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The Effectiveness of Health and Safety Committees

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Résumé de l'article

Dans tous les pays industrialisés occidentaux, les réformes de la législation et des politiques gouvernementales ont commencé à insister sur l'importance d'assurer la participation active des travailleurs à la planification et à la mise en œuvre de programmes et de politiques de santé et de sécurité aux lieux du travail. Les comités paritaires de santé et de sécurité au Canada sont devenus la manifestation la plus valable de la participation ouvrière à de tels programmes. Ces comités confèrent aux travailleurs et également aux employeurs une façon importante de collaborer à la prévention et à la solution des risques professionnels. Ils peuvent réunir tout un train d'expériences pratiques et de connaissances techniques, fournir des outils de communication à la main-d'œuvre et en recevoir d'elle, faciliter la contribution des travailleurs et des employeurs aux décisions auxquelles parviennent les membres des comités. Et ces comités offrent les avantages de conseils directs et continus et constituent ainsi une réponse immédiate aux risques professionnels.

La nécessité de rapports de coopération plus suivis entre le travail et le patronat, spécialement en ce qui a trait à la santé et à la sécurité professionnelles peut être considérée comme une conséquence de l'incapacité séculaire de l'industrie à se discipliner et du gouvernement à adopter des normes de santé et de sécurité valables. Certains observateurs soutiennent que les gouvernements ont aussi manqué à leur devoir de mettre en vigueur et de promouvoir ces normes de façon adéquate.

Les principales mesures pour accroître le degré de participation directe des travailleurs en tant que moyen d'améliorer la santé et la sécurité professionnelles sont :

a) l'information en matière de santé et de sécurité ainsi que l'éducation; b) des stimulants et des pénalisations économiques (comme l'indemnisation des travailleurs) et c) l'adoption et la mise en vigueur de normes de santé et de sécurité professionnelles.

Les insuffisances de ces politiques sont apparentes lorsqu'on considère les statistiques disponibles relatives aux maladies et aux accidents industriels. Chacune de ces politiques est un fouillis de contraintes et de difficultés pratiques. Une analyse des politiques et des programmes des treize compétences canadiennes en ce domaine laisse voir qu'il existe des différences notables entre les obligations et les fonctions des comités et un écart profond en ce qui a trait au degré d'appui que les gouvernements leur accordent pour assurer leur efficacité. Néanmoins, il est évident que les comités paritaires aux lieux du travail sont des facteurs de plus en plus importants dans la diminution des risques pour les travailleurs canadiens. L'insuccès admis des modes les plus traditionnels d'aborder la santé et la sécurité industrielles signifie qu'on devrait faire une plus grande confiance à la coopération patronale-ouvrière. Le nombre des comités paritaires de santé et de sécurité s'accroît sans doute dans l'avenir. Les employeurs et les travailleurs devront en favoriser le développement.

En effet, ces comités reçoivent un appui considérable de la part de quiconque croit à l'autorégulation par opposition à la législation ou aux stimulants économiques comme moyens de réduire les taux d'accidents et de maladie que l'on trouve dans les entreprises canadiennes. Malgré un intérêt plus marqué pour l'établissement et le développement des comités paritaires de santé et de sécurité au travail, peu d'études ont été effectuées pour en apprécier l'efficacité. Cet article traite des principaux facteurs d'évaluation de ces comités. Des quelques travaux qu'on a réalisés sur le sujet et de leur examen, il est possible d'énumérer une série de mesures de la valeur de cette forme de participation des travailleurs. Les données accessibles en Alberta (enquêtes au moyen d'entrevues) et en Saskatchewan (résumés annuels tirés des procès-verbaux des assemblées de comités) sont évaluées à la lumière de ces mesures de façon à répondre à la question :

« Les comités paritaires de santé et de sécurité professionnelles sont-ils efficaces? »

En se fondant sur des critères surs, nous croyons que l'enquête de l'Alberta et les statistiques tirées des procès-verbaux de la Saskatchewan fournissent la preuve certaine qu'ils sont efficaces. C'est par la diminution des blessures et des maladies que leur valeur se mesure le mieux. Cependant, celle-ci doit aussi reposer sur d'autres critères tels que leur influence sur les relations professionnelles et la prise de conscience qu'elle entraîne tant chez les travailleurs que chez les employeurs de l'importance des programmes de santé et de sécurité par les diverses mesures qu'ils peuvent susciter.

Bien qu'il soit encore trop tôt pour conclure que les comités paritaires de santé et de sécurité sont des instruments surs pour réduire les blessures et les maladies professionnelles, certains indices montrent que tel est le cas. Il est plus probable que l'impact de ces comités ressortira avec le temps et nous recommandons qu'une étude des variables macroéconomiques, associée à une analyse des procès-verbaux des comités et à l'utilisation de méthodes d'enquête par entrevues, serait la plus susceptible de répondre de façon concluante à la question de savoir si ces comités sont efficaces ou non.

Nous avons de bonnes raisons d'être optimistes, parce que, en tant qu'expression de la maturité politique des entreprises canadiennes, ce type de comités paritaires a été accepté par la grande majorité des industries et des gouvernements au Canada comme moyen de répondre aux problèmes croissants de santé et de sécurité au travail. Leur acceptation par les travailleurs, les employeurs et les gouvernements devrait assurer leur développement et leur sécurité.

The Effectiveness of Health and Safety Committees

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and
Pran Manga

Despite the increasing interest in the establishment and the development of joint labour-management occupational health and safety committees, there have been few studies undertaken to determine their effectiveness. The external and internal factors which influence committee effectiveness, and measures for determining their effectiveness are presented. The confusion between influencing factors and actual measures of committee effectiveness is discussed.

Throughout the western industrialized countries, reforms in government legislation and policies have begun to stress the importance of ensuring the active participation of workers in planning and implementing occupational health and safety (OHS) policies and programs at their workplaces. Joint labour-management occupational health and safety committees in Canada have become the most significant manifestation of worker participation in industrial health and safety programs. These committees confer upon workers and management alike an important means for dealing jointly with the prevention and the resolution of occupational hazards. These committees can bring together a range of practical experience and technical knowledge, provide a means of communication to and from the workforce, and facilitate the commitment of workers and

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•• The opinions expressed in this paper are not necessarily those of the author's employers, past or present. The authors would like to acknowledge the comments offered by Iris Sulyma on earlier drafts of this paper.

employers to the decisions reached by the members of the committee. Committees offer the advantages of direct and continuous monitoring of and immediate response to industrial hazards¹.

The major policy alternatives to increasing the level of direct worker participation as a means of improving occupational health and safety are: (a) industrial health and safety information and educational policies; (b) various economic incentives and disincentives (such as workers' compensation); and (c) legislation and enforcement of occupational health and safety standards. The shortcomings of these policies are apparent when considering the available industrial injury and illness statistics. Each of these policies is bedevilled with significant constraints and practical difficulties. Their shortcomings are further compounded by the apparently ineffective manner in which they have been typically applied².

A review of the policies and the programs of the thirteen Canadian jurisdictions suggest that there are significant differences between the duties and functions of the committees and the degree to which committees are supported by government to ensure their effectiveness. Nonetheless, it is evident that joint work site committees are increasingly important factors in reducing hazards to Canadian workers. The current lack of success of the more traditional approaches to occupational health and safety means that greater reliance will be placed on co-operative labour-management approaches. Joint labour-management occupational health and safety committees will undoubtedly increase in number in the future.

Employers and workers should respond favourably to this development. Indeed, these committees are strongly favoured by those who believe in the potential for self-regulation in contradistinction to government legislation or economic incentives as an approach for reducing the unacceptably high levels of occupational injury and illness occurring in Canadian workplaces.

It is evident from the literature that there is a tendency to confuse the factors which influence committee effectiveness with the measures of effectiveness. In fact, a number of studies have literally assumed that committees are effective, and have then proceeded to describe the factors which appear to be related to their presumed effectiveness. In this paper, the major fac-

¹ For a more comprehensive discussion of the rationale for establishing joint labour-management occupational health and safety committees, see G.K. BRYCE and P. MANGA, «Committees to Guard the Workplace», *Policy Options*, Vol. 4, No. 5, September 1983, pp. 49-51.

² P. MANGA, R. BROYLES and G. RESCHENTHALER, *Occupational Health and Safety: Issues and Alternatives*, Technical Report No. 6 of the Economic Council of Canada's Regulatory Reference Series, 1981.

tors that determine the effectiveness of joint work site health and safety committees are identified. To provide a basis for the analysis that will follow, the more significant of these factors are then discussed.

There is a dearth of accurate and meaningful data on joint work site committees. From the few studies which have been undertaken and from a review of the literature, a set of specific measures for determining the effectiveness of this form of worker participation can be identified. Applying these identified measures, the available data from Alberta and Saskatchewan is then evaluated to assess whether joint labour-management occupational health and safety committees are effective. Implications for the continued use of joint occupational health and safety committees and the directions for future research are then summarized.

FACTORS INFLUENCING EFFECTIVENESS

There are many factors which may contribute to the overall effectiveness of health and safety committees. We list summarily the more significant factors that either directly or indirectly affect the performance (or the establishment, for that matter) of joint labour-management occupational health and safety committees, regardless of the jurisdiction or industry concerned. We have subdivided these factors into two groups; those which a committee can reasonably be expected to be able to control (eg. «internal factors»), and those which are usually beyond the ability of the committee to influence (eg. «external factors»)³. Lastly, it should be noted that the specific factors listed below are not necessarily placed in a particular order of importance within their respective group.

External Factors

- 1) The commitment of employers and senior management to the principles of OHS in general, and to the committee in particular. Examples of their commitment would include: appointment of a senior official to the committee, especially an official committed to OHS and capable of

³ P.B. BEAUMONT, J.R. COYLE, J.W. LEOPOLD, and T.E. SCHULLER, *The Determinants of Effective Joint Health and Safety Committees*, mimeograph, Centre for Research in Industrial Democracy and Participation, University of Glasgow, May 1982, provide a similar separation of external and internal determinants. However, their research focused solely on a limited number of external factors and did not address the broader possible range of internal and external factors which could influence committee effectiveness. Their study also indicated that there was an interactive effect between internal factors and external factors, as well as between the factors and possible measures of effectiveness.

initiating change; prompt follow-up to committee recommendations; full explanation of delays in implementing or rejecting recommendations; provision of sufficient resources to undertake tasks; and a clearly established reporting system within the organization.

- 2) The commitment of employees and/or labour unions to the principles of OHS in general, and to the committee in particular. Examples of their commitment would include: appointment of worker representatives willing and capable of participating effectively; worker or union acceptance of responsibility for some of the committee's decisions; regular attendance at meetings by worker representatives; and whether OHS concerns are also addressed by committee members outside of the regular committee meeting framework.
- 3) The quality of general labour-management relations at the work site; whether the work site is unionized or not; and management and labour's attitude towards worker participation, regardless of the form it may take.
- 4) The quality, accessibility and use of the information necessary to ensure less hazardous workplaces.
- 5) The form, content and underlying focus of the industrial health and safety education and training programs. It is especially important to have programs established to train committee members in OHS in general, and how to conduct and participate in effective meetings.
- 6) Access to and use of occupational health and safety personnel. Examples would include: the safety officer; health nurse; external consultants; medical practitioners; safety engineers; and other health and safety professionals or paraprofessionals. In this area, it is important to ensure that the role of external resource personnel is clearly defined, especially in relation to interest in and commitment to the issues the committee is concerned with.
- 7) The general conditions of the physical plant; the complexity of the industry or work processes; the inherent risks associated with the particular industry or workplace; and the size of the work force; and the organizational structure of the company.
- 8) The demographics of the workforce (eg. age distribution, education levels, work experiences, turn-over rates, and so on).
- 9) Legal requirements placed upon committees by governments. These would include: whether the government's program establishes mandatory or voluntary committees; requirements for a certain structure, composition and size; provisions of basic terms of reference; and legislated incentives to encourage worker participation, such as payment for time spent on committee business and immunity for members conducting committee business.

- 10) Mandate of the committee. This would be provided in the terms of reference stated under law, but would also include numerous other factors such as: whether the committee reacts to problems or initiates action on its own; the degree to which the committee acts in an advisory capacity or exercises authority to effect real change; whether the right sort of issues are dealt with (eg. crucial, long-term problems relating to policy and programs, rather than minor, administrative or house-keeping problems); whether the committee is permitted to administer its own budget; involvement in work site inspections; maintenance of accident reports; hygiene monitoring abilities; conducting safety audits; involvement in enforcement programs; involvement in the worker's right to refuse dangerous work assignments or in the worker's right to know about unsafe or unhealthy conditions; development of workplace safety rules and procedures; and so on.
- 11) Number of committees operating at the work site, and the relationship between these committees.
- 12) The financial status of the company or the industry, as a whole.
- 13) The past experience of the committee members, either within committee structures or with OHS in general.

Internal Factors

- 1) How does the committee measure its own effectiveness? Do members understand the purpose of the committee (especially in relation to an overall OHS program), and understand their duties and authorities? Are purpose, duties, or authorities periodically reviewed and revised by the members, if necessary?
- 2) How much time do the committee members spend on OHS activities, during committee meetings and outside the committee process?
- 3) Committee communication with workers and managers at the worksite. Examples would include: workers being provided with copies of the meeting agenda, minutes of every meeting, or an annual report of accomplishments; a method for the workers and management who are not on the committee to bring issues to the attention of the committee; and special briefings arranged with other workers and/or managers in attendance.
- 4) The manner in which decisions are reached. This may include: the process by which consensus is achieved; taking secret votes on decisions; or the operation of cooperative, problem-solving sessions, rather than adversarial decision-making processes. In this regard, the method of solving problems can be as important as the solutions reached.

- 5) There are also numerous administrative and practical factors which can influence committee effectiveness, but these are common to the effective operation of virtually any committee. These factors include: the size of the committee; the use of agendas and minutes; formation of sub-committees; frequency and regularity of meetings; timing and location of meetings; duration of meetings; attendance at meetings; participation in discussion and actions; and the manner in which unresolved issues are dealt with.

This listing is not exhaustive. It is only meant to illustrate the wide range of the problems and the factors influencing the effectiveness of this form of worker participation in occupational health and safety programs⁴. We discuss in further detail a few of the more important determinants of the effectiveness of joint labour-management occupational health and safety committees, as follows.

Commitment from Employers

Kochan, Dyer and Lipsky⁵ were amongst the first researchers to explore the dynamics of joint labour-management industrial health and safety committees. They were particularly interested in identifying the major factors that contributed to the effectiveness of these committees. Although their 1977 study cannot be directly applied to the Canadian industrial scene, they did find that the attitudes and the expressed policies of senior management were the major determining factors for effective and viable joint work site committees. This observation is apparently universally accepted and the impact of management's commitment to the committee program cannot be overstated.

We note that it is important for management to demonstrate its commitment to these joint health and safety committees by appointing at least one senior corporate officer who can exercise real authority and affect real change in the workplace. In this way, the committee's recommendations will be taken seriously by both labour and management, and the process of making these recommendations will be taken seriously by the committee itself.

4 Recently, Labour Canada and the Canadian Centre for Occupational Health and Safety have both published documents which contain useful guidelines for promoting effective committees. For further details reference *Establishment and Operation of Safety and Health Committees*, 1984, Labour Canada publication Cat. No. L31-51/1984E or V. WUORINEN, *Check List and Guideline for Joint Occupational Health and Safety Committees*, P84-1E, Canadian Centre for Occupational Health and Safety, June, 1984.

5 T.A. KOCHAN, L. DYER, and D.B. LIPSKY, *The Effectiveness of Union-Management Safety and Health Committees*, Kalamazoo, Michigan, W.E. Upjohn Institute for Employment Research, 1977.

Voluntary or Mandatory Committees

One of the more contentious issues arising from the joint work site health and safety committee programs is the question of whether committees should be voluntarily established or mandated through legislation. A policy of mandatory committees is seen by some observers to represent an excess of government intervention and an unwarranted attempt to 'prematurely' increase the level of industrial democracy in Canadian workplaces⁶. Advocates of voluntary committees defend their position to be consistent with the «deregulation» or «self-regulation» thrust of government policies. The implied criticism of government mandated committees is, however, misdirected. It is incorrect to equate mandatory committees with the legislative approach to solving occupational health and safety problems. Indeed, mandatory joint labour-management occupational health and safety committees are consistent with the self-regulation philosophy commonly advocated in Canada⁷.

Voluntary committee programs assume the existence of enlightened management, who's goodwill benefits workers without the need of government intervention. All too often it seems that direct government action is required precisely because a significant number of management personnel are not so enlightened. There is abundant historical evidence that an absence of mandated committees is likely to mean no workplace involvement by workers in resolving their health and safety concerns, thus making a mockery of the concept of self-regulation⁸. A policy of mandatory committees may be particularly relevant for non-unionized workplaces (which make up the vast majority of Canadian workplaces) where the lack of bargaining units to represent the workers' concerns may lead to an inadequate involvement of workers in occupational health and safety.

In some jurisdictions it is sometimes argued that voluntary committees, whether established through collective bargaining agreements or otherwise, are likely to be more effective than those mandated by government.

6 It should be noted that even in jurisdictions where the establishment of committees is voluntary, they can be mandated by government order where the presence of these committees is deemed to be appropriate.

7 In 1975, the Alberta Industrial Health and Safety Commission (the Gale Commission) recommended that it should be mandatory for joint safety and health committees to be established at all Alberta work sites, unless the employer is specifically excused from having one by the government. In 1976, the Ontario Royal Commission on the Health and Safety of Workers in Mines (the Ham Commission) also addressed the issue of promoting the 'internal responsibility system'.

8 P.B. BEAUMONT and J.W. LEOPOLD, «A Failure of Voluntarism: The Case of Joint Health and Safety Committees in Britain», *New Zealand Journal of Industrial Relations*, Vol. 7, Spring 1982, pp. 61-75.

However, this is a mere assumption, and as far as we know, is not supported by empirical analysis. The political preference for voluntary committees amongst employers is, of course, understandable, especially given the still dominant view among them that OHS is solely their responsibility.

Obviously there are different social philosophies expressed by the alternative paths the various Canadian governments have taken with respect to establishing joint work site health and safety committee within their jurisdiction. Whichever policy is adapted, it is apparent that there will be a concurrent need to create the appropriate support systems to ensure that the committees operate effectively.

With a voluntary program, the government's emphasis would probably remain on the traditional legislation enforcement and monitoring programs (in part, perhaps, to screen for settings where committees should be encouraged).

For broad, trans-industrial mandatory committee programs, the government's emphasis would be placed on the educational and informational services. These services would, in turn, be directed towards decentralizing the monitoring and enforcement components of the government's overall occupational health and safety program by creating significant roles for the joint work site committees.

It is, of course, true that mandating committees via government legislation alone does not and cannot guarantee the creation or the maintenance of viable health and safety committees. It does seem, however, that where the criteria for mandatory committees are well defined, they may be the better 'solution' to the OHS problems faced by workers than most, if not all of the alternatives⁹. A decentralized program of workplace committees, backed by informational and educational resources, should prove more effective than the promulgation and enforcement of more and more government regulations. Mandatory committees may be a necessary, albeit in some instances also painful, first step in ensuring that workers will have some meaningful voice in decreasing the level of industrial injuries and diseases.

The Committee's Mandate: How Much Authority? How Much Responsibility?

These two questions should naturally be asked together. Inasmuch as a committee gains authority, there is a corresponding requirement that the

⁹ MANGA et al, *op. cit.*, pp. 279-290, offer an excellent summary and commentary on the major policy and program alternatives available to Canadian governments to address the growing problems of OHS.

committee exercise its authority in a responsible manner. Should a committee have the authority to (a) order specific physical plant changes; (b) order purchases of protective equipment and require employees to use such equipment; or (c) effect changes in production processes, shift-rotations, or employee training programs? Should committees be able to administer a portion of the employer's budget allocated for industrial health and safety? Or should the actions of these committees be limited to that of merely making recommendations to management? These questions become particularly difficult to answer when the areas of interest start to move away from the field of occupational health and safety and into the more nebulous arena of quality of working life, exemplified by such programs as worker determination of hours of work and stress abatement.

On the other hand, the advisory role may also prevent committees from becoming an extension of the collective bargaining process¹⁰. There should be more problem solving activities rather than restrictive collective bargaining strategies occurring at the committee meetings as a result. (It should be noted that, for unionized shops, recommendations not accepted or acted upon by management could possibly be raised later during the negotiating process.)

Committees normally have an element of control and overview which makes them, at least in some jurisdictions, part of the enforcement process. Some Canadian work site health and safety committees have a clearly defined recourse to ask for the intervention of the government's inspectors and health and safety personnel to assist them in resolving problems. Employers are generally against giving joint health and safety committees authority to implement decisions because these decisions may, and usually do, involve economic considerations¹¹. We are not aware of any committees in North America which have independent authority to make direct changes in work practices or initiate capital expenditures.

The Committee's Involvement in the Worker's Right to Know

The development of the workers' right to know is perhaps inevitable where the workers' right to participate in occupational health and safety

¹⁰ This observation was supported by the findings of KOCHAN et al, *op. cit.* Their study, although somewhat limited in terms of its application to the Canadian industrial scene, is an informative review of the factors which influence the effectiveness of committees at unionized work sites.

¹¹ As G.K. BRYCE and P. MANGA, *op. cit.* have noted, it is highly unlikely that Canadian workers will be given any real power to influence the financial decisions that are made by management, whether or not these decisions affect the health and safety of workers. This realm of decision making is seen, even by some of the most vocal unionists, as the sole domain of the employer.

programs has been realized through the joint work site health and safety committees. However, a specific and clearly legislated 'right to know', similar to a 'right to refuse unsafe work' has not been enshrined in any Canadian jurisdiction. Legislation in Canada, more often than not, prescribes an employer's general and limited 'duty to inform' (usually limited to a specific set of recognized hazards), rather than providing an explicit statutory right for the employee to know, to be informed, or be properly trained¹².

It is apparent that for meaningful self-regulation to occur in the workplace, there will have to be a corresponding appropriate level of knowledge and understanding of the hazards involved by both workers and management. In this respect, committees should not hesitate to develop their own information resource centres. Of particular value would be the maintenance of a current inventory of all the known or suspected hazards at the workplace. Such an inventory, mainly compiled by employers or government, may increase the impact of a work site committee. A specific example would be the number of 'near misses' or accidents that did not result in any worker being injured, but were nonetheless significant events. The sharing of such information across any one particular industrial sector could have greater impact than the more traditional exchange of worker fatality statistics.

There is increasing appreciation of the view that knowledge acquired via information dissemination, educational and training programs, and joint consultations is fundamental for full and effective worker participation. Only where a right to know is clearly legislated would there be a corresponding obligation placed upon the parties concerned to ensure that this right can be exercised without frustration. In as much as Canadian legislatures are the providers of this form of worker rights, the onus is upon all governments to provide the necessary programs and systems to facilitate its full expression across all jurisdictions.

¹² As an example, in Ontario, the committees' ability to obtain information from the employer is limited to «industries of which the employer has knowledge» (Ontario's *Occupational Health and Safety Act*, Clause 8(6)(d)). This obviously places a significant constraint on clearly determining what industries the employer does or does not have knowledge of. We believe that this limitation is intentional since it narrows the employer's responsibilities to the identification of potential or existing hazards, the safety experiences, work practices, or standards of the 'known industries'. This provision does not address the need to identify or provide all possible sources of information or resources that may be required to maximize worker participation.

The Committee's Involvement in the Worker's Right to Refuse Unsafe Work Assignments

Although provisions to protect workers from unsafe work have existed in a number of Canadian jurisdictions, these have traditionally been based upon a prohibition against operating unsafe industrial equipment or otherwise endangering fellow employees. These earlier provisions did not deal with processes or environmental hazards that could affect the worker's safety and health. Nor did these early provisions offer any real protection for the employee against possible reprisals from the employer should the worker exercise his rights provided by the legislation. It was all too often a choice of either doing the perceived dangerous work or quitting.

More substantial legislative protection for workers refusing unsafe work assignments has only recently been established in most Canadian jurisdictions. For the most part, the majority of Canadian workers must rely upon outdated or limited labour relation legislation to resolve unfair dismissal or charges of discrimination that they may be subject to when acting on health and safety matters. For workers covered by collective agreements, arbitration processes have set a number of standards for the worker's right to refuse unsafe work. However, the use of labour arbitrators is costly and available to a minority of Canadian workers. The arbitration system is also a lengthy 'after-the-fact' process that offers little if any real or immediate protection for workers who refuse unsafe work assignments.

Committees can perform a variety of functions prior to and during the period of a work refusal. In particular, a committee can arbitrate and assist in determining if an 'imminent' or 'unusual' danger is present in a particular situation. (Most Canadian legislation requires that there must be sufficient grounds for a worker to «believe» that there is an «imminent» or «unusual» danger as a basis for refusing a unsafe work assignment.) This is especially important where a union does not exist or where an existing collective agreement does not address this contentious issue. This assistance can be rendered, in most cases, promptly and with a minimal level of disruption to the work process. Where workers are not given clear and appropriate participative rights to affect real change, the need for increased individual actions, such as unsafe work refusals, may be even more necessary. We expect that there will be a greater reliance on the use of joint health and safety committees or worker health and safety representatives in resolving disputed work refusals.

MEASURES OF EFFECTIVENESS

Since joint labour-management occupational health and safety committees are of relatively recent vintage, it is not surprising to discover that there are very few studies evaluating their effectiveness in influencing OHS matters in Canadian workplaces. Although a few studies have been conducted in the United States and in the United Kingdom, the only Canadian attempt to examine the effectiveness of committees that we are aware of was conducted by the Alberta government in 1978. The salient feature of this study was the reliance on the opinions and perceptions of the committee co-chairmen (i.e. representing labour and management) as the principal source of information for assessing the effectiveness of the committees. This is also the approach adopted in the American and British studies.

There are, however, sources of data which could be used to evaluate the effectiveness of joint OHS committees. The most notable and useful source we are aware of is the ten-year summary of joint work site committee minutes compiled by the Saskatchewan government. This data is the basis for our exploration of the question of committee effectiveness in the next section.

Few meaningful measures of the effectiveness of joint labour-management occupational health and safety committees were identified or applied in the existing studies. It is evident from the literature that there is a tendency to confuse measures of committee effectiveness with the factors which influence committee effectiveness. There is a confusion between means and ends. In fact, a number of studies have literally assumed that committees are effective, and have then proceeded to describe what factors appear to be related to their presumed effectiveness.

It is not all that difficult to suggest a number of distinct measures of effectiveness. The measures are suggested by the questions we list below. They are indicative only and not meant to be exhaustive.

- 1) Has there been a significant reduction in accident, injury, illness or absenteeism rates attributable to the committee's activities?
- 2) Is there an improved compliance with government OHS legislation? Have government corrective orders decreased in frequency and/or seriousness?
- 3) Did the committee identify workplace health or safety problems? Did it monitor and make decisions to improve the situation? Was action taken by the committee to address the identified problems effective?
- 4) What proportion of the committee's activities were reactive to identified hazards, and what proportion were proactive (eg. in preventing hazards from being manifest)?

- 5) How many of the committee's recommendations were implemented?
- 6) Did the committee meet or exceed the objectives it had set for itself?
- 7) Were the committee's decisions difficult to reach?
- 8) Are workers at the worksite generally more aware of health and safety issues? Have worker and/or management attitudes towards OHS improved?
- 9) What is the perception of other workers or management personnel of the committee? Do they believe that it is performing a useful function?
- 10) Are there improved labour-management relations at the work site attributable to the committee?

It is obvious from these questions that there are a number of alternative measures of the effectiveness of committees. It is equally obvious that some are more important than others. For instance, it can be argued that measures in response to the first question is the most direct and objective way to measure the effectiveness of these work site committees. It is, however, regrettably true that the better measures of effectiveness are not the ones that have been employed in the existing literature. We are not aware of a single Canadian jurisdiction which has recently attempted to determine whether the application of this policy instrument (especially in relation to other instruments) results in meaningful improvements in occupational health and safety, or general labour-management relations.

AN ANALYSIS OF THE AVAILABLE CANADIAN DATA

Aside from a few unpublished internal government reports we have read, there is only one major Canadian survey that has been completed to date and only one major source of statistical data available which sheds some light on the activities of joint labour-management occupational health and safety committees. The first of these was undertaken by the Alberta government during 1978, shortly after the commencement of its designated joint work site health and safety committee program. The other is summary data on the activities of 2,500 committees over a ten year period taken from committee minute report forms submitted to the Saskatchewan government on a fairly regular basis. Both sources of information provide quantitative and qualitative data (albeit with some limitations) for an evaluation of the effectiveness of committees along the lines suggested in the previous sections.

The 1978 Alberta Survey

In 1978, the Occupational Health and Safety Division of the then Alberta Department of Labour, initiated a study of the joint work site health and safety committee program it had established through Ministerial orders eight months earlier. A sample of 36 committees was randomly chosen for the survey, out of a possible 74 committees that had been designated during 1977. Modelled on the earlier study undertaken by Kochan et al¹³, interviews were conducted with each of the co-chairpersons from the 36 selected committees. Although this survey must be seen as somewhat premature, given that it was undertaken only a few months after the committees were established by Ministerial order, it does contain some useful information. To date the Alberta survey has not been repeated.

Employer committee co-chairpersons identified the required proportion of worker to employer members as one of the major problems with the smooth operation of the committees. One employer representative stated, «Equal numbers of workers is silly. If workers don't show up for meetings, we shouldn't have to ask a manager to leave»¹⁴. Employee co-chairpersons expressed concern about the difficulties in worker members being able to attend meetings because of such factors as work scheduling problems and other job constraints¹⁵.

Both groups of committee co-chairpersons agreed that worker members on the joint committees had raised the largest proportion of all concerns. This observation matches the evidence from Saskatchewan. One further interesting observation that can be extracted from the survey data is that workers who are not committee members apparently raised a significantly greater number of concerns than those who were, with non-unionized workers being more active than unionized workers.

The employer co-chairpersons were asked what role they felt workers should play in work site health and safety. While about 60 percent thought that employees should act as consultants and that management should make the final decisions, 40 percent of the management co-chairmen felt that the employees should have at least an equal say in making major decisions. This

¹³ KOCHAN et al, *op. cit.*

¹⁴ GOVERNMENT OF ALBERTA, *An Initial Review of the Joint Work Site Health and Safety Committee Program in Alberta*, Research and Education Branch, Occupational Health and Safety Division, Alberta Worker's Health, Safety and Compensation, August 1978, p. 53.

¹⁵ Having additional or alternative worker representatives would provide equal representation at committee meetings, regardless of which shifts the worker representatives might be on.

is an interesting contradistinction to the traditional view that management should exercise complete control over health and safety matters at the workplace.

The committee co-chairpersons were asked how they felt at the time their worksites were designated to have committees established and how they felt about the designation at the time of the survey (approximately 8 months later). As might be expected, labour co-chairpersons were more pleased initially when their work site was designated than were management representatives. Eight months later, there was no significant difference between the two groups in their perception of the designation with both groups becoming more pleased over time. The Alberta data indicated that mandatory designation of committees does not necessarily adversely affect either managements' or workers' perception of the effectiveness of their committee. With time, the employer's perception of the designation appeared to shift and paralleled that of the workers'.

The committee co-chairpersons were also asked whether joint occupational health and safety committees should be mandatory, and whether more should be established across a wide range of industries. Predictably, there were significant differences between labour and management on these two issues. More labour co-chairpersons than management co-chairpersons believed that committees should be mandatory (65 percent versus 50 percent) and that other work sites should have them also (83 percent versus 53 percent). What is most noteworthy, however, is that more than half of the management representatives supported both the mandatory designation of committees and the further expansion of the committee program.

According to the survey results, support for the additional committees by management representatives was related to their overall satisfaction with the function of their own committees. On the other hand, worker representatives interviewed supported the expansion of the committee program regardless of the level of their satisfaction with their committees. Overall, when the committee co-chairpersons were asked to take everything into account, the vast majority were satisfied with their committees.

The Alberta health and safety committee co-chairpersons were asked to judge how effective their committees had been in improving health and safety conditions in their respective workplaces. From their responses it is apparent that the committees did identify problems and improve OHS conditions at their worksite. Both labour and management co-chairmen agreed that, in their opinion, committees have been successful in improving both health and safety conditions in the workplace.

While there was no significant difference between labour and management co-chairpersons' views of health conditions, there was a significant disagreement between the two groups with respect to improvements in safety conditions. Roughly 60 percent of management co-chairpersons saw their committees being able to moderately improve both health and safety conditions. On the other hand, while over 90 percent of the worker co-chairpersons saw improvements in safety conditions, only half saw improvements in health conditions.

Committee co-chairpersons agreed that committee meetings were conducive to co-operation between labour and management, and that members felt free to express their views without fear of recrimination. Solutions to problems, it seemed, were often forthcoming. This atmosphere of co-operation was also reflected in the experience of both labour and management representatives in dealing with health and safety problems outside the committee process. About three-quarters of the co-chairpersons agreed that their committees did have some positive impact on general labour-management relations.

The Saskatchewan Data

The Saskatchewan program for mandatory occupational health and safety committees was initiated in the early 1970s. Since its inception there has been a great interest in this, the first mandatory worker health and safety participation program in North America¹⁶. As part of the Saskatchewan government's support system for the estimated 2,400 committees, the Occupational Health and Safety Branch initiated a program to indirectly monitor the activities of the committees in 1972. A formal program for recording committee activities was created using a standardized Committee Meeting Minute Form. The committee activities were then compiled, coded and computerized¹⁷.

16 Historically, the Saskatchewan provincial governments have been identified with much innovative and progressive social legislation and many programs, not the least of which are its public hospital, medical, dental and pharmaceutical programs. The novel and progressive philosophy underlying its reform of occupational health and safety concepts, legislation, and programs was nevertheless remarkable. It is thus not surprising to learn that during the mid and late-1970s, the Occupational Health and Safety Branch of the Saskatchewan Ministry of Labour has hosted dozens of curious and concerned individuals, government officials, and other groups from literally all points of the globe.

17 As noted by G. BRYCE in *Joint Labour-Management Occupational Health and Safety Committees: An Example of Worker Participation in Work Site Health and Safety Programs*, April 1981 (unpublished research project report, University of Ottawa, Health Administration Program), in addition to this monitoring/recording function, the minutes allowed the committee to bring some of its concerns to the area officer or to the Branch, whenever such involvement was necessary. The prompt 'flagging' of specific committee requests for assistance took place during the transcription phase of the committee minutes monitoring program.

The following review of the committees operating in Saskatchewan comes from computer summary tables prepared by the Saskatchewan Occupational Health and Safety Branch. To our knowledge, this statistical summary is the only one of its kind in Canada and possibly the only summary of joint work site committee activity of its kind in the western industrialized world. As such, it offers some potentially useful insights into the actions and the effectiveness of joint labour-management occupational health and safety committees¹⁸.

At the start of the program in 1972, there were only 276 committees. The start-up years of the program (1972 to 1974) saw the most dramatic increase in the total number of committees created. As shown in Table 1, it is apparent that the committees dealt with an increasing number of issues and concerns per meeting over time (increasing annually from 1975 by just over 2.1 percent). The overall ratio of new to old concerns addressed by the committees was relatively stable at 3 to 1. From 1972 to 1981, only 15.7 percent of committee meetings were adjourned early because there were no concerns raised. That is to say, fully 84.3 percent of the meetings dealt with numerous and substantive health and safety concerns. The decline in the proportion of meetings with 'no concerns' and the steady increase in the average number of concerns addressed at meetings probably reflects the improvements in the co-operative attitudes and joint actions vis-a-vis health and safety problems as the committees mature.

A review of the origins of the health and safety concerns brought to the committee's attention, summarized in Table 2, indicates that individual committee members have been actively involved in bringing issues in at least 90 percent of the cases¹⁹. One observation of note is the proportion of issues raised at the meetings by either the plant nurse or the safety supervisor at approximately 9 percent of all concerns.

Summarizing the general topics discussed during committee meetings, Table 3 shows that the major items of discussion are those relating to safety hazards and physical agents account for 60.2 and 14.0 percent of all topics,

¹⁸ As the authors have discovered, it may not be possible to update this summary to include data from 1982 to the present, owing to the change in Saskatchewan government, a new Director being appointed, and a new set of priorities having been established for the committee program as a result. This observation was confirmed by a special report prepared by R. SENTES, «Labour Department Remodels, OH&S Policy», *Canadian Occupational Health and Safety News*, March 28, 1983, pp. 3-4.

¹⁹ Although the actual numbers are small in comparison, the annual decrease in the proportion of issues raised by non-committee members suggests that workers are being adequately represented by the committee members. This observation is further substantiated by the low number of concerns or issues raised by the unions. These results should reassure concerned employers who fear greater union actions through these committees.

while unsafe work procedures and processes constitute only 8.33 percent of all concerns or issues raised at the meetings. These findings support one of the underlying philosophies of the Saskatchewan OHS legislation, and that is «cure the workplace, rather than the worker».

Data on the initial actions taken by the committees, Table 4, in response to the concerns raised at their meetings, provides some significant insights and indicates some trends in committee development. The most striking of these is the large proportion of items that are resolved by the committee itself (just under 90 percent). Few issues that have to be referred to higher management, and although this category represents less than 2.0 percent of all actions, there appears to be a steady decrease in these actions. This trend seems to substantiate the observation that there is a growing acceptance by management of this form of worker participation and cooperative decision-making. The other major declines occur for actions taken at the shop-floor level and those requiring the committee to take further investigative actions²⁰. These trends reflect the growing ability of the committee program as a whole to resolve health and safety issues.

The type and distribution of solutions to problems is presented in Table 5. Almost 72 percent of the committees solutions related to equipment or materials, while approximately 25 percent related to the manner in which work is done. That just over 1 percent of the committees' original solutions turn out to be unsatisfactory is a further indication that the actions taken by committees are effective in addressing the problems.

Table 6 summarizes the reasons why the action initiated by the committees did not resolve the identified health or safety problems. It is clear that the vast majority of the reasons fall into two major categories: 'committee to discuss further' at 42.1 percent and 'delays due to back-ordering' at 53.6 percent. These reflect the universal management problems of scheduling, budgeting and the need for further discourse. The significant drop in 'solutions that were not agreed to by members' (and the overall low proportion of these problems) indicates that the joint health and safety committees were becoming more competent in resolving industrial health and safety issues over time. The low proportion of and the corresponding annual decrease in the 'lack of funds' category is another good indication of realistic and economically sound decisions being made by the committees, as well as a desire on management's part to undertake the committee recommendations. This observation also applies to the lower and decreasing rate in the 'beyond the authority of management' category.

²⁰ The large annual drop in the early years, and the maintenance of the rate at just over 1.0 percent in the category 'no action taken' is a further indication that the committees were able to deal effectively with health and safety problems at the level of the workplace.

TABLE 1
Number of Meetings and Number of Concerns Per Meeting, 1972-1981

Item	Program start-up 1972-74 ^b	1975	1976	1977	1978	1979	1980	1981	TOTAL
Number of committees of file Meetings reported to OHS Branch	2,400 ^c	2,417	2,446 ^c	2,552	2,571	2,676 ^c	2,780	2,867	2,616 ^d
Average annual number of reported meetings per committee	8,048	3,087	3,248	3,299	3,170	3,009	2,867	2,995	29,723
Meeting with «no concerns» reported	1.12	1.28	1.33	1.29	1.23	1.12	1.03	1.04	1.15
As a percentage of all reported meetings	1,880	491	384	320	313	300	270	74	4,032
Number of meetings — corrected ^a	(23.4%)	(15.9%)	(11.8%)	(9.7%)	(9.8%)	(10.0%)	(9.4%)	(2.5%)	(15.7%)
Total number of «concerns» reported	6,168	2,596	2,864	2,979	2,857	2,709	2,597	2,921	25,691
Average number of «concerns»/meeting — corrected	24,444	16,858	18,004	20,885	20,359	23,214	21,309	25,623	170,696
Number of «new concerns» discussed	3.96	6.49	6.29	7.01	7.13	8.60	8.21	8.77	6.64
Average no. of «new concerns»/meeting — corrected	18,621	12,587	12,847	15,317	15,324	17,553	15,828	16,668	124,745
As a percentage of all reported concerns	3.02	4.85	4.49	5.14	5.36	6.48	6.09	5.71	4.86
Number of «old concerns» discussed	(76.2%)	(74.7%)	(71.4%)	(73.3%)	(75.3%)	(75.6%)	(74.3%)	(65.1%)	(73.1%)
Average number of «old concerns»/meeting — crid.	5,823	4,271	5,157	5,568	5,035	5,661	5,481	8,955	45,951
As a percentage of all reported concerns	0.94	1.64	1.80	1.87	1.77	2.12	2.12	3.06	1.79
	(23.8%)	(25.3%)	(28.6%)	(26.7%)	(24.7%)	(24.4%)	(25.7%)	(34.9%)	(26.9%)

^a The 'number of meetings — corrected' is equal to the 'number of meetings reported' less the 'meetings with no concerns reported'.

^b Data from 1972 to 1974 has not been used in determining trends from the start-up of the program through to the end of 1981. It has been included with the annual summaries for reference purposes.

^c Estimated number of committees as the exact figures were not provided in the original data supplied.

^d The average number of committees on file per year from 1975 to 1981.

SOURCE: Extracted from computer print-outs of summary data supplied by the Occupational Safety and Health Branch, Saskatchewan Department of Labour.

TABLE 2
Origin of Concerns Raised During Committee Meetings, 1972-1981

<i>Origin of concern</i>	<i>Program start-up 1972-74^d</i>	1975	1976	1977	1978	1979	1980	1981	TOTAL
Committee members (labour & management) ^a	23,827	15,080	15,776	18,628	17,443	19,469	19,400	23,696	153,319
As a percentage of all concerns raised	(98.1%)	(90.5%)	(88.6%)	(89.8%)	(86.8%)	(86.0%)	(89.4%)	(91.8%)	(90.3%)
Average number of concerns raised by committee members per meeting	3.86	5.81	5.51	6.25	6.11	7.19	7.47	8.11	5.97
Workers who were not committee members ^b	310	60	59	10	31	82	92	150	794
	(1.28%)	(0.36%)	(0.33%)	(0.05%)	(0.15%)	(0.36%)	(0.42%)	(0.58%)	(0.47%)
Union	15	5	14	5	0	21	27	2	89
	(0.06%)	(0.03%)	(0.08%)	(0.02%)	(0.0%)	(0.09%)	(0.12%)	(0.01%)	(0.05%)
OHS Branch	31	180	117	96	65	110	0	22	621
	(0.13%)	(1.08%)	(0.66%)	(0.46%)	(0.32%)	(0.49%)	(0.0%)	(0.09%)	(0.37%)
Plant nurse or safety supervisor	96	1,347	1,841	2,014	2,561	2,968	2,173	1,945	14,945
	(0.40%)	(8.08%)	(10.3%)	(9.70%)	(12.7%)	(13.1%)	(10.0%)	(7.53%)	(8.80%)
TOTAL NUMBER OF CONCERNS:	24,279	16,672	17,807	20,753	20,100	22,650	21,692	25,817	169,768

^a Combines three categories from original data («committee member, non-specific; «management representatives»; and «labour representatives»). It is estimated that the relative proportion of labour to management concerns raised during meetings from 1972 to 1981 to be 43:100.

^b Combines two categories from original data («workers, not committee member» and «groups of workers, not committee members»). It is estimated that the relative proportion of individual worker's to groups of workers' concerns raised during meetings from 1972 to 1981 to be 100:85.

^c Excludes «other concerns» classification coded in original data as this group constituted less than 0.06 percent of the total number of all reported concerns.

^d Data from 1972 to 1974 has not been used in determining trends from the start-up of the program through to the end of 1981. It has been included with the annual summaries for reference purposes.

SOURCE: Extracted from computer print-outs of summary data supplied by the Occupational Safety and Health Branch, Saskatchewan Department of Labour.

TABLE 3
General Topics Discussed During Committee Meetings, 1972-1981

<i>General topic areas discussed during meetings^a</i>	<i>Program start-up 1972-74^c</i>	1975	1976	1977	1978	1979	1980	1981	TOTAL
Safety hazards	16,643 (64.4%)	10,268 (59.4%)	11,195 (60.9%)	13,219 (61.2%)	12,406 (59.6%)	13,248 (57.2%)	13,250 (59.0%)	15,973 (59.5%)	106,202 (60.2%)
Physical agents	4,087 (15.8%)	2,191 (12.7%)	2,390 (13.0%)	2,765 (12.8%)	2,636 (12.7%)	3,178 (13.7%)	3,190 (14.2%)	4,189 (15.6%)	24,626 (14.0%)
Accidents discussed	675 (2.61%)	2,029 (11.7%)	1,893 (10.3%)	2,160 (10.0%)	2,659 (12.8%)	3,307 (14.3%)	2,196 (9.78%)	1,920 (7.15%)	16,839 (9.55%)
Work processes and procedures	1,917 (7.42%)	1,466 (8.48%)	1,558 (8.45%)	1,826 (8.46%)	1,585 (7.62%)	1,833 (7.92%)	2,084 (9.28%)	2,421 (9.02%)	14,690 (8.33%)
Hazardous materials	1,042 (4.03%)	688 (3.98%)	732 (3.98%)	835 (3.87%)	760 (3.65%)	847 (3.66%)	911 (4.06%)	1,246 (4.64%)	7,061 (4.00%)
Plant inspections	610 (2.36%)	152 (0.88%)	168 (0.91%)	249 (1.15%)	268 (1.29%)	286 (1.24%)	255 (1.14%)	297 (1.11%)	2,285 (1.30%)
In-plant health services	844 (3.27%)	460 (2.66%)	415 (2.26%)	517 (2.49%)	481 (2.31%)	390 (1.68%)	491 (2.19%)	707 (2.63%)	4,305 (2.44%)
Illnesses discussed	36 (0.14%)	24 (0.14%)	18 (0.10%)	16 (0.07%)	19 (0.09%)	60 (0.26%)	75 (0.33%)	92 (0.34%)	340 (0.19%)
TOTALS ^b	25,854	17,278	18,369	21,587	20,814	23,149	22,452	26,845	176,348

^a These general topic areas were further sub-divided into groups of more specific topics.

^b Totals for topics discussed may not equal total concerns discussed due to occasional multiple coding of concerns into two or more topic codes.

^c Data from 1972 to 1974 has not been used in determining trends from the start-up of the program through to the end of 1981. It has been included with the annual summaries for reference purposes.

SOURCE: Extracted from computer print-outs of summary data supplied by the Occupational Safety and Health Branch, Saskatchewan Department of Labour.

TABLE 4
Initial Action Taken by Committee, 1972-1981

<i>Initial action taken by committee</i>	<i>Program start-up 1972-74^c</i>	1975	1976	1977	1978	1979	1980	1981	TOTAL
Resolved by the committee	18,010 (73.9%)	14,703 (88.3%)	16,487 (92.6%)	19,506 (93.8%)	19,098 (95.2%)	20,705 (93.7%)	19,937 (92.8%)	22,751 (88.7%)	151,193 (89.6%)
Committee to investigate further ^a	3,132 (12.9%)	954 (5.73%)	1,034 (5.81%)	1,034 (4.97%)	643 (3.20%)	968 (4.38%)	801 (3.73%)	1,976 (7.69%)	10,632 (6.30%)
Referred to higher management	875 (3.60%)	382 (2.30%)	75 (0.42%)	66 (0.32%)	102 (0.51%)	83 (0.38%)	306 (1.42%)	450 (1.75%)	2,339 (1.39%)
Taken at shop floor level	1,329 (5.48%)	248 (1.49%)	41 (0.23%)	35 (0.17%)	61 (0.30%)	63 (0.29%)	115 (0.54%)	258 (1.00%)	2,150 (1.27%)
Referred to the OHS Branch	83 (0.34%)	82 (0.49%)	64 (0.36%)	100 (0.48%)	102 (0.51%)	102 (0.46%)	213 (0.99%)	141 (0.55%)	887 (0.53%)
No action taken by committee	827 (3.41%)	261 (1.57%)	105 (0.59%)	44 (0.21%)	63 (0.31%)	177 (0.80%)	113 (0.53%)	133 (0.52%)	1,723 (1.02%)
TOTAL NUMBER OF CONCERNS ^b	24,256	16,630	17,806	20,786	20,069	22,094	21,485	25,709	168,834

^a Combines «committee to investigate further» and «referred to higher committee level» from the original data as the latter constituted less than 0.12 percent of the total of actions taken.

^b Excludes «other concerns» classification in original data as they constituted an insignificant proportion of the total number of concerns.

^c Data from 1972 to 1974 has not been used in determining trends from the start-up of the program through to the end of 1981. It has been included with the annual summaries for reference purposes.

SOURCE: Extracted from computer print-outs of summary data supplied by the Occupational Safety and Health Branch, Saskatchewan Department of Labour.

TABLE 5
Committee's Solutions to Problems, 1972-1981

Type of solution	Program start-up 1972-74 ^a	1975	1976	1977	1978	1979	1980	1981	TOTAL
Better maintenance	4,427 (24.6%)	3,767 (31.5%)	3,623 (31.0%)	5,269 (38.6%)	5,415 (38.1%)	7,202 (44.9%)	5,828 (36.2%)	5,934 (33.0%)	41,465 (34.7%)
Modify existing or purchase new equipment	7,105 (39.5%)	3,507 (29.4%)	4,304 (36.8%)	3,748 (27.5%)	4,152 (29.2%)	3,627 (22.6%)	5,129 (31.9%)	6,091 (33.8%)	37,663 (31.5%)
Better worker safety training	1,852 (10.3%)	2,690 (22.5%)	2,515 (21.5%)	3,350 (24.5%)	3,724 (26.2%)	4,257 (26.5%)	3,889 (24.2%)	3,951 (21.9%)	26,228 (21.9%)
Change in work procedure	1,356 (7.53%)	446 (3.73%)	610 (5.21%)	507 (3.72%)	144 (1.01%)	330 (2.06%)	600 (3.73%)	1,227 (6.82%)	5,220 (4.36%)
New protective equipment for workers	820 (4.46%)	420 (3.52%)	379 (3.24%)	569 (4.17%)	596 (4.19%)	423 (2.63%)	386 (2.40%)	478 (2.66%)	4,071 (3.40%)
Renovating or expanding plant	1,252 (6.96%)	282 (2.36%)	180 (1.54%)	153 (1.12%)	164 (1.15%)	161 (1.00%)	154 (0.96%)	197 (1.09%)	2,543 (2.13%)
New attempt — original solution unsatisfactory	522 (2.90%)	762 (6.38%)	60 (0.51%)	23 (0.17%)	17 (0.12%)	38 (0.24%)	38 (0.24%)	39 (0.22%)	1,499 (1.25%)
Change in personnel	60 (0.33%)	4 (0.03%)	1 (0.01%)	6 (0.04%)	1 (0.01%)	19 (0.12%)	38 (0.24%)	23 (0.13%)	152 (0.13%)
Other solutions (not specified)	607 (3.37%)	66 (0.55%)	28 (0.24%)	21 (0.15%)	0 (0.0%)	0 (0.0%)	21 (0.13%)	61 (0.34%)	804 (0.67%)
TOTAL NUMBER OF SOLUTIONS	18,001	11,944	11,700	13,646	14,213	16,057	16,083	18,001	119,645

^a Data from 1972 to 1974 has not been used in determining trends from the start-up of the program through to the end of 1981. It has been included with the annual summaries for reference purposes.

SOURCE: Extracted from computer print-outs of summary data supplied by the Occupational Safety and Health Branch, Saskatchewan Department of Labour.

TABLE 6
Reasons for no Implemented Solutions on Action Initiated by Committee, 1972-1981

Type of solution	Program start-up 1972-74 ^a	1975	1976	1977	1978	1979	1980	1981	TOTAL
Delay due to back-ordering	1,784 (28.0%)	2,973 (62.9%)	3,083 (50.8%)	3,461 (48.3%)	2,815 (48.9%)	4,250 (65.0%)	4,104 (72.7%)	4,352 (55.2%)	26,822 (53.6%)
Committee to discuss further	3,242 (51.0%)	1,680 (35.5%)	2,918 (48.1%)	3,656 (51.0%)	2,936 (51.0%)	2,090 (32.4%)	1,438 (25.5%)	3,133 (39.8%)	21,093 (42.1%)
Solution not agreed to by committee members	656 (10.3%)	37 (0.78%)	54 (0.89%)	38 (0.53%)	4 (0.07%)	40 (0.62%)	52 (0.92%)	195 (2.47%)	1,076 (2.15%)
Beyond the authority of management	224 (3.5%)	4 (0.08%)	1 (0.02%)	5 (0.07%)	0 (0.0%)	20 (0.0%)	12 (0.21%)	63 (0.80%)	329 (0.66%)
Lack of funds	54 (0.85%)	15 (0.32%)	9 (0.15%)	7 (0.10%)	1 (0.02%)	32 (0.50%)	22 (0.39%)	13 (0.16%)	153 (0.31%)
Other reasons (not specified)	403 (6.3%)	18 (0.38%)	3 (0.05%)	2 (0.03%)	6 (0.10%)	9 (0.14%)	18 (0.32%)	124 (1.57%)	583 (1.16%)
TOTALS	6,363	4,727	6,068	7,169	5,762	6,441	5,646	7,880	50,056

^a Data from 1972 to 1974 has not been used in determining trends from the start-up of the program through to the end of 1981. It has been included with the annual summaries for reference purposes.

SOURCE: Extracted from computer print-outs of summary data supplied by the Occupational Safety and Health Branch, Saskatchewan Department of Labour.

CONCLUDING COMMENTS AND OBSERVATIONS

Joint labour-management occupational health and safety committees are an important factor in reducing hazards in Canadian workplaces. Where the collective bargaining process is unable or unsuitable for reducing occupational hazards, legislated committees and safety representatives may well become the major instruments for ensuring that workers participate in resolving the problems of industrial injury and disease. Indeed, the current lack of success of the more traditional approaches, such as regulations and their enforcement, and economic disincentives via workers' compensation programs, together with greater demands for industrial democracy, means that reliance on both the joint work site committees and the worker safety representatives will undoubtedly increase in the future. We have argued on both theoretical and empirical grounds that employers should respond favourably to these developments.

It is too early to determine conclusively that joint labour-management occupational health and safety committees are effective and efficient instruments for reducing occupational injuries and diseases, although there are empirical indications that this is the case. In the British research²¹, an attempt to overcome the difficulties of isolating a committee's impact on accident, injury or illness rates from other factors was addressed. The impact of joint work site committees would most likely occur over a period of time, and we recommend that a combined study of macroeconomic variables, coupled with an analysis of committee minutes and the use of survey/interview techniques, would be more likely to answer the question of whether committees are effective or not.

We believe that the Alberta survey and the Saskatchewan data provide strong evidence that joint work site health and safety committees are effective. Committees' effectiveness can perhaps best be measured in terms of reducing occupational injuries and illnesses. However, committees' effectiveness must also be determined by other measures, such as impacts on labour-management relations and improvements in worker and management awareness of the importance of occupational health and safety programs.

On the basis of existing studies and evidence from the performance of joint labour-management committees in Alberta and Saskatchewan, we have good reason to be optimistic. As an expression of the political maturity of Canadian workplaces, this form of joint labour-management committees has been accepted in the vast majority of Canadian industries and govern-

²¹ J.R. COYLE and J.W. LEOPOLD, «Health and Safety Committees — How Effective are They?», *Occupational Safety and Health*, November 1981, pp. 20-22.

ments as an appropriate response to the growing problems of industrial health and safety. This acceptance by labour, management and governments should, by itself, assure their continued growth and effect.

L'efficacité des comités de santé et de sécurité au travail

Dans tous les pays industrialisés occidentaux, les réformes de la législation et des politiques gouvernementales ont commencé à insister sur l'importance d'assurer la participation active des travailleurs à la planification et à la mise en oeuvre de programmes et de politiques de santé et de sécurité aux lieux du travail. Les comités paritaires de santé et de sécurité au Canada sont devenus la manifestation la plus valable de la participation ouvrière à de tels programmes. Ces comités confèrent aux travailleurs et également aux employeurs une façon importante de collaborer à la prévention et à la solution des risques professionnels. Ils peuvent réunir tout un train d'expériences pratiques et de connaissances techniques, fournir des outils de communication à la main-d'oeuvre et en recevoir d'elle, faciliter la contribution des travailleurs et des employeurs aux décisions auxquelles parviennent les membres des comités. Et ces comités offrent les avantages de conseils directs et continus et constituent ainsi une réponse immédiate aux risques professionnels.

La nécessité de rapports de coopération plus suivis entre le travail et le patronat, spécialement en ce qui a trait à la santé et à la sécurité professionnelles peut être considéré comme une conséquence de l'incapacité séculaire de l'industrie à se discipliner et du gouvernement à adopter des normes de santé et de sécurité valables. Certains observateurs soutiennent que les gouvernements ont aussi manqué à leur devoir de mettre en vigueur et de promouvoir ces normes de façon adéquate.

Les principales mesures pour accroître le degré de participation directe des travailleurs en tant que moyen d'améliorer la santé et la sécurité professionnelles sont: a) l'information en matière de santé et de sécurité ainsi que l'éducation; b) des stimulants et des pénalisations économiques (comme l'indemnisation des travailleurs) et c) l'adoption et la mise en vigueur de normes de santé et de sécurité professionnelles. Les insuffisances de ces politiques sont apparentes lorsqu'on considère les statistiques disponibles relatives aux maladies et aux accidents industriels. Chacune de ces politiques est un fouillis de contraintes et de difficultés pratiques.

Une analyse des politiques et des programmes des treize compétences canadiennes en ce domaine laisse voir qu'il existe des différences notables entre les obligations et les fonctions des comités et un écart profond en ce qui a trait au degré d'appui que les gouvernements leur accordent pour assurer leur efficacité. Néanmoins, il est évident que les comités paritaires aux lieux du travail sont des facteurs de plus en plus importants dans la diminution des risques pour les travailleurs canadiens. L'in-

succès admis des modes les plus traditionnels d'aborder la santé et la sécurité industrielles signifie qu'on devrait faire une plus grande confiance à la coopération patronale-ouvrière. Le nombre des comités paritaires de santé et de sécurité s'accroîtra sans doute dans l'avenir. Les employeurs et les travailleurs devront en favoriser le développement.

En effet, ces comités reçoivent un appui considérable de la part de quiconque croit à l'auto-régulation par opposition à la législation ou aux stimulants économiques comme moyens de réduire les taux d'accidents et de maladie que l'on trouve dans les entreprises canadiennes.

Malgré un intérêt plus marqué pour l'établissement et le développement des comités paritaires de santé et de sécurité au travail, peu d'études ont été effectuées pour en apprécier l'efficacité. Cet article traite des principaux facteurs d'évaluation de ces comités. Des quelques travaux qu'on a réalisés sur le sujet et de leur examen, il est possible d'énumérer une série de mesures de la valeur de cette forme de participation des travailleurs. Les données accessibles en Alberta (enquêtes au moyen d'entrevues) et en Saskatchewan (résumés annuels tirés des procès-verbaux des assemblées de comités) sont évaluées à la lumière de ces mesures de façon à répondre à la question: «Les comités paritaires de santé et de sécurité professionnelles sont-ils efficaces?»

En se fondant sur des critères sûrs, nous croyons que l'enquête de l'Alberta et les statistiques tirées des procès-verbaux de la Saskatchewan fournissent la preuve certaine qu'ils sont efficaces. C'est par la diminution des blessures et des maladies que leur valeur se mesure le mieux. Cependant, celle-ci doit aussi reposer sur d'autres critères tels que leur influence sur les relations professionnelles et la prise de conscience qu'elle entraîne tant chez les travailleurs que chez les employeurs de l'importance des programmes de santé et de sécurité par les diverses mesures qu'ils peuvent susciter.

Bien qu'il soit encore trop tôt pour conclure que les comités paritaires de santé et de sécurité sont des instruments sûrs pour réduire les blessures et les maladies professionnelles, certains indices montrent que tel est le cas. Il est plus probable que l'impact de ces comités ressortira avec le temps et nous recommandons qu'une étude des variables macroéconomiques, associée à une analyse des procès-verbaux des comités et à l'utilisation de méthodes d'enquête par entrevues, serait la plus susceptible de répondre de façon concluante à la question de savoir si ces comités sont efficaces ou non.

Nous avons de bonnes raisons d'être optimistes, parce que, en tant qu'expression de la maturité politique des entreprises canadiennes, ce type de comités paritaires a été accepté par la grande majorité des industries et des gouvernements au Canada comme moyen de répondre aux problèmes croissants de santé et de sécurité au travail. Leur acceptation par les travailleurs, les employeurs et les gouvernements devrait assurer leur développement et leur sécurité.