciary in response to injured workers or their surviving family members suing their employers seeking compensation for their injuries on the theory that their employers owed them a duty of care that survived the contract of employment. In the common law countries, courts rejected those claims, relying on a market-based approach. Workers were presumed to have freely entered into contracts of employment that covered all terms and conditions of employment, including health and safety hazards. Therefore, in exchange for their wages, employees were presumed to have assumed the risk of injury from hazardous conditions in the workplace, including the risk of injury through the negligence of their co-workers. The doctrines of voluntary assumption of risk and the fellow-servant rule made it exceedingly difficult for workers to successfully sue for compensation but, more importantly for our purposes, it established a regime of market regulation in which OHS standards were set by market forces in the absence of positive state regulation, of which there was none at the time.<sup>8</sup> Civilian jurisdictions varied but in general held employers responsible for their personal negligence, but the requirement of proof of causation and fault created substantial barriers that prevented most worker from successfully suing, resulting in a situation similar to that of the common law countries. As a result, OHS was also regulated through the labour market.<sup>9</sup>

The second wave of OHS regulation was triggered by worker mobilizations against child and female labour, long hours and the horrific working conditions experienced by most workers in the first industrial revolution. Workers' movements were sometimes supported by political reformers who tended to focus on the perceived threat that child and female labour posed to social reproduction. Beginning in the first decades of the nineteenth century, these efforts resulted in the enactment of protective OHS laws that partially restricted the freedom of factory owners to hire workers and organize work as they saw fit. The earliest laws restricted child and female labour in factories, including both age and hours of work restrictions. These laws were followed by the imposition of a general duty on factory employers to take all reasonably necessary measures to protect the health and safety of all factory workers, as well as specific safety standards dealing with matters such as machine fencing, ventilation and sanitary conditions. Although the sequence varied from country to country, subsequently enacted laws extended protection to workers in other settings, including railways, mines, construction and shops.<sup>10</sup>

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<sup>8</sup> For example, see Tomlins Law, Labor and Ideology; Witt, Accidental Republic (US); Peter W.J. Bartrip and Sandra Burman: *The Wounded Soldiers of Industry: Industrial Compensation Policy, 1833-1897* (Oxford University Press, 1983) (England); R.C.B. Risk, "'This Nuisance of Litigation': The Origins of Workers' Compensation in Ontario" in David Flaherty (ed), *Essays in the History of Canadian Law*, (Vol. II, University of Toronto Press, 1983) 418 (Ontario, Canada).

<sup>9</sup> Julia Moses, *The First Modern Risk: Workplace Accidents and the Origins of European Social States* (Cambridge University Press, 2018) (hereinafter Moses, *First Modern*); Robert Baldwin and Terence Daintith (eds), *Harmonization and Hazard: Regulating Health and Safety in the European Workplace* (Graham & Trotman, 1992) (various chapters).

<sup>10</sup> BL Hutchins and A. Harrison, *A History of Factory Legislation* (Franklin, 1903); Katherine A. Moos, 'The Political Economy of State Regulation: The Case of the British Factory Acts' (2021) 45 *Cambridge Journal of Economics* 61; Eric Tucker, *Administering Danger in the Workplace: The Law and Politics of Occupational Health and Safety Regulation in Ontario, 1850-1914* (University of Toronto Press, 1990); Madeleine Johnston, 'The Role and Regulation of Child Factory Labour During the Industrial Revolution in Australia, 1873-1885' (2020) 65 *International Review of Social History* 433; Donald W. Rogers, *Making Capitalism Safe: Work Safety and Health Regulation in America, 1880-1940* (University of Illinois Press, 2009); Henry Rothstein, Regine Paul and David

Effective direct state regulation, however, was not achieved simply by enacting laws; they had to be enforced against employers, a respectable class that states (and workers) relied upon to invest their capital and provide jobs. There was a structural pressure that ran against treating employers as entities needing discipline to keep them compliant with the law. Moreover, inspectors interacted daily with employers and were inclined to accept their assurances that the problems they brought to employers' attention would be resolved in due course and, in any event, the inspectors lacked the resources necessary to carefully monitor employer compliance. Thus, although there was variation over time and place, from the outset the dominant approach to factory inspection was an extreme compliance model; as long as employers evinced a willingness to cooperate, inspectors did not take enforcement measures even when violations remained unresolved on subsequent inspections, producing what WG Carson described as "the conventionalization of factory crime."<sup>11</sup>

A second feature of second wave OHS reforms, although typically occurring several decades after factory acts, was the enactment of workers' compensation laws that provided easier access to compensation for work injuries than was available under the common or the civil law. These often embraced a no-fault compensation model that entitled workers to scheduled amounts of compensation as long as they could establish that their disability was work-related. Often this was the exclusive remedy. Other jurisdictions adopted a mixed model where workers had the option of accepting no fault compensation or seeking higher damages through a fault claim. As well, some countries adopted a public insurance system while others required employers to purchase private insurance. However, for our purposes, the most important point is that the adoption of no-fault compensation systems was based on an acceptance that work-related injuries and fatalities were an inherent feature of industrial production that, by implication, could not be eliminated by stricter health and safety laws and their enforcement.<sup>12</sup>

That said, the adoption of no-fault compensation had the effect of shifting more of the cost of workplace injuries onto employers, which created an economic incentive to reduce compensation costs by reducing work injuries. The resulting Safety-First Movement, which was heavily influenced by principles of scientific management, however, focused on controlling and disciplining unsafe, accident-prone workers rather than the hazardous conditions that demanded employee vigilance (See Figure 1).

Over the course of the first half of the twentieth century the combination of no-fault workers compensation and weakly enforced safety laws produced compensation-safety regimes that

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Demeritt, 'The Boundary Conditions for Regulation: Welfare Systems, State Traditions, and the Varied Governance of Work Safety in Europe' (2020) 33 *Governance* 21.

<sup>11</sup> WG Carson, 'The Conventionalization of Early Factory Crime' (1979) 7 *International Journal for the Sociology of Law* 37; P.W.J. Bartrip and P.T. Fenn, 'The Evolution of Regulatory Style in the Nineteenth Century British Factory Inspectorate' (1983) 10 *Journal of Law and Society* 201; Richard Johnstone, 'Occupational Health and Safety Prosecutions in Victoria: An Historical Study' (2000) 13 *Australian Journal of Labour Law* 113; Tucker, *Administering Danger*; Rogers, *Making Capitalism Safe*.

<sup>12</sup> Moses, *First Modern*; I.M. Rubinow, *Social Insurance with special reference to American conditions* (Henry Holt 1913).

largely contained worker unrest, albeit not without episodic conflicts and variations among state officials over the scope for regulation and enforcement.<sup>13</sup>



Figure 1

Industrial Accident Prevention Association, Ontario Canada, circa late 1950s

Most third-wave regimes emerged in the 1960s in response factors that varied from place to place but that included stubbornly high injury rates, growing awareness of occupational disease (often from exposure to substances whose hazardous properties were known to but hidden by their producers), and by the emergence of militant worker health and safety movements.<sup>14</sup> The limited success of the pre-existing regime of direct regulation led reformers in several directions at once but what unified them was their view that firms needed to and could better manage OHS hazards and that the state had an important role to play in steering them in that direction. This goal was to be reached through three inter-related initiatives that varied considerably from place to place and over time. The most traditional was to rationalize direct state regulation by enacting

<sup>13</sup> Mark Aldrich, *Safety First: Technology, Labor and Business in the Building of American Work Safety, 1870-1939* (Johns Hopkins Press, 1997); Mike Esbester, 'Organizing Work: Company Magazines and the Discipline of Safety' (2008) 3 *Management and Organizational History* 217; Rogers, *Making Capitalism Safe*, ch.8; Moses, *First Modern*, ch.6; Eric Tucker 'Compensating Work-Related Disability: Theory, Politics and History of the Commodification-Decommodification Dialectic' in Ravi Malhotra and Ben Isitt (eds), *Disabling Barriers: Social Movements, Disability History and Law* (UBC Press, 2017), 189-210; Daniel M. Berman, *Death on the Job: Occupational Health and Safety Struggles in the United States* (MR Press 1978).

<sup>14</sup> Christopher Sirrs, 'Accidents and Apathy: The Construction of the "Robens Philosophy: of Occupational Safety and Health Regulation in Britain, 1961-1974' (2015) 29 *Social History of Medicine* 66; Robert Storey, 'Activism and the Making of Occupational Health and Safety Law in Ontario, 1960s-1980' (2005) 3 *Policy and Practice in Health and Safety* 41; Charles Noble, *Liberalism at Work: The Rise and Fall of OSHA* (Temple University Press, 1986), ch..2-3; Paul Brodeur, *Outrageous Misconduct: The Asbestos Industry on Trial* (Pantheon, 1985).

omnibus health and safety laws instead of sector specific ones, shifting from highly prescriptive standards to general duty and performance standards, a stronger focus on the regulation of hazardous substances and an emphasis on the inspectors' advisory role. The second was a mandated internal responsibility system (IRS) that stipulated the general duties of various duty holders, including employers, supervisors and workers, and required that the employer establish processes and documentation practices as part of their safety management system. The third, and perhaps most controversial, was to give workers rights in the employer's IRS, including a right to know about hazards in the workplace and to be trained to handle them, a right to participate in the IRS both individually and through representatives and joint committees, and a right to refuse unsafe work.

A key influence on the development of third wave regimes in England and the Commonwealth was the Robens Report issued in 1972.<sup>15</sup> The report famously asserted that "the most important single reason for accidents at work is apathy" and that the solution was to foster a more effective system of self-regulation.<sup>16</sup> The means for accomplishing this, perhaps ironically for Robens, required *law* that imposed duties on employers to provide safe work systems and to train and supervise workers and that required them to consult with employees in the development of these measures. Although contested at the time, the so-called Robens philosophy influenced the Ham Commission Report in Ontario, Canada, which also emphasized the central importance of the IRS, including worker participation, supported by a contributory external responsibility system whose principal role was to support the self-regulatory system.<sup>17</sup>

Parallel developments were taking place in the European Union (EU) through directives that member states are required to transpose into domestic law. The most important of these was the 1989 Framework Directive for the Introduction of Measures to Encourage Improvements in Safety and Health for Workers.<sup>18</sup> Its key provisions impose a duty on employers to protect the health and safety of workers by adopting management practices to evaluate and avoid or control risks and incorporate these measures into all decision-making at all levels and to consult with workers and/or their representatives and allow them to participate in discussions in all areas of OHS.<sup>19</sup>

Yet, as discussed below, despite these broad similarities, the institutionalization of third wave regimes varied considerably, depending to a great extent on the underlying welfare state and industrial relations systems of each country.<sup>20</sup>

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<sup>15</sup> Lord Robens, *Safety and Health at Work. Report of the Committee, 197072*. Cmnd 5034.

<sup>16</sup> *Ibid.* 1.

<sup>17</sup> Theo Nichols and Pete Armstrong, *Safety or Profit?: Industrial Accidents and the Conventional Wisdom* (Falling Wall Press, 1973); James M. Ham, *Report of the Royal Commission on the Health and Safety of Workers in Mines*, (Ministry of the Attorney General, Ontario, 1976). On the influence of Robens elsewhere, see Felicity Lamm, 'Australian and New Zealand Occupational Health and Safety – A Comparative Analysis' (1994) 32 *Asia Pacific Journal of Human Resources* 57.

<sup>18</sup> EU Framework Directive 89/391.

<sup>19</sup> David Walters et al., *Regulating Health and Safety Management in the European Union* (Peter Lang 2002) (hereinafter Walters, *Regulating*).

<sup>20</sup> Henry Rothstein et al., 'Varieties of Risk Regulation in Europe: Coordination, Complementarity and Occupational Safety in Capitalist Welfare States' (2019) 17(4) *Socio-Economic Review* 993-1020; Eric Tucker, 'Re-Mapping Worker Citizenship in Contemporary Occupational Health and Safety Regimes' (2007) 37(1) *International Journal of Health Services* 145-70.



### III. Assessing Third Wave OHS Regulation in Practice: Trends and Controversies

Any attempt to assess the performance of third wave regulation must recognize that its practice varies enormously and changes over time, often without legislative reform. Therefore, the modest goal of this section is to identify and address two inter-related themes that have been prominent in policy and academic discussions. These are the efficacy of the IRS, including worker participation, and inspection and enforcement.

Worker participation in OHS regulation varies enormously. While workers' right to know about the hazards present in the workplace is widely accepted, the strength of worker voice and the right to refuse unsafe work is more contested and its institutionalization tends to reflect different industrial relations orientations. The unitarist perspective, where it is claimed that workers and employers generally share common interests, has had an outsized influence in OHS regulation such that collective bargaining approaches to worker participation have been discouraged.<sup>21</sup> A contrary view that influenced the development of third-wave reforms in the 1960s and 70s came from militant worker health and safety movements claiming that safety and profit making were often in conflict and insisting that workers' health should not be for sale. They demanded that because it was workers' lives and health that were at risk, workers were entitled to decision-making powers in relation to health and safety. While these movements provided an important impetus for third-wave reforms, most participatory arrangements had their roots in pluralist industrial relations systems, where joint health and safety committees and rights to refuse unsafe work had already been negotiated in collective agreements, prior to being legislated.

The dominance of the pluralist frame can be seen in the requirement in most jurisdictions that larger employers establish joint health and safety committees with employee members appointed by the workers directly or by their trade union, and that worker health and safety representatives (HSRs) be protected against retaliation, entitled to paid time off to perform their duties and be trained, and receive information from the employer. As well, HSRs' powers are typically limited to conducting workplace inspections and investigations, accompanying OHS inspectors, being consulted about OHS arrangements, and making recommendations to the employer. However, underlying these pluralist structures arguably is a unitarist assumption that common interests will prevail, so that there is no need to address power imbalances or provide for dispute resolution mechanisms. Joint Health and Safety Committees (JHSCs) generally lack decision-making power, HSRs rarely have the unilateral power to stop unsafe work, and few workers have a right to collectively refuse unsafe work or strike. To generalize, it might be said that the law mandates pluralist structures but expects them largely to operate on unitarist assumptions.<sup>22</sup>

There is a large literature assessing the efficacy of worker participation in OHS management and there seems to be a general consensus that worker participation has a positive impact. The strength of that impact, however, is associated with the presence of a number of conditions

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<sup>21</sup> This was particularly true in the Robens Report and the Ham Report.

<sup>22</sup> David Walters and Theo Nichols, eds., *International Perspectives on Representing Workers' Interests in Health and Safety* (Palgrave Macmillan, 2009); David Walters and Theo Nichols, *Worker Representation and Workplace Health and Safety* (Palgrave Macmillan, 2007). The United States is an outlier in that its federal law does not require JHSCs although a number of state laws do. James J. Brudney, 'Muted Voices: United States Employees' Role in Regulating and Protecting Workplace Health' (forthcoming, *Comparative Labor Law & Policy Journal* 2023).



including strong legislative support for worker representation; pre-existing employer commitment to participatory approaches to OHS and workplace management generally; supportive worker and union organization inside and outside the establishment; and well-trained and well-informed HSRs.<sup>23</sup>

There is a growing concern that the preconditions for effective worker participation are eroding. Trade union representation, particularly in the private sector, has been declining in most countries.<sup>24</sup> That absence deprives HSRs of an important source of health and safety information and makes them more vulnerable to experiencing adverse employment consequences for actively pursuing workers' autonomous OHS interests, despite legislated anti-retaliation protection. Additionally, the growth of precarious employment, which can also impact unionized workers faced with downsizing, outsourcing and offshoring, as well as workers in part-time and temporary arrangements, generally reduces the willingness of workers to press their health and safety concerns, especially when they anticipate employer resistance. These developments are also associated with a general decline in employer commitment to participatory management approaches. As a result, resulting in employers frequent seek to incorporate HSRs into *management's* health and safety system by having them become extensions of management's eyes and ears and conduits for communicating management messaging.<sup>25</sup>

The individual right to refuse unsafe work, which backstops all other failures to address hazardous working conditions, is premised on workers knowing about hazardous working conditions and, more importantly, feeling secure enough to challenge management when ordered to perform work they perceive is hazardous. However, the erosion of the preconditions that make collective worker representation effective also undermines the willingness of individual workers to refuse unsafe work. Indeed, a recent study of worker participation in OHS regulation during COVID found that even among unionized workers there were few work refusals and when they did occur, OHS inspectors rarely supported them.<sup>26</sup>

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<sup>23</sup> See Annalee Yassi et al., 'Effectiveness of Joint Health and Safety Committees: A Realist Review' (2013) 56(4) *American Journal of Industrial Medicine* 424-438; Walters and Nichols (2007).

<sup>24</sup> For example, trade union membership among OECD countries declined from about 33% in 1975 to about 16% in 2018, while collective bargaining coverage shrank from 46% in 1985 to 32% in 2017. 20. OECD, *Negotiating Our Way Up: Collective Bargaining in a Changing World of Work* (2019). the Future of Work (July 2021) Online <https://www.ilo.org/infostories/en-GB/Stories/Labour-Relations/trade-unions#where>.

<sup>25</sup> David Walters, "Representing Workers on Safety and Health: The Current Challenge?" in Peter Sheldon et al., eds., *The Regulation and Management of Workplace Health and Safety: Historical and Emerging Trends* (Routledge 2021), 123-140; Alan Hall, *The Subjectivities and Politics of Occupational Risk* (Routledge 2022); Kaj Frick, 'Worker Influence on Voluntary OHS Management Systems – A Review of its Ends and Means' (2011) 49: *Safety Science* 974-987; Neil Gunningham, 'Occupational Health and Safety, Worker Participation and the Mining Industry in a Changing World of Work' (2008) 29(3) *Economic and Industrial Democracy* 336-361; Wayne Lewchuck, 'The Limits of Voice: Are Workers Afraid to Express Their Health and Safety Rights?' (2013) 50(4) *Osgoode Hall Law Journal* 789-812,

<sup>26</sup> Alan Hall and Eric Tucker, 'Worker Participation in a Time of COVID: Case Studies of OHS Regulation in and Ontario' (2022) 90 *Labour/Le Travail* 1-39; Jeffrey Hilgert, *Hazard or Hardship?: Crafting Global Norms on the Right to Refuse Unsafe Work* (ILR Press 2013); Jason Foster, Bob Barnetson and Jared Matsunaga-Turnbull, 'Fear Factory: Retaliation and Rights Claiming in Alberta, Canada' (2018 ) 8(2) *Sage Open* <https://doi.org/10.1177/2158244018780752>; Garry C. Gray, 'A Socio-Legal Ethnography of the Right to Refuse Dangerous Work' (2002) 24 *Studies in Law, Politics and Society* 133-169.

Given the importance of worker participation to making the IRS the keystone to OHS regimes, its decline has generated concern about its efficacy.<sup>27</sup> Other challenges have been identified as well, including the growth of small and medium size workplaces that have fewer management resources, fissured work arrangements that fragment responsibility for OHS management and the growth of precarious employment. A growing body of international evidence points to worse OHS outcomes when these conditions are present, suggested a diminished capacity to self-regulate. As one major study of regimes that mandate self-regulation, concluded “[w]hatever the intentions...the conclusion that is inescapable in all our case studies is that the managerialist assumptions on which their achievement is based, take little account of structural and organizational changes that have occurred since their development.”<sup>28</sup>

These concerns about the efficacy of the internal responsibility system lead to questions about state inspection and enforcement, which in third-wave regimes were primarily intended to support the IRS, not detect and punish violators. Of course, the claim that inspectors in second-wave regimes were strict, legalistic enforcers going by the book was vastly overstated as historical studies, discussed earlier, demonstrated. From the beginning, factory inspectors rejected the idea that they were to act as police and instead insisted their role was to persuade and educate.<sup>29</sup> In any event, this ‘new’ approach to enforcement became the declared policy of governments and gained support from developments in regulation theory, most famously advanced under the rubric of “responsive regulation.”<sup>30</sup> The central image of this approach is the enforcement pyramid which assumes that most firms are virtuous citizens who wish to comply with the law, and should be supported in doing through education and advice. Inspectors should only start moving up the pyramid of sanctions if and when compliance support fails. So, while deterrence measures are necessary to deal with bad apples, the model predicts they will rarely be needed. There is a large literature debating the merits of this approach that raises a range of questions, including about the capacity of inspection regimes to monitor employer compliance and responsiveness to prior interventions and whether the model adequately accounts for the context of profit-driven production when safety and profit potentially are in conflict.<sup>31</sup>

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<sup>27</sup> For a range of perspectives about the prospects for OHS management systems, see Kaj Frick et al., eds., *Systematic Occupational Health and Safety Management: Perspectives on an International Development* (Pergamon 2000).

<sup>28</sup> Quote from Walters, *Regulating*, 316. Also see Michael Quinlan, ‘The Effects of Non-Standard Forms of Employment on Worker Health and Safety’ (ILO, Conditions of Work and Employment Series No. 67, 2015); David Walters and Philip James, *Understanding the Role of Supply Chains in Influencing Health and Safety Management* (IOSH 2009); Danièle Champoux and Jean Pierre Brun, ‘Occupational Health and Safety Management in Small Size Enterprises: An Overview of the Situation and Avenues for Intervention and Research’ (2003) 41(1) *Safety Science* 301-318; Leslie I. Boden, Emily A. Spieler and Gregory R. Wagner, ‘The Changing Structure of Work: Implications for Workplace Health and Safety in the US (Paper prepared for the Future of Work Symposium, U.S. Department of Labor, 2015) Online [https://www.dol.gov/sites/dolgov/files/OASP/legacy/files/Future\\_of\\_work\\_the\\_implications\\_for\\_workplace\\_health\\_and\\_safety.pdf](https://www.dol.gov/sites/dolgov/files/OASP/legacy/files/Future_of_work_the_implications_for_workplace_health_and_safety.pdf).

<sup>29</sup> Eugene Bardach and Robert A. Kagan, *Going by the Book: The Problem of Regulatory Unreasonableness* (Transaction Publishers 2002 (1982)) and references note 11.

<sup>30</sup> Ian Ayres and John Braithwaite, *Responsive Regulation: Transcending the Deregulation Debate* (Oxford University Press, 1992).

<sup>31</sup> For an overview of debates, see Christine Parker, ‘Twenty Years of Responsive Regulation: An Appreciation and Appraisal’ (2013) 7(1) *Regulation and Governance* 2-13. For? And What Price Was Paid?’ (2013) 7(1) *Regulation & Governance* 48-60 and Steven Tombs and David Whyte, ‘A Deadly Consensus: Worker Safety and Regulatory Degradation under New Labour’ (2010) 50 *British Journal of Criminology* 46-65.

Whatever one's views on enforcement theory, there is a large literature examining OHS enforcement, much of which is critical of current practices, stemming from restricted resources and the very limited use of deterrence measures. For example, in the UK, a number of researchers have identified a longstanding decline in resources allocated to OHS enforcement including a 28% decline in frontline OHS inspectors between 2010 and 2020. Not surprisingly, every form of enforcement activity declined.<sup>32</sup> More generally, a study of inspection in four third-wave jurisdictions with compliance-oriented inspection (Australia, United Kingdom, Sweden and Quebec, Canada) concluded "we do not find significant evidence of 'responsive enforcement' being pursued consistently or successfully across the range of workplaces and employers that are subject to inspection."<sup>33</sup> Finally, a systematic literature review of the effectiveness of OHS enforcement found strong evidence that inspections with penalties reduce workplace injuries, and strong evidence that that consultative activity alone has *no* effect on injury rates.<sup>34</sup>

Arguably these findings point to a deterrence gap in OHS enforcement, deeply rooted in the history and practice of OHS regulation and now reinforced and legitimated by much recent regulatory theory. Resistance to these enforcement gaps also has deep roots and periodically gains widespread support after regulatory failures contribute to the deaths of workers.<sup>35</sup> For example, after the 1991 Westray mine disaster in which 26 miners died, it was revealed that OHS inspectors knew of the dangers and had issued repeated orders that had been ignored without sanctions. The resulting outrage led to a successful decade-long campaign to amend the criminal law to facilitate the prosecution of employers for criminal negligence.<sup>36</sup> Yet, despite getting criminal laws on the books, employers are rarely prosecuted.<sup>37</sup> As in the past, the obstacles to prosecuting employers remain strong.

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<sup>32</sup> Andrew Moretta, Steve Tombs and David Whyte, 'The Escalating Crisis of Health and Safety Enforcement in Great Britain: What Does Brexit Mean?' (2022) 19(5) *International Journal of Environmental Research and Public Health* 3134 <https://doi.org/10.3390/ijerph19053134>; Phil James, 'Protecting Life and Death under the Coalition' in Steve Williams and Peter Scott, eds., *Employment Relations under Coalition Government: The UK Experience* (Routledge 2016), 127-143.

<sup>33</sup> Walters et al., *Regulating*, 315.

<sup>34</sup> Emile Tompa et al., 'A Systematic Literature Review of the Effectiveness of Occupational Health and Safety Regulatory Enforcement' (2106) 59(11) *American Journal of Industrial Medicine* 919-933. Also, see Kevin Purse and Jillian Dorrian, 'Deterrence and Enforcement of Occupational Health and Safety Law' (2011) 27(1) *International Journal of Comparative Labour Law and Industrial Relations* 23-39.

<sup>35</sup> Paul Almond and Sarah Colover, 'Communication and Social Regulation: The Criminalization of Work-Related Deaths' (2012) 52 *British Journal of Criminology* 997-1016; Juyeon Lee, Myoung-Hee Kim and Erica Di Ruggiero, 'The Corporate Killing Movement in South Korea: A Critical Realist Analysis of Social Structure and Collective Agency' (2021) 31(2) *Critical Public Health* 156-168.

<sup>36</sup> Harry Glasbeek and Eric Tucker, 'Death by Consensus: The Westray Story' (1993 Summer) 3(4) *New Solutions* 14-41; Steven Bittle, *Still Dying for a Living* (UBC Press, 2012). *An Act to amend the Criminal Code (criminal liability of organizations)*, S.C. 2003, c. 21.

<sup>37</sup> For the UK, see Paul Almond, 'Workplace Safety and Criminalization: A Double-edged Sword' in Alan Bogg et al., eds., *Criminality at Work* (Oxford University Press 2020), 391-408; Steve Tombs and David Whyte, 'The Myths and Realities of Deterrence in Workplace Safety Regulation' (2013) 53 *British Journal of Criminology* 746-763. For Canada, see; Harry Glasbeek, 'Missing the Targets – Bill C-45: Reforming the Status Quo to Maintain the Status Quo' (2013) 11(2) *Policy and Practice in Health and Safety* 9-23. Also, see Richard Johnstone, 'Work Health and Safety and the Criminal Law in Australia' (2013) 11(2) *Policy and Practice in Health and Safety* 25-44.

#### IV. Future Challenges

Following a campaign by global unions, in June 2022, the ILO amended its Declaration on Fundamental Principles and Rights at Work to include “a safe and healthy working environment.” The effect of its inclusion, (adding it to the earlier-included rights addressing freedom of association, forced labour, child labour and employment discrimination) is that all ILO members are under an obligation to respect, promote, and realize, in good faith, the principles of health and safety even if they have not ratified the two underlying ILO OHS conventions.<sup>38</sup> While this amendment signals global recognition of the seriousness of OHS, it is perhaps shocking that it has only come in 2022 given the global burden of OHS-related deaths, disease and disability.<sup>39</sup>

While workplace injuries and illnesses are improving in some parts of the world, clearly there are major challenges ahead for effective OHS regulation, arising from changing workplace hazards and the reorganization of work, among others.

By identifying new workplace hazards, I do not mean to imply that old ones, including traumatic injuries, sprains and strains, overexertion, and occupational disease due to exposure to dust and other hazardous substances have been eliminated, although in many places they are less prevalent due to fewer workers being exposed and reduced exposures due to automation and engineering controls. As difficult as it has been to ameliorate older hazards, effectively regulating new hazards may be particularly daunting. For example, numerous researchers have identified workplace stress and overwork as major health hazards.<sup>40</sup> However, the causes of stress and overwork are typically closely associated with management practices aimed at extracting more effort from workers and OHS regulation, indeed labour law generally, does not reach this deeply into the abode of production unless there is bullying or harassment.<sup>41</sup>

The reorganization of work, particularly the rise of precarious employment or non-standard employment, including temporary work, triangular employment relations, home-based work, and gig work, amongst others, has been associated with poorer safety outcomes. One of the reasons for this is increased risk of regulatory failure, which has multiple causes.<sup>42</sup> Among them are workers’ fear of retaliation for asserting workplace rights, lack of union representation,

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<sup>38</sup> Ivan Williams Jimenez, ‘Occupational safety and health – a fundamental right’ Online ILO, ‘A Safe and healthy working environment is a fundamental principle and right at work’ (2022) Online (Social Europe, 28 April 2022) Online <https://socialeurope.eu/occupational-safety-and-health-a-fundamental-right>; ILO ‘A safe and healthy working environment is a fundamental principle and right at work’ (ILO) Online <https://www.ilo.org/global/topics/safety-and-health-at-work/areasofwork/fundamental-principle/lang--en/index.htm>. The two ILO Conventions are: *Occupational Health and Safety Convention, 1981 (C-155)* and *Promotional Framework for Occupational Health and Safety Convention, 2006 (C-187)*. There are 187 member countries: 79 ratified C-155, 59 ratified C-187).

<sup>39</sup> ILO/WHO “Joint Estimate” estimated that in 2016, about 1.9 million workers died as a result of work-related diseases and injuries.

<sup>40</sup> For example, see A.C.L. Davies, ‘Stress at Work: Individuals or Structures?’ (2022) 51(2) *Industrial Law Journal* 403-434 Jeffrey Pfeffer, *Dying for a Paycheck* (Harper Business, 2018).

<sup>41</sup> Katherine Lippel, ‘The Law of Workplace Bullying: An International Overview’ (2010) 32(1) *Comparative Labor Law & Policy Journal* 1-14.

<sup>42</sup> Elsa Underhill and Michael Quinlan, ‘How Precarious Employment Affects Health and Safety at Work: The Case of Temporary Agency Workers’ (2011) 66(3) *Relations Industrielles* 397-421.

fragmentation of legal responsibility, ambiguity about legal coverage and the absence of regulations that address these organizational structures.<sup>43</sup>

What unites these new challenges with older ones is that they are the result of capitalist accumulation strategies built on the extraction of value from human labour. While safety and profit do not necessarily conflict, when they do there is a structural pressure on employers to prioritize profits. OHS regulation is necessary to counter that structural pressure and has and continues to ameliorate the risk of premature death and disability for many workers. But regulation is largely reactive and so limited in its ability to prevent the creation of new hazards and its efficacy is tempered by the socio-economic context in which it operates.

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<sup>43</sup> Underhill and Quinlan, *ibid.*; Eric Tucker, 'Ambiguities and Absences: Occupational Health and Safety Regulation of Platform-Mediated Work in Ontario, Canada' (2023) 1 *Journal of Work Health and Safety Regulation* 18-41; Richard Johnstone and Michael Quinlan, 'The OHS Regulatory Challenges Posed by Agency Workers: Evidence from Australia' (2006) 28(3) *Employee Relations* 273-289.