

# **Case Study**

Dofasco's Healthy Lifestyles Program

March 2002

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## **Introduction**

This case study is one of a series of twelve such studies conducted by the Canadian Labour and Business Centre during 2001 – 2002.

Issues of workplace health and wellness are an ongoing priority for the Centre, which is a joint organization founded on strong membership from the main workplace parties – business and labour. We believe that approaches which promote workplace health and wellness are in the best interests of both employers and workers – a clear ‘win-win’. In particular, in a period of anticipated growing skill shortages, those employers who pay attention to workplace health issues will have a competitive advantage over others in recruiting and retaining workers with much-needed skills.

The following case study reflects the Centre’s main objective in undertaking this work, namely:

- To identify the key features of the wellness initiatives in each workplace;
- To document the role of both management and unions/workers in managing these initiatives;
- To assess the relationship between the initiatives and the organization’s business strategy and ‘culture’; and
- To document the ways in which the workplace monitors the impacts of its health/wellness activities.

In short, the case studies are as much about the *process* of workplace wellness as about the *content* and *impacts* of individual workplaces’ initiatives.

Taken as a group, the full set of cases has been deliberately assembled to reflect, as widely as possible, a broad diversity of workplaces in terms of geography, sector, size, and union/non-union status. As a group, the cases are intended to tap the experience and practice of a variety of workplaces, in order to maximize the benefit from the case study work. Readers will note, as a result, that no two cases are alike, and that the lessons to be learned from each case vary considerably.

The full set of case studies will be available on the Centre’s website at [www.clbc.ca](http://www.clbc.ca), where they will be published individually. The Centre is also preparing a summary commentary on the cases, which will identify key common features – and important differences – among them. Finally, the Centre is developing a series of regional seminars at which some of the workplaces featured in these case studies will share their experiences. As they are scheduled, the seminars will also be listed on the CLBC website.

The Canadian Labour and Business Centre welcomes readers’ comments and questions, which may be communicated to the Centre at (613) 234-0505, or to [info@clbc.ca](mailto:info@clbc.ca)

## **Dofasco Inc.'s Healthy Lifestyle Activities**

- *Dofasco is Canada's second largest steel maker. It is non-unionized and has approximately 7,300 employees.*
- *The company's business strategy emphasizes employee engagement. Hence, "It is a business imperative to have them healthy, and at work."*
- *The company has a formal statement of policy on health, safety and wellness and several structures and processes to implement the policy.*
- *A key structure is the Lifestyle Resource Group. It has employee representatives from all sections of the Hamilton facility and develops and encourages wellness programs.*
- *Participation in the lifestyle programs is substantial and growing.*
- *The company believes that the reduction in the lost time injury rate since the early 1990s, the reduction in WSIB payments from 1995 to 2001, and the decline in occupational working time lost from 1994 to 2001 are due, in part, to the health, safety and lifestyle initiatives. The three indicators were not all equally affected by the health, safety and lifestyle initiatives.*
- *Dofasco managers agree that, despite the success of the healthy workplace initiatives, additional focus and leadership in this area are needed. They also agree that stress has emerged as an important health issue.*

### **I. The Company**

Dofasco Inc. is Canada's second largest steel maker. In 1999, it was the most profitable steel producer in North America and it was the most profitable in Canada in 2000. The company is non-unionized and currently has approximately 7,300 employees at its Hamilton facility. It produces over four million tons of steel annually, representing about 30 percent of Canada's flat rolled sheet steel shipments.

Established in 1912, the company has subsidiaries and joint ventures in the United States and Mexico. Its wide range of steel products is sold to customers in the automotive, construction, steel distribution, packaging, pipe and tube, manufacturing, and appliance industries.

On the two measures which Dofasco managers consider crucial – cost per ton of steel produced and earnings before interest and taxes – Dofasco has been performing well. With respect to the first measure, Dofasco ranks second in North America among 18 steel mills measured. With respect to the second, Dofasco has consistently ranked near the top of all North American integrated and mini mills since 1996.

Earnings per share have gone from a loss of \$2.96 in 1992 to a profit of \$3.16 in 1999. In 2000, Dofasco recorded a profit of \$188 million on total sales of \$3.2 billion.

The majority of the workforce is male. The average age is 46, with most of the employees falling into the 35 to 55 years-of-age category. The company spends about \$16 million a year on employee training and development. In 2000, Dofasco paid approximately \$500 million in direct wages to employees.

In 2000, Dofasco was ranked first in North America among thirty steel suppliers in the Jacobson and Associates customer satisfaction survey. Also, in 2000, Report on Business Magazine named Dofasco one of the best companies in the country to work for.

Dofasco has been named one of the world's most sustainable companies by the Dow Jones Sustainability World Index for three consecutive years, (1999-2001). The sustainability ranking is based on a company's financial, social and environmental performance. For the year 2001, Dofasco was the only steel company, and one of 15 Canadian companies listed on the Index. Among the reasons for listing Dofasco were:

- the company's balanced scorecard approach to performance measurement, which integrates customer, investor, worker, and internal management perspectives;
- the company's commitment to health, safety and wellness;
- the company's focus on adopting and commercializing technologies that are driven by customer demand and that have produced lighter, more fuel-efficient automobiles.

Dofasco's President and Chief Executive Officer confirms that the company's objectives are not only financial in nature:<sup>1</sup>

“Dofasco is focused on sustainable growth. This means long-term success for our customers, our shareholders and our employees. It also means a long-term commitment to our communities through environmental stewardship, financial strength and active participation in the well being of our hometowns. We strongly believe that each of these factors are interdependent.”

## **II. Impetus for Healthy Workplace Initiatives**

Dofasco's business strategy has changed considerably in the last decade. Until the late 1980s, the business strategy was a volume-based, growth strategy. The company concentrated on producing as much steel as possible at the lowest price possible.

However, in the late 1980s, the market began to change. The pressure from imports intensified, the demand for steel began to level off and new competitors entered the steel market. Cost increases, which at one time could be passed on to the customer, now had

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<sup>1</sup> Quoted in "Dofasco Listed on Dow Jones Sustainability World Index," Dofasco News Release, October 5, 2001, p. 2.

to be absorbed by the company. As a result, the profit margin on a ton of steel began to shrink.

From 1990-1992, Dofasco recorded net losses of more than \$900 million and it was awash in debt.

The company had little choice but to change the way it did business. It shut down old facilities, reduced its work force from 13,000 to 7,000 employees and developed a new business strategy, which it called Solutions in Steel, and which, explains Dofasco's President, focuses on three elements: operational excellence, technology and innovation, and intimate customer relationships.<sup>2</sup>

“Our strategy ... was to pursue the higher-value end of the market. Instead of trying to increase profitability by increasing the amount of steel we produce, we began developing new, innovative products that provided added value for our customers, as well as sustainable value for our shareholders.”

The change in strategies is reflected in product sales. In 1992, almost half of Dofasco's steel was sold as hot-rolled – commonly seen as one of the most basic commodity-grade steels. In 2000, that number was down to a quarter. Conversely, in 1992, galvanized steel – a high-end, value-added product – comprised only about a quarter of the company's product mix. It is now around 44 percent.<sup>3</sup>

In 1993, nearly 18 percent of the steel that Dofasco shipped was 'secondary' steel, that is, steel that the company can sell and ship, but for which it does not earn its best potential return. By 1999, that amount was down to 9.5 percent.<sup>4</sup>

### **III. Linking the Business Strategy to Health, Safety and Lifestyles**

The restructuring process of the early 1990s led to a new focus on employee engagement. The company decided to try to change the somewhat paternalistic "entitlement" culture, (as described by Dofasco's President), that it had fostered for decades and to promote an "earnings" culture.<sup>5</sup> It sought to "link the success of the employee directly with the success of the company and the fortunes of the shareholders."<sup>6</sup> It trained its employees in

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<sup>2</sup> John Mayberry, "Growth Through Innovation: The Selective Pursuit of Opportunity," for the James Gillies Lecture, Schulich School of Business, Toronto, March 1, 2001, p. 11.

<sup>3</sup> Ibid., p. 15.

<sup>4</sup> Bill Solski, "The Business Agenda for Corporate Stewardship," Speech to the Annual General Meeting of the Mining Association of Canada, Quebec City, June 21, 2000, p. 8.

<sup>5</sup> John Mayberry, "Growth Through Innovation: The Selective Pursuit of Opportunity," p. 12.

<sup>6</sup> Ibid., pp. 12 - 13.

problem-solving, manufacturing processes, and customer service, and, in keeping with one of the elements of the Solutions in Steel strategy, began to involve its employees in efforts to work out solutions to customers' problems.

The company de-layered management, established team-based manufacturing, gave more responsibility to cross-functional groups, and shared financial information with employees.

According to the General Manager of Manufacturing Services,<sup>7</sup>

“We have to be quicker off the mark to respond to customer needs. We need to add value for our customers, not just provide product. In order to add value, we need to engage our employees, make sure they understand our goals and strategies, and empower them to execute them.”

He adds:<sup>8</sup>

“From a business perspective, our employees are our most valuable asset and one of our greatest competitive advantages. We have put a lot into hiring, training, and keeping our world-class employees. *It is a business imperative to have them healthy, and at work.*” [Emphasis added.]

During the early 1990s, in the midst of its financial crisis, the company reviewed and clarified its basic guiding principles. It identified its core values and set out a formal statement of values, the first part of which reads as follows:

- Health and Safety: nothing is more important than the health and safety of our people.
- Openness: we are honest and open in all of our relationships and communications.
- Recognition: we value the contributions people make, share the rewards, and celebrate success.
- Respect: we treat others with the respect we would want in return.
- Teamwork: we believe we can find a better way by working together.

It is not insignificant that health and safety tops the list of Dofasco's core values.

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<sup>7</sup> Bronko Jazvac, "Our Strength is People," Remarks to the North American Leadership Summit: Employer Advances in Health and Productivity Management, October 13, 2000, pp. 3 - 4.

<sup>8</sup> Ibid., p. 4.

#### IV. Dofasco's Healthy Lifestyles Program - Origins

Health, safety and wellness are not new values at Dofasco. In 1943, a recreation club was formed which led to the building of the Frank H. Sherman Recreation and Learning Centre. The 100-acre facility includes baseball diamonds, twin hockey arenas, soccer pitch, tennis courts, running track, golfing facilities, plus training and meeting rooms. All employees and their families have access to the complex. In the early 1970s, the company established a full-range of preventive medicine programs. During the 1980s, Dofasco set up a noon-hour stretching program, as well as a human factors team, consisting of an occupational therapist, physiotherapist and kinesiologist, to help injured or disabled employees get back to a satisfying personal and work life.

Still, the financial crisis of the early 1990s served to focus the minds of senior managers on employee health, safety and wellness. The aging of the company's workforce, plus the accidental deaths in the late 1990s of three people, further strengthened the company's resolve to protect and improve the health of its employees.

In an October 2000 speech, the General Manager of Manufacturing Services explained how the company's concern with traditional occupational health and safety issues broadened into a concern with lifestyles and wellness.<sup>9</sup>

“A decade ago, we looked at health and safety primarily in a traditional manner...in occupational terms. We are a big company in a heavy manufacturing field. Our focus was to prevent accidents and ensure a safe work environment for our employees.”

“We focused on identifying significant issues in the work environment and addressing them. We spent time and effort in training our people to work safely and operate machinery safely. It was a tried and true approach to health and safety.”

However, in examining the data, managers noticed “that 86 percent of our L.T.I.s [lost time injuries] occurred due to home-like injuries, not occupational-type injuries.”<sup>10</sup> That meant that even if the company eliminated all occupational lost time injuries, “we were only addressing a small portion of the problem.” Thus, the company began to think more in terms of health and wellness, not just safety.

It was also at this time that Dofasco's Medical Services Department and its Pension and Benefits Department came together to consider the feasibility of instituting a lifestyle program. Such a program would advance the goals of both Departments. For Medical

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<sup>9</sup> Ibid., pp. 4 - 5.

<sup>10</sup> Ibid., p. 5. Home-like injuries refers to injuries that could happen at one's home, e.g., spraining an ankle while climbing stairs, twisting a knee while stretching for something, straining a back muscle while improperly lifting something.

Services, a major objective was "to contribute to the establishment of and maintenance of the physical and mental well-being of employees."<sup>11</sup> For Pension and Benefits, the key goal was "to contain the growing cost of health benefits while meeting the company's commitment to provide competitive benefits."<sup>12</sup>

The company decided that, before setting up a lifestyle program, an employee health audit needed to be undertaken. Conducted in 1993, the audit revealed a number of health issues, particularly smoking and obesity. It showed that smokers and over-weight employees lost more time at work than employees who did not smoke and were not over-weight. (See **Table 1** below.)

**Table 1**

<b>Risk Category</b>	<b>Average Hours Lost (per employee per year)</b>	<b>Absentee Rate</b>
Smoker/Obese	106	4.75
Smoker/Not Obese	96	4.30
Non-Smoker/Obese	72	3.21
Non-Smoker/Not Obese	53	2.37

Source: Dr. A. Hall, P. McLenachan, The Benefits of Developing a Lifestyle Program, The Dofasco Inc. Experience, 1993, p. 4.

From these data, the lost-time cost of smoking and obesity was calculated. This cost, which does not include the costs associated with the additional use of the company health plan or with lost productivity, came to almost \$5 million a year. (See **Table 2** below.)

**Table 2**

<b>Risk Category</b>	<b>% of Work Force</b>	<b>Additional Hours Lost per Employee*</b>	<b>Additional Absenteeism Cost per Employee**</b>	<b>Cost for Total Work Force***</b>
Smoker/Obese	16.7	53	\$1,590	\$1,860,000
Smoker/Not Obese	17.5	43	1,290	1,580,000
Non-Smoker/Obese	34.8	19	570	1,390,000
Non-Smoker/Not Obese	31.0	0	0	0
Total	100			\$4,830,000

Source: Dr. A. Hall, P. McLenachan, The Benefit of Developing a Lifestyle Program, The Dofasco Inc. Experience, 1993, p. 4.

\*Additional hours lost over Non-Smoker/Not Obese.

\*\*Assume \$30 per hour for wages and benefits.

\*\*\*Based on % distribution over a work force of 7,000.

<sup>11</sup> Dr. A. Hall, P. McLenachan, The Benefit of Developing a Lifestyle Program, The Dofasco Inc. Experience, 1993, p. 3.

<sup>12</sup> Ibid.

At this point, the question facing Dofasco was not whether to establish a wellness program, but how. According to the company's Manager of Medical Services, "Whenever we pushed workplace wellness from a medical, white coat point of view, it always died."<sup>13</sup> Similarly, the General Manager of Manufacturing Services stated:<sup>14</sup>

“...we try to engage employees in health and safety. Not by pushing it down their throats, but by supporting their desire for more knowledge, and more empowerment over their work environment and their personal well-being. In other words, we decided to use a "pull" strategy for health and wellness.”

To root a health initiative in the culture of the company and get widespread participation, Dofasco managers found that it had to be employee-driven and that senior management must clearly demonstrate strong support for the initiative.

Recently, Dofasco examined its employee health data to determine if there is a relationship between accidents and employee health. It found that people who smoke, people with a BMI greater than 27, people with elevated blood pressure, and those with psychological issues are more likely to have an accident and be away from work than those who do not have these issues. This finding demonstrates the relationship between health and wellness, on the one hand, and safety, on the other. It also helps to explain why the healthy workplace program is considered by Dofasco managers to be an important company initiative.

## V. Programs

**Appendix 1**, which is based on the Conference Board of Canada's grid of workplace health initiatives, shows that Dofasco has programs and activities in all areas of workplace health.

The following are the company's specific lifestyle activities at the present time:

- shiftwork and lifestyle program — provides information to employees on ways to improve sleep and make good nutrition choices; delivered by staff members; sessions are held during work hours;
- cardiopulmonary resuscitation (CPR) instruction — delivered during work hours by staff members;
- Weight Watchers — four sessions are offered weekly and are delivered by the Weight Watchers organization; employees are reimbursed 50 percent of the cost if they attend nine of 10 sessions;

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<sup>13</sup> Quoted in "Healthy Workplace," Leading Edge Health, 2 (1), 2000, p. 11.

<sup>14</sup> Bronko Jazvac, "Our Strength is People," p. 7.

- smoking cessation program — delivered during work hours by staff;
- standard first aid course — a two-day course delivered by staff during work hours;
- back power program — delivered during work hours by staff and trained volunteers; provides information on the care of the back and teaches exercises to strengthen the back; this program is followed by programs on the care of other muscles and joints;
- foot care program — delivered by an outside chiropractor and is free to employees;
- noon-hour aerobics sessions — delivered by trained volunteers; 20 classes held weekly;
- fitness facilities (off-site and on-site) — the off-site fitness facility (actually a recreation, learning and development centre) is managed by Dofasco employees and is open to employees and their families; the on-site facility is managed by an outside consultant, is available to employees, free of charge, 24 hours a day;
- fitness appraisals — delivered on-site by an outside consultant;
- plant walk/stretch programs — sponsored by the business units and delivered by an outside fitness instructor whose fee comes out of the business unit's budget;
- employee assistance program — initial assessments are done by staff; if necessary, employees are referred to Hamilton-Wentworth Family Services;
- active living challenges — consist of two to three weeks of physical activities; delivered by staff and outside consultants;
- yoga and tai chi classes — delivered by trained volunteers at no charge to employees; available after hours;
- health and safety fairs — occur during work hours; offer information sessions and various health tests, e.g., for blood pressure, cholesterol; the business units also offer health and safety training days;
- sleep and alertness information sessions — awareness sessions delivered by staff;
- mind/body relaxation sessions — delivered by trained volunteers and show participants relaxation techniques;
- presentations to employees on lifestyles, coping with stress and change, exercise, ergonomics in the office, back education, nutrition, alcohol and drug abuse, hearing conservation, skin health, and bereavement.

In addition, all new employees at Dofasco are provided the opportunity to participate in a three-day off-site training program, the major purpose of which is to promote team-building but which involves numerous physical activities.

As can be seen from the above, the Dofasco lifestyle program addresses a number of health issues, including stress. In addition, the basic objectives of each initiative vary, as do its administrative features. For instance, the objective of some sessions is to provide information and increase awareness, while the objective of others is to demonstrate techniques. The objective of some sessions is to provide group physical activity. Some initiatives are delivered by staff, some by volunteers, others by outside consultants and recognized organizations. Some are available free of charge to employees, some charge a fee and at least one allows for the reimbursement of the user if certain conditions are met.

Because outside consultants tend to be unfamiliar with the Dofasco corporate culture, and because they are usually more expensive than internal staff, the Dofasco Lifestyle Program Team Leader prefers to rely on staff and volunteers to deliver the sessions and activities.

## **VI. Structures and Formal Policies**

The company's policy statement on health, safety and wellness, issued in 1996, is brief and reads as follows:

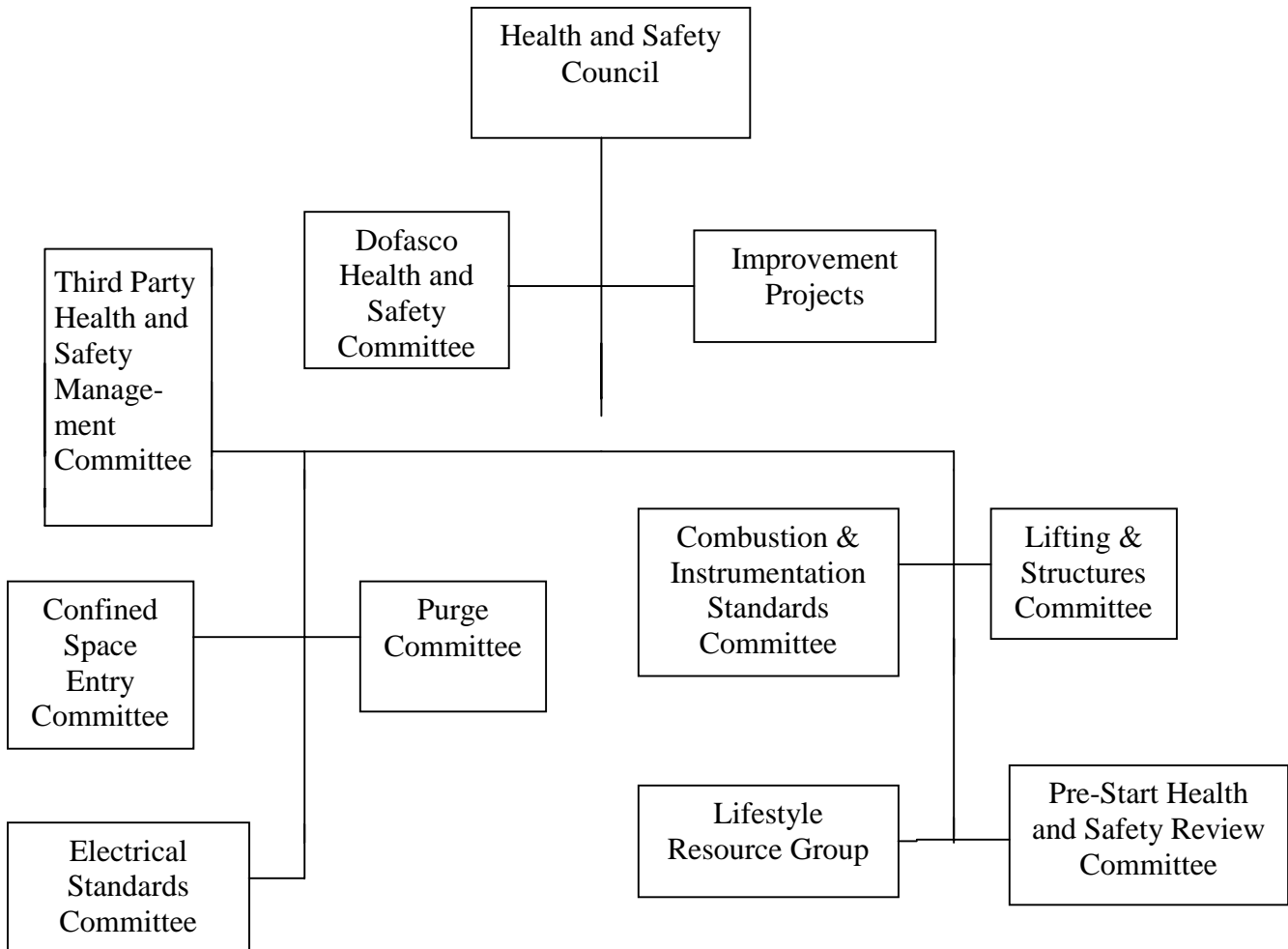
“At Dofasco, there is nothing more important than the health and safety of our people.

We are committed to:

- Integrating health and safety practices into all aspects of our work. We will continue to incorporate these practices into product and process design, manufacturing and business planning;
- Providing innovative and preventive health and safety programs. We will continually optimize the effectiveness and integrity of our programs through open communications, comprehensive training and education, audits and workplace assessments;
- Developing understanding among those in leadership of their personal responsibilities and their accountability to provide a safe and healthful workplace;
- Developing understanding among all employees of their personal responsibility to work safely, their accountability for individual performance and the assignment of appropriate authority to implement these responsibilities; and
- Meeting or exceeding the requirements of applicable legislation and regulations for performance in health and safety matters. Dofasco will demonstrate leadership within our industry.”

Dofasco's health and safety initiatives and its wellness activities are organized and managed by a number of linked structures. The final decision-making body, with respect to health, safety and lifestyles, is the Health and Safety Council. (See **Figure 1.**) The Council is comprised of all manufacturing general managers, the operations' 13 business unit managers, the manager of purchasing, the general manager of health, safety and loss prevention, the manager of health and safety, the manager of medical services, the general manager of engineering and maintenance technology, and the manager of finished product shipping. It is a senior management group chaired by the Vice President of Manufacturing and meets every two weeks. It reports to Team Hamilton, a committee comprised of all of Dofasco's vice presidents and other key senior management personnel.

**Figure 1**  
**Health and Safety Council**  
**Committee Structure**



The mission of the Council, says a Dofasco document, is to "provide the drive and passion to develop, communicate and implement a strategy that will achieve an Accident Free Workplace." Among its responsibilities are the following:

- ensure that health and safety is integrated into all business area decisions;
- identify areas for improvement and set priorities;
- review and, where appropriate, approve recommendations from all designated standing committees;
- set standards and establish consistency in program implementation;
- make recommendations on health and safety to Team Hamilton and the Quality Management Council, (the latter being a group comprised of senior managers just below the vice president level).

The Dofasco Health and Safety Committee consists of 11 elected employees and six appointed management representatives, one of whom is the General Manager of Manufacturing Services. Its mission, according to a Committee document, is to "promote and recommend continuous improvements to maintain a safe and healthful workplace through employee involvement and commitment." Its major purpose is to carry out the functions of a health and safety committee as detailed in the Ontario Occupational Health and Safety Act and supported by operating guidelines. As required by the Act, it is co-chaired by an elected employee and an appointed management member. Its annual operating budget is in the \$15,000-\$20,000 range. As a legally mandated committee, it is not required to report to the Council; nevertheless, its recommendations are reviewed and considered by the Council.

As shown in **Figure 1** above, Dofasco also has committees that address health and safety issues in specific areas. There is, for instance, the Dofasco Electrical Standards Committee. With an operating budget of about \$16,000, it deals with the development of electrical safety standards at Dofasco. Among its goals for 2001 are:

- to develop a standard for the guarding of exposed, live electrical equipment;
- to develop a standard that sets out the requirements for the electrical test equipment used in the facility;
- to increase the electrical awareness of business unit managers; and
- to develop and adapt training to accommodate changes in electrical safety and technology.

**Figure 1** also shows a Lifestyle Resource Group (LRG). Established in 1995, this is the structure that promotes the company's lifestyle program. The mission of the lifestyle program is to enhance the well-being of employees and their families by,

- increasing the awareness of health risks;
- providing information regarding lifestyle choices; and
- providing opportunities for lifestyle change.

A fundamental objective of the LRG is to encourage employee ownership of the lifestyle program. The Group is comprised of about 35 volunteer representatives from the company's business units; members devote about eight hours a month to Group activities.

They periodically attend training courses in both traditional health and safety issues and lifestyle issues. An important function of the members is to communicate information on wellness activities to the employees of each business unit.

The lifestyle program has a paid staff of two, plus a team leader, and a yearly committee operating budget of about \$28,000. This money, and the funding for the majority of the health and lifestyle programs, come out of the Medical Services Department budget. In addition, each business unit must allocate a certain amount of its operating budget to wellness activities. Some business units embrace wellness and lifestyle programs more enthusiastically than others do. Thus, there is some unevenness in the level of activity across the company. Roughly \$225,000 is spent by the business units each year for wellness and lifestyle initiatives. In contrast, the Health and Safety section of the Health, Safety and Loss Prevention Department has a yearly budget of \$2 million and a staff of seventeen, plus external experts (who are only occasionally used).

Among the several goals of the LRG for the year 2001 were the following:

- implement semi-annual "Active Living Week" events to reach out to all members of the corporation;
- expand on-going yoga programs for new participants;
- offer back power train-the-trainer programs;
- implement and support a stop smoking pilot program at Dofasco;
- pilot an in-house, ten-week tai chi program.

While the LRG exists to foster wellness activities, it is not solely responsible for this work. Individual employees, too, can initiate activities and a process has been established for this purpose. It begins with a survey of the individual's business unit or department to determine interest, using a standard survey form. The final decision is made by the manager of the business unit with input from the LRG. Each business unit determines the criteria for acceptance of a proposal.

The Health, Safety and Loss Prevention Department is the major administrative structure on health and safety. Headed by a general manager, it pursues a number of fundamental goals, including the following (taken from its 2002 Business Plan):

- improve the health and safety program by incorporating risk management;
- assist the company leadership in achieving an accident-free workplace;
- support the development of a health and safety culture;
- integrate health, safety and loss prevention concerns into business decisions and project planning and development;
- support the integration of lifestyle and wellness initiatives into business planning;

- clarify responsibilities and support performance management improvement.

The Department's activities are mainly in the traditional health and safety area, such as eliminating or mitigating ergonomic and hygiene hazards, but it also pursues lifestyle goals, such as promoting the company's smoking cessation program.

The Department has also established a network of health and safety facilitators and each of the operations' 13 business units, such as coke production, must have one. The health and safety facilitator is a full-time rotating position occupied by a regular, trained and leadership-capable employee for a period of three years.

The responsibilities of this employee, who reports directly to the business unit manager, are:

- develop and maintain the business unit's health and safety QS9000 Level 2 health and safety program;
- assist in the corporate health and safety program evaluation for his/her own business unit plus one from another area (done every three years);
- evaluate and report on business unit health and safety program compliance via the annual business area internal evaluation; and
- coordinate and facilitate the development of the health and safety components of the annual business plan (based on new corporate requirements, health and safety program improvements identified, accident trends, etc.).

## **VII. Management Commitment, Employee Involvement**

The foregoing demonstrates both the commitment of management to employee health and wellness and the extensive involvement of employees in the decision-making around health and wellness initiatives.

The acceptance of health and safety as a core value of Dofasco, the allocation of resources to the LRG, the allocation of resources to the business unit managers to undertake wellness activities, the establishment of a Health and Safety Council with membership comprised of senior company managers, and the critical role that the Health, Safety and Loss Prevention Department plays in business and purchasing decisions are all convincing indicators of a strong management commitment to employee health. In addition, Dofasco has a variable pay arrangement for managers; 10 percent of the variable component of all managers' pay (and all employees' pay) is dependent on the extent to which the company meets its health and safety goals. (The Health and Safety section makes recommendations on the company and business area health and safety goals and they are approved by Team Hamilton and the Health and Safety Council.)

Finally, it is worth noting that the Vice President of Manufacturing and the General Manager of Health, Safety and Loss Prevention were members of the Working Group on Improving Steel Plant Safety of the International Iron and Steel Institute (IISI). According to a Dofasco spokesperson, they participated in this Group in order to learn of

best practices in health and safety in the steel industry and to assist in the development of a methodology to compare health and safety performance. The company remains a member of the Working Group (whose name has changed to Working Group on Safety and Occupational Health).

Employee involvement in decision-making around health, safety and wellness is manifested in several ways: the considerable employee involvement in the LRG; the employee participation in the Dofasco Health and Safety Committee and other specialized health and safety committees; and the important role of health and safety facilitators. In addition, individual employees can lobby for fitness and wellness initiatives on their own. One employee developed a business case to convince senior manufacturing managers to turn a part of a plant change facility into a fitness room. A fitness room, used for endurance training, was set up. Another employee, on his own time but using the company tuition refund program, obtained training as a registered yoga instructor. He now teaches yoga to other interested employees.

Not only is employee involvement in decision-making substantial, so also is employee participation in the lifestyle activities offered at Dofasco. For instance:

- participation in on-site weight control programs went from 157 in 1997 to 346 in 2001. In the years that the programs have been in operation, 1,082 participants have lost a total of 22,318 pounds, although the Team Leader of the LRG quickly acknowledges that not all the weight has been kept off;
- attendance at the company's annual health and safety fair increased from 1,800 in 1998 to 3,466 in 2001;
- well over 1,200 employees have had fitness appraisals at the company's fitness centres;
- each of the 20 noon-hour aerobics classes held weekly has between 15 and 30 participants;
- more than 3,500 employees have participated in Back Power sessions;
- participation in Corporate Walk Days, held bi-annually and intended to recruit the unconverted, has increased from 700 in 1997 to 800 in 2000; this activity was recently replaced with bi-annual Active Living Challenges and over 1,200 employees participated in 2001;
- the number of participants in walk and stretch programs, held in shop floor locations, increased from under 100 in 1997 to 250 in 2000;
- the average number of monthly visits by employees to the company's in-plant fitness facility increased from under 600 in 1997 to over 1,500 in 2001;
- the number of employees participating in health screening for cholesterol, blood sugar and blood pressure increased from 1,052 in 2000 to 2,136 in 2001.

The substantial participation in the programs reflects the employee-driven nature of the company's lifestyle effort as well as the determination of the LRG to attract all employees, not only those who are interested in healthy lifestyles whether or not there is a Dofasco program.

Of course, not all of the lifestyle programs have been well attended. The stress management sessions and smoking cessation programs have tended not to draw many employees. As a result, organizers have re-arranged the scheduling of the programs to make it more accessible to employees.

### **VIII. Impacts**

A thorough evaluation of a health, safety and wellness program, or any human resource initiative, requires analysis of the impacts on both the individual and the organization. At the level of the individual employee, one would want answers to these questions, at the very least:

- what has been the impact on the individual employee's overall health and fitness?
- does the participant feel better, have more energy, perceive that he/she is getting something from the activity?
- have there been improvements in various indicators, such as blood pressure, cholesterol level, weight, and body mass?
- is the employee absent from work less often because of injuries and other health problems?
- to what extent has the health, safety and lifestyle program increased employee job satisfaction?

At the corporate level, one would want to know the extent to which the health, safety and wellness program improved productivity and efficiency. Thus, such indicators as absenteeism rates and health benefit costs would have to be tracked.

It is exceedingly difficult to determine the impact of a health, safety and wellness program, or any specific initiative, on organizational performance since many factors influence organizational performance. It may be that an organization's profits and productivity increased over the period during which the program was in effect, but the reason for the increase may have more to do with new technology, or to changes in manufacturing methods, or to developments in the market. One, therefore, must be careful about attributing too much to a healthy workplace initiative.

The accepted theory among many managers is that health, safety and lifestyle programs produce healthier, happier employees; because they are healthier and happier, they are more energized and more engaged; because they are more energized and engaged, they work more creatively, miss fewer days and have fewer accidents. As a result, company sales, productivity and profits increase. While the theory may be true, it is very difficult to prove.

Many managers simply accept the theory and believe that trying to prove it is a waste of time, money and energy.

Dofasco managers are among those who subscribe to the accepted theory, but they also collect considerable information to try to substantiate it.

For instance, as **Table 3** below shows, the lost time injury rate has been cut by more than half, going from 7.0 per 200,000 hours worked in 1991 to 2.07 per 200,000 hours worked in 2000. During the same period, steel shipments went up, increasing from under 3.5 million tons to 4.5 million tons.

**Table 5** shows that the number of cases of non-occupational musculoskeletal injuries (that is, musculoskeletal injuries that occurred away from work) decreased from five cases per 200,000 working hours in 1991 to 1.5 cases per 200,000 hours in 2000.

The company's payments to the Ontario Workplace Safety and Insurance Board (WSIB) have dropped considerably, as **Table 4** illustrates. The annual assessment went from \$4.71 per \$100 of payroll in 1995 to \$1.76 per \$100 of payroll in 2001. From 1995 to 1998, the company's payments in total to the WSIB were reduced by more than \$6 million.<sup>15</sup>

Occupational working time lost, which refers to working time lost as a result of injuries or illnesses caused at work, has also been reduced. From 1994 to 1999, it was reduced by more than half. It went from about 1.4 hours per 100 hours worked in 1994 to 0.6 by 2001.

It cannot be concluded with certainty that the reductions in occupational working time lost, WSIB payments and lost time injuries and illnesses were due solely to Dofasco's health, safety and lifestyle program. However, it is reasonable to suggest that the program has contributed to these reductions, which benefited both the individual employee and the organization.

**Table 3**  
**Lost Time Injury Frequency**

<b>Year</b>	<b>Lost Time Injuries/200,000 Hours Worked</b>
1991	7.0
1992	5.20
1993	5.50
1994	6.00
1995	4.70
1996	3.50
1997	3.43
1998	2.92
1999	2.76
2000	2.07
2001	2.34

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<sup>15</sup> *Ibid.*, p. 13.

**Table 4**

<b>Year</b>	<b>WSIB Premium per \$100 of Payroll</b>
1995	\$4.71
1996	\$4.71
1997	\$3.27
1998	\$2.03
1999	\$2.11
2000	\$1.81
2001	\$1.76
2002	\$1.84 (increase due to economic aftermath of Sept. 11/01)

**Table 5**  
**No. of Cases of Non-Occupational Musculoskeletal Injuries**

<b>Year</b>	<b>No. of Cases per 200,000 Working Hours</b>
1991	5.0
1992	4.3
1993	2.8
1994	3.3
1995	2.6
1996	1.6
1997	2.6
1998	3.4
1999	2.6
2000	1.5

The beneficial impact on individuals is shown by other data. For instance, the substantial and growing participation in the various initiatives, (see page 14), indicates that the employees perceive that they are getting something from them. Otherwise, they would not participate. The following is a comment from a manager in the Engineering and Maintenance Technology (EMT) Department about one of the fitness programs:

“We initiated our EMT stretch program in the spring of 1999 as a pilot to determine the level of employee interest and the potential health benefits for our employees. We conducted two assessment surveys, including an introductory evaluation of initial participant fitness skills and program expectations and a final evaluation of participant fitness improvements and overall program effectiveness. The program runs three times a week at a cost of about \$5,000 per year.

EMT employee participants reported the following as a direct result of their participation in the stretch program:

- significant improvement in flexibility, muscle endurance, ability to complete daily tasks without fatigue, overall fitness, and knowledge of health and fitness;
- significant improvement in balance, coordination and self-confidence;
- marked improvement in employee relationships and level of enthusiasm within the Department of Engineering and Maintenance Technology;
- decrease in neck, wrist and shoulder soreness, fatigue and back strains.

It is truly a privilege, appreciated by all participants, particularly given our current financial constraints and demonstrates management commitment to the health of our employees.”

Two employee health audits, taken in years when the program had not yet reached full stride, show some improvement in employee health from 1993 to 1998. The 1993 audit revealed that 80 percent of employees were overweight, that is, they had a body mass index of over 25; 50 percent were obese, with a body mass index over 27; and 35 percent smoked. The 1998 audit revealed a five percent decline in the number of overweight employees and a five percent drop in the number who smoked. However, it also showed a five percent increase in the number of obese employees.

In 2003, the company will undertake another formal health audit as well as a cost benefit analysis.

A culture of health, safety and wellness appears to be forming at Dofasco. As employees have noted in interviews, putting on hardhats and safety goggles is second nature and cleaning up work areas, whether their own or their colleagues', is done as a matter of routine. According to one employee, "people are now more conscious of health and safety matters." An example of this heightened awareness is provided by employees in the Iron and Cokemaking areas, who are looking for ways to get healthy, fresh food available at their workplace rather than rely on the traditional food from vending machines.

In addition, the company's latest employee satisfaction survey, (second quarter, 2001), shows very strong employee agreement with the following statements:

- Health and safety is a prime consideration;
- Supervisors/managers respond to health and safety concerns; and
- People take responsibility for the health and safety of co-workers.

As noted near the beginning of this article, Dofasco adopted a team-based approach to production in the early 1990s as part of its effort to increase employee involvement in decision-making. To determine the contribution of this approach to the company's health and safety performance and to productivity, Dofasco invited a group of MBA students from Wilfrid Laurier University (WLU) to undertake a study of two of Dofasco's temper mill operations, Cold Roll and Tin Plate.

The methodology used by the students consisted of focus groups of employees and managers, conducted separately, and a survey of the focus group participants.

The perception of the participants was that "the team-based format lead [sic] to increased job satisfaction, H&S [health and safety] performance and overall performance within the mills."<sup>16</sup>

Task rotation, which is an integral aspect of the team-based method, was viewed positively. According to the study:<sup>17</sup>

“A significant number of participants stated that task rotation decreases boredom, therefore heightening awareness of the task at hand. The end result, according to participants, is decreased accidents, as well as an increase in overall job satisfaction.”

The students' report cautions that, while the two mills have been performing well, in productivity terms and in health and safety terms, they could not make a direct correlation between these two variables and the team-based format. It needs to be noted that the shift to team-based manufacturing was accompanied by a shift in the company's business strategy. The emphasis henceforth was to be on quality and on working safely, not on quantity of tons produced. It is, therefore, not clear whether the exceptional health and safety performance of the two mills is due to the shift in the manufacturing method or the shift in managerial emphases. Both probably made a contribution, but the senior management stress on quality and on working safely appears to be the larger contributor. The students said as much in their report:<sup>18</sup>

“Based mainly on the data collected from the focus groups and surveys, the WLU team concluded that a strategy which emphasizes H&S objectives ahead of output in tonnage has led to a significant level of improvement in business and other H&S metrics within the organization. The WLU team also believes that empowering employees through a team-based format is the other key success factor.”

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<sup>16</sup> D. Hawton, et al., Health and Safety Performance and Business Results, Dofasco Inc., September 17, 2001, p. 5.

<sup>17</sup> Ibid.

<sup>18</sup> Ibid., p. 17.

## IX. Conclusion

The preceding has outlined the health, safety and wellness program at a major private sector, Canadian corporation, Dofasco Inc. It has shown that:

- the program is comprehensive; all of the types of activities that were identified on the Conference Board's grid of healthy workplace activities are in place at Dofasco;
- the program was motivated, to a significant extent, by the company's core value and the need to improve the company's competitiveness during the financial crunch of the early 1990s;
- management's commitment to the health and wellness of the employees is deep and it has been demonstrated in a number of ways;
- employee involvement in the program is extensive; employees use the facilities and participate in the lifestyle activities and they are involved in decision-making around program initiatives; however, there is no formal committee or mechanism, with representation from both senior managers and employees, that could serve as a forum for discussion of health, safety and wellness issues;<sup>19</sup> and
- the program is gaining acceptance and appears to be effective; that is to say, both the employee and the organization appear to benefit from the program.

Two questions here are: Why has Dofasco's program been successful? And why is a culture of health, safety and wellness evolving at Dofasco? A major reason is the commitment of senior management to the program. The relentless insistence by senior management that employees work safely, the affirmation of health and safety as a core value of the company, the network of formal structures established by senior management to deal with health, safety and wellness, the considerable (though perhaps still insufficient) resources allocated, the rewarding of managers and employees who meet health and safety goals – these are all manifestations of senior management commitment. Such commitment enables other managers to take health, safety and wellness more seriously. It also enables employees to take these matters more seriously. As one employee observed, "Your boss can't get in your face about it ... when it's being supported from a level of Mr. Borsellino's [Vice President of Manufacturing] calibre."

Other reasons include the employee-driven nature of the program, the scheduling of activities to accommodate the employees, and the establishment of a broad-based structure, the Lifestyle Resource Group, to promote health and wellness. Having employees from throughout the corporation sit on this entity greatly facilitates communication about health and wellness activities.

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<sup>19</sup> Recent amendments to the Canada Labour Code, the federal government's primary labour law, require companies in the federal jurisdiction with 300 or more employees to establish employer-employee health and safety *policy* committees. Dofasco is governed by Ontario labour law.

What of the future of the program at Dofasco? There is little to reason to suggest that the future of the program is anything but bright. However, it would appear that at least two issues need to be addressed in order to ensure its continued effectiveness. First, the lifestyle and wellness side of Dofasco's program may be "under-resourced," as one manager put it. The three paid staff are responsible for a program that is intended to reach over 7,300 employees. Voluntary involvement is substantial and laudable, but volunteers burn out (as do over-worked employees) or they develop other interests. Therefore, the strategy of relying on volunteers for the long-term success and effectiveness of the program needs to be re-examined.

Second, and more importantly, mental health issues, particularly stress, are being recognized as important issues at Dofasco, as they are in other organizations. According to the company's Manager of Medical Services, "a lot of people come to work with a knot in their stomach". It is not clear why people are feeling stressed. One employee suggested that it was due to "fewer people doing more work". A number of stress management courses and programs are already in place at Dofasco, e.g., yoga and tai chi programs. However, to shed more light on the factors causing the stress, Dofasco has undertaken a formal and comprehensive study of the problem. It has also entered into an agreement with the Canadian Mental Health Association under which the Association will support the development of mental health workshops, designed by Dofasco staff, that will be delivered to employees to raise awareness of mental health concerns and of the employee's role and responsibility in dealing with the issue.

**Appendix 1**

**Categories of Workplace Health Initiatives**

<b>Category</b>	<b>Specific Initiatives</b>	<b>Present ('X')</b>
<b>Physical Work Environment</b> (factors that affect the safety of the work environment and the physical health of employees)	Identification, evaluation and control of hazards (chemical, biological/infectious, physical)	X
	Ergonomics	X
	Injury prevention	X
	Emergency response programs	X
	Air quality	X
	Smoke-free workplace policy	X (in offices and certain areas of the plant)
	Other	
<b>Safety Management Practices and Resources</b>	Formal written health/safety policy	X
	Qualified health/safety technical knowledge present in workplace	X
	Written safety rules and operating procedures, understood by employees	X
	Joint health/safety committees	X
	Regular safety audits	X
<b>Health Services</b> (initiatives which have a direct impact on health)	Employee/family assistance program	X
	Medical services (physicians, nurses, nurse practitioners)	X
	Workplace medical examinations; health risk screening	X
	Medical surveillance programs	X
	Immunization	X (flu clinics)
	Disability case management	X
	Active rehabilitation	X
	Return to work initiatives	X
	Self-care education	X
	Disease management	X
	Occupational health/safety information systems	X
	Ergonomic assessments	X
	Other professional services (fitness professionals, etc.)	X (fitness appraisals)
	Other (specify)	X (back fitness testing)
<b>Work/Family/Life</b> (workplace initiatives to help employees balance work and personal life)	Child care	X (information only)  summer camp: "Camp Steelaway"

	Elder care	X (information only)
	Personal responsibility leave	X
	Alternative work arrangements	X (parental leave)
	Work-family-life transition support	X (reduced work hours)
	Other (specify)	X anger management family counseling financial counseling
<b>General Working Environment</b> (general workplace practices which could affect personal health/safety, socio-economic or career opportunities, and employees' sense of well-being at work)	Violence in the workplace	X
	Equity in the workplace	X
	Harassment policy	X
	Literacy/numeracy	X
	Other work-related skills development, e.g., professional development, skill-enhancement training	X (CPR, First Aid)
	Other (specify)	
<b>Workplace Culture</b> (psycho-social aspects of the workplace that affect mental, physical and social health)	Employee empowerment	X
	Participation in decision-making about workplace changes	X
	Pace of work	X
	Two-way communication	X
	Incentive/recognition programs	X
	Other (specify)	
<b>Healthy Living</b> (individual lifestyle factors, promotion of healthy living, prevention of illness)	Substance use and abuse	X
	Smoking cessation/control	X
	Nutrition/weight control	X
	Disease prevention	X
	Stress management and mental health	X
	Active living and fitness	X
	Other (specify)	X (foot care, back education, shiftwork management)
<b>Supplemental Health and Dental Benefits</b>	General health benefits (e.g., home care, vision care, out-of-country coverage)	X (hearing care)
	Dental benefits	X
	Other (specify)	X (massage clinic, orthotics, orthodontics)