Royal Commission on Workers’ Compensation in BC

Occupational Health and Safety Program Delivery (Part 2)

Final Report

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INTRODUCTION

Purpose

The Terms of Reference for the Royal Commission on Workers’ Compensation in BC direct it to examine the statutory framework, mandate, structure, organization, governance and administration of the British Columbia workers’ compensation system in order to meet the needs of the people of British Columbia for a high quality public system that is equitable, effective and efficient in the context of changing workplaces, and consistent with the underlying principles of workers’ compensation in British Columbia, namely:

(a) accident prevention
(b) no fault compensation
(c) collective employer liability
(d) industry funding
(e) universal coverage, and
(f) administrative adjudication

This paper examines the administration of the Prevention Division of the Workers’ Compensation Board of BC. It represents Part 2 of a two-part series of reports on occupational health and safety, and on the programs and services provided through the Prevention Division.
Overview

The field of occupational health and safety has not always received the kind of attention that it warrants in Canada and elsewhere, and has suffered from limited resources, poor data, and limited research on program effectiveness.

A recent review of the costs of occupational injury and illness in the United States concluded that¹:

The costs of occupational injuries and illnesses are high, in sharp contrast to the limited public attention and societal resources devoted to their prevention and amelioration. Occupational injuries and illnesses are an insufficiently appreciated contributor to the total burden of health care costs in the United States (p.1557).

The province of British Columbia has one of the highest rates of occupational injury in the country. There may be several reasons for this high rate, including the concentration of high hazard industries within BC, and some of the BC Board’s policies with respect to the acceptance of claims². Nevertheless, it is clear that effective prevention efforts are of critical importance within this province.

This report addresses several concerns raised in submissions to the Royal Commission. It also draws upon two recent external reviews of the Prevention Division, the 1992 *Occupational Safety and Health in British Columbia: An Administrative Inventory*³ (referred to herein as the 1992 *Administrative Inventory*), and the 1997 *Occupational Health and Safety in British Columbia: An Administrative Inventory of the Prevention Activities of the Workers’ Compensation Board*⁴ (referred to herein as the 1997 *Administrative Inventory*). The report’s conclusions are based on analyses of numerous Prevention Division documents including policy and procedure manuals, planning documents, audits, internal and external research studies, and analyses of data on activities and outcomes provided by the Prevention Division at the request of the Royal Commission. Interviews with selected Prevention Division management, and with a small number of Prevention Division staff, were conducted to clarify discrepancies with respect to the data and to confirm information provided within the documents. Finally,
information on prevention programs from other jurisdictions was considered where relevant.

At the time of the Royal Commission, the Board was undergoing tremendous change. In 1995, the Board put in place its Strategic Plan, and each division was responsible for preparing an annual Business Plan each year thereafter. All Divisions had introduced a series of new initiatives in conjunction with the Strategic Plan. For the Prevention Division, new strategic initiatives and directions were compiled under the WorkSafe plan, which included more targeted consultation and enforcement efforts, new automated services such as the employer’s Accident and Injury Reporting System (AIRS), and a new employer-partnership initiative entitled the “Diamond Program”. A small Research and Evaluation unit was established within the division just prior to the start of the Royal Commission. The delivery of occupational health and safety courses for employers and workers, traditionally the responsibility of the Prevention Division, was being transferred to the community colleges. The new Occupational Health and Safety Regulations were finalized and a province-wide initiative was put in place to educate field officers, employers and workers with respect to the new regulations. In addition, a reorganization of the Prevention Division took place in 1997, with two new directors and a whole department devoted to industry-specific programs and special projects.

The Royal Commission had initially hoped that by reviewing the Board’s documents it would be possible to comment on the extent to which:

- the Prevention Division is effective in its delivery of programs and services;
- the development of new strategic directions is consistent with evidence on effectiveness; and,
- various programs and services are being resourced sufficiently.

Unfortunately, the Prevention Division has “not historically conducted separate research into the efficiency and effectiveness of prevention programs,” and its current measures of performance fail to provide conclusive evidence of the effectiveness of its programs and services. Furthermore, in the midst of the kind of changes discussed above, some strategies were too new, or had not yet been rolled out sufficiently, for any analysis of
effectiveness. Also, over the course of the Royal Commission, the Board continued to test and modify its strategies.

This research does not constitute a comprehensive evaluation of the Prevention Division's activities. Rather, it represents an investigation of specific issues and concerns to the Royal Commission, within the commission's time and resource constraints. The report's conclusions are intended to highlight some of the recent advances made by the Board, as well as some of the important areas where further development might be pursued by the Board. To the extent possible, it examines the Board's prevention effort both prior to, and following the change in Board leadership and strategic direction of the mid-1990s.

The information provided by the Prevention Division to the Royal Commission was not always complete. On some issues, the division was unable to provide data or documentation in answer to specific questions from the commission. On other issues personal interviews provided somewhat different – sometimes significantly different – information than that contained in the documents the division provided. Finally, the Prevention Division told the Royal Commission that much of the specific data provided by the division in response to requests by the Royal Commission was unreliable. Comparisons of some of this data with that provided in other Board reports (e.g., Annual Reports) revealed a number of inconsistencies.

The structure for the analyses conducted for the present report was derived from two primary sources:

- the Auditor General of British Columbia’s Accountability Framework\(^6\)
- the Twelve Attributes of Effectiveness developed by the Canadian Comprehensive Auditing Foundation\(^7\)

Conclusions are summarized according to the twelve effectiveness attributes.
Overall, the conclusions from this report are as follows:

- The Prevention Division has developed a set of strategies to address occupational health and safety, which are clearly presented in its WorkSafe Plan and in its annual Business Plans.
- There is less clarity at the operational level, amongst Prevention Division staff, regarding the division’s direction and priorities.
- The workplace injury rate in BC remains among the highest in Canada, but it has declined steadily since 1990; the workplace injury rate in Canada has also declined steadily since 1990.
- Resources allocated by the Prevention Division to traditional enforcement activities (i.e., inspections) appear to have declined somewhat in recent years, partly as a result of other demands on field officer’s time (e.g., Regulation Review), and traditional enforcement approaches (orders and warning letters) have been used somewhat less frequently.
- At the same time, there have been a number of positive new developments, offering the potential to create and build upon partnerships with industry, and to improve health and safety through collaborative efforts.
- There is currently no structure in place to reliably determine what impacts the various strategies are having upon workplace health and safety; injury rates are used to monitor overall performance of the division, however injury rates can be affected by other variables apart from the division’s activities.
- The Prevention Division has resources available to it that could place it ahead of many other jurisdictions in terms of the services it could offer. In addition to a dedicated staff, the division has access to compensation and assessment information and resources with the potential for collaborative team efforts, a high per capita inspectorate and a high proportion of occupational hygiene officers, and its own lab for monitoring health risks.
- These resources are not utilized to their full capacity. Board divisions have increased their efforts to work together in recent years, but they continue to operate in “silos” for the most part. There has been no management strategy in place to mobilize resources for the most effective approach to the prevention of occupational disease (although one may be in place in the near future), and samples submitted to the lab have declined in recent years.
• There is a shortage of information available with which to monitor and report on processes. For example, the division is either unable to identify, or is unable to identify without an excessive expenditure of resources, the regulation violations that are associated with injuries (if any), the extent to which employers are in compliance following sanctions (orders, warning letters and penalties), whether or not employers have paid their penalties, the number of worksites that the division is responsible for in order to determine resources required, or the number of workers within these worksites.

• Few resources have been allocated to program evaluation, so that the division cannot determine under what circumstances what interventions, or mix of interventions, are likely to have the greatest impacts.

• The new research unit within the Prevention Division has the potential to contribute to the Prevention Division’s understanding of injury and disease causality, and to its understanding of program and service impacts; increased resources within the evaluation unit should also help to achieve this objective.

• In a recent employee survey, staff within the Prevention Division were found to have higher ratings than other Board employees on all dimensions, including job satisfaction; Prevention employees, like other Board employees, had low ratings on certainty and optimism, and encouragement and recognition.

1.0 Clear Objectives

1.1 Management Direction

Definition: The extent to which the objectives of an organization, its component programs or lines of business, and its employees, are clear, well-integrated and understood, and appropriately reflected in the organization’s plans, structure, delegations of authority and decision-making processes.

Findings: The Prevention Division’s Mission and Vision are presented in its 1998 Business Plan, as follows (p.5):
Our Mission:

To reduce the incidence of workplace disease and injury and to strengthen the occupational health and safety performance in workplaces in B.C.

Our Vision:

Workers and workplaces safe and secure from injury and disease.

The Prevention Division’s Mandate and Authority, as presented in the April, 1998 Draft Prevention Policies,\textsuperscript{10} is described as follows (Part A1, p.1):

The Board provides occupational health and safety services to assist persons to fulfill their responsibilities to ensure healthy and safe places of employment. These services include:

- defining a healthy and safe workplace by enacting regulations,
- providing information, education, advice and guidance,
- evaluating the conditions in places of employment to determine compliance with the regulations, and
- encouraging or requiring employers, workers and other contributing persons to initiate remedial measures to address and resolve workplace conditions or situations which are unhealthy or unsafe.

These services are primarily provided by the Division.

The Board’s general approach in providing these services is as follows:

- Optimum health and safety conditions can best be promoted through labour-management cooperation, developed through the working of an efficient occupational health and safety committee at the workplace, and assisted by help and encouragement from the Board.
• The preference to promote healthy and safe working conditions by cooperation must not be allowed to detract from the Board’s obligation to establish and enforce regulations. The enforcement of the regulations must not depend entirely on persuasion and discussion. This would require an enormous increase in the inspection staff and create a disincentive to comply with the regulations in the first place.

Additionally, the Draft Policies document addresses the responsibilities of employers and of workers. With respect to the role of Division with respect to employers, it states in part (Part A1, p.2):

The Division’s mandate is to encourage employers, through education and guidance, to institute and maintain adequate health and safety programs. These must not only identify and recognize hazards in the workplace but must also comply with the regulations. An integral part of the mandate is routine and special inspections of, or visits to, places of employment together with the ensuing discussions, advice, guidance and corrective orders. This is to ensure compliance with the regulations. The regulations are the minimum requirements, and serve as the base for building an even more effective health and safety program.

Where this approach is successful, the Division continues to operate in this manner. Where it is unsuccessful, the inspecting officers use other persuasive means including warning letters, recommendations for additional assessment, closure orders and prosecutions.

In the Mandate and Authority section’s subsection on “workers,” the discussion primarily concerns responsibilities of workers, and of employers with respect to workers.

Finally, the Mandate and Authority section of the Draft Prevention Policies document contains a subsection on occupational heath and safety committees, which states that “the Board encourages, and in many situations requires, the establishment of safety committees” (Part A1, p.4).
The Prevention Division has recently developed a five-year “WorkSafe” plan, which contains six strategies with specific goals and objectives. These goals are expressed as outcomes, and the objectives are expressed as a mix of processes and outcomes. The goals and objectives of each strategy, as presented in the WorkSafe Five Year Plan\textsuperscript{11}, and the 1996, 1997 and 1998 Prevention Division Business Plans\textsuperscript{12}, change only slightly from year to year. In the WorkSafe Five Year Plan, the goals of the WorkSafe Strategies are as follows:

WorkSafe Strategies:
1. Focus on High Risk Industries/Firms: the goal is to reduce the absolute number of workplace accidents and injuries (fatalities, long-term disabilities or LTDs and short-term disabilities or STDs).
2. Focus on Large Firms: the goal is to decrease fatalities, LTD and STD claims within the largest firms.
3. Outreach: the goals are to significantly reduce injury and death of young workers; and, to increase public awareness of occupational hazards and risks.
4. Increasing Compliance: the goals are to emphasize a balanced approach which includes education, consultation, inspections and, where necessary, the sanction process; and, to improve compliance with IH&S regulations.
5. Addressing Causality: the goals are to improve the ability to identify prevention issues more accurately; and, to evaluate the linkage between prevention worksite activities and changes in outcome.
6. Finding New Opportunities to Reduce Costs: the goal is to identify areas to reduce costs related to accidents, injury and diseases occurring in workplaces and to facilitate improved practices to minimize costs when injuries do occur.

In the Prevention Division’s 1998 Business Plan (p. 39-52), the wording for some of the strategies and their goals has slightly changed. For example, Strategy #2 is now referred to as a “Focus on Large Firms and Regional Targets”. Strategy #3, Improving Outreach, aims to increase access to and quality of WCB prevention resources (personnel, training, and information). Strategy #5, Addressing Causality, aims to “improve the quantity and quality of accident reporting and data gathering so as to identify root causes of accidents and then focus prevention efforts on these causes”. Strategy #6 is now called “Finding New Opportunities to Improve Service and Reduce
Costs”, and aims to “promote professional development and training of all Prevention staff in order to ensure the delivery of consistent, quality client service.” Activities for this strategy are now to include investigating customer service levels and addressing the issues raised.

The 1998 Corporate Business Plan\textsuperscript{13} includes a seventh “Prevention Strategy”, although it is not found in the division’s own 1998 Business Plan. This strategy is as follows (p. 41):

Strategy #7: Research and Development: the goal is to develop a model and process for research and development at the WCB to include grants and awards and strategic projects.

Activities under this strategy include consolidating research at the Board to ensure focus, establishing self-funding for the future, and establishing a program for research and development that includes causality research, evaluation of interventions, and education and training, to support the Board’s strategic plan and priorities.

It was explained in interviews with Prevention Division management that research and development has been part of the Prevention Division’s Strategy #5, Addressing Causality, and that Strategy #7 will be handled by a new Strategic Projects department in the Prevention Division which will be responsible, in part, for coordinating research.

These strategies describe a mix of targeted interventions involving education, research, public awareness campaigns, partnerships, and enhanced enforcement efforts that, together, are aimed at assisting employers and workers to create safer workplaces. The Prevention Division’s current structure and resources, along with the alliances and partnerships that have been created, enable this mix of strategies to be offered.

Until recently, the Prevention Division was divided into two major divisions: Field Operations, and Central Operations\textsuperscript{14}. Field Operations, headed by the Director of Field Operations, was divided into 10 regions, each with its own manager. Occupational Safety and Hygiene Officers were assigned to each of the regions. Field Operations
also contained a First Aid section, an Engineering, Ergonomics and Occupational Health section, and a Workplace Hazardous Material Information System (WHMIS) coordinator.

Central Operations, headed by the Director of Central Operations, contained all other services provided by the division, including Prevention Administration, Accident and Injury Reporting System (AIRS) Implementation, Outreach and Education, Public Affairs, Hearing Conservation Section and Audiology Unit, Laboratory, Variance and Sanction Review, Prevention Policy, and Research and Evaluation.

The Division underwent a reorganization in 1997 “to more effectively deal with large-scale program initiatives”\(^{15}\). The Division was split into four departments, each headed by a Director, which included Regional Services, Programs, Central Resources, and Diamond\(^{16}\). Very recently, Diamond was subsumed under the Programs department, and a new department for research and “strategic projects” was established\(^{17}\).

Regional Services appears to cover most of what were formerly Field Operations’ responsibilities, and Central Resources continues to be responsible for most of Central Operation’s former areas. Engineering and Occupational Physicians are now under Central Resources, although ergonomic consultation is still listed as part of Regional Services. Similarly, Hearing Conservation and Audiology, and First Aid/Diving and Blasting, appear to now be contained within the Programs area, although first aid, blasting and diving certification are still listed as part of Regional Services\(^{18}\).

The new Programs/Diamond department is divided into ten sections. This department “manages large scale health and safety issues or industry specific initiatives”\(^{19}\). Seven of the sections are industry-specific, including: Health Care and Government; Heavy Manufacturing/Film and Live Arts/Wood Products; Construction, Road Building and Trades; Agriculture, Fishing and Marine; Chemical; Forest Sector, Hydrocarbon, and Trucking; and Hospitality. The other three sections within the Programs department are Hearing, Conservation and Audiology; First Aid, Diving and Blasting (with Retail Food added according to the May, 1998 Organizational Chart); and Regulation Implementation. As noted above, Diamond is a now part of the Programs department.
The Prevention Division, like other areas of the Board, has made considerable advances in recent years in clarifying its goals and directions through its ongoing annual business plans and performance reports. The planning effort that the division has undergone in recent years would be expected, in time, to pay off in terms of greater clarity for staff and external stakeholders with respect to the goals and objectives of the division.

At the present time, however, there still appears to be some uncertainty about the role of the Board’s Prevention Division, from the perspective of Prevention Division personnel. Furthermore, there have been concerns expressed inside and outside of the Board about the division’s tendency to change directions in response to political pressure.

Looking back over the past twenty years, the Prevention Division’s position on enforcement does appear to have fluctuated, as evidenced through reviews of Annual Reports over this time period, analyses of enforcement data, and reflections of internal and external stakeholders.

The 1992 Administrative Inventory discusses some of the critical periods in the past twenty years where changes in enforcement policy occurred. For example, during Adam Little’s tenure as Chair from 1977 to 1981, enforcement activities reflected in orders and penalties declined, and it was made clear to field officers that “the imposition of sanctions against a firm was to be used as a last resort.” Walter Flesher was appointed Chair in 1983, and his general manager, William Greer, was reportedly “known for his vigorous approach to inspection and enforcement” (p.30). As pointed out in the Administrative Inventory and as can be seen in Figures 1 and 2, there was a dramatic increase in the number of penalty assessments between 1983 and 1991, and a pronounced jump in 1990, during Greer’s tenure as Acting Chair. Greer was also responsible for establishing the list of the Prevention Division’s “11 Deadly Sins,” which provided greater clarity with respect to when violations should be considered serious and deserving of a penalty consideration.
Figure 1: Number of Penalties 1976-1996

Figure 2: Total Penalty Dollars 1976-1996
Labour representatives argued in their submission to the Royal Commission that it is the lack of clear public policy direction that has allowed this kind of variability to endure:

A primary problem is instability and uncertainty in public policy. The effect of frequent changes in leadership within the governing body of the Board, and within its executive administration since 1972 have been exacerbated by the lack of clear public policy direction. Board policy direction has swung to and fro like a pendulum, based on the personal belief system of a small cohort of appointed or hired individuals.

After the new Board of Governors was appointed in 1991, there appears to have again been a gradual decline in enforcement. According to the 1992 *Administrative Inventory*, staff of the Prevention Division reported that since the Governors were appointed (p.31):

…they have received “mixed messages” from the Board of Governors and the upper management of the WCB. The most frequently voiced perception was that the management team wanted field officers to take a “warm and fuzzy” approach to enforcement. This was interpreted to mean that officers should write fewer orders, recommend fewer penalties, and become more of a consultant, educator, and friend to the employers of the province.

In the 1997 *Administrative Inventory*, it is reported that representatives of the labour community believe that “the WCB’s commitment (and duty) to enforcing regulations has deteriorated. There is a perception that field officers have been told to employ a soft approach, write fewer orders, and recommend fewer sanctions.” Employers have also noted a change in the Prevention Division’s approach, with a “new emphasis on education, consultation, collaboration, and facilitation.”

Managers and staff interviewed for the Royal Commission had differing perspectives with respect to the direction in which the division was heading, with some staff feeling that it was “business as usual” in terms of the balance between enforcement and consultation, and others feeling that there now was a greater emphasis upon consultation. Prevention Division managers and senior executive described the current
focus as follows: The role of field officers is to identify the best mix of approaches for individual employers. In some cases this may mean consultation, in others education, and in still others, traditional enforcement. What it does mean is that traditional compliance efforts are not the automatic solution in every case, but that this option is there and should be used when the situation calls for it.

Field officers interviewed for the Royal Commission spoke favourably about the variety of tools available to them – including education, consultation, inspection and application of sanctions such as penalties – to use with employers. These options allowed them to modify their approach as needed depending upon the efforts and interests of employers (unlike other jurisdictions, for example, which separate enforcement from consultation functions, or which must rely on prosecutions rather than administrative penalties). The difficulty that they experienced, however, was in trying to maintain their traditional enforcement responsibilities along with the new responsibilities and priorities established through WorkSafe.

Current Board policy documents and public statements suggest that in most cases enforcement is to be used as a last resort. As noted by the Prevention Division in 1997, “Education and consultation are usually the first routes chosen for reasons of practicality and immediacy. Regulations are needed to provide a minimum legal standard over the long term but are more of a final resource if education and consultation fail.”

In their submission to the Royal Commission, however, the Compensation Employees’ Union argued that there is a lack of clarity in Prevention Division goals and objectives:

We need to clarify what we think complying with the regulations means. Is minimum compliance with the regulations sufficient? Or is – or should – our goal be to ensure that an employer has an effective safety and health program supported by a safety culture, characterized by commitment by management in partnership with workers – rather than just simply a program supported by the required written documents? Is compliance without understanding really compliance?
According to the 1997 Administrative Inventory, field officers feel that Prevention Division leadership is “essentially political, bowing too easily to external (and internal) pressure” and that the division is “constantly changing direction.” Furthermore, staff expressed concerns about the number of new strategies undertaken by the division and uncertainty about how they all fit together. Similarly, in interviews conducted for the Royal Commission, it was suggested that there had been more political influence upon the division in recent years from various external stakeholders than there had been in the past, and that the division seemed to be “jumping to their tune”.

Some of the staff concerns related to the division’s focus on injury rates. It was argued that a reduction in injury rates means something different than ensuring compliance with regulations. If resources are directed toward consultation to lower the rate of high-cost injuries (e.g., soft-tissue injuries), there may be less opportunity to ensure compliance with the regulations in high-risk situations. Field officers are accountable for achieving both, however. Thus, some felt the field officer was faced with an “ethical dilemma” (“if we don’t enforce, someone may die”) and had to decide “am I going to get in more trouble for doing one thing or the other”. Field officers are given targets and are accountable for reducing the injury rate, but it was noted that if a disaster like Westray was to occur because they haven’t been paying as much attention to hard-nosed compliance, they would also be held accountable.

It was also argued there were a lot of “great new ideas” but that they kept getting added on, so that now there are too many “number one priorities” and not enough clarity from senior management with respect to what the real priorities are: “you can’t accomplish seventeen number one priorities”.

Data provided by the Prevention Division to the Royal Commission shows that there has been a decline in the proportion of inspections, and in the proportion of employers inspected, since the early 1990’s (See Figures 3 to 7). The Prevention Division cautions against comparing numbers of inspections over time however, because of the fact that at one time, several inspection reports could be produced for one inspection, and quotas that were once in place no longer are. The division reports that it is focusing on improved quality of inspections, so that while the total number of inspections has been
Figure 3: Number of Inspections (1976-1997)

Figure 4: Number of Worksites Inspected
Figure 5: Number of Employers

Figure 6: Likelihood of Inspection
(Number of Inspections/Number of Registered Employers)
declining, the total *hours* involved in inspection activity may not be. Furthermore, field officers have been called off to work on special projects over this time period, most notably regulation review, so that fewer resources have been available to allocate to inspections.

The above charts also show that in any one year, about half of the employees covered by the WCB are also covered by inspection activity. This kind of analysis has several problems, however. The analysis is based on total payroll for employers inspected; an employer may have several worksites, with only a portion of these worksites inspected in a given year, but the analysis would indicate that workers at all worksites have been covered. The proportion of employees covered is derived from payroll figures, so it is not an exact representation of number of people employed. Finally, the figures provided are for each year separately; they cannot be summed to conclude, for example, that if 50% of employees are covered in one year, 100% will be covered in two years. Very often, the same large employers are subject to ongoing inspection activity each year, whereas a number of small employers may be rarely, if ever, inspected. Bearing these data problems in mind, the chart shows that there has been a gradual decline in the
proportion of employees covered by inspections over time. As the number of employers registered with the Board has increased, the number of Field Services staff has also increased, but apparently not sufficiently to maintain the level of inspection activity that was in place several years ago. As discussed elsewhere, other responsibilities that have been placed on field officers in recent years, as well as factors such as increases in leave time, may also explain the decline in activity.

Data on orders and sanctions provided to the Royal Commission by the Prevention Division suggests that there has been a downward trend in the use of enforcement options since 1990. For example, while 55% of inspections resulted in orders in 1990, only 42% of inspections resulted in orders in 1996. Similarly, the number of warning letters dropped from 1,912 in 1990 to 790 in 1996, and to 663 in 1997 (see Figures 8-10). Penalty data is less clear; overall, there appears to have been a decline since 1990, but penalty levels have fluctuated over the past seven or eight years. At the same time, the Prevention Division appears to be stepping up its use of prosecutions for workers and employers.

It might be argued that a reduction in orders and warning letters reflects increased compliance with the regulations amongst employers, or a move toward using sanctions only in the more serious situations. Additionally, some of the trends appear to mirror pre-1990 levels, which some might believe were more appropriate than the high levels seen in 1990. Nevertheless, these kinds of trends are suggestive of a change in activity, and may be important for the Board to monitor.

Both employer and labour representatives, and reportedly field officers and managers themselves, have complained about inconsistency in the approach of field officers. A submission from employer representatives to the Royal Commission stated that:

One of the major criticisms of the Prevention Division from employers all over BC is the lack of consistency in the interpretation and enforcement of the pages of orders. Work procedures that have been accepted by one officer are rejected by another. We have been advised that the WCB is working on this problem but we still see few signs of progress.
Figure 8: Total Number of Orders

Figure 9: Percentage of Inspections with One or More Orders
According to the 1997 *Administrative Inventory* (p. 232):

Field officers and some managers raised the problem of inconsistency among field officers and among managers – particularly in the interpretation and application of regulations and policy. Some suggested that “managerial differences” and an unwillingness to employ a team approach are primarily responsible for officer inconsistency. Others suggested that officers need better mechanisms to communicate with each other. Field officers noted that they have every incentive to want to improve consistency.

To the extent that inconsistency among field officers is occurring, there may be many possible reasons. In addition to those mentioned above, they might include, for example, unclear direction, unclear policy and regulations, different field officer skill sets, insufficient training, insufficient performance monitoring, or differences between employers and worksites involved. Concerns about unclear leadership, lack of managerial support (including insufficient time for managers to provide supervision), and
irregular performance appraisal have emerged in this and previous reviews of the system. As the issue of inconsistency seems to be one that comes up in each review of the system, including both Administrative Inventories and this Royal Commission, it seems an important one for the Prevention Division to address.

Prevention Division policies are not always clear on how field officers are to balance their enforcement and consultation roles. For example, the Draft Prevention Policies\textsuperscript{43} states in Policy A6.2.1, under “When are orders issued?” (A6.2.1, p.1-2):

Employers may invite an officer to inspect or review all or part of a work site and consult with the employer on the work site’s compliance with the regulations. During the visit, the employer should be able to freely discuss any health and safety problems. Employers should not be discouraged from asking the Board’s assistance because they are afraid of receiving orders. On the other hand, an officer visiting a site cannot ignore situations that may be creating a significant risk of injury or disease to workers. Where significant violations of the regulations are observed during a consultation visit, the officer will issue appropriate orders. If the orders relate to the reason for the initial consultation request and an additional assessment or prosecution is later considered, the making of the request for consultation will be taken into account.

There may also be regional differences in the use of enforcement options, although again it is difficult to disentangle the various contributing factors that might distinguish one region from another, such as the approach of the regional manager and the field officers, and the nature of the industries with which they are dealing. While the 10-year average number of orders in each region is within 26\% of the overall 10-year average (1.53 orders per inspection), the number of warning letters (10-year average across regions is 1 warning letter for every 32 inspections) shows wider variation, particularly in the Kootenay region (1 warning letter for every 19 inspections, a variation of 68\%)\textsuperscript{44}. There is also variation in the number of penalties. While Vancouver companies receive an average number of orders and warning letters, they receive 56\% more penalties per inspection, although the average dollar value of these penalties is the lowest of all regions (See Figures 11-12).
### Figure 11: 10-Year Regional Averages

<table>
<thead>
<tr>
<th>Region</th>
<th>Inspections per Year</th>
<th>Orders per Inspection</th>
<th>Warning Letters per Inspection</th>
<th>Number of Penalties</th>
<th>Penalties per Inspection</th>
<th>Average Penalty Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vancouver</td>
<td>2941</td>
<td>1.58</td>
<td>0.033</td>
<td>40</td>
<td>0.014</td>
<td>$3,973</td>
</tr>
<tr>
<td>North Shore/Richmond Delta</td>
<td>7439</td>
<td>1.44</td>
<td>0.027</td>
<td>49</td>
<td>0.007</td>
<td>$4,409</td>
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<td>Coquitlam/Burnaby/New Westminster</td>
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<td>1.24</td>
<td>0.023</td>
<td>52</td>
<td>0.007</td>
<td>$4,771</td>
</tr>
<tr>
<td>Surrey/Langley/Abbotsford</td>
<td>8731</td>
<td>1.24</td>
<td>0.022</td>
<td>58</td>
<td>0.007</td>
<td>$4,048</td>
</tr>
<tr>
<td>Prince George/Fort St. John</td>
<td>4079</td>
<td>1.93</td>
<td>0.031</td>
<td>47</td>
<td>0.012</td>
<td>$5,104</td>
</tr>
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<td>365</td>
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### Figure 11: Comparison of Penalties (1996 vs. 10 Year Average)

[Bar chart showing comparison of penalties for different regions in 1996 and the 10-year average.]
Related to this issue of inconsistency are the effects of the “silos” within the Board, whereby management and staff from different divisions operate in isolation from each other. Traditionally, field officers were the primary source of direct face-to-face contact that employers had with the WCB. However, strategic initiatives such as Case Management and the Employer Services Strategy increasingly call for Board staff from other Divisions to consult with employers and workers in the field. In addition, the trend towards delivering services via third party providers means that more and more individuals with varying knowledge and responsibilities are increasingly representing the WCB.

While this move towards improving direct service is a positive development, managers and staff within the Prevention Division interviewed for the Royal Commission expressed some concerns about the lack of coordination that is in place. Board staff from other divisions expressed similar concerns about the level of coordination between the strategic initiatives. Interviewees also reported that there is no corporate approach in place to ensure that information provided to employers and workers from representatives of different divisions is accurate and consistent. This is less of an issue for Regional offices where there has traditionally been more sharing of knowledge and expertise between divisions by virtue of being located within the same office environment.

The kinds of problems that are occurring, related by field officers, are those where other divisional staff make recommendations to the employer that are inconsistent with what would be recommended by the Prevention Division. For example, a staff member from Compensation Services recommended a change to one claimant’s workstation, when the Prevention Division required different kinds of changes for that workstation and for other similar workstations throughout the organization. In another example, a Prevention Division field officer reported that a hazardous exposure existed, informed the worker and the employer following the testing, and then later learned that the claim had been denied. The field officer was still in a position to require that the employer deal with the exposure levels, even though the employer believed the problem did not exist because the claim had been denied.

Field officers told the commission that they had rarely been called upon by Compensation Services staff to conduct joint visits to employer work sites except during
a claims investigation. Conversely, claims staff told the commission that Prevention Division staff were not always available to them. In addition to these perceived barriers, minimal cross training takes place ensuring, for example, that claims adjudicators have a basic understanding of the regulations or that field officers have adequate knowledge of compensation policy and procedures. Basic processes to share information within Divisions and coordinate the cross impacts of various strategies could be improved.

There are many ways in which the Board could improve its coordination between divisions, and it has made progress in recent years in doing so. Still, throughout the course of interviews for Royal Commission research, the need for more collaboration was identified. The fact that the divisions are housed in separate buildings, blocks apart, in Richmond probably makes joint efforts there particularly unlikely.

Some of the changes within the Prevention Division in the past year have been attributed by the division to its most recent Administrative Inventory and to the ongoing work of the Royal Commission. For example, with respect to WorkSafe Strategy #6, the division’s 1998 Business Plan states that “Formal reports such as Ashford and Rest and the Royal Commission hearings have identified a need to gather feedback from clients about the services and products delivered by the Prevention Division” (p.51). Elsewhere in the 1998 Business Plan it is stated that (p.20-21):

The Administrative Inventory identified the ability to acquire and analyze relevant health and safety data as a key issue for the Division. It is anticipated that the Royal Commission will also comment on the need for data. In recognition of this need, the 1998 plan includes the addition of a new Divisional focus on data acquisition and the addition of a researcher to the Research and Evaluation unit.

Frequent reviews can be frustrating if, as a result, the organization is required to undergo continual change in response to the recommendations from these reviews. In some circles, there is concern that the Royal Commission will result in yet another wave of change for an organization that has just now begun to establish a clear and consistent path for itself, based on the Strategic Plan. In Royal Commission interviews, however, some staff expressed the view that the same issues keep coming up through the various reviews of the system, and nothing changes, because the division has never been held
accountable for dealing with them. Both of the Prevention Division Administrative Inventories called for a greater focus on occupational diseases, and both of these, and Administrative Inventories looking at other sections of the Board, called for increased staff support and development. In a proposal developed for the Board’s recently approved Research Foundation, it is pointed out that (p.1-2):

In recent years, external and internal demand for research to improve the WCB’s operations has increased. This demand partially has been met by increased research activities. However, critical gaps remain in the acquisition, coordination and application of new knowledge.

…All seven administrative inventories, from 1991 to 1997 have emphasized the importance of strengthening research and its application at the WCB. The same point was also made in the 1997 review of Vocational Rehabilitation.

### 2.0 Effective Strategies

#### 2.1 Relevance

**Definition:** The extent to which a program or line of business continues to make sense in regard to the problems or conditions to which it is intended to respond.

**Findings:** In its planning documents\textsuperscript{47}, the Prevention Division discusses the issue of “relevance” as the need to demonstrate that its activities are directed toward the right industries, the right occupations, and that it has the right types of intervention. The approach that is described to achieve relevance is the appropriate allocation of resources to high claim industries, and to high claim occupations.

Relevance of objectives relates directly to the continuing role for “prevention” in terms of supporting and encouraging safe and healthy workplaces, and the appropriateness of specific objectives and activities to address this overall purpose.
We recommend that management provide periodic assurance on the continued relevance of WCB programs, such as prevention, rehabilitation, assessment, and compensation. To assess program relevance, management should track and report on key worker, employer, and environmental factors and compare these trends to WCB program activity types and levels to assess the relevance of WCB programs in light of this information. Activity levels and trends, such as the number of hours dedicated to inspections versus education, should be reported in a manner that allows the reader to compare this information to trends in needs, such as workplace safety, injury types, and injury severity.

…The continued relevance of WCB regulations should also be of key importance to both the Panel and the external stakeholders. The WCB has recently conducted a large-scale review of the regulations, and, as a result, has made several changes to them. Management is currently developing a process for an ongoing review of the regulations.

We think that two indicators in particular should alert the WCB to the need to review the relevance of the regulations: the root causes of the injuries reported and the level of stakeholder satisfaction with the WCB and its regulations.

Overall, the objectives of the division and its WorkSafe strategies in terms of reducing claims through various means, including enhanced education and public awareness, promoting compliance with the regulations, and increasing research to understand causality, are relevant to the basic needs of employers and workers for improved workplace safety.

However, reducing workers’ compensation claims is not necessarily the first or most important goal of an occupational health and safety program -- though it may be the most important goal for the Workers’ Compensation Board as a whole. Reduced claims is one likely outcome of improved workplace health and safety. An occupational health
and safety program might also have amongst its objectives improved worker and employer knowledge and understanding of relevant worksite hazards, including potential health hazards, and improved worksite processes for identifying and addressing worksite hazards. It might also have an objective of enhanced understanding of equipment and technological hazards, and increased use of "engineering controls" which contain hazards at their source. Presumably, in time, strategies aimed at achieving these kinds of objectives would result in reduced accidents and illnesses, and reduced claims. In fact, these may be more effective strategies in the long run, in terms of improved health and safety and reduced claims, than a strategy that aims to reduce claims directly.

A number of factors may be responsible for occupational injuries and disease. These include the nature of the industry, the type of equipment and nature of work processes, organizational characteristics (e.g., size; support for occupational health and safety; adherence to regulations), and individual characteristics (e.g., inexperience; fatigue).

A goal of reduced claims may lead to different kinds of activities than a goal of improved workplace health and safety. A goal of reduced claims will lead to activities directed at high claim producers. A goal of improved health and safety can lead to activities that would include targeted interventions with high claim producers, but that also attempt to get at the underlying causes of accidents and illnesses (whether they manifest as claims, near-misses, or exposure risks) and to address the range of health and safety hazards that may be present or that are likely to be present in the future. This kind of a strategy relies heavily on research, on monitoring interventions and their impacts, and on fine-tuning service delivery, and the payoff may not be seen immediately.

The division needs to ensure that the programs and services that it is offering are the most useful. If new programs and services are to be put in place, needs assessments should be conducted, and available research on program effectiveness should be carefully analyzed. Furthermore, an improved process of assessing causality and of using information on causality to inform programming and resource allocation needs to be in place. As pointed out in the 1997 Administrative Inventory...

...the WCB continues to “lack adequate analysis about cause and consequences”. The Prevention Division has made significant strides to address
this concern, but more remains to be done. Developing prevention policies, regulation, and strategies requires a clear understanding of why accidents and exposures occur in addition to how, in turn, they lead to injuries, diseases, and fatalities. Deploying the most effective mix of tools and resources requires analysis and evaluation of what works, what doesn’t, and with whom.

Similarly, the Auditor General of BC’s Accountability Reporting Review\(^{50}\) states that (p.19):

To reduce the injury rate, it is important that the WCB understands the root causes of injuries and trends in those causes. A comprehensive analysis of causes would include dimensions beyond simply the immediate reason for the accident. It would also include the effect of WCB legislation, regulations, and policies on worker and employer attitudes and beliefs and, ultimately, the rate of injuries in the workplace.

The importance of basing prevention program development on an understanding of workplace injury and disease causality is well recognized in the field. It is also recognized that existing knowledge in this area is limited. The following comments from recent reviews of approaches to understanding the epidemiology of occupational injury illustrate these points:

Injury prevention efforts are most likely to be successful when injury etiology is understood, so that prevention efforts can be directly focused on causal (etiologic) factors ...Inaccurate estimation of causal parameters can lead to incorrect inferences and incorrect public health decisions\(^{51}\).

Epidemiologic research on the etiology of injuries at work is rather scant [Veazie et al., 1994], even though improved understanding of etiology is considered a necessity for the selection and implementation of interventions [Baker et al., 1992]. Therefore, it comes as no surprise that it is very difficult to discern whether the progress in reducing work-related injuries has been limited by the selection of inappropriate interventions or by inadequate implementation of interventions [Sorock and Courtney,
It is also clear that improvements in epidemiologic methods can enhance the ability to better define these problems and identify the ultimate causes of occupational injury.\textsuperscript{52}

The Prevention Division has become increasingly aware of the need to develop a better understanding of causality, but needs to place more emphasis on using this information to guide decisions about services, resource allocation, and measurement of impacts.

For example, strategies to address causality in the Prevention Division’s 1996 and 1997 Business Plans\textsuperscript{53} were somewhat limited, but it seemed to have been given more attention in the 1998 Business Plan. In 1996, the Plan referred simply to deploying AIRS and electronic reporting of field services activity, and included some very general statements about analyzing the effectiveness and impacts of worksite activities on injury/disease reduction, and producing cost awareness statements for programs. In 1997, added to the 1996 list were: developing a position paper and strategy on biological/atmospheric monitoring, conducting and communicating results of noise surveys, and continuing the production of monthly, quarterly and annual statistics.

In the Prevention Division’s 1998 Business Plan\textsuperscript{54} the following additional activities are listed as “examples of focused inputs/activities for addressing causality” in the upcoming year:

\begin{itemize}
  \item Develop data acquisition strategies which will use non-claim data such as demographics, economic indicators, workplace socio-economic indicators to determine targets and measure performances. For example, the “Diamond” program will take into account the overall effectiveness of employers’ health and safety programs, including their compliance with the regulations and the culture and beliefs of the organization.
  \item Use accident and injury reports to capture and target hygiene issues and “near misses”.
  \item Provide a statistical analysis of the causes of Young Worker workplace injury and disease and the industry sector where young workers are injured.
  \item Increase the research resources and capacity of the Division.
\end{itemize}
Commission and support researchers in the community on emerging or prevalent OHS issues.

Develop a model which addresses the changing industry and firm focuses, changing demographics, or other targeting tools.

A next step that the division might take would be to begin to develop a structured plan which identifies and links the various components in a causality model, including the nature and trends in existing (and potential) injuries and diseases, the known (and potential) causal and contributing factors that might be investigated (e.g., organization culture and management support, training and supervision, functioning of safety programs and OSH committees, knowledge of and compliance with regulations critical to the industry/occupation, work practices and processes in specific industries), the prevention services that are (and could be) provided (e.g., collaborative efforts with senior management, intensive inspection efforts with follow-up, industry partnerships, media advertisements promoting general awareness or providing specific information, specific educational courses on health and safety programs), and the intended impacts of each type of service on the causal and contributing factors (e.g., enhanced awareness of critical safety concerns and support from senior management, enhanced knowledge and understanding of regulations critical to the industry/occupation amongst workers, increased compliance with the regulations, increased effectiveness of OSH committees and programs) and ultimately on reduced injuries and disease. Prevention Division staff, particularly safety and hygiene officers, would likely provide very valuable input into such a model. Industry-specific approaches might also be developed along similar lines, in consultation with staff and Programs managers.

Additionally, the division could start to design innovative and useful research and evaluation efforts to assess the presumed links in the model, including assessing the specific intended outcomes of the various initiatives. Such an approach would assist the division in identifying gaps in services, as well as the relative benefits and costs of various alternative services.

In its submission to the Royal Commission, the Compensation Employees’ Union provides the following observations on the WorkSafe slogan and media campaign (p.4):
How appropriate are slogans and media campaigns? Do we know if they actually influence attitudes and change behaviour?

WorkSafe implies that “you” (i.e., the workers) should work safely. The message should really focus on safe and healthy work. The slogan reflects two major biases or shortcomings of the system. These are the tendency to blame workers for accidents and the tendency to focus more on injuries and safety than on occupational diseases and occupational hygiene.

Recent television ads give the message that workers should pay more attention to safety at work so that they return home to their loved ones. Shouldn’t these ads at least be balanced with ones communicating the consequences employers face for not providing safe and healthy workplaces, or – on a more positive note – the benefits of providing safe and healthy workplaces?

Prevention Division interviews suggest that this media campaign is part of an ongoing strategy which has the dual objectives of enhancing the overall image of the Board and enhancing awareness of and support for workplace safety. Royal Commission researchers were informed that this first round of television ads was aimed at general perceptions, and that the next steps will be more focused. In the *Public Affairs’s 1998 Business Plan*, it is stated that (p.1):

> The function of the Public Affairs section in the Prevention Division is to improve and enhance awareness and understanding of workplace hazards and risk with employers, workers, industry, the community and the public. The long term goal is to help to change attitudes and behaviors towards workplace health and safety to facilitate the reduction of occupational fatalities and injuries.

Other activities aimed at providing more specific information on hazards and Prevention Division activities, such as the release of the new regulations, are also in place within the Public Affairs unit. In the unit’s Business Plan, it is stated that one of the major obstacles that it faces in 1998 is “the lack of consumer research/evaluation undertaken to determine the effects of public affairs initiatives, Prevention programs, campaigns and other initiatives in increasing awareness” (p.4).
2.2 Appropriateness

Definition: The extent to which the design of a program or its major components, and the level of effort being made, are logical given the specific objectives to be achieved.

Findings: Issues with respect to program design are discussed below in terms of two major issues: (1) planning and program design, and (2) monitoring of processes.

Planning and Program Design
As discussed earlier, the WCB and the Prevention Division have recently begun to develop strategic plans, which is a very positive step. The Prevention Division’s five-year WorkSafe plan addresses issues such as the need for targeting and focusing of scarce resources to the worst offenders, enhancing public awareness and education with respect to the seriousness of work-related injury and disease, the need to identify underlying causes and solutions through research, and ways to improve organizational efficiency.

Also as discussed earlier, an understanding of causality should guide program design. Recently, the Prevention Division appears to have moved toward trying to develop a better understanding of causality, and toward providing services that address underlying causes. For example, its Programs department is structured by industrial group, so that problems and issues specifically within that industry, such as equipment design failures or frequently occurring accidents within certain occupations, can be addressed with those individuals and organizations most likely to be affected by them. There may be opportunities for more sharing and collaboration between the Programs group and Regional Services, so that field officers can use this information in their targeting and in their discussions with employers on-site. With more accessible data on each employer, through the Mobile Office System and through AIRS, field officers will be better able to access the claims histories and accident reports of employers on-site.

To understand accident causality, the division needs to critically examine the information that it has available on the circumstances surrounding occupational injuries and diseases. Deploying AIRS is cited as one of the main activities involved in achieving a better understanding of causality, and the causality fields that the commission has
examined in AIRS are impressive. However, AIRS is currently only being used by the larger employers. This situation may change as the division moves to the use of the Internet for reporting accidents – small employers may be more inclined to report accidents to the Board through the Internet than to set up a program on their own system in the event that an accident occurs. AIRS is completed only by the employer; detailed information on cause from the perspective of workers is not obtained.

In addition, the Prevention Division has made it clear to the commission that the only really reliable information on whether or not there has been a regulation violation in the case of an injury can be obtained from field officers when they investigate the accident. Since field officers only conduct about 315 (317 in 1994, 307 in 1995, and 322 in 1996) accident investigations per year, and usually only in cases of fatalities and serious accidents, this leaves about 145,000 claims where data on causality will be incomplete or unreliable (compensation services provides some data on claims that are not reported through AIRS).

The division’s Focus Reports are useful because they extend analysis of causality beyond the traditional “struck by” and “struck against” categories that provide little information on cause or contributing factors, such as equipment failure, regulation violations, presence or absence of appropriate supervision and training. Some of these reports must be prepared manually, however, and are based only on a very small subset of accidents. While these reports may help to direct particular activities for particular industries, it is difficult to see how they have fed back into overall program design.

In addition to the above concerns, the following observations have been made with respect to planning and program design within the division:

- Important information needed to make decisions about “supply and demand” in the allocation of resources is not available (for example, number of worksites is unavailable, and the division’s estimates of how frequently an employer can expect to receive an inspection is inconsistent with actual data provided on inspections).
- New programs and strategies appear to get underway before the structure needed to support these programs is in place (e.g., communication, training, quality control processes, research and evaluation capabilities).
- Decisions regarding new programs, program adjustments, and optimal allocation of resources can not be based on what works best because the division has almost no information on program effectiveness, and has allocated minimal resources to this activity; the division is unable to provide information on the relative effectiveness of its various prevention strategies for reducing injury and disease, nor on the unique contribution of Prevention Division activities to any observed change in its primary performance measure, that is, claim rates.
- Important information for measuring effectiveness is not available, including number of workers at each worksite (which would provide a more accurate assessment of risk and injury rate than the estimate using payroll and industry wage rates).
- Formal needs assessments are often not conducted prior to introducing new programs and services.
- The WorkSafe objectives may fall short in meeting the problems or needs of workers and employers who are not in the targeted industries and firms, who may be at risk of occupational disease, and whose workplaces do not currently show high claim rates. A focus on reduction in claims, rather than on improvements in health and safety, may restrict program options and exclude or restrict available resources for certain groups (e.g., small employers and employers in non-targeted industries) and for other potential hazards (e.g., emerging occupational health hazards that are not yet manifested in claims). The division does not appear to have worked out a set of strategies that will address the needs of those individuals and firms that are not at the top or bottom end of the claims scale.
- There does not appear to be a strategy in place for addressing occupational disease. Some of the Prevention Division personnel interviewed by the Royal Commission expressed the view that the division did not have a clear understanding of occupational diseases within the province, nor a coherent management strategy with which to address occupational disease. A lack of data on occupational exposure, disease, and risk factors, and declining air
samples and commercial products being received by the division’s laboratory for analysis, may also limit the division’s ability to address occupational diseases appropriately.

Finally, some field officers complained about the changing directions within Outreach and Education. They noted that Outreach had, at one time, been a valuable resource to them. However, in recent years, field officers had rarely been included in Outreach’s development of information and materials for distribution (while consultants from outside the organization had been involved). Consequently, they felt that these materials sometimes had important information missing or were not as well suited for their audience (i.e., employers and workers) as they might otherwise have been. There were also some concerns expressed about the transferring of responsibility for the delivery of educational courses from the division to the community colleges. Some staff had the impression that the courses were not well attended and that some of the instructors did not have sufficient experience to make the courses meaningful and worthwhile for employers and workers.

In their submission to the Royal Commission, the Compensation Employees’ Union expressed a number of concerns about the Prevention Division’s planning process, as follows:

- It’s not clear to us what a strategy or project is trying to accomplish much of the time.
- Projects aren’t broken down into manageable chunks.
- Checkpoints, activities, relationships, and time estimates aren’t well established and are often unrealistic.
- Communication about strategies and projects often doesn’t occur so key people often don’t know they have been undertaken.
- Everyone connected with a project isn’t kept informed.
- Pilot projects and evaluation measures aren’t always included.

The structure of the system, including the funding structure, may influence the Prevention Division’s policy and program design. Employer assessments are the sole source of funding for the system, and the Prevention Division and Compensation
Services annual budgets are derived from the same total assessment fund. In a number of other Canadian jurisdictions, funding is shared through general revenue and employer assessments.

According to the *1997 Administrative Inventory* the labour community perceives that the WCB shows a bias in favour of employers:

…is moving away from its statutory social policy function towards a corporate and private sector insurance model of ‘service delivery’. …Labour representatives commented that prevention has not been an institutional priority for the WCB. …Many labour representatives see the Prevention Division as too closely tied to a compensation definition of workplace health and safety, i.e., they limit their focus to workers’ disabilities instead of the larger issue of promoting worker health. …They suggest that the Senior Executive Committee (SEC) of the WCB is primarily concerned with cost and the palatability of solutions to employers, and that it lacks an understanding of and appreciation for prevention (p. 210-211).

The recent focus of the Prevention Division toward increased consultation and more narrow, targeted enforcement is also consistent with the expressed interests of employers in submissions to the Royal Commission. It is inconsistent with the interests of labour as expressed in their submissions, who call for enhanced enforcement efforts.

In its review of various structures for occupational health and safety in other Canadian jurisdictions, the commission found that six of the twelve jurisdictions have a separate Occupational Health and Safety agency that is a division or branch of a line department of government; in the remaining six jurisdictions the occupational health and safety function is a responsibility of the workers’ compensation board or commission.

Interviews with representatives from other Canadian jurisdictions suggest that the decision to combine or separate occupational health and safety and compensation functions has typically been based on concerns about potential conflict of interest, or a response to resource constraints.
Where there is a separate agency responsible for occupational health and safety, the primary advantages cited for this structure include avoidance of any perceived or actual conflict of interest and the independence to set priorities. The key disadvantage, according to many respondents, is that with occupational health and safety in a separate government department, it is subject to government budget and fiscal controls and constraints. Another disadvantage relates to the ability to share information between the occupational health and safety division and the workers’ compensation agency. Where the workers’ compensation board is responsible for occupational health and safety, the key advantages cited are greater co-ordination of activities and sharing of information. The key disadvantage is the perception that there is an inherent conflict of interest in the workers’ compensation agency having responsibility for occupational health and safety.

**Monitoring of Processes**

The Prevention Division was unable to provide answers to a number of questions posed by the Royal Commission with respect to its processes. The division either does not have a mechanism in place to monitor these processes, or has stated that it would consume weeks of staff time to provide answers to these process questions. Some of these issues seemed to be critical to the ongoing planning and monitoring of Prevention Division services.

The division is currently unable to identify whether or not a regulation has been violated in the case of an accident or injury. The only information on the relationship between a regulation violation and injuries that are occurring can be obtained from accident investigations, which are carried out on less than 1% of claims accepted annually by the Board. Knowledge of which regulation violations, if any, are associated with reported claims would be useful in that it would enable the Board to monitor the level of compliance with existing regulations (which could then feed into efforts to educate employers and workers, and could feed into targeting strategies), the importance of certain types of regulations relative to others within particular industries and occupations (i.e., areas that should be given particular attention during inspections), and gaps in existing regulations (i.e., when injuries are traced to activities for which no current regulation exists).
The Division is also unable to report on whether or not employers who receive penalties have in fact paid these penalties. This is an administrative function handled by the Assessment Department, and there is currently no feedback loop to the Prevention Division. Furthermore, the division cannot provide assurance regarding whether or not those employers who receive penalties have been followed-up with subsequent inspections, without a great expenditure of resources to do so. Taken together, this raises questions about the extent to which the necessary checks are in place to ensure that violations are being followed-through on, and to ensure that repeat violations do not occur.

While it is likely that field officers themselves take responsibility for following up on those employers for whom a penalty has been applied, and that managers support field officers in these efforts, the division cannot be certain that this is always the case. Field officers can be called away for special assignments, can suddenly become ill, or can change jobs or regions. Some regional managers are responsible for more than 40 field officers, are reportedly not always available to staff, and may simply not have the time to remain up-to-date on each case that their field officers are handling. The Business Case for the Program Department, presented in the 1998 Business Plan, states that (p.73):

One of the biggest issues with Managers in the Prevention Division has been workload.

The Field Services Department managers were responsible for the management of the staff within their region as well as taking responsibility as a manager for an industry sector or a special project. ...Officers complained they never saw their manager and that he was not available to advise on critical issues.

Assigning managers exclusively to the Programs Department, and leaving regional managers to handle field issues alone, is hoped to free up more time for ongoing staff issues.

The division has also had difficulty providing the Royal Commission with information on the proportion of employers who are in compliance after they have received an order. Part of the reason for this is that only about 15% to 19% of employers are followed-up.
with on-site visits after they receive orders. When they are followed up, there may be more than one follow-up inspection at the same and/or different locations, with different results on each occasion\(^65\). Furthermore, the employer may receive an order on follow-up for the same violation or for a different violation; in both situations, they would be considered to be in non-compliance. The Prevention Division reportedly was looking into various ways of conducting this analysis, but information on compliance levels was not forthcoming. A 1995 *Internal Audit* report\(^66\) was unable to determine the degree or timeliness of compliance with Prevention Division orders at that time because there was no independent or universal process for confirming order compliance. The audit also found that follow-up decisions were not being consistently recorded.

The Prevention Division’s policy is that warning letters are to be followed-up with inspections within three months of having issued them. Data provided by the Prevention Division suggests that most, but not all, warning letters are followed up. The proportion of warning letters followed up by subsequent inspections appears to have declined somewhat since 1990. In 1990, 99% of warning letters were followed up with subsequent inspections, whereas for 1994, 1995 and 1996 the figures provided by the Prevention Division were 95%, 92% and 90%, respectively\(^67\). The Prevention Division’s former *Policy and Procedure Manual*, and the current *Draft Operating Instructions*, provide clear direction with respect to follow-up on warning letters and the time frame in which these are to occur. Neither document appears to provide direction on follow-up to penalties. The 1995 *Internal Audit*\(^68\) report referred to above also examined follow-up on warning letters, and reported (p.6):

> the review of 34 instances in which a Warning Letter was issued to an employer revealed that in 14 cases some form of on-site follow-up was performed within 3 months of the letter. Of these 14 instances, only 2 were formally recorded on the Order Tracking system as “Follow-up inspections”. Prevention Division follow-up procedures for Warning Letters state that follow-up inspections must be performed within 3 months.

Management’s written response to the audit at the time was that an operational procedure was instituted in 1994 to instruct officers to record inspections as follow-ups
when appropriate such as after a warning letter was sent, and that the officers had been instructed to perform follow-ups on all firms that received warning letters (p.7).

Clearly, a large number of employers are in non-compliance with the regulations. According to information supplied by the Board to the Royal Commission, between 1988 and 1996, 42% to 56% of employers who were inspected received at least one order\(^69\). Furthermore, those employers who receive an order usually receive more than one order. For example, in 1996 53,264 orders were written\(^70\) for 17,468\(^71\) employers, or an average of 3.05 orders per employer. How serious these violations are is not known, although the Prevention Division has the information to be able to determine this (at least with respect to the specific regulations cited in orders). If an order or warning letter is written for a serious violation, but there is no effective follow-up, and a serious accident occurs for the same violation down the road, the Board could be viewed as having acted negligently.

The division launched an initiative in 1995 to deal with employers who had been in maximum demerit for five years or more. Around this same time, analyses were being completed for the Experience-Rated Assessment (ERA) Evaluation Study which showed that 368 firms had been in continuous maximum demerit for five years between 1988 and 1992, and that the claims costs from these firms were $23 million over and above their assessments payable for this five-year period\(^72\). The Prevention Division selected twenty-five long-standing maximum demerit firms, and sent each firm’s President a letter from the WCB President and CEO, inviting the firm to meet with the Vice-Presidents of all of the divisions to discuss options to improve their claim record.

This was a very positive initiative in several respects. It focused attention on employers who appeared to be most in need, and it represented a collaborative effort between the divisions.

The pattern of Prevention Division activity in the years preceding this intervention is useful to consider. One would expect that these employers, representing those with the worst claim histories relative to others in their subclass, would show a pattern of inspection activity that would be quite different from that of the average employer. Indeed, in the years preceding this initiative, some of these twenty-five firms had
received extensive intervention from the Board’s Prevention Division. Some of the very large firms, for example, had had multiple inspections each year, probably within various different worksites.

Other employers, however, had received only minimal intervention. Among the twenty-five firms, some had had one inspection, or in some cases no inspections, in one or more of the preceding four years. One firm had not been contacted by the division at any point in the preceding four years. Furthermore, it did not always appear that intervention became increasingly more intensive over the years for those firms that were inspected, even though the firm’s injury rates remained the same or became worse over time. In some cases, firms received one or two inspections one year, none the next, then one or two the following year, despite their consistently poor performance. For example, one employer received two inspections and two orders in 1992, then had no contact by the division in 1993, even though 12 claims were reported in 1992 and 14 were reported in 1993. Another employer was inspected three times in 1990, once in 1991, not at all in 1992, and once again in 1993, while reporting total injuries of 55, 36, 29 and 35 over this time period. Calculated in terms of the “injury rate” (i.e., number of STD claims divided by hours worked estimated from payroll), this last employer had an injury rate of 34 in 1993, compared to the overall industry average of 5.

Those employers who do have a consistent record of activity from the Board may show an eventual decline in injury rates, but this is not known. The division would need to examine the injury rate patterns for a sample of employers who have experienced consistent activity from the division, while controlling for other possible contributing factors.

It is impossible for the Royal Commission to comment upon whether or not the inspection and sanction process in place within the Prevention Division is operating effectively and in a manner that would be expected to ensure a reduction in injury rates over time. It is possible that the division’s new targeting strategies will result in more consistent attention being paid to the high claim employers. However, from the limited information available to the Royal Commission – including the inspection histories of these top twenty-five employers, the rates of follow-up on orders and warning letters, and the absence of information on subsequent compliance levels following orders and
penalties – it appears that a more in-depth review and analysis of processes and outcomes within the Regional Services department of the Prevention Division would be warranted. This would help the division to better understand how it is delivering its services and under what circumstances these services are more, or less, effective. Looking at recent inspection patterns of employers in consistent demerit positions, as above, would also likely be helpful. With more and more demands being placed on field officers as a result of the new initiatives, this kind of analysis seems particularly critical.

Obtaining information from the Board to assess program delivery processes is often time-consuming, requiring accessing disparate databases or manual calculations, and in many cases relevant information is simply unavailable. The information that is captured by the Board has been unreliable in many cases. Consequently, the activity patterns reported throughout this report must be interpreted with caution. Inconsistencies in the data provided are often quite apparent. A very positive development is that the division is implementing strategies which will hopefully collect more useful information, through the Mobile Office System (MOS) and AIRS. The Royal Commission has not been able to investigate in any depth whether or not these new strategies will provide the answers to the kinds of questions the division might be asked in the future. It has been noted that some information gathering may require more process change than technological (for example, if the division was to gather information on regulation violations in cases of accidents or injuries over and above the fatalities and serious accident investigations which make up 1% of claims reported).

Finally, it is questionable whether or not the current enforcement process serves as a sufficient deterrent to employers. For some employers, the likelihood of inspection is extremely low: in 1996, 41,486 inspections were conducted74, and 15,748 of the province’s estimated 400,000 worksites were inspected75. Thus, in a given year, any worksite in the province has a 1 in 25 chance of being inspected.

Approximately 50% of workers (based on payroll statistics) work for employers who are inspected in one year, because a majority of inspections are performed on larger companies76. This figure does not take into account the fact that some of these employers have multiple worksites. The payroll statistics are derived from the total reported payroll of the employer (i.e., from all worksites), whereas not all of the
employer’s worksites may have received inspections. Additionally, many of the same employers will be inspected every year, and some employers will never be inspected. The proportion of employees covered by inspected employers has declined steadily over the past 5 years from about 60% in 1992.

In 1996, each inspected worksite received an average of 2.6 inspections\textsuperscript{77}, and 42% of these inspections resulted in at least one order being written\textsuperscript{78}. Thus, the likelihood of receiving an order is high, with about every second inspection resulting in an order. However, on-site follow-up inspections to ensure compliance with orders only occur in about 1 in 5 cases\textsuperscript{79}. Furthermore, the conditions under which sanctions can and should be applied are not always clear, including what constitutes a “serious” violation (Note: The 11 Deadly Sins list has been recently revised, but it has not changed dramatically from the original list). The 15,748 worksites inspected in 1996 received 790 Warning Letters\textsuperscript{80} and 260 penalties\textsuperscript{81}. The chance of receiving a penalty as a result of an inspection is less than 1 in 100\textsuperscript{82}, and the average penalty will be less than $5,000\textsuperscript{83}. Prosecutions are rare and fines resulting from prosecutions, even in cases of fatality, can be less than $20,000\textsuperscript{84}.

2.3 Responsiveness

\textit{Definition:} An organization’s ability to adapt to changes in such factors as markets, competition, available funding or technology.

\textit{Findings:} Responsiveness is particularly important in a field such as occupational health and safety. Without the capacity to anticipate trends in injury and disease, a program can only respond to present-day patterns with the hope of reducing the likelihood of these escalating. New and unanticipated injuries and diseases that emerge slowly as a result of changes in technology, work processes, and other factors may be missed. Processes need to be in place in order for the organization to be responsive to emerging trends. There must be sufficient resources applied to obtaining and analyzing relevant information, through research and through exposure monitoring. As new risks emerge,
the organization must be ready to apply the necessary resources and interventions that will reduce the chances of problems escalating.

Responsiveness can also be considered in terms of the extent to which stakeholder concerns are listened to and addressed, through formal needs assessments that feed into planning and through consultative processes.

In its planning documents, the Prevention Division presents an “analysis of the business environment” which includes a number of issues to which the Division has reportedly been attentive to in its planning. These issues include accountability, accessibility, public expectations, public participation and consultation, changes in industries served, technological changes and demographic changes. Part of the Prevention Division’s strategy, which is reflected most clearly in the Diamond project, is to increase employer and worker skill and responsibility in recognizing and reducing hazards, so that there will be less need for external monitoring and intervention. To address the problem of occupational diseases, the Prevention Division has a staff of fifty-five Occupational hygienists which represents, according to the division, the greatest concentration of hygienists in North America. The Division also employs two occupational medicine physicians, and has its own Laboratory Services section which analyzes air samples, commercial products and biological samples submitted by occupational hygienists, physicians, employers, and other interested parties. In the past few years, the division has moved ahead into a number of non-traditional areas such as protection against workplace violence and ergonomics. Also, as discussed above, the new Programs department, which is organized by industry, should be useful in identifying emerging industry-specific trends.

There are indications, however, that the Prevention Division has tended to be more reactive than proactive in its approach in the past, and that it does not always have the capacity to adapt quickly to changes in the nature of work and occupational hazards.

The 1992 *Administrative Inventory* recommended that:

To fulfill its mission of prevention, the OSH Division should enhance its ability to anticipate needs and problems. This means that, operationally, its focus should
be a moving target that reflects future changes in the technology and economic/industrial profile of B.C. commerce. Working together, the Engineering Section and the Field Services Department can help the OSH Division emphasize a proactive approach toward the prevention of accidents, injury, and disease in the workplace.

The completion of the new Occupational Health and Safety Regulations is an extremely positive step in addressing current risks in the workplace. The Royal Commission has heard a number of favourable comments about these regulations, and about some of the processes involved in their completion. It has also heard about some of the roadblocks, frustrations and deadlocks that occurred, and about the significant proportion of Prevention Division resources consumed.

The development of these regulations has been a long time coming. The previous regulations will have been in place for 20 years by the time the new regulations become effective. No doubt some of these regulations are timeless. However, as noted in the 1992 Administrative Inventory, many of the regulations were "outdated and clearly inadequate" (p.199). When regulations are out of date, and new regulations are not in place to cover the kinds of hazards existing in today’s workplaces, one runs the risk of new kinds of injury and disease occurring. In their submission to the Royal Commission, the Compensation Employee’s Union argued that “A process for continuously improving and updating regulations needs to be developed to ensure that the Board’s regulations reflect advances in technological and scientific knowledge, and the changing circumstances in British Columbia’s industries and workplaces.”

The 1997 Administrative Inventory states that the Prevention Division’s occupational health group is “hampered by a lack of data on occupational exposure, disease and risk factors in provincial workplaces”88. The Administrative Inventory points out that the Prevention Division’s occupational health officers do some sampling as part of their inspection activity, but that the division tries to encourage employers to conduct their own sampling89. The Administrative Inventory also notes that there has been a significant decline in the number of air samples and commercial products received by the Prevention Division’s laboratory services since the mid 1980’s, which has serious implications for prevention activities, including exposure assessment and risk
identification, hazard and disease surveillance, trend analysis, and early detection of illness. Concerns about the reduction in samples, and about the absence of a coordinated effort to collect and analyze occupational health data, were also raised in interviews conducted for the Royal Commission.

The Prevention Division has a Grants and Awards function that is intended to provide funds for external research into occupational health and safety. A 1996 Audit found that the program did not maintain an appropriate system of budgeting and accounting for funds, and that the budget for 1995 was used almost exclusively to fund projects committed to prior years. There was no process in place to track and deal with the reports received as a result of the research. Research findings were not always brought back and used by the Prevention Division in its ongoing planning and program development activities. A number of changes have since been made to the function which will improve its capacity to contribute to the Prevention Division, and early identification and prevention of workplace risks is now one of the four program objectives that funded projects are expected to address.

The Prevention Division presents the new WorkSafe strategies and the Diamond project as attempts to address the need to improve safety with limited resources and a growing population of employers that must be served. It has not been established, however, that these strategies represent the most cost-effective use of resources.

### 3.0 Aligned Management Systems

#### 3.1 Protection of Assets

*Definition:* The extent to which important assets – such as sources of supply, valuable property, key personnel, agreements, and important records or information – are safeguarded so that the organization is protected from the danger of losses that could threaten its success, credibility, continuity and, perhaps, its very existence.

(Note: This criteria was not assessed for the Prevention Division. The Prevention Division is housed in a separate facility from the main WCB headquarters in Richmond,
however decisions with respect to this facility may not be made by the division itself. Many of the audit findings for Grants and Awards and Field Services have been addressed in other sections.)

3.2 Financial Results

*Definition:* The matching of, and the accounting for, revenues and costs and the accounting for and valuation of assets, liabilities, and equity.

*Findings:* The financial viability of the Prevention Division is determined by the financial viability of the WCB, for the most part. There are some areas where the Prevention Division collects funds for services, such as payment for certain courses offered. Additionally, the division distributes funds for services, such as grants and awards for research.

The commission did not examine in any depth the financial systems specific to the Prevention Division. The one area that has recently been audited by the Board’s own Internal Audit Department, the Grants and Awards function, revealed a number of problems with its administration. As discussed above, the 1996 *Internal Audit* report found that the program did not maintain an appropriate system of budgeting and accounting for funds, and that the budget for 1995 was used almost exclusively to fund projects committed to prior years. Without a budget increase, it would have been impossible to fund future projects. Furthermore, deliverables were not effectively tracked so that in some cases payment would be made long before a product was received, if indeed it was received.

Significant improvements to Grants and Awards program have been made since the audit according to documents provided to the Royal Commission. The Grants and Awards program will be included as part of the new Research Foundation, to be established within the Prevention Division.
The Prevention Division issues penalties to employers, but the penalties are added to employers’ overall assessments so that payment is not tracked by the Prevention Division.

Whether or not administrative problems occur in different areas of the division where funds are allocated or collected is not known. Based on a review of audits conducted over the past few years, and on Royal Commission interviews, it does not appear that other areas of Prevention Division have been subject to internal audits. The Board’s Internal Audit Department recently prepared a scoping document, which outlines areas that might be addressed in future audits. This document outlines potential issues related to targeting, inspecional services, outreach and education services, officer training, management reporting, and AIRS implementation. It also states that the upcoming audit of the Prevention Division might include an examination of key financial controls, which would be part of a Board wide audit of business units. No particular issues with respect to key financial controls within this division are identified within the scoping document.

3.3 Costs and Productivity

*Definition:* The relationships among costs, inputs and outputs.

*Findings:* The Prevention Division was asked to provide the Royal Commission with program information, including number of Prevention Division employees by program area, Prevention Division budget, number of employers and number of worksites, dating back to 1976. Information on number of employers was available from 1984 on, but it differed substantially from information presented in the Board’s Annual Reports. The Prevention Division also indicated that some of the budget information might be unreliable. Consequently, budget and employer figures for the following discussion were taken from the Board’s Annual Reports, as were overall administration costs for the WCB.

According to the Board’s Annual Reports, the Prevention Division’s budget grew from $13,278 in 1985, or $19,050 after CPI adjustment for comparison with 1997 dollars, to $35,057 in 1997. This 84% increase in budget corresponds to a 77% increase in the number of registered employers over the same time period. The Prevention Division
requested a budget increase (core operating and enhancements) to $44,585,728.00 in 1998.\textsuperscript{96} The budget for the division in 1998, according to the 1998 Corporate Business Plan, is $40,766,000, or 19.6% of administration expenses.

Comparing total administration figures for the board with budget figures for the Prevention Division, it appears that between 1985 and 1997, the division’s budget has fluctuated between 15% and 20% of the total administration budget for the board\textsuperscript{97}. The 1997 Annual Report\textsuperscript{98} lists Prevention and Enforcement expenses at $35,057,000, which represents 17.5% of total administration expenses of $200,223,000, or 2.9% of the total budget for the board including payments for claims ($1,202,943.00). The Prevention Division employed 385 full-time equivalents (FTEs) in 1997\textsuperscript{99}, which equals about 16% of the Board’s total of 2,470 employees\textsuperscript{100}.

Based on a review of other jurisdictions in Canada conducted for the Royal Commission\textsuperscript{101}, the total dollars allocated to occupational health and safety in BC is above average, but lower than the other two large Canadian provinces, Ontario and Quebec.

In Canada, some provinces and territories receive funding from the government in addition to employer funding. Alberta, Ontario, New Brunswick, Nova Scotia, and the Yukon receive some additional government funding. The government in the Northwest Territories has agreed to contribute a portion of the budget for occupational health and safety for three years until 1999, at which time funding will come directly from workers compensation.

The following jurisdictions receive government funding for OHS activities\textsuperscript{102}

<table>
<thead>
<tr>
<th></th>
<th>% of OHS Budget Provided by Government</th>
</tr>
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<tbody>
<tr>
<td>Alberta</td>
<td>41%</td>
</tr>
<tr>
<td>Ontario</td>
<td>27%</td>
</tr>
<tr>
<td>NB</td>
<td>19%</td>
</tr>
<tr>
<td>NS</td>
<td>50%</td>
</tr>
<tr>
<td>NWT</td>
<td>47%</td>
</tr>
<tr>
<td>Yukon</td>
<td>40%</td>
</tr>
</tbody>
</table>
Attempting to identify the proportion of resources allocated to prevention activities across jurisdictions is complicated by the data collection and reporting difficulties discussed throughout this report. Indeed, data obtained by the Royal Commission appeared to differ somewhat from that recently collected by the WCB and reported in the 1997 Administrative Inventory\textsuperscript{103}, although the WCB report calculated the total budget per capita, and the commission’s figures are based on dollars per worker covered by WCB legislation (workers covered by Occupational Health and Safety legislation was sought for the most accurate comparison, but was unavailable in some jurisdictions). Both reviews conclude that BC has one of the higher occupational health and safety budgets in Canada. The Royal Commission’s review found that BC’s budget is higher than 7 other provinces, and lower than 4 other provinces/territories. Compared to the two other large Canadian provinces with more than one million workers covered, BC’s occupational health and safety budget is the lowest at approximately $19.53 per worker covered. Ontario’s rate calculated for workers covered by workers compensation legislation was $23.20, and Quebec’s rate was $27.52, per worker covered.

Reinhart (1995)\textsuperscript{104} notes that in the United States, OSHA receives $300 Million each year to provide occupational health and safety coverage for 100 Million workers (or about $3.00 per worker), which is less than one half of one percent of what is spent on workers’ compensation.

According to information provided by the Prevention Division, the total number of full-time equivalent employees (FTE’s) in the Prevention Division gradually dropped from 326 in 1982 to a low of 244 in 1986\textsuperscript{105}, then increased to 385\textsuperscript{106} in 1997.

In 1997, the WCB of BC had about 191\textsuperscript{107} OSO’s and OHO’s for about 155,000\textsuperscript{108} employers, which averages to about 812 employers per field officer. In 1997, these field officers completed 35,894 inspections\textsuperscript{109}. A slightly higher ratio of inspections was reported in 1996 (149,582 employers\textsuperscript{110} and 41,486 inspections\textsuperscript{111}). This suggests that at that time each field officer was able to conduct 188 to 217 inspections annually\textsuperscript{112}, many of which would be repeat inspections. The Board’s estimate of 400,000 worksites means that each field officer is responsible for about 2100 worksites. The number of worksites inspected has remained relatively constant over the past ten or so years\textsuperscript{113}, although the proportion of worksites inspected has decreased due to steady increases in
the number of employers. These figures suggest that in recent years, each field officer has been capable of covering between about 82 and 94 worksites annually.

The Prevention Division was asked to provide number of staff by program area from 1976 to 1997, but for various reasons it was not possible to compare figures (restructuring over the years, insufficient breakdown by staff and program area, data on FTE budgets and number of employers unavailable prior to 1984, data for 1993 was missing, and some of the data were reportedly unreliable).

According to a report on occupational health and safety in Canada published in 1981, BC’s Prevention Division in 1978 employed 65 inspectors and supervisors in accident prevention, and 20 inspectors in industrial hygiene. The labour force served at the time was 1,000,000, and the number of “worksites” (presumably employers) was 74,000.

The 1981 report also stated that (p.183):

> The staff is sufficiently large to permit inspections ranging from a frequency of once every six months to once every four years. ...The division is capable of undertaking 35,000 to 38,000 inspections per year. Each inspector is seen as capable of undertaking just under 500 inspections per year. In most cases the number of actual inspections will be fewer. At most, two inspections per day are expected under normal conditions...

These statistics on number of inspections do not match the data provided by the Prevention Division for the years around 1978 (total inspections conducted in 1976 at 23,271, in 1977 at 24,017, and in 1978 at 19,103), but they are similar to what the Board reported in its Annual Reports at the time (e.g., 1976 at 37,136). The 1992 Administrative Inventory noted that at the time it was written, regional managers set the following general quotas for field officer’s activity: 500-800 inspections for safety officers; 200-300 inspections for hygiene officers; 20 educational presentations for all officers; and 5 audits for all officers. These quotas are no longer in effect. The 1997 Administrative Inventory notes that field officers are now accountable to their managers in terms of the total time spent on targets derived from WorkSafe (p.111).
The absence of quotas for field officer activity was confirmed in interviews for the Royal Commission.

The Prevention Division has made it clear that trying to track numbers of inspections over time may be of minimal usefulness. As noted above, the Prevention Division has informed the Royal Commission that previously, field officers could produce several inspection reports for a single site visit. In some cases, quotas reportedly drove activities in terms of obtaining quick inspections on sites with many different employers and trades. The division also has reported that the current focus is more on quality inspections rather than quantity. The Prevention Division defines quality inspections as follows:\textsuperscript{118}:

The inspection process should include many components. A high quality inspection would involve the following:

- officer prepares employer report card in advance of inspection and when on site reviews this with workers and employer representatives so they might better understand the human and financial costs of their workplace injuries. The report card outlines the highest ranking occupations in terms of injuries and cost, the types of injuries, the history of a repeated non-compliance.
- officer evaluates joint OHS committee minutes and activities and looks for opportunities to facilitate improved operations and internal responsibility.
- officer inspects workplace with employer and worker representatives, writes orders and discusses reasons at closure conference.
- officer talks to workers and supervisors during the inspection tour to look for opportunities for imparting knowledge/advice (teachable moment) and glean an insight into the commitment to OHS at the workplace.
- officer offers to arrange professional assistance, if necessary, from engineering, hygiene, occupational health physicians and ergonomists or other Board resources

The Prevention Division was also asked what criteria the division used to ensure inspections were of high quality, what changes were planned to improve quality, and how these changes would be monitored. The Prevention Division’s response was that
the criteria were set out in the list of components above, and that the main method of ensuring quality was by manager review and supervision of officer’s activities. This included reviewing officer’s reports, dealing with complaints and appeals concerning orders, and accompanying officers on inspections. Additionally, injury rates of the firms for which the officer was responsible could be reviewed. Prevention policies and operating manuals were also referred to in the Prevention Division’s response, as guidance for the field officers. Finally, it was noted that changes to the organization of the department would be expected to free up managers’ time for supervision. Based on this response, there did not appear to be a divisional strategy in place to promote quality inspections and to monitor the extent to which inspection activity was changing in accordance with the new strategic directions, but rather that quality monitoring remained the responsibility of the line managers.

Total field officer hours spent on inspections, consultation and education in the past three years\(^{119}\) show a decline in inspection hours from 169,894 in 1995 to 152,713 in 1997. Education hours have also declined slightly, from 18,956 in 1995 to 18,050 in 1997. Consultation hours, which includes program reviews, accident investigations, contact records and claims investigations, increased substantially between 1995 to 1996 (32,935 to 44,612), then dropped again slightly in 1997 to 41,358. Finally, as mentioned previously, field officers have been involved in a number of other projects in recent years, including dealing with the new regulations. In 1997, “special projects” accounted for 15% of field officer time, compared with only 8% in 1995\(^{120}\). Conversely, inspections accounted for 46% of field officers time in 1995, and 41% in 1997.

The available information suggests that field officers are completing fewer inspections than they had in previous years, but whether or not the inspections and consultations that are now being conducted, and that may be more time consuming, are also of higher quality and ultimately more effective is not known.

The 1997 *Administrative Inventory*\(^{121}\) reports that in the Prevention Division’s Laboratory Services there has been a decline in the number of air samples and commercial products received by the lab for analysis since the mid-1980’s. For example, in 1983, Laboratory Services analyzed 4,724 air samples, 1,225 commercial products, and 2,365 biological samples. In 1995, the lab analyzed 2,987 air samples, 575 commercial
products, and 1,023 biological samples. Numbers dropped even more dramatically for 1996 and 1997, but the Prevention Division attributes this decrease to “officers participating in new regulation development and training.” Additionally, there has been a decline in the number of blasting and diving certificates issued, part of which probably reflects a move toward privatization of aspects of this function.

The 1997 Administrative Inventory also notes that some of the labour representatives interviewed recalled a stronger commitment to education and training on the part of the WCB in the 1980's than at the present time; WCB Annual Reports show a decline in the number of External Education courses and student exposure hours from 1991 to 1996. The number of courses offered in 1997 increased by 34% over 1996 levels (222 to 297), and student exposure hours increased but by a smaller margin of 12% (17,737 to 19,904 hours). Much of these increases can be attributed to the “Industry Education through WCB Education Partners” which saw significant one year increases in the number of courses (3 to 53) and number of student hours (378 to 6,102). The Board provides curricula for these courses, which are held at community colleges.

In other areas there appears to have been an increase in activity over the past few years, including the number of audiograms processed by the Hearing Conservation Section, and the number of Level 1 First Aid certificates issued by the Occupational First Aid.

The Prevention Division’s 1998 Business Plan attributes the reduction in the hours of field service activity to officer involvement in the regulatory review and implementation process, and to recruitment delays. WorkSafe strategies have also consumed staff time, which is not reflected in the numbers reported by the Prevention Division in the WCB’s Annual Reports. As discussed above, special projects have consumed more time in recent years. There are other explanations for a drop in inspection rates as well, such as increases in vacation and leave time, that may translate to reduced services in all program areas. Vacation and leaves accounted for 15% of field officer’s time in 1991 and have gradually increased to account for 21% of their time in 1996 and 20% in 1997. The Prevention Division has reported that in the next six years, 49% of field officers will be eligible for retirement. With increasing tenure, staff will have greater
vacation entitlement, and aging may be associated with a greater need for other leaves as well.

In a 35-hour workweek, and a 52-week year, 20% vacation and leave time represents 7 hours per week, or 52 days (364 hours) per year. One-quarter of this time, the 5% difference between 1991 and 1997, represents 13 additional days of leave time per officer per year. For 191 field officers, this works out to be 2,483 more days, or 17,381 more hours, allocated to vacation and leaves in 1997 than in 1991. If each inspection consumed a half a day or 3.5 hours, and not accounting for staff increases that have occurred, one would expect a decline in the number of inspections over this time period of about 5000, due to increased vacation and leave time alone.

The Prevention Division has recently implemented a number of technological solutions to increase efficiency and to improve the quality of information available to the division, including AIRS (Accident and Injury Reporting System) and MOS (Mobile Office System). The division also appears to be considering options of having some of its functions handled by outside agencies. WorkSafe strategy #6 is aimed specifically at finding new opportunities to improve service and reduce costs.

Whether or not the shifting of resources, the introduction of new initiatives, and the move toward consultation and quality inspections have been “good investments” on the part of the Prevention Division is not known. The allocation of resources to one area or another does not appear to have been based on an assessment of what works best, or on where the need has been proven to be greatest, since the Prevention Division has not conducted program evaluation nor formal needs assessments for most of its programs. Whether or not the allocation of funds to television advertisements emphasizing the need to work safely is as cost-effective (i.e., in terms of having an impact on improved safety and reduced accidents in the workplace) as the allocation of the same funds to the training of occupational health and safety committee members in hazard recognition, for example, has not been assessed. In his July 18th presentation to the Royal Commission, the Vice-President of the Prevention Division at the time, Mr. Ralph McGinn, agreed that the Board has historically had difficulty measuring the effectiveness of its programs, and that because of the limited information available it can not make decisions about resource allocation the basis of program effectiveness.
Decisions about new initiatives such as the Diamond program do not always appear to be based on sound analysis of costs and potential benefits. Assumptions are made that by improving the internal responsibility system the limited resources available to the external responsibility system will be freed up to be used more effectively, but the resources required to improve the internal responsibility system may themselves be high, and may represent an equal or greater drain on the Prevention Division than its more traditional activities. Whether or not a drain would occur, how long it might last, what the implications would be for those employers who are not included in the new initiatives, and what the actual benefits of this approach would be relative to other strategies, does not appear to have been analyzed in sufficient depth. Costing for the Diamond program has proven to be difficult.

3.4 Working Environment

Definition: The extent to which the organization provides an appropriate work atmosphere for its employees, provides appropriate opportunities for development and achievement, and promotes commitment, initiative, and safety.

Findings: The constant turmoil, changes in leadership, and negative publicity experienced by the Board has no doubt taken its toll on Prevention Division management and staff, as it has on management and staff in other divisions of the Board.

Turnover in executive and managerial positions has been a longstanding problem at the Board. Since 1990, there have been two complete overhauls of the Board’s governance structure, 5 different Chairs, and 3 different President/CEOs. In 1997, the Board again experienced a change in Chair, and the resignation of its President/CEO. In a rare move, the Board has now appointed a President/CEO, Mr. Ralph McGinn, from amongst its senior executive ranks.

In 1991, Workers’ Compensation in British Columbia: An Administrative Inventory at a Time of Transition\textsuperscript{132} stated that “Few things became apparent to us more quickly than
the low level of staff morale at the WCB” (p.150). Part of this was attributed to external criticism of the WCB. The report also noted that: “We have been told repeatedly by staff of their concerns regarding excessive turnover in the managerial ranks. Their dissatisfaction reflects a sense that standards of performance are being changed, that they and their managers have been at risk for speaking their minds, that personnel decisions seem capricious, and that the quality of agency performance suffers” (p.144).

The 1997 *Administrative Inventory* also identified staff morale problems within the Prevention Division, which it attributed to conflicts inherent in occupational health and safety, the barrage of adverse publicity, constant turnover in leadership, heavy organizational demands, and tensions surrounding attempts to change. This report also called for more staff input into policies and plans, and improved opportunities for staff training and development.

In 1997, the Board contracted with Wilson Banwell to conduct employee surveys to assess:

- **Job Satisfaction**: the extent to which employees enjoy their jobs and are proud of their association with the WCB
- **Certainty and Optimism**: the extent to which employees understand and support the direction and feel positive about the future of the organization
- **Sense of Contribution**: the extent to which employees feel a sense of personal value and contribution
- **Work Demand**: the extent to which employees believe their work load is something they can manage
- **Manager Support**: the extent to which employees feel their managers provide support
- **Group Support**: the extent to which employees feel their fellow employees provide support
- **Encouragement and Recognition**: the extent to which employees feel recognized for their contribution and their effort is encouraged

The researchers received an excellent response rate of 80% to the surveys. A total of 248 Prevention Division employees completed the surveys.
Scores were on a scale from 1 to 5, with “3” neutral, and lower scores indicating less favourable responses.

The main findings included the following:

- Prevention Division employees had higher scores on all factors than other WCB employees
- the highest score for Prevention Division employees, and for WCB employees overall, was on the factor “job satisfaction” (Prevention employees mean = 4.10; overall WCB employees mean = 3.73)
- Prevention Division employees also had relatively high scores on “Sense of Contribution” and on “Group Support” (3.77 and 3.74, respectively)
- the lowest scores for Prevention Division employees and for WCB employees in general were on the factors “Certainty and Optimism” (Prevention employees mean = 2.99; overall WCB employees mean = 2.76) and “Encouragement and Recognition” (Prevention employees mean = 2.96; overall WCB employees mean = 2.83)

Individual items with the highest scores for Prevention employees were:

- My job is challenging
- I’m glad I took my job and would take it again
- I enjoy my job
- I would be happy to be still working for the WCB in three years
- I am trusted to take responsibility for achieving results

Individual items with the lowest scores for Prevention employees were:

- I am well informed about changes and events taking place in the WCB
- I have a clear picture of where my division is headed
- The WCB executive have a clear vision for the future
- I receive meaningful personal recognition for my contributions and extra effort
- I am usually consulted about decisions that will affect my job
Thus, the primary concerns amongst Prevention Division employees, were those that were also of concern amongst Board employees as a whole, namely a lack of clarity with regard to the direction of the Board and insufficient information about the changes, a lack of input into decisions affecting their work, and a lack of recognition.

The Compensation Employees’ Union expressed concerns to the commission about Prevention Division staff experiencing threats of violence (with insufficient attention paid to these threats by the Board), insufficient input into Prevention Division planning, insufficient information on the division’s new initiatives, and having too many competing demands on their time as a result of the new strategies. In addition, they expressed concerns about a lack of management support and constant “crisis management” (p.8):

Requests for information from senior management frequently interfere with service delivery. Members are expected to “drop everything” and respond to these requests within a very short time frame. ...Senior management does not support middle management. If middle managers do not get the support they need, their ability to manage and provide clear direction and support to our members is limited. ...A number of other factors contribute to this atmosphere of crisis management in the division. These include the frequent “firings” or “shuffling” of managers and a lack of training among managers. Some managers are hired with little or no experience in occupational safety and health (p. 8).

Concerns have also been expressed about the minimal attention paid to training and professional development for staff. The 1996 Administrative Inventory that examined other areas of the Board, entitled The Workers’ Compensation System of British Columbia: Still in Transition, stated that “The WCB has a tremendous reservoir of talent among its staff. Unfortunately, that talent is neither encouraged nor consciously developed as a regular part of doing business at the WCB. Staff development seems to be treated as an add-on”. In 1997 and 1996, training for Prevention Division field officers reached a low point of 3% of total reported time, compared with 6% in 1995, 13% in 1994, 7% in 1993 and 8% in 1992. The 1997 Administrative Inventory calls for increased training in communication and negotiation skills that will improve field officer’s consultation abilities, and points out that:
In addition to the adverse effects on morale and organizational innovation, this paucity of staff and professional development can have serious implications for worker health and safety. Workplace technology and organization are evolving rapidly; prevention staff need to keep abreast of these important changes and developments in order to effectively perform their compliance, education, technical assistance, and consultation functions.

In their submission to the Royal Commission, the Compensation Employees’ Union stated that:

We believe that it is critical for all staff in the Prevention Division to receive adequate training and staff development … If it is important to have a ‘mix of tools’ to achieve the goals of the Prevention Division, it is equally important for all professional staff to have training and staff development opportunities. It is also equally important for support staff to upgrade and develop new skills so they can offer more efficient service to clients… We find this neglect of training and staff development ironic in a regulatory organization that emphasizes the importance of education and training in its regulations, and in its enforcement and educational activities.

Concerns have also recently been expressed about the Board’s hiring and promotional practices and the impact on quality of service. The Board implemented a “Knowledge, Skills and Ability” competency-based hiring and promotion process in 1993, using vacant positions for Occupational Safety Officers in the Prevention Division as a pilot test. The 1997 Administrative Inventory reports that this process has not run smoothly, and “it was finally decided to hire based on seniority, not test scores”. Reportedly, some of the new field officers have little industrial experience.
4.0 **Performance Measurement and Reporting**

4.1 Monitoring and Reporting

*Definition:* The extent to which key matters pertaining to performance and organizational strength are identified, reported, and carefully monitored.

*Findings:* The Board has recently developed a set of performance measures that it is tracking on a regular basis for each division. Most of the Prevention Division’s performance measures deal with injury rates and claims, including overall injury rates and total claims; claims by type (short-term disability, long-term disability, and fatalities), and claims by targeted industry (i.e., the seven high-claim industries). Four of the performance measures have to do with activity: percent of time spent by Field Services in key industries; number of AIRS installations; and two measure “additional assessments” or penalties imposed (i.e., the number of penalties assessed and imposed, and the dollar value of penalties assessed and imposed). Additionally, the Prevention Division has recently established a Research and Evaluation unit to assess the effectiveness of its programs.

The Prevention Division could experience greater benefits from ongoing program evaluation and performance measurement than it is at the present time. The Prevention Division continues to rely on changes in claim rates to report on its performance. In the Board’s April, 1997 presentation to the Royal Commission, its targets of ten percent decreases in the injury and severity rates by the year 2000 were said to be based on “gut feel” rather than scientifically derived estimates. While the Prevention Division has now established a Research and Evaluation unit, very few resources have been allocated to this unit, although an increase was requested for 1998.

Injury rates can be affected by many different factors. According to the documents and interviews with senior management, the Prevention Division views overall injury rate changes, and injury rate changes in targeted industries, as global indicators of the division’s performance. While this may be generally true, and it is often the way injury rates are viewed in other jurisdictions, it is equally possible that injury rate changes, both short-term and long-term, are occurring because of a variety of other factors unrelated to
Prevention Division activity. With such a global measure, the division cannot assess which of its activities are working and why they are working. Furthermore, when rates go up rather than down, or fail to show the expected decline, the division has few options available to explain the trend.

The notion that injury rates are unreliable indicators of program effectiveness is not new. For example, the 1981 Economic Council of Canada report entitled *Occupational Health and Safety: Issues and Alternatives* states:

…injury statistics are influenced by many factors and users are cautioned accordingly. New injuries and wage loss injuries will be responsive to shifts in the composition of the workforce, shifts in the structure of industry, worker attitudes toward reporting injuries, compensation board policies on what constitutes a compensable injury, appeal times, and the business cycle. Consequently, it is desirable to be cautious in drawing general conclusions about program effectiveness from the statistics and in undertaking inter-provincial comparisons. …it is difficult to determine the extent to which (reductions in fatalities over the past decade in BC) are attributable to shifts in the composition of the work force, activities of organized labour, and actions of the board.

Furthermore, the 1997 *Administrative Inventory* states that:

Although Statistical Services has advised that short-term differences in STD claims are not dependable indicators of success, the Prevention Division may be taking credit prematurely for decreases in all seven targeted industries for the first half of 1996. (The Division is, however, careful to point out possible economic and labour market confounders). The corporate goal of a 10% reduction in the serious injury rate by 2000 also fails to heed warnings about this statistic as a reliable measure of prevention activity.

There are a variety of indicators that might be used to assess effectiveness, particularly those that reflect changes in workplace practices. The 1992 *Administrative Inventory* presented the Prevention Division with an extensive list of possible data sources.
available at that time to the division that could be used for planning, targeting, monitoring and evaluation. Along with claims data, the list included accident and injury reports, industrial hygiene data, specific occupational disease or health effects data, inspection reports, orders, warning letters, penalty recommendations, sanction data, variance requests, employer/worker contacts or inquiries, program review (audit) information, educational program data, and minutes of occupational health and safety committee meetings. Furthermore, new data could be collected through surveys or during inspections, program reviews, or accident investigation, to assess knowledge and understanding, such as knowledge of relevant hazards, knowledge of relevant regulations, and training needs.

In its public documents, the Board attributes reductions in injury rates to Prevention Division activities. At the same time, the Board recognizes and acknowledges that it is unable to draw definitive conclusions about the effectiveness of Prevention Division programs.

The 1996 Annual Report stated that (p.5):

> With the cooperation of the WCB's partners in industry and education, WorkSafe is having an effect. In 1996, the WCB achieved its primary goal of helping lower serious workplace injury rates. The injury rate -- claims per 100 person-years of employment -- fell to 5.0, a decline of 5.7 percent, exceeding the WCB's two-percent reduction goal for the year.

Similarly, the Prevention Division's 1997 Business Plan states (p.20):

> Prevention in partnership with employers and workers has been effective in reducing the number of injuries. For example, last year, the use of a multi-pronged approach (radio campaigns, training for fallers, emphasis on seat belt use by skidder operators and increased inspection activity) reduced injuries and fatalities in the logging industry. In 1995-96, the combined measures of the officers, outreach, and public affairs section have reduced the number of injuries to young workers by 11.5%.
The 1997 Business Plan refers to the cost-benefits of WorkSafe, stating that “the WorkSafe plans will generate a high rate of return on investment through reduced claims costs”\(^{145}\). At the same time, the Prevention Division acknowledges that it is currently unable to clearly identify the link between its programs and services, and effectiveness, in the 1997 Business Plan (p.24):

Another related problem is the difficulty of measuring the link between cause and effect of divisional programs. At present divisional systems do not provide sufficient detail to allow correlation’s between prevention activities and outcomes. As well, there can be a delay between the time preventative action taken (sic) and the time when a measured reduction in resultant claims occurs. This difficulty in measurement presents additional challenges to the division in terms of justifying investment in new or enhanced preventative activities. (p.24)

The 1997 Business Plan also states that (p.20):

There are increasing pressures to measure effectiveness and to ensure the Division is able to demonstrate that its initiatives reduce accidents and injuries. …The Division is committed to ensuring that programs are evaluated for effectiveness.

Similarly, the 1998 Business Plan states that (p.30):

There are increasing pressures to measure effectiveness and to ensure the Division is able to demonstrate that its initiatives contribute to the reduction of accidents and injuries (p. 30).

Finally, the influence of factors other than Prevention Division activities is directly acknowledged in the division’s Briefing Paper, which states with respect to WorkSafe initiatives, that\(^{146}\):
Some indication of the results of Prevention Division activity may be taken from the (table of STD claims for the 7 targeted industries). It compares the number of short-term disability claims at the end of September, 1996, with the same period in 1995 in the 7 targeted industries. The numbers are reduced in all industries, but this may be partly due to economic or other factors.

In 1997, the injury rate did not decline as expected. The Prevention Division’s 1998 Business Plan stated (p.3):

As we enter the fourth quarter of 1997, it is apparent that the allocation of resources to Regulation Review, to provide volumes of information to the Administrative Inventory process and to the Royal Commission and the training of new field officers is a factor in the resources available to address increasing claims and fatal accidents in the logging, construction and health care sectors.

Operational Highlights of the 1997 Annual Report discuss the fact that the injury rate has remained relatively stable over the past year (5.0 to 5.1), with a decline of 25% overall since 1990. It also points out that industry-specific performance ranged from a 5% increase in claims in construction to an 8% decrease in sawmills. There appears to be no discussion of reasons for differences between industries, the factors to which success or failure might be attributed, nor the future directions for the upcoming year to address any disturbing trends within the high-risk industries.

Similarly, the decrease in the number of claims filed by large employers targeted by the Board, which varied from 4% to 20%, is not discussed in terms of reasons or future directions. Other information presented in the Annual Report deals with the research projects and grants that the Board funded in the past year, educational initiatives, the media campaign, and the new occupational health and safety regulations.

Research in other jurisdictions suggests that enforcement efforts may be more effective if there is a realistic chance of receiving a consequence for non-compliance. Low penalties have been cited as a possible explanation for the limited deterrence effect of enforcement in other jurisdictions.
If the “average” employer is rarely inspected, rarely re-inspected after receiving an order, and rarely penalized for violations, one questions the extent to which “enforcement” is in place as an effective deterrent. Studies that examine changes that occur among employers subject to serious enforcement activity might be more likely to uncover impacts than studies that look at impacts of “enforcement” among employers as a whole. The Prevention Division has not had a process in place to monitor the effects of variations in its enforcement policy (e.g., increasing or decreasing frequency of inspections, increasing or decreasing use of orders, warning letters and penalties, increasing or decreasing value of penalties imposed). Any evaluation of the effectiveness of enforcement the Prevention Division would need to include:

- assessment of the way in which enforcement has been delivered
- multiple impact indicators
- possible competing explanations for changes

In the 1997 *Administrative Inventory*, it is noted that:

Paradoxically, changes in claims rates are not seen in those subclasses that have experienced the greatest change in inspection activity (Mason, 1995b). Some field officers suggest that this might be explained by inspections that continue to focus on the plant and its violations of regulations, rather than on the source of the accidents/injury, which might require intervention beyond regulatory compliance (p.101).

The Prevention Division reports that each region has developed a list of firms with injury rates in excess of the industry norm. These firms were to receive increased activity from field officers in 1996 and 1997. Royal Commission researchers were informed in interviews that the injury rates for these regional targets for comparison purposes were unavailable.

The Prevention Division also has not had a process in place for measuring the effectiveness of its other support services. The 1997 *Administrative Inventory* states that:
Like its inspection and consultation functions, the fundamental goal of the WCB’s educational activities is to positively affect workplace health and safety. To date, there has been little attention given to assessing the effectiveness of the Prevention Division’s educational activities. … The Outreach and Education section collects information on its formal courses -- number given, number in attendance, and satisfaction with the course. While these data can help inform decisions about expanding or contracting course offerings, they provide no information about effectiveness.

Similarly, there is limited information on direct impacts of the Board’s media activities.

Employee knowledge about specific job hazards, and about occupational health and safety regulations, is limited. For example, epidemiological studies in the United States have found that only 5 to 20 percent of employees are well informed about the safety and health risks associated with their jobs. The 1997 Administrative Inventory notes that small business employers and representatives voiced concerns that the WCB was not doing enough to educate small and medium-sized businesses about their health and safety responsibilities (p.225). They suggested that many small business employers know little about the WCB, occupational health and safety, and their regulatory requirements. Angus Reid conducted a survey of young workers for the Board at the PNE Job Fair in June, 1997. A total of 446 young workers, of the estimated 4,000 present, participated in the survey, which found that only 33% of those surveyed knew of the health and safety regulations that the employer must follow, and the level of awareness of specific types of regulations was substantially lower. Those who had received workplace safety education or training at school were considerably more aware of their rights than those who had not.

As noted above, the division now has a small Research and Evaluation department. The department has helped to produce a number of short surveys and reports, and provides support to the division in its targeting strategies. Three program evaluations are listed in the Performance Plans 1998 for Central Resources, including evaluation of Student WorkSafe (Kindergarten to Grade 1), construction, and logging. The 1998 Business Plan proposes that a senior researcher be hired for this division, to “focus on
the area of cost effectiveness assessments” for divisional programs. Five studies would be completed by this position in 1998, including the evaluations of the construction and logging initiatives, and projects to establish cost effectiveness measures. Additionally, funding is requested for evaluation of the new Programs area.

The Prevention Division’s 1998 Business Plan states that the division is in the process of review and refinement of its performance measures, part of which has involved the Auditor General’s review, discussed above. Among the recommendations that the Auditor General’s report made for the Prevention Division were:

- That management define the seriousness of injuries and potential for improvement of the most serious injuries and provide this information to the Panel and in the annual report.
- That the reporting to the Panel and the annual report include a review of the significant causes of injuries and diseases in the workplace and an analysis of trends in the causes. This analysis should also involve a review of the underlying causes of injuries, including other factors that may affect worker and employer attitudes and behaviour, such as WCB legislation, regulations, and policies, as well as government policies. We recognize the difficulty in this type of analysis and suggest that the WCB conduct more research and apply existing research to completing this analysis.
- That WCB management continue to report on the number of additional assessments recommended and imposed. The WCB should also report the number of inspection reports issued, including contextual information, and explore ways of reporting on the level of compliance it is seeing during its audits and inspections, and the outcomes of its site visits.
- That management enhance ways to measure the impact of prevention activities on the safety performance of targeted firms, to assess which activities have the greatest impact on which type of firms and under which specific circumstances. Results of these assessments should be reported to both the Panel and the external stakeholders.
- That the general awareness of and support for WCB regulations and workplace safety be included in the annual report.
5.0 Real Consequences

5.1 Achievement of Intended Results:

Definition: The extent to which goals and objectives have been realized.

Findings: At the present time, the Prevention Division has little empirical evidence of the effectiveness of its programs and services.

There are numerous anecdotal cases of the Prevention Division's success in enhancing workplace safety, including cases where injury rates fall dramatically after intensive intervention by the division. These cases have been described, for example, in the Prevention Division’s reports on business activities and outcomes\(^{151}\), in the division’s Prevention at Work newsletter\(^{152}\), and in public presentations by the Board to the Royal Commission.

Also, there has been a 25% decline in the injury rate in BC since about 1990, from 6.7 to 5.0 (Note: the 1997 rate was originally calculated by the Board to be 5.1, but it is being recalculated; the rate in 1996 was 5.0). If industries that have come under the Board’s jurisdiction since Bill 63 are included, the rate drops to 4.6% in 1997\(^{153}\) (which represents a 31% drop, although the rate for these new employers was likely low to begin with, due to the industries involved).

While BC’s rate has been declining in recent years, the average injury rate for Canada has also been declining. BC experienced a decline of 1.4 points in its injury rate between 1976 and 1996, representing a decline of 22% from the 1976 rate\(^{154}\). Over the same time period, Canada experienced a decline of 1.5 or 33% from its 1976 rate\(^{155}\). Since 1990, BC has seen a decline of 1.7 or 25% from the 1990 rate, whereas Canada has seen a decline of 1.9 or 38%. 


Table 1: Comparison of Injury Rates in BC and Canada

<table>
<thead>
<tr>
<th></th>
<th>Injury Rate ’76</th>
<th>Injury Rate ’90</th>
<th>Injury Rate ’96</th>
<th># Decline (’76-’96)</th>
<th>% Decline (’76-’96)</th>
<th># Decline (’90-’96)</th>
<th>% Decline (’90-’96)</th>
</tr>
</thead>
<tbody>
<tr>
<td>British Columbia</td>
<td>6.4</td>
<td>6.7</td>
<td>5.0</td>
<td>1.4</td>
<td>21.9%</td>
<td>1.7</td>
<td>25.4%</td>
</tr>
<tr>
<td>Canada</td>
<td>4.6</td>
<td>5.0</td>
<td>3.1</td>
<td>1.5</td>
<td>32.6%</td>
<td>1.9</td>
<td>38.0%</td>
</tr>
<tr>
<td>Difference (BC - Canada)</td>
<td>1.8</td>
<td>1.7</td>
<td>1.9</td>
<td>-0.1</td>
<td>-10.7%</td>
<td>-0.2</td>
<td>-12.6%</td>
</tr>
</tbody>
</table>

During each of the three time periods, BC’s rate was nearly 2 points higher (i.e., nearly 2 more workers with time-loss injuries for every 100 person years) than the average for Canada, and there was little variability between the three time periods with respect to this difference.

Between 1991 and 1996, BC has had one of the highest workplace fatality rates in Canada. In 1995, BC placed among the top three provinces in Canada with the highest workplace fatality rates (BC at 8.56; Newfoundland at 9.04; and Prince Edward Island at 18.0157) and the highest rates of time-loss injuries (BC at 5.01; Quebec at 4.52; Prince Edward Island at 7.71)158. In 1996, preliminary data suggests that BC’s fatality rate was the highest of all the provinces at 9.59159.

The Board notes that changes in policies within other jurisdictions, such as the introduction of a 3-day waiting period, likely account for some of this decline in injury rates. Injury rates in all jurisdictions are calculated in terms of accepted WCB claims and not actual injuries on the job. Also, Human Resource Development Canada statistics for BC are slightly lower than those reported to the Royal Commission by the Prevention Division of the WCB of BC; the difference between BC and Canada overall might be slightly less if HRDC’s rates of injury in BC are used for comparison purposes160.
The extent to which the Prevention Division activities have contributed to the drop in injury rate in BC is very difficult to determine. Chances are, the division has been successful to some degree in reducing the rate of injury in some firms and industries, or in ensuring that there wasn’t an increase. The Prevention Division has not attempted to measure the unique contribution that it has had on the injury rate apart from other possible contributing factors. It is recognized that these kinds of analyses are difficult.

The Prevention Division’s 1998 Business Plan shows reductions in acts of violence, reductions in STD claims in agriculture, reductions in STD claims in the fishing industry, and reductions in falls from elevations in construction and in industry overall, following “a preventive initiative that includes the introduction of new regulations”. Trends over time are presented; there does not appear to have been an analysis of the contribution of the new regulations relative to other possible contributing factors.

In interviews with Prevention Division management, the decline in injury rate within the sawmill sector was identified as a significant outcome of WorkSafe. Annual Reports show the Sawmill injury rate at 9 in 1990, and 7 in 1996, a drop of 22%, starting in 1995. The 1998 Business Plan reports that “the initiatives in the last eighteen months have yielded marked decreases in the number of accidents and injuries” in this industry.

The Operating and Financial Report for Year End 1996 shows that short-term disability claims decreased from 1995 to 1996 in the seven key industries. In all but one of the seven key industries, long-term disability claims increased, and the logging industry saw a substantial increase in fatalities in that year. The 1997 Year End Operating Report states that STD claims decreased in three of the seven targeted industries in 1997 (sawmills, trucking, and retail food). Increases occurred in three of the seven industries, but the report notes that BC’s employment rate also rose by 1.8% in 1997. Payroll information would not be available until the third quarter of 1998, so the division was only able to report claims, not injury rates. Also between 1996 and 1997, traumatic fatalities increased, most notably in logging and construction. The 1998 Business Plan also reports that traumatic fatalities in construction more than doubled in 1997 and construction claims were increasing after two years of decline. The Business Plan also states that the overall number of injuries in health care continued to grow.
The Prevention Division has little information as of yet on the extent to which its activities have resulted in increased understanding of health and safety risks, increased understanding of effective approaches to reducing those risks, or increased use of effective measures within the workplace to reduce risks. The division is starting to look at some of these issues, in its ad tracking studies and Field Officer surveys, however these studies have so far been limited in their focus (See further discussion in Part 1 Report).

In its submission to the Royal Commission, the Compensation Employees’ Union expressed concerns about attributing cause and effect relationships, as follows (p.4):

Recently, Ralph McGinn stated that the Prevention Division had:

…exceeded its goal to work with employers and workers to reduce the injury rate by two percent in 1996 – the rate dropped by 5.7 percent for a record low of five short-term disability claims per 100 person years.

(“Strategic Directions: Putting the Plan Into Action”, Board Talk, June/July 1997, page 6)

It is misleading to attribute a decline in injury rates to Prevention Division actions over such a short time frame. How can we have confidence that research on causality will be thorough and useful when the Prevention Division is so ready to conclude cause and effect without foundation? If we don’t do this research, how will we be able to make sense of increases in injury rates, if they occur?

…Another example of this tendency to jump to conclusions about cause and effect can be found in the division’s five-year strategy document. It states:

In the late summer of 1994 the Division became increasingly concerned with the rising number of fatal accidents in the logging sector. An in depth evaluation to determine causality and patterns was undertaken that led to the release in early October of a report of the findings. A greater compliance focus was placed on logging activity, a series of radio spots
highlighting typical fatal scenarios called Stay Alert—Stay Alive was undertaken on regional radio stations to reach workers early each day on their way to work. Investment [sic] $75,000 for this outreach initiative saved 5 or 6 lives and at least $1,250,000 [sic] in survivor reserves and awards. Traditionally 7 or 9 loggers die in the months of October, November, December. In 1994, only 1 logger lost his life at work in this period. ("Making a Difference: A Five Year Strategy for Prevention")

This report was dated August 22, 1995. How can we possibly claim that the Prevention Division’s compliance and outreach activities had this kind of impact with the passage of one October, November, December time frame? The results could have been a fortuitous anomaly.

In interviews with Prevention Division personnel, there appeared to be a difference of opinion between senior management and staff with respect to the meaningfulness of injury rates as an indicator of success. Some staff felt that the division couldn’t gage whether or not it is successful. They stated that if the injury rates go up, it will be attributed to something else, but if they go down, it will be attributed to something the division has done. Senior management, on the other hand, felt injury rates were a good general indicator of how the division was doing.

Based on the available information, it is not possible to draw conclusions regarding the effectiveness of the Prevention Division’s services.

5.2 Acceptance

Definition: The extent to which the constituencies or customers for whom a program or line of business is designed judge it to be satisfactory.

Findings: The Prevention Division does not routinely assess the satisfaction of workers and employers with its various services, with the exception of certain education and outreach services. Client surveys provided to the Royal Commission by the Board included169:
• a 1996 External Customer Service Satisfaction Survey to evaluate the Prevention Division’s Information Line, that asked about how satisfied callers were with the service, courteousness, time on the call, timeliness, overall rating of the service, and likelihood of calling again

• a pilot Employer and Worker Satisfaction Survey to assess satisfaction with field officers’ worksite visits, which assessed overall satisfaction with the visit, perceived value of the visit in enhancing health and safety at the worksite, accuracy of information provided, professionalism and courteousness, ability to answer questions, and knowledge of and use of various WCB publications (there was a more extensive survey conducted after the pilot survey, however the report was not available during the time the document review for this report was being completed)

• various other small surveys related to specific courses delivered by the Board, WCB advertising strategies, and general population surveys (e.g., PNE Job Fair Survey to assess young workers perceptions re. workplace health and safety).

The division reported that plans were in place to conduct follow-up surveys of field services, and to assess satisfaction with aspects of the young worker program (e.g., employer information sessions). Some of these have been completed as of the date of this report.

Based on a review of the reports provided to the commission, satisfaction levels tend to be relatively high. The low response rate in some cases, however, suggests that these findings should be interpreted with caution.

In November and December 1996, the Prevention Division conducted a telephone survey of 73 external callers to the Prevention Division’s Information Line. A total of 85 callers out of 620 who called during the two weeks that the study was conducted agreed to participate in the survey, and of these 73 subsequently completed the survey, for a response rate of 12%. Fifty-two percent of the callers were “workers”, 22% were “employers”, and the rest were “other” (e.g., self-employed; student). Eighty-seven percent reported being adequately to very satisfied with the response they received, with forty-two percent of respondents indicating that they were “very satisfied”. Eighty-two
percent of respondents gave the overall service a rating of 4 or 5 on a 5 point scale (5 = excellent).

The open-ended question at the end provided some indication of how the service might be improved so that it could better assist people with health and safety problems that they are encountering at work. For example, it was suggested that: the Information Line should have specialists for various industries, that written information should be provided to supplement the verbal information over the phone, that there should be more publicity on how to access information, that there should be greater access (e.g., make line available longer than regular working hours) or that there were limitations in terms of information that was made available.

The Board also conducted a pilot employer and worker satisfaction survey for field officer visits. Two regions were assessed, using two different distribution methods. In one region, 211 surveys packages were mailed out after the visit, with two copies of the survey in each package or a total of 422 surveys, and 77 usable surveys were returned, for a return rate of 18%. In the other region, field officers left the surveys at the worksite after their visit. The report notes that "It is difficult to quantify the exact number of surveys that were actually delivered by officers and left at worksites", but only 13 were returned. Consequently, the survey was based on 90 usable surveys, with about equal numbers of employer and worker respondents (44.4% and 41.1% respectively), and about 13% "other" (e.g., supervisors).

Seventy-three percent of respondents reported that the purpose of the visit was inspection, in comparison with 9.0% who reported the visit was for consultation, 3.4% for education, and 4.5% for accident investigation. Satisfaction levels were between 4 and 5 on a 5-point scale (5 = high satisfaction) with, for example, a score of 4.31 on overall satisfaction, and a score of 4.34 on the value of the visit in enhancing health and safety at the worksite. Workers and employers were about equally satisfied on all measures. Respondents were also asked to indicate if they were aware of and had used other Board services (from a list of 10 other services), and to indicate their levels of satisfaction with these services. Six of the ten services were used by at least 15 of the 90 respondents in the past 6 months, including posters, publications, First Aid, AIRS, Hearing Conservation, and the Information Line. Of these, satisfaction was highest for
First Aid (4.0) and lowest for AIRS (3.47). (Satisfaction levels reported by less than 15 respondents excluded).

According to the Prevention Division’s First Quarter Report of 1998 a satisfaction survey was also sent in the last quarter of 1997 to employers and workers after a visit by a Prevention Officer. In this report and in interviews it was noted that a postal disruption impeded the survey, but the report states that over 400 surveys were returned from five regions (the total number of surveys distributed was not indicated in this report). Some of the findings were as follows: 70% were satisfied with the Prevention Officer’s ability to answer questions; 74% were satisfied with the officer’s professionalism and courteousness; 67% were satisfied with the accuracy of the information provided; and 63% were satisfied with the value of the visit in terms of enhancing health and safety.

In interviews, there were some concerns expressed about the methodology used for these surveys, in particular, that responses to the survey were sometimes given in the presence of the field officers whose work the employer was commenting upon. Some field officers also pointed out that “our job is sometimes making people unhappy” (for example, by writing an order or penalty to require an employer to make a change he/she might not otherwise make), so that measuring results in terms of client satisfaction is not always appropriate for the division.

The fact that the Information Line survey had an extremely small sample size with a response rate of 12% brings into question the extent to which this represents the general population of Information Line users. The response rate for the pilot survey of field services was not much higher at 18%, and the response rate from in-person distribution could not be determined.

The 1997 Administrative Inventory suggested that while stakeholders are now more involved in the WCB and have greater access to information than ever before, “a climate of distrust and even animosity pervades the system.” Submissions to the Royal Commission from employer and worker representatives outlined a variety of concerns with respect to the focus of the division and the delivery of its programs and services.
Among the issues raised by stakeholders in these submissions were:

- the need to increase the level of resources and attention paid toward prevention;
- interest in increased emphasis on enforcement, increased inspections and higher fines;
- interest in increased emphasis on internal responsibility, collaboration, employer consultation and education, and reduced emphasis on inspections and fines;
- increased accountability for workers; the need to clarify due diligence and the conditions under which there will be an automatic penalty;
- the need for more training for workers and employers, young workers, OSH representatives, and management; the need for more attention to training of WCB staff;
- the need to increase research to improve understanding of causes of occupational injury and disease;
- the need to increase the size of merits and demerits, and to tie merits and demerits to other safety performance indicators and return-to-work programs;
- concerns about the delay in revising regulation and the process involved; concerns about the focus on organized labour and large employers;
- enhanced rights and responsibilities for workers and increased powers and support for occupational health and safety committees.

The extent to which these issues are representative of the interests of the larger population is difficult to say, as is the extent to which clients on the whole are generally satisfied or dissatisfied with the Prevention Division.

Based on its series of interviews with employer and worker representatives, the 1997 Administrative Inventory\(^{171}\) reported that employers’ concerns with respect to the Prevention Division had to do with:

- the politics of Regulation Review and dissatisfaction with the new regulations;
- instability of leadership and an inconsistent management philosophy at the WCB;
• the need for the WCB to adopt a more collaborative and consultative approach to occupational safety and health;
• perceived inconsistencies in the inspection, enforcement, and sanction process and inappropriate targeting of prevention resources;
• differential treatment of employers and workers.

Workers’ concerns related to:
• a perceived diminution of enforcement activity;
• the need to complete the Regulation Review process and a willingness to address the contentious issues;
• the role of workers in internal responsibility systems;
• preservation of the WCB’s social policy function.

5.3 Secondary Impacts

Definition: The extent to which other significant consequences, either intended or unintended and either positive or negative, have occurred.

Findings: There are a number of possible positive intended or unintended, and negative, unintended impacts that might have occurred as a result of Prevention Division activity, some of which may be useful for the division to monitor.

For example, with respect to positive impacts, the following might be found to occur:

• improved labour relations within firms where the Prevention Division has helped management and workers to work cooperatively on health and safety issues
• identification of early treatment needs of employees whose health is being affected by factors outside of work, as a result of monitoring and testing by the Prevention Division
• reduced accidents at home and in the community as a result of the Prevention Division’s educational efforts with children and youth
• enhanced partnerships between industry groups and associations on non-safety related issues, as result of increased contact and facilitation encouraged by the Prevention Division to deal with safety issues
• research funded by the Prevention Division resulting in findings which contribute to improved treatment approaches, or to eventual cures, for diseases that can be caused by work as well as non-work related factors

It is also possible to speculate upon areas where the potential for negative unintended impacts exists, and where it might be useful for the division to monitor.

Negative unintended impacts might occur as a result of an organization’s priorities, policies and strategic directions. With respect to the Prevention Division, the kinds of unintended impacts that might have occurred as a result of past priorities and strategic directions, or current strategic directions, could include, for example:

• the emergence of certain diseases and injuries associated with changing work and technology, that require regulations different from those established in the 1970’s, or increased risk of new kinds of occupational diseases and injuries emerging because of the focus on current claims
• increased costs for business to comply with new regulations, with possible business closures or unfavourable changes in business practices
• increased risk of injury and disease in workplaces not targeted through WorkSafe (assuming that resources normally allocated to other firms and industries are reduced as a result of resource re-allocation to WorkSafe initiatives)
• reduced incentive to comply on the part of employers because of the reduced likelihood of inspection, orders, and warning letters occurring since 1990, the uncertainty of on-site follow-up, and the perception of the WCB as “educator” rather than enforcer
• incentive under ERA (or other financial incentives through Diamond) to reduce claims and claims costs rather than to improve safety, and insufficient financial incentive under ERA to make investment in safety worthwhile from a financial standpoint; as with ERA, any new programs that reward low claims
and claims costs runs the risk of encouraging efforts to reduce claims rather than to improve safety.

The Auditor General’s report also addresses secondary impacts, as follows (p.31):

Most, if not all, public sector programs have secondary impacts associated with them. These can be positive or negative. …It is likely that the WCB’s programs do have significant side effects. Some people have suggested that the psychological well being of long-term claimants is at risk in certain cases. Others have suggested that some employers ignore safety practices because they feel that the consequences of non-compliance are low compared to the cost of compliance. …We recommend that the WCB identify potential secondary impacts and assess which ones are worthy of investigation and reporting.
Endnotes


2 For example, no waiting period for claims.


7 *Putting Theory Into Practice*. Canadian Comprehensive Auditing Foundation. 1993.

8 Definitions of the CCAF 12 Effectiveness Attributes are taken from p.15-16 of *Putting Theory Into Practice*, referenced above.


14 Prevention Division structure prior to the recent change is described in WCB of BC. *Prevention Division Briefing*. Prepared by: Nick Attewell, Manager Prevention Policy, November 19, 1996. (p.14-20).


17 Prevention Division Organizational Chart dated May 29, 1998; also confirmed in interviews.


20 *Administrative Inventory* (ibid) (pp.19-34).

21 Source: Excel Spreadsheet attached to this graph contains 4 different sources of Penalty data. The graph is based on #1.


Source: Excel Spreadsheet attached to this graph contains 4 different sources of Penalty data. The graph is based on #1.


23 1997 Administrative Inventory (ibid) (p.213)
24 1997 Administrative Inventory (ibid) (p.219)
25 1997 Administrative Inventory (ibid) (p.228)
27 1997 Administrative Inventory (ibid) (p.228)
28 1997 Administrative Inventory (ibid) (p.242)
31 Table Note: Higher numbers based on number of registered employers provided by the Prevention Division. Lower numbers presented in Board Annual Reports. Not all registered employers are under the jurisdiction of the Prevention Division.

Source: Excel Spreadsheet attached to this graph contains 2 different sources of data on Number of Employers.


(Not all registered employers are under the jurisdiction of the Prevention Division)

33 Source: Excel Spreadsheet attached to this graph contains % Employers Inspected Data: WCB of BC. Prevention Division. Response to Royal Commission Request. Request dated November 5, 1997. Response to Q. 5. (Second page, based on payroll)


36 WCB of BC Annual Report. Statistics ‘97 (p.71)

37 1997 Administrative Inventory.


41 Source: Excel spreadsheet attached to this graph contains 2 different sources of Warning Letter data. The graph is based on #1.


42 1997 Administrative Inventory.


45 Source:


Year. Created on 98/01/15). “Penalties Per Inspection” calculated as total number of penalties 1987-1996 divided by total number of inspections 1987-1996 (See Excel Spreadsheet “10-Year Regional Averages Spreadsheet.XLS”)


1997 data unavailable.


1997 Administrative Inventory (ibid) (p.239).


WCB of BC. Prevention Division, Response to the Royal Commission’s Request dated August 18, 1997, Response to Question 1.

Data provided in 1997 Administrative Inventory (ibid) (p.133)


87 WCB of BC. Prevention Division. Response to Royal Commission Request dated August 18, 1997,
89 WCB of BC. Prevention Division. Support Information for Prevention Division Presentation to the Royal
87 WCB of BC. Prevention Division. Support Information for Prevention Division Presentation to the Royal
81 WCB of BC. Prevention Division. Support Information for Prevention Division Presentation to the Royal
82 WCB of BC. Prevention Division. Support Information for Prevention Division Presentation to the Royal
Commission, July 18, 1997. Response to Question I-5. (number of inspections: 41,486 divided by
number of worksites inspected: 15,478 = 2.6)
83 WCB of BC. Prevention Division. Support Information for Prevention Division Presentation to the Royal
84 See, for example, “Penticton landscaping firm prosecuted for worker’s death”, Prevention at Work,
86 WCB of BC. Presentation to the Royal Commission, July 18, 1997.
87 1992 Administrative Inventory (ibid) (p.196).
88 1997 Administrative Inventory (ibid) (p.xxi).
89 1997 Administrative Inventory (ibid) (p.94).
90 WCB of BC. Internal Audit. Internal Audit – Confidential. Grants and Awards Program Audit – Final
91 WCB of BC. Internal Audit. Internal Audit – Confidential. Grants and Awards Program Audit – Final
93 WCB of BC. Support Information for Prevention Division Presentation to the Royal Commission, July
94 Prevention Division budgets over time taken from WCB of BC, Annual Report 1997 (p.47) and WCB of
Index, 1996 Classification, Annual Average All-Items Indexes, Canada Historical Summary and from


WCB of BC. Prevention Division. 1998 Business Plan (p.91)


WCB of BC. Prevention Division. 1998 Business Plan. Prepared for: Prevention Division. Prepared by: P. Wolczuk/P. Meaney. January 6, 1998.(p.15.58) indicates 1997 projected FTE=385.5; the list of permanent staff positions (p.25) totals to 405 (which, it is stated, does not include the 43 new positions identified in the enhancement request for 1998); the Prevention Division’s response to Q.1.1 of the Commission’s June 23, 1997 request regarding FTE’s shows 388.93 budgeted in 1997.

WCB of BC. Annual Report 1997 (p.21).


1997 Administrative Inventory (ibid) (p.29).


WCB of BC. Prevention Division. 1998 Business Plan. Prepared for: Prevention Division. Prepared by: P. Wolczuk/P. Meaney. January 6, 1998.(p.15.58) indicates 1997 projected FTE=385.5; the list of permanent staff positions (p.25) totals to 405 (which, it is stated, does not include the 43 new positions identified in the enhancement request for 1998); the Prevention Division’s response to Q.1.1 of the Commission’s June 23, 1997 request regarding FTE’s shows 388.93 budgeted in 1997.

WCB of BC. Prevention Division. Response to Royal Commission Request dated August 18, 1997, Response to Question 14. (Provided in attachment to letter from Prevention Division dated March 11, 1998): Field Officers by Region (total OSO’s and OHO’s = 191; WCB of BC. Prevention Division Briefing. Prepared by: Nick Attewell, Manager, Prevention Policy. November 19, 1996. (p.14) states that there are 190 Occupational Safety and Hygiene Officers; 1997 Administrative Inventory (p.30) indicates that there were a total of 188 OSO’s and OHO’s, with 5 vacancies.

WCB of BC. Annual Report 1997 (p.48). Number of employers indicated is 153,499; WCB of BC. Annual Report Statistics’ 97 (p.65) shows estimated number of employers at 156,233.

WCB of BC. Annual Report 1997 (p.65).


Assuming 191 OHO’s and OSO’s.


1997 *Administrative Inventory* (ibid) (p.189).

1997 *Administrative Inventory* (ibid) (p.203).

WCB of BC. *Laboratory Services Operational Update.* Phyllis Stoddart, Manager, Laboratory and Technical Services, Laboratory Services, July 1998. (p.3)

1997 *Administrative Inventory* (ibid) (p.178).

1997 *Administrative Inventory* (ibid) (p.173).


1997 *Administrative Inventory* (ibid) (p.201,202).


Factor scores taken from Employee Survey Results, Meeting Leaders Guide for Managers, Prevention Division.


1997 *Administrative Inventory* (ibid) (p.249).

1997 *Administrative Inventory* (ibid) (p.249)


1997 *Administrative Inventory* (ibid) (p.113)

1992 *Administrative Inventory* (ibid) (p.86).


1997 *Administrative Inventory* (ibid) (p.98)


For example, under *Success Stories,* p.8, Interventions at Greater Victoria Hospital Society.


Research and Analysis Section, Task Force for Review of Parts II & III of the Canada Labour Code, Labour Branch, 1996. (p.11). According to HRDC’s report on Occupational Injuries and Their Cost by Province or Territory 1992-1996, the fatality rate for PEI in 1995 was subsequently revised, and was reported in this document to be 4.0.


160 BC’s rates were provided by the Prevention Division in response to Royal Commission request dated June 23, 1997, Response to Question I-8. Canada’s rates were taken from Human Resource and Development Canada’s Occupational Injuries and Their Cost in Canada 1991-1995, and from their most recent statistics (1992-1996), provided through their Website. The HRDC statistics for BC do not match the statistics provided by the WCB of BC to the Royal Commission, varying by as much as 0.3 to 0.4 each year. BC’s rates provided to the Royal Commission are higher than those reported by HRDC so that the difference between BC and Canada may be somewhat lower.


171 1997 Administrative Inventory (ibid) (p.217-218)