

2000

“the world
of work
has changed
dramatically
since 1913...”



INSTITUTE
FOR WORK & HEALTH
INSTITUT DE RECHERCHE
SUR LE TRAVAIL ET
LA SANTÉ

Institute for Work & Health *Report 2000*



Message from the President

As we reflect on the accomplishments of the Institute for Work & Health, both in the past year and the past decade, we continue to solidify our position as the leading independent work/health research centre in Canada with special expertise in musculoskeletal problems.

The work at the Institute continues to be acknowledged for its research excellence. Donald Cole's *Toronto Star*/SONG project team received our single largest grant ever awarded by the U.S.-based National Institute for Occupational Health and Safety. This grant, as well as others, will fund the third phase of this important work. Other external sources of Institute funding continue to increase each year.

We have also experienced a number of important changes to our scientific staff. Harry Shannon has taken a sabbatical at Tufts University, and Donald Cole has been appointed Senior Scientist for Workplace Studies. Mieke Koehoorn joined us as our Mustard Fellow in Work Environment and Health. Meanwhile, Emile Tompa, a labour-market economist from Statistics Canada, has taken the reins as manager of the Population/Workforce Studies group.

These talented individuals have joined other staff to help reach an important milestone: the publication of our 100th Working Paper. In the last year, we have also published over 20 papers in peer-reviewed journals. We launched our Associate Membership Program and have signed up members from Canada and the U.S. The Institute has produced a number of useful tools for stakeholders. These include a well-received manual for our successful DASH Outcome Measure, educational materials from our Grand Rounds partnership with the Workplace Safety and Insurance Board, and several practical guides to support our Work-Ready project on effective treatment of soft-tissue injury and return to work.

Another key accomplishment was the development of Research Transfer as a core function of the Institute's work, and the appointment of Jane Bartram as director of Research Transfer. This new strategy has been adopted to ensure that the Institute's research is usable and useful to our key stakeholders.

I was also pleased to have edited *Injury and the New World of Work*, recently published by UBC Press. More than a dozen colleagues associated with the Institute are featured in this collection, detailing the current challenges to workplace injury prevention, treatment and the compensation system in Canada.

As we look towards the coming year, we see a stronger need for the evidence-based research outputs produced at the Institute. We continue our commitment to produce excellent research for the practical improvement of employee health in Ontario and in Canada.

Terrence Sullivan



Message from the Chair

As we close this last decade of the second millennium, the Institute too is marked by a major change.

In October of 1999, Fraser Mustard stepped down as the Chair of the Board of Directors.

Fraser served as chair since the inception of the Institute in 1990 and will continue to serve on the Board as Chair Emeritus. His scientific leadership and commitment to excellence have truly enriched this Institute.

As one expression of our thanks to Fraser for his years of guidance, the Institute held a tribute reception in his honour raising more than \$50,000 for the Institute's Mustard Fellowship in Work Environment and Health.

Over the past year, the Institute played a leadership role in the development of the Canadian Institutes of Health Research (CIHR) including scientific director Cameron Mustard's membership on the CIHR's interim governing council. The CIHR is a new initiative sponsored by the federal government to integrate health research nationally and to enhance the health of Canadians.

I am very pleased to report that the diversity and excellence of the Board has grown with the addition of two new members: Lesley Bell from the Ontario Nurses' Association and George Thompson, Executive Director of the National Judicial Institute.

One of the greatest challenges and successes for the Institute this past year was the hosting of the 4th International Congress on Medical-Legal Aspects of Work Injuries. The Institute and the Workplace Safety & Insurance Board welcomed 500 participants from 22 countries to this fruitful three day meeting of the world's leading workplace health researchers and policy-makers.

The new millennium will no doubt see startling changes in the world of work and health. The Board of the Institute is poised to tackle these challenges and believes the Institute is well positioned to meet them, building upon our strong base of musculoskeletal work in the last decade.

A handwritten signature in blue ink, appearing to read "Lorna Marsden".

Lorna Marsden



Keeping pace with change

There is little doubt that the world of work has changed dramatically in recent years, and with it the types of injury, disability, and disease that affect today's workforce. Acute injuries, fatalities, and traditional occupational diseases remain serious concerns, but the contemporary workplace sees more soft-tissue injuries, a reality that has called attention to a whole new area of concern: that of the interplay between biomechanical and psychosocial factors.



Traditional approaches to prevention and treatment are no longer adequate. The new world of work demands new solutions to new health-related challenges.

As a multidisciplinary organization focused on work-related health issues, the Institute for Work & Health plays an important role in understanding the changing world of work. Not only does it conduct vital research – much of which attracts international attention – it is also uniquely positioned to influence Canadian health policy.

A survey of the Institute's ongoing workplace and workforce research provides a clear picture of the changed world of work. By exploring in detail the causes, prevention and treatment of work-related injury and disease, the Institute is able to not only track current changes but anticipate trends and respond to them effectively.

In the course of doing so, the Institute has identified several challenges facing today's employers, workers, healthcare practitioners, and policy-makers. Chief among them are those that arise from the shift from a traditional manufacturing and resource-based economy to a largely service and knowledge-based one, the rise in the incidence of soft-tissue injuries, the need for new approaches to prevention and safe, effective return-to-work programs.

Some of these themes formed the agenda at the 4th International Congress on Medical-Legal Aspects of Work Injuries held in Toronto in June 1999. Hosted by the Institute and the Ontario Workplace Safety and Insurance Board (WSIB), the successful event drew experts in the fields of law, medicine, social policy, occupational safety and health protection – more than 500 participants from 22 countries – further evidence of the Institute's increasing role on the world stage.

In the wake of the Congress, the Institute has continued to forge international alliances, collaborating with researchers the world over. With representation on the

organizing board, the Institute is also instrumental in planning the next Congress, to take place in Australia in 2001.

Closer to home, the Institute continues to play a leadership role in the advancement of research initiatives. Institute president Terrence Sullivan has been active on the WSIB's Research Advisory Council which was established to oversee a grants program in occupational health and safety. The Institute collaborated with a large number of university and workplace partners in developing proposals for this competition, seven of which were awarded financing. These initiatives have broadened and deepened the Institute's research involvements with university and workplace partners across the research spectrum.

The changing nature of work

Canada's transition from a traditional manufacturing- and resource-based economy to a largely service- and knowledge-based one has been the subject of much study in recent years. This change has meant a reduction in costly acute and sometimes fatal injuries, but a gradual growth in soft-tissue injuries (sprains and strains).

The Institute has initiated several workplace studies to examine the effects of this shift. The General Motors Study on Risk Factors for Low Back Pain (forthcoming in the *American Journal of Public Health*) has led to a greater understanding of the workplace risk factors associated with back pain. And with that understanding comes the ability to develop effective prevention strategies. Elsewhere, a three-phase study of repetitive strain injuries (RSIs) in workers at *The Toronto Star* newspaper, which is currently in its final phase, tackles the issue of soft-tissue injuries from a different angle. By focusing on existing healthcare and workplace policies, the study is poised to reveal new and better approaches to worksite interventions, and the factors associated with upper-extremity disorders.

Another developing area of interest at the Institute is the growth in non-standard, contingent work and outsourcing, a development that gives rise to concerns for workers' compensation since these increasingly popular work arrangements present unique challenges for health and safety efforts.



THESE INITIATIVES
HAVE BROADENED AND
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WORKPLACE PARTNERS
ACROSS THE RESEARCH
SPECTRUM.

PROFILE



Dr. Pierre Côté

WHO Dr. Pierre Côté, research fellow, Institute for Work & Health; doctor of chiropractic; PhD candidate in epidemiology, Department of Public Health Sciences, University of Toronto; Master's degree in surgery and epidemiology, University of Saskatchewan (with a focus on back and neck pain in the general population); Doctoral Fellow with the National Health Development and Research program, Health Canada; primary research interest: the etiology and prevention of disability related to occupational low-back pain and whiplash.

WHAT A study of whiplash injuries that result from car accidents, specifically examining recovery rates and processes, both physical and mental, for PhD thesis.

HOW Study will examine three groups of claimants: those seeking care from a chiropractor; those being attended to by a medical doctor; and a third group who are in the care of both a chiropractor and medical doctor.

WHY "Neck pain comprises the most common cause of work absenteeism, so it has a huge impact on the workplace. Therefore, by studying various aspects of recovery from whiplash – even those caused by car accidents – we can glean information applicable to the treatment of workplace injuries."

In examining the decline of standard employment arrangements, two distinct needs are suggested: the first is for possible new and different approaches to prevention, adjudication, regulation and rate-setting; the second is for a continuing research commitment to shed light on the inherent health-related challenges of non-standard employment practices.

In general terms, the growth in employment insecurity has been associated with an increase in health risks to workers. Occupational health and safety outcomes may be poorer for self-employed workers due to the selective nature of such work, fluctuating economic and reward factors, disorganization, and the increased likelihood that these workers may fall through regulatory cracks.

"Wellness in the contingent workforce is a major challenge," says Terrence Sullivan. "Right now, contingent workers are largely on their own."

Sprains and Strains: On the Rise

Concurrent with these labour market shifts and changes in the nature and amount of employment, the Institute has noted that the kinds of disability and disease faced by workers have changed significantly. Acute injuries, fatalities, and traditional occupational disease remain a priority for prevention initiatives. But injuries of a musculoskeletal nature – a.k.a. strains and sprains – are a growing concern. Such work-related musculoskeletal disorders (WMSDs) are common and costly and now comprise the largest category of work-related injuries in Canada. And yet WMSDs (and their treatment) are both controversial and poorly understood.

Multiple projects aimed at demystifying WMSDs are currently under way at the Institute. Nineteen ninety-nine saw the launch of a series of Future Search conferences aimed at sharing information on repetitive strain injury with numerous stakeholders. A similar purpose fuelled the development of a new video series called Clinical Grand Rounds, a joint educational initiative of the Institute and the WSIB. The series, which features Institute researchers and senior scientists, presents a variety of topics, including “Psychosocial Risk Factors for Musculo-skeletal Disorders,” “Prognostic Factors for Soft Tissue Injury Claimants,” “Upper Extremity Disorders: Managing in the Grey Zone,” and “The Principles of Evidence-Based Practice.” It represents a novel way to transfer research conducted by the Institute and others in the field to nurse case managers, adjudicators, physicians, and community providers while promoting evidence-based practice in the continuum of care for injured workers.

The production of the Clinical Grand Rounds video series is just one realization of the Institute’s mandate to improve the transfer of information to stakeholders. In particular, the series enables the Institute to relay valuable research to a large audience at a modest cost.

In the realm of research, the Institute, in collaboration with the Union of Needletrades Industrial and Textile Employees (UNITE) and the Ontario Health Clinics for Ontario Workers (OHCOW), has embarked on a new study to investigate WMSDs. By focusing on the clothing industry, specifically on 35 unionized clothing manufacturers, the Institute and its partners hope to provide a good overview of the industry, and ultimately identify new approaches to prevention, organizational factors, early intervention, and work-modification.

The Institute continues to play a leading role in the Cochrane Collaboration, an international network of individuals and institutions committed to preparing, maintaining and disseminating systematic reviews of the effects of health-care interventions. The Institute’s contribution to the Collaboration is the establishment of the 40-member Back Review Group. Under the editorial guidance of Dr. Claire Bombardier, a senior scientist at the Institute, and Dr. Alf Nachemson, a Member of the Institute’s Research Advisory Committee, the Group will conduct reviews of randomized controlled trials and controlled clinical trials of primary and secondary prevention of neck and back pain, and other spinal disorders, excluding inflammatory diseases and fractures. In addition to reviewing current studies, the Group will identify gaps in the literature where randomized controlled trials are nonexistent, and suggest areas where further studies are warranted.



THE SERIES ENABLES
THE INSTITUTE TO RELAY
VALUABLE RESEARCH TO
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The rise in the occurrence of strain and sprain injuries (primarily to the back, neck, shoulder, and arm – including the wrist) is often linked, at least in part, to the production methods in manufacturing and service jobs. However, WMSDs appear sensitive to both biomechanical and psychosocial risk, and remedial factors.



The Institute is making a significant contribution to the understanding of the relationship between such psychosocial factors as job control, job satisfaction, effort-reward balance, and impaired body function (i.e., low-back pain) through initiatives such as the General Motors and Toronto Star Studies. The General Motors Study is one of the largest-ever studies involving very detailed biomechanical measurements and psychosocial risk factors.



Similarly, the Institute is forging practical approaches to the assessment of disability such as the DASH (Disabilities of the Arm, Shoulder and Hand) Outcome Measure. In 1999, the Institute, together with the American Academy of Orthopaedic Surgeons, published a user's manual to accompany this successful tool. Accessible and easy to use, the DASH manual is the Institute's response to requests from clinicians around the globe for further information about the development and application of the DASH Outcome Measure.

Unique approaches

In addition to its groundbreaking research in the area of WMSDs, the Institute is instrumental in shaping news and views on a variety of other work-related health fronts. One such area of interest is women's health problems. Women experience different exposure to injury and face different recovery challenges.

Even so, women's occupational health problems are poorly studied, leaving many questions unanswered. Why, for instance, do women appear to file relatively few compensation claims? And why, when they do, do they remain off work for longer than men do? In 1999, the Institute launched an in-depth qualitative study designed to answer such questions. In particular, the workplace study (officially known as *An Exploration of the Psycho-social Environment and how it Varies Across Hierarchy and Gender in a Service Sector Environment*), which is based on interviews with employees in the service sector, will probe the role of work-related stress in health problems while examining the impact of stressors on hierarchy and gender.

“Certainly women are more susceptible to the ‘second shift’ phenomenon – putting in a second work day at home – and they report higher stress,” says Sullivan.

Another subject of concern at the Institute is the way in which worker health and safety is measured. A recently launched project, in which the Institute is partnered with St. Michael’s Hospital in Toronto, is designed to examine indicators of worker health and safety with a view to developing a customized health and safety performance measurement tool. The project, entitled Healthy Workplace Balanced Scorecard (an offshoot of the larger Healthy Workplace Assessment Project), is inspired by the Kaplan & Norton balanced scorecard, a popular tool used in business management. The business scorecard balances a group of financial outcomes with leading indicators of these outcomes. These leading indicators measure internal business processes, customer perspectives and organizational learning and growth.

The Healthy Workplace Balanced Scorecard adopts a similar formula, comparing a group of health and safety outcomes with three categories of leading indicators of these outcomes. One of the key advantages of the Scorecard is its flexibility and adaptability to individual workplaces. The involvement of St. Michael’s Hospital in the project will therefore result in a customized set of indicators, based on the health and safety strategy of the hospital.



PROFILE

Mieke Koehoorn

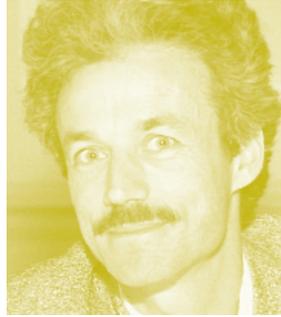
WHO Mieke Koehoorn, PhD in epidemiology, University of British Columbia; Mustard Fellow, Workplace Studies, Institute for Work & Health; Lecturer, Department of Public Health Sciences, University of Toronto.

WHAT A study of the risk factors and patterns of health-care utilization associated with musculoskeletal injuries among B.C. health-care workers.

HOW Linking databases from hospital, government, and compensation systems to identify factors that place hospital employees at risk of musculoskeletal injuries at their worksites.

WHY “Musculoskeletal injuries are the most prevalent and costly condition affecting the Canadian workforce, accounting for approximately 60 per cent of workers’ compensation claims. The prevalence is even higher in the health-care sector. Recent statistics from the Canadian Labour Force Survey indicate that nurses have the highest number of lost work days and the highest percentage of lost time attributable to illness and injury among major occupational groups in Canada. So it’s my hope that the findings from my research will provide valuable insight in the effort to manage and improve the prevention of musculoskeletal injuries.”

PROFILE



Donald Cole

WHO Dr. Donald Cole, M.D.; MSc.; senior scientist, Institute for Work & Health; Royal College Specialist in Occupational Medicine and Community Medicine; associate professor, Department of Clinical Epidemiology and Biostatistics and School of Geography and Geology, McMaster University; expert in work-related musculoskeletal disorders; recipient of US National Institute for Occupational Safety & Health (NIOSH) grant.

WHAT Evaluation phase of a large workplace study. Will build upon previous research with the workplace partners in assessing the impact of a joint labour-management program on primary, secondary and tertiary prevention of WMSD among office workers.

WHERE The Toronto Star newspaper.

HOW Use qualitative methods to document the nature of interventions and their implementation. The primary comparison will be between self-reported risks for WMSD, symptoms of WMSD and disability associated with WMSD before the intervention program and after one-and-a-half years of implementation of an ergonomic policy, including training, work re-organization and workstation change.

WHY "The Toronto Star is a good reflection of the way work is shifting, from manufacturing to a more office/technology-based environment. It's a great opportunity to deal with WMSDs through collaborative research."

A focus on prevention

As in other areas, the changing nature of work will necessitate a new approach to prevention, one that addresses such contemporary concerns as ergonomics, stress management, and musculoskeletal injuries.

"Our objective is to be the leading organization in Canada in promoting understanding of these types of work-related disabilities," says Sullivan, adding that "risk factors for musculoskeletal injury are only now being properly studied."

Recent research reveals a strong link between various psychosocial risk factors and a range of work-related health problems. In the course of examining RSIs in employees at The Toronto Star, researchers led by Donald Cole, a senior scientist at the Institute, found the condition was linked to ergonomics and psychosocial factors such as deadlines, workload and coworker support.

That being the case, the question arises: Can you engineer psychosocial factors? The first step, according to the researchers, is to understand that several psychosocial effects arise from the interaction of job structure and worker perception. Hence it's the job structure which provides researchers with one modifiable point of prevention.

Traditional prevention strategies have endorsed a three-pronged approach: a sound regulatory and enforcement policy; incentive mechanisms; and an internal responsibility system. Rather than promoting one preventive measure over another, current wisdom advocates finding a balance among these three approaches.

Prevention is an area of intense interest at the Institute where one research group focuses its attention on population health. This unique approach aims to improve the health of the entire population by examining a broad range of factors and conditions that influence our health.

Under the stewardship of Cameron Mustard, the Institute's scientific director, this multidisciplinary group is pursuing two broad research themes: first, disability compensation systems; and second, labour-market experiences. Recently, in a commissioned report to Health Canada, lead by Institute scientist John Lavis, the Institute identified population-level indicators that could be used to monitor work-related determinants of health in a population, and thus inform the conceptualization, development, and evaluation of policies and programs related to these determinants.

The report advocates the use of population-level indicators because they tell us about trends in the impact of individual health like employment/ working conditions. Specifically, it recommends indicators for which data are routinely collected (unemployment rate, long-term unemployment rate, and permanent lay-off rate) and those for which data are not routinely collected (such as insecurity associated with pending job loss, or insecurity associated with major organizational change).

In the future, firm-level factors may prove pivotal in prevention efforts. Clearly the organizational and management practices of the modern workplace and the age and experience of its workforce are powerful predictors of injury rates. It may be that management commitment and an empowered health and safety committee are two of the keys to improving prevention. However, for particular diseases and fatalities, education, regulation, and enforcement remain essential.



FOR PARTICULAR DISEASES
AND FATALITIES,
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Getting back to work

“There are three areas a company can tackle to improve employee health,” says Sullivan. “First, they can look at organizational and management practices, and the biomechanical and psychosocial dimensions of the job. The best companies do that intrinsically. Second, they can look at improving value for money in benefits. And third, when a sickness, illness or disability occurs, companies can promote effective disability management.”



“IF INJURY CONDITIONS ARE MANAGED BETTER, WORKERS RETURN TO HEALTH MORE QUICKLY AND THEY MAINTAIN THEIR ATTACHMENT TO THEIR COMPANY.”

Sounds simple enough. However, it is only recently that a range of high-quality studies have emerged on the effective management of soft-tissue injury, particularly low-back pain. Work-Ready, a tri-provincial collaborative research project, is one such study. Based on a review of the available scientific evidence, as well as on numerous interviews with stakeholders in the three provinces, Work-Ready researchers have identified some of the main factors that prolong disability from occupational soft-tissue injuries. Led by Institute scientist John Frank, they have summarized their findings in a series of injured worker case studies that have already proved to be useful tools for employers, health-care providers, and compensation boards across the country.

Institute research has shown few traditional medical interventions to be effective in the early acute stage (the first three to four weeks) of uncomplicated low-back and other soft-tissue injuries. Moreover, aggressive medical intervention in the acute stages of uncomplicated soft-tissue injury may even result in ancillary problems – i.e. slower recovery and delayed return to work.

Conversely, well-designed, staged interventions, involving successive job-linked rehabilitation efforts in the sub-acute period (six to twelve weeks) for those off work with low-back pain may be effective in promoting recovery and return to work.

Not to be overlooked in the treatment and recovery process is the importance of individualized and firm-level ergonomic interventions at the work station and workplace respectively. Other factors that appear to promote safe, early, return to work include a people-oriented workplace culture, early non-coercive contact with the workplace after injury, unionization and the availability of modified work.

The good news is that there are ways to lessen the burden of soft-tissue injury. By working in concert, the major stakeholder audiences – the workplace parties, the health care providers and patients, and the insurers – can effect the kinds of well-designed clinical, workplace, and insurer-based interventions necessary to promote recovery and return to work.

“If injury conditions are managed better, workers return to health more quickly and they maintain their attachment to their company,” confirms Sullivan.

Leading the way

Today's workplace is anything but static. Globalization, shifting labour markets, the rise of the service and knowledge sectors, increased use of technology, and modern management practices are just some of the factors affecting workers' health at the turn of the century.

By focusing not just on the treatment needs of injured and ill workers, but on causation and prevention practices, the Institute for Work & Health is taking bold steps toward providing new solutions to emerging workplace problems. Proactive, rather than reactive, in its approach to research, the Institute is poised to influence work-related health policy in the years to come.



PROFILE

Cameron Mustard

WHO Cameron Mustard, ScD; scientific director; doctoral training in epidemiology, health policy and behavioural sciences, Johns Hopkins School of Hygiene and Public Health; associate professor, Department of Public Health Sciences, Faculty of Medicine, University of Toronto; associate director, Population Health Program of The Canadian Institute for Advanced Research; Interim Governing Council member, Canadian Institutes of Health Research; member of the Board of Directors of the Canadian Institute for Health Information; chair, Population Health Review Panel, Medical Research Council.

WHAT Follow-up study of the Ontario Child Health Study (OCHS) cohort, a group of 3,200 children aged 4-16 years of age when first interviewed in 1983.

HOW In the fall of 2000, the sample, now aged 21-33 years of age, will be reinterviewed. The OCHS sample will contribute to the very small number of cohorts that have measured emotional, physical and behavioural health during childhood and subsequently followed children into adulthood and labour market participation.

WHY "This study will contribute to the scientific knowledge of early developmental determinants of successful transitions to adult social roles, including labour force participation."

Institute for Work & Health

Auditors' Report

To the Directors of INSTITUTE FOR WORK & HEALTH

We have audited the balance sheet of Institute for Work & Health as at December 31, 1999 and the statements of revenue and expenses, surplus and cash flow for the year then ended. These financial statements are the responsibility of the Institute's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the financial position of the Institute as at December 31, 1999 and the results of its operations and cash flow for the year then ended in accordance with generally accepted accounting principles.

The financial statements of Institute for Work & Health as of December 31, 1998 were audited by other auditors who expressed an opinion without reservation on those statements in their report dated March 12, 1999.

Stern Cohen LLP

**Chartered Accountants
Toronto, Canada
February 4, 2000**

Institute for Work & Health

Statement of Revenue and Expenses and Surplus

For the year ended December 31,

	1999	1998
	\$	\$
Revenue		
Workplace Safety and Insurance Board of Ontario	4,498,622	4,500,000
Interest	34,072	23,843
Other	1,092,334	593,180
	<u>5,625,028</u>	<u>5,117,023</u>
Expenses		
Salaries and benefits	3,234,119	3,472,892
Capital asset amortization	174,633	179,523
Travel	325,604	205,211
Supplies and service	147,659	121,720
Occupancy costs	292,605	280,651
Equipment and maintenance	125,862	85,605
Publication and mailing	261,823	200,270
Voice and data communications	31,316	31,211
Staff training	67,416	73,555
Other	160,936	107,399
Outside consultants	504,333	318,746
	<u>5,326,306</u>	<u>5,076,783</u>
Excess of revenue over expenses for the year	<u>298,722</u>	<u>40,240</u>
Surplus – Beginning of year	453,545	507,347
Awards to Foundation (<i>note 4</i>)	(133,718)	(94,042)
Surplus – End of year	<u>618,549</u>	<u>453,545</u>

See accompanying notes.

Institute for Work & Health

Statement of Cash Flow

<i>For the year ended December 31,</i>	1999	1998
	\$	\$
Operating Activities		
Excess of Revenue over Expenses for the Year	298,722	40,240
Amortization of capital assets	174,633	179,523
Amortization of lease inducement	(68,280)	(68,280)
Deferred revenue	(88,176)	349,102
Working Capital from Operations	316,899	500,585
Net Change in Non-Cash Working Capital Balances Related to Operations	20,783	75,656
Cash from Operations	337,682	576,241
Investing Activities		
Purchase of Capital Assets, Net	(236,996)	(94,964)
Decrease (Increase) in Short-term Investments	(5,406)	498,398
Decrease (Increase) in Long-term Investments	(315,543)	(209,000)
	(557,945)	194,434
Financing Activities		
Increase (Decrease) in Due to Workplace Safety & Insurance Board of Ontario	1,378	(1,243)
Awards to Foundation	(133,718)	(94,042)
	(132,340)	(95,285)
Change in cash during the year	(352,603)	675,390
Cash – Beginning of year	724,258	48,868
Cash – End of year	371,655	724,258

See accompanying notes.

Institute for Work & Health
(Incorporated under the laws of Ontario)

Balance Sheet

<i>As at December 31</i>	1999	1998
	\$	\$
Assets		
Current Assets		
Cash	371,655	724,258
Short-term investments	103,760	98,354
Accounts receivable – related foundation	70,579	95,480
– other	94,797	79,126
Prepaid expenses and deposits	15,395	20,714
	<u>656,186</u>	<u>1,017,932</u>
Capital assets (note 2)	320,791	258,428
Long-term investments	524,543	209,000
	<u>1,501,520</u>	<u>1,485,360</u>
Liabilities		
Current Liabilities		
Accounts payable	165,465	159,231
Deferred revenue (note 3)	591,056	679,232
Due to Workplace Safety & Insurance Board of Ontario	1,378	–
	<u>757,899</u>	<u>838,463</u>
Lease inducement	125,072	193,352
	<u>882,971</u>	<u>1,031,815</u>
Surplus	618,549	453,545
	<u>1,501,520</u>	<u>1,485,360</u>

Other information (note 4)
See accompanying notes.

Approved on behalf of the Board:


Director


Director

Institute for Work & Health

Notes to Financial Statements

December 31, 1999

The Institute for Work & Health was incorporated without share capital on December 20, 1989 as a not-for-profit organization.

The Institute is predominantly funded by the Workplace Safety and Insurance Board of Ontario (WSIB) up to the Institute's approved WSIB budget. Other revenues are generated through quality improvement and research activities and certain interest earned.

1. Significant accounting policies

Amortization

Capital assets are stated at cost. Amortization is recorded at rates calculated to charge the cost of the assets to operations over their estimated useful lives. Maintenance and repairs are charged to operations as incurred. Gains and losses on disposals are calculated on the remaining net book value at the time of disposal and included in income.

Amortization is charged to operations on a straight-line basis over the following periods:

Furniture and fixtures – 5 years

Computer Equipment – 3 years

Leaseholds – term of the lease

Revenue Recognition

The Institute follows the deferral method of accounting for contributions. Restricted contributions, which are contributions subject to externally imposed criteria that specify the purpose for which the contribution can be used, are recognized as revenue in the year in which related expenses are incurred. Unrestricted contributions, which include contributions from the WSIB, are recognized as revenue when received or receivable if the amount to be received can be reasonably estimated and collection is reasonably assured.

Institute for Work & Health

Notes to Financial Statements

December 31, 1999

Investments

Short-term investments are carried at the lower of cost or market.

Long-term investments are valued at cost, except in situations where the decline in value is permanent, in which case the investments are recorded at market value.

Foreign Currency Transaction

Monetary assets and liabilities in foreign currencies have been translated into Canadian dollars at the exchange rates prevailing at the balance sheet date. Non-monetary assets and liabilities are converted at the rate of exchange in effect at the date of the transaction. Revenue and expenditures arising from foreign currency transactions have been translated at the exchange rate prevailing at the date of the transaction. Gains and losses arising from these translation policies are included in income.

Lease Inducement

The lease inducement, consisting of cash and rent free periods, is deferred and amortized over the term of the lease.

2. Capital Assets

	Cost	Accumulated amortization	Net	
			1999	1998
			\$	\$
Furniture and fixtures	275,097	192,896	82,201	37,986
Computer equipment	601,203	426,628	174,575	119,618
Leaseholds	308,394	244,379	64,015	100,824
	<u>1,184,694</u>	<u>863,903</u>	<u>320,791</u>	<u>258,428</u>

Institute for Work & Health

Notes to Financial Statements

December 31, 1999

3. Deferred Revenue

The Institute records contributions as deferred revenue until they are expended for the purpose of the contribution.

4. Other Information

Commitments

The Institute is committed under leases for premises which expire at various dates until August 2001 with annual rents, exclusive of operating costs, as follows:

	\$
2000	207,000
2001	141,000
	<u>348,000</u>

Pensions

For those employees of the Institute who are members of the Hospital of Ontario Pension Plan, a multi-employer final average payment contributory pension plan, the Institute made contributions to the Plan during the during the year amounting to \$60,973 (1998 \$151,642).

Related Party Transactions

The financial statements include the following balances and transactions with The Foundation for Research and Education in Work and Health Studies.

	1999	1998
	\$	\$
Transactions		
Awards to Foundation	<u>133,718</u>	<u>94,042</u>
Balances		
Accounts receivable	70,579	95,480

Institute for Work & Health

Notes to Financial Statements

December 31, 1999

These transactions and balances are measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties.

Subsequent to year-end the Institute awarded \$120,000 to the Foundation. The award was made from the Institute's surplus which had accumulated from revenues earned to December 31, 1999.

Commitments and Contingencies

The Institute has entered into certain multi-year contracts with various professionals for research services. The contracts provide for fixed annual payment amounts, along with certain provisions for early termination of such contracts. If these contracts were to be terminated with sufficient notice, management's estimate of the liability approximates \$500,000. The Institute believes that early termination of such contracts is unlikely.

Investments

At December 31, 1999 the cost of short-term and long-term investments approximated market value.

Comparative Figures

The fiscal 1998 figures have been reclassified where necessary to conform to the presentation adopted in the current year.

Year 2000 Issue

The effects of the Year 2000 issue may be experienced by the Institute after January 1, 2000, and the impact on operations and financial reporting may range from minor errors to significant systems failures which could affect the Institute's ability to conduct normal operations. The Institute believes that it has mitigated its Year 2000 risks. However, there can be no assurance that the uncertainties surrounding the Year 2000 issue will not materially and adversely affect the Institute.

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“
...the world of work has changed dramatically since 1913...”

Ontario's Justice William Meredith is credited for his path-breaking commission in 1913, which first established workers' compensation in Canada.

2000



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FOR WORK & HEALTH
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