

Too much treatment, too early after whiplash injury delays recovery

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Whiplash patients who are treated too aggressively right after being injured may actually take longer to recover than those who get less treatment. That’s the conclusion of a recently published study by Institute Scientist Dr. Pierre Côté.

The study found that patients with whiplash injuries who visited their general practitioner (GP) once or twice in the first few weeks recovered much faster than those who visited family physicians or chiropractors more often in the month after injury.

Whiplash is an injury to the neck that typically results from a motor vehicle collision. Whiplash is the most common type of traffic injury and affects 83 per cent of people involved in an automobile collision.

“We found that patients who visited a GP and/or consulted a chiropractor more than six times during the first 30 days after their injury took twice as long to recover as those who saw their GP only once or twice,” says Côté. “Those who received combined care from GPs and specialists also took longer to recover.”

Côté analyzed data on 2,486 patients who had reported whiplash injuries to the Saskatchewan Government Insurance (SGI). The SGI is the province’s automobile insurer.

“We identified patients as either high- or low-users of health care,” Côté explains. “We also noted what kinds of health providers they consulted, including a GP, chiropractor, a combination of general practitioner and chiropractor, or a combination of GP and specialist, like an orthopedic surgeon.”

Low-utilization was defined as making one or two visits to a GP and between one and six visits to a



chiropractor. High utilization was defined as making more than two visits to a GP or more than six visits to a chiropractor.

Recovery was measured by the number of days between the injury and the date the insurance claim was closed. An analysis showed that claim closure is a valid marker of health recovery because it is associated with clinically important improvements in neck pain and physical functioning, as well as reduced symptoms of depression.

The analysis accounted for a number of factors including the severity of each person’s whiplash injury and his or her prior health status. “This was important because such factors could influence how often individual patients consulted their care providers and how long it takes them to recover,” Côté explains.

But even after these factors were considered, the researchers still found that patients in the low-utilization group recovered more quickly, even if their injuries were more severe or their prior health had been poor. Similarly, patients in the high-utilization group took longer to recover, regardless of the severity of their injury.

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The Institute for Work & Health is an independent, not-for-profit organization whose mission is to conduct and share research with workers, labour, employers, clinicians and policy-makers to promote, protect and improve the health of working people.

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At Work is published by Institute for Work & Health
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Issue #43 Winter 2006 ISSN # 1261-5148

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**The Institute for Work & Health operates with
the support of the Ontario Workplace Safety
& Insurance Board.**

WSIB Workplace Safety & Insurance Board
CSPAAT Commission de la sécurité professionnelle et de l'assurance contre les accidents du travail



What researchers mean by...

primary, secondary and tertiary prevention

Scientists are always looking for new and better ways to prevent disease and injury – both to avert human suffering and to control the tremendous economic costs of ill health. But when researchers and health experts talk about “prevention,” what do they mean?

Going upstream Imagine you're standing beside a river and see someone drowning as he floats by. You jump in and pull him ashore. A moment later, another person floats past you going downstream, and then another and another. Soon you're so exhausted, you know you won't be able to save even one more victim. So you decide to travel upstream to see what the problem is. You find that people are falling into the river because they are stepping through a hole in a bridge. Once this is fixed, people stop falling into the water. When it comes to health, prevention means “going upstream” and fixing a problem at the source instead of saving victims one by one.

In general, prevention includes a wide range of activities – known as “interventions” – aimed at reducing risks or threats to health. These are usually grouped into three categories.

Primary prevention Here the goal is to protect healthy people from developing a disease or experiencing an injury in the first place. For example:

- education about good nutrition, the importance of regular exercise, and the dangers of tobacco, alcohol and other drugs
- education and legislation about proper seatbelt and helmet use
- regular exams and screening tests to monitor risk factors for illness
- immunization against infectious disease
- controlling potential hazards at home and in the workplace

Secondary prevention These interventions happen after an illness or serious risk factors have already been diagnosed. The goal is to halt or slow the progress of disease (if possible) in its earliest stages; in the case of injury, goals include limiting long-term disability and preventing re-injury. For example:

- telling people to take daily, low-dose

aspirin to prevent a first or second heart attack or stroke

- recommending regular exams and screening tests in people with known risk factors for illness
- providing suitably modified work for injured workers

Tertiary prevention This focuses on helping people manage complicated, long-term health problems such as diabetes, heart disease, cancer and chronic musculoskeletal pain. The goals include preventing further physical deterioration and maximizing quality of life. For example:

- cardiac or stroke rehabilitation programs
- chronic pain management programs
- patient support groups

What works best? For many health problems, a combination of primary, secondary and tertiary interventions are needed to achieve a meaningful degree of prevention and protection. However, prevention experts say that the further upstream one is from a negative health outcome, the likelier it is that any intervention will be effective – think about fixing the hole in the bridge so people stop falling through and drowning downstream.

Unfortunately, this isn't always possible, especially when there's limited knowledge about what causes a particular illness or injury. For example, when it comes to low-back pain, there are few proven primary prevention measures. But researchers are learning more about secondary prevention – i.e. how to reduce disability and promote recovery in workers who have already experienced problems.

While primary and secondary prevention interventions are clear in areas like cancer or heart disease, such distinctions may be less useful in talking about musculoskeletal disorders. That's because episodes of back pain and other symptoms tend to come and go, blurring the lines between primary, secondary and tertiary prevention. So when it comes to musculoskeletal disorders, some researchers prefer to talk about “prevention, period.”

In the next issue of At Work, we will explain what researchers mean by “quantitative” and “qualitative” research.

Knowledge transfer still a “young discipline,” says KTE Advisory Board chair

Exactly what is knowledge transfer? What role does it play in delivering research-based messages – both to the public at large and to those whose decisions affect workers’ health and well-being? For answers to these and other questions, *At Work* recently spoke with Sonya Corkum, a knowledge transfer consultant who currently chairs the Institute’s Knowledge Transfer & Exchange Advisory Committee:

Q. First of all, what’s the difference between knowledge transfer and straightforward, well-executed communication of research findings?

Corkum: Certainly principles of effective communication apply in both areas: know your audiences, figure out what information they need, when they need it, and how they want it delivered. But knowledge transfer – or KT for short – goes a bit further. We consider cumulative research findings rather than isolated messages. We think about “receptor capacity” – is the audience equipped to hear and understand the findings? If not, how can we help them? How can we influence a culture among policy-makers or health-system managers that incorporates evidence into its decision-making? We also think about who should deliver a particular message. For example, will doctors be more receptive to messages that come from medical colleagues vs. those from civil servants?

Q. Overall, what is the current state of knowledge transfer as an organized discipline in Canada. Is it growing?

Corkum: It’s fair to say Canada is a leader in this area, mainly because of our historical interest in such fields as health promotion. Many leading KT thinkers and practitioners are here in Canada – Dr. John Lavis at McMaster University in Hamilton, Ontario, Dr. Jeremy Grimshaw at the Ottawa Health Research Institute, Jonathan Lomas at the Canadian Health Services Research Foundation. While there’s a sense that KT is growing, it still isn’t organized in any real sense, though knowledge transfer networks have evolved around certain diseases and issues – cancer research and injury prevention, for example.

Q. So who “does” knowledge transfer?

Corkum: We’re a pretty diverse group. KT practitioners include people with health-care backgrounds like nurses and occupational therapists. Others have training in communications or technology transfer. While a few courses of study exist, one can’t get a degree or diploma in KT, though I expect that will happen eventually. Actually, KT is in many ways still an emerging discipline. One challenge is that KT is rather like teaching or communications: almost everyone does or has done a little themselves, and therefore often assume they can do it well.



Sonya Corkum holds degrees in health education and business administration, along with a diploma in public health. Formerly the Vice-President of Partnerships and Knowledge Translation at the Canadian Institutes of Health Research, she is now Technical Advisor with the World Health Organization.

Q. The Institute for Work & Health has been called a leader in this field. How so?

Corkum: IWH is unique because it’s set up for researchers and KT professionals to collaborate whenever possible in designing, conducting and sharing research. I feel that the Institute takes a mature, unbiased approach to KT – they don’t just disseminate their own researchers’ findings but consider what others have learned about things like back pain and return to work. The Institute was an early adopter of the “exchange” concept in KT. That is, they aim for more than a one-way flow of information from researchers to clinicians and other decision-makers. They engage those individuals, asking what kind of research needs to be done. This information then flows back to the Institute and is used to develop and improve their research program.

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Too much treatment, too early after whiplash injury delays recovery (continued from page 1)

“Whiplash is a very common injury,” says Côté. “Our findings suggest there is an opportunity for family physicians, chiropractors and specialists to reduce the physical, psychosocial and economic burden of whiplash. They can help prevent the development of chronic conditions by not treating patients too aggressively after the onset of injury. Our study supports previous research which

emphasizes that clinicians should manage whiplash through pain control, reassurance, education and timely return to normal activities.”

Côté’s study was funded by the Canadian Institutes of Health Research (CIHR) and the National Health Research and Development Program (NHRDP). The study received ethics approval from the University of Saskatchewan.

The study was published in the October 24, 2005 issue of the Archives of Internal Medicine. To view the abstract, go to: <http://archinte.ama-assn.org/cgi/content/abstract/165/19/2257>.

In Brief ...

Patients with whiplash injuries who are treated too aggressively in the month following their injury may take longer to recover than those who get less treatment.

Systematic review finds little evidence in support of back belts

Is wearing a back belt really effective in preventing and/or reducing occupational low-back pain?

According to a new systematic review by researchers at the Institute for Work & Health, there is limited evidence to support their use.

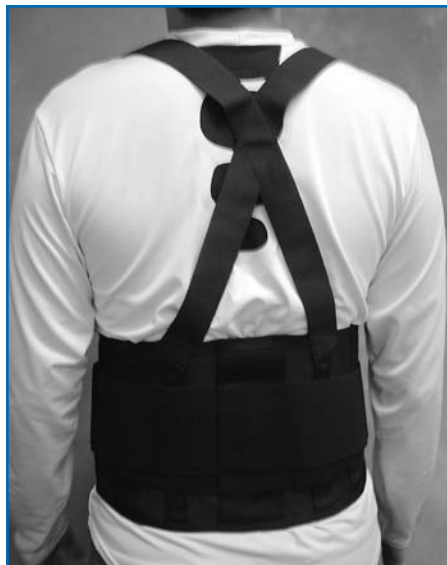
“There is no convincing evidence that wearing back belts in the workplace reduces injury or lost-time following an injury,” says IWH researcher Dr. Carlo Ammendolia, who led the study.

The systematic review, carried out by Ammendolia, and IWH scientists Drs. Michael Kerr and Claire Bombardier, evaluated previous studies on the use of back belts.

The belts, usually made of plastic or elastic, are designed to support the lumbar spine and abdomen. They are typically worn while lifting or carrying heavy loads.

The researchers identified ten studies from the existing scientific literature including five randomized controlled trials (RCTs), which are considered the “gold standard” in quality of evidence. All of the studies focused on workers – such as health-care workers, airline baggage handlers and construction workers – whose jobs exposed them to heavy lifting and/or repetitive tasks, like bending and lifting. The studies compared the incidence and duration off work once an injury had occurred among those who wore the belts and those who didn’t.

“In general, most of the fair- and good-quality studies we looked at found



that workers with no prior history of low-back pain were unlikely to benefit from wearing a back belt,” says Ammendolia. “There was no change in the number of injuries reported, or any reduction in lost-time claims.”

So is there any benefit at all from wearing back belts? Ammendolia says that there may be some limited benefit for workers who have a history low-back pain.

“However, we still require more research in this area before giving any definite recommendations.” He cautions that if back belts are worn, they should only be used for a short period of time, such as two to three weeks following an injury, and workers should be weaned off of them as soon as possible. “Back belts can give a false sense of security to workers who have experienced back pain in the past,” explains Ammendolia. “Prolonged use can restrict range of

motion, lead to weakening of the back muscles and a psychological dependence.”

While several systematic reviews on back belt use have already been published, this study is unique because it evaluated both clinical trials and observational studies and included a recent randomized controlled trial which was the largest of its kind. “This is the most up-to-date and most inclusive study,” says Ammendolia. “There were no restrictions on the study designs that we reviewed.”

Back injuries account for 20 to 30 per cent of all lost-time claims and are the leading overall cause of lost productivity in the workplace, according to the Association of Workers’ Compensation Boards of Canada.

“Back belts have failed to be effective. As we continue to examine the effectiveness of primary prevention methods for low-back injury, we should also devote efforts to secondary prevention. While we may not be able to prevent back injuries all the time, we can prevent and reduce ongoing disability,” says Ammendolia.

The study, Back Belt Use for Prevention of Occupational Low Back Pain: A Systematic Review, was published in the February 2005 issue of the Journal of Manipulative and Physiological Therapeutics.

In Brief ...

There is no convincing evidence that wearing back belts in the workplace reduces injury or lost-time following an injury.

Knowledge transfer still a “young discipline,” says KTE Advisory Board Chair (continued from page 3)

Q. The Institute is continuing to expand its systematic review program. Are there special challenges in sharing or disseminating the results of this kind of research?

Corkum: In a systematic review, researchers weigh existing evidence on interventions and processes – for example, what works best in return to

work or the effectiveness of interventions to prevent workplace injury and disability. I think the Institute understands that, in most areas of health care, people seek evidence-informed decisions, not evidence-based decisions. It would be naive to think that other factors – political, experiential or economic – are discounted in favour of science.

Yes, there are challenges in sharing knowledge from systematic reviews. In many cases, there’s little or no good research to draw on. Or the existing research isn’t strong enough to support the message that “this works.” Knowing that there is weak or no evidence to support a decision is also important information that needs to be shared.

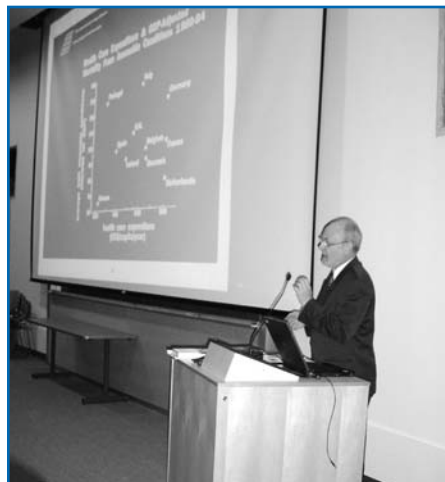
Population health lectures bring ideas to light

Why do some people enjoy relatively long and healthy lives, while others experience illness, disability and premature death? This question has tantalized population health scientists for decades, says one of Canada's foremost researchers and thinkers in this field, Dr. John Frank.

Ten years ago population health experts thought they knew some of the answers, says Frank, a Professor in the Department of Public Health Sciences at the University of Toronto and Scientific Director of the Institute of Population and Public Health at the Canadian Institutes of Health Research (CIHR).

But recent findings underscore just how complex this topic really is, according to Frank, who recently delivered the first in a series of thought-provoking, monthly lectures on population health.

The series highlights important and innovative ideas produced over the past two decades by researchers with the Population Health Program at the Canadian Institute for Advanced Research (CIAR). The goal of the lectures, scheduled to run through the first



Dr. John Frank delivered the first in a series of thought-provoking, monthly lectures on population health.

half of 2006, is to trace the legacy of the program, including ideas that have permanently changed the way health is perceived on a global scale. The series is co-sponsored by the CIAR, the University of Toronto and the Institute for Work & Health (IWH).

It's clear that broad groups of factors known as "determinants" play a role in the health of individuals and populations, Frank told his audience. These determi-

nants include biological and psychological factors, as well as the effects of our physical and social environments. Another key, closely-related determinant is socioeconomic status – a person's income level, job status and educational attainment.

But just knowing that these determinants exist and exert some impact isn't enough, says Frank, who is also a Senior Scientist at IWH and was the Institute's first Scientific Director from 1991 to 1997.

The real question is whether measurable gains in health and life expectancy can be made by somehow altering these factors – for example, by supporting public health initiatives to prevent disease by changing behaviours, by improving disposable income among the poor (vs. other health-related expenditures) to better diagnose and treat illness.

*The lecture series – called *The Determinants of the Health of Populations: Twenty Years of Ideas* – is free and open to the public. To read more about Dr. John Frank's lecture and to register for upcoming lectures, visit <http://www.iwh.on.ca/about/conferences.php>*

Institute scientists honour the late Dr. Terry Thomason's career

In 2000, Dr. Terry Thomason, a leading occupational health and safety researcher, published a study comparing the costs of workers' compensation insurance for employers in parts of Canada and the United States.

In collaboration with Dr. John Burton, an expert in labour relations and a member of the Institute's Scientific Advisory Committee, Thomason observed that the costs of workers' compensation insurance in Ontario were often below insurance costs in certain parts of the United States. Their findings have led to a new wave of research aimed at comparing the efficiency of workers' compensation insurance in Canada and the United States. Thomason passed away in April, 2002.

In a recently published article, IWH President Dr. Cameron Mustard and Director of Operations Sandra Sinclair summarize and build on Thomason's research by identifying possible reasons for the cost differences in Canadian and American workers' compensation systems.

Based on a number of research studies on how health-care services are organized and financed, Mustard and Sinclair argue that Canada's publicly funded single-payer system is more efficient than the private markets model in the United States.

They also claim that the higher utilization of the health-care system in the United States does not produce better health outcomes for patients. This is

despite the significant effort in both countries to improve the efficiency and quality of health-care services.

Thomason's work, they say, "is an excellent example of the potential of comparative cross-national studies to inform our understanding of the implications of different policy choices."

The article entitled, "Health Care and Workers' Compensation" is part of a collection of essays in honour of Thomason's career, published in *Workplace Injuries and Disease: Prevention and Compensation* (2005).

Mustard, Cameron and Sinclair, Sandra. "Health Care and Workers' Compensation." *Workplace Injuries and Disease: Prevention and Compensation*. Eds. Karen Roberts, John Burton Jr., and Matthew Bodah. 199-217.

More and more Canadians are facing a new reality: There is no such thing anymore as a steady job. Contract, temporary and part-time work, as well as self-employment, are replacing stable jobs that once were the rule. Nearly 40 per cent of workers do not hold permanent, full-time jobs. As globalization, outsourcing and technology change the way we work, Ottawa and provincial governments must ensure labour policies cover new employment relationships so fewer workers fall through the cracks.

— from an editorial in the Toronto Star, August 3, 2004

What do these three very different workers have in common?

- a data-entry clerk brought in on an ad hoc basis to supply extra services during a merger between two large insurance companies
- an executive assistant hired on a temporary contract by a local community college to work for its Acting Dean of Student Affairs
- an independent dry-waller helping to complete a new condominium project already delayed due to a long construction workers' strike

They are all examples of “non-standard” employment – that is, none of these workers is a typical, full-time employee who enjoys a certain degree of job security. In each case, the person has been hired on a temporary basis and could be negatively affected by related factors beyond his or her control.

Dr. Emile Tompa uses the term “precarious” to describe these types of employment experiences and says more and more workers – here in Canada, and around the world – are finding themselves in this situation.

“The term ‘precarious’ reflects the fact that such work arrangements can create insecurity and stress,” says Tompa, a labour and health economist and Scientist at the Institute for Work & Health. “This has the potential to negatively affect workers’ health and well-being.”

Changes in global economy affecting work arrangements

For many years, full-time permanent employment was the norm in Canada. In exchange for their time and skills, many workers could expect a regular pay-cheque, regular hours, health, dental and retirement benefits, and training and advancement opportunities.

This remained the “gold standard” until productivity slowed in the 1970s, says Tompa. “Today, many organizations see full-time employment as expensive and restricting. Many are reluctant to assume the cost and commitment of entitlements such as extended health-care insurance, dental insurance and pension benefits.”

With globalization, the expansion of market boundaries has pressured companies to compete internationally and to respond quickly to market changes. Those with “flexible staffing” have greater freedom to add or remove people as needed in line with market changes, he adds.

While precarious employment – associated with characteristics such as non-permanent contract, few benefits, an ever-present chance of being dismissed – has been a fact of life in many service-oriented sectors, even well-paid, highly skilled workers are feeling the pressure. Dr. Ellen MacEachen, a postdoctoral fellow at the Institute, is leading a federally-funded study exploring health and safety in “high-tech” computer software sales and services workplaces (see sidebar page 7).

Some current Canadian trends in non-standard work

With funding from the Canadian Institutes of Health Research (CIHR), Tompa and his colleagues have completed several studies in the area of non-standard work and precarious employment. Their



research builds on work undertaken by the Community-University Research Alliance (CURA) on Contingent Work. The CURA group is based at York University in Toronto and led by IWH Adjunct Scientist Dr. Leah Vosko.

To track recent Canadian trends in non-standard work, Tompa and his colleagues Heather Scott-Marshall, Roman Dolinschi, Scott Trevithick and Sudipa Bhattacharyya analyzed data from two sources – the Canadian Labour Force Survey (LFS)¹ and the Survey of Labour and Income Dynamics (SLID).²

Although their findings have not yet been published, here’s what these Institute researchers have learned so far:

- Non-standard work arrangements are more common for men and women of all ages than they were 25 years ago. In general, younger workers (aged 17 to 24), older workers (aged 55-64)

and female workers have the greatest exposure to precarious employment.

- In 2002, 56 per cent of women aged 17 to 24 and 42 per cent of those aged 55 to 64 were employed in non-standard jobs.
- More than one-third of women experienced at least 12 months of part-time employment in one six-year period, regardless of age, and about half of those working part-time were involuntary (see below) part-time workers.
- As for men, in 2002, 48 per cent of those aged 17 to 24 and 31 per cent of those aged 55 to 64 were employed in non-standard jobs. That reflects an increase of 10 per cent over a 26-year period.

Tompa says these increases have been driven primarily by growth in part-time employment, including both voluntary and involuntary (involuntary part-timers would prefer a full-time job but can't find one). The frequency of "solo self-employment" (people working for themselves with no employees) and

multiple job holding (individuals holding down two or even three jobs at once) has also increased.

Seeking links between precarious work and health

So what are the health implications – if any – of precarious employment? Previous studies have found some clear links.

In their systematic review of the evidence published in 2001, Australian researchers led by Dr. Michael Quinlan looked at nearly 100 studies published to date on the health and safety effects of precarious employment in industrialized societies. They found that the evidence suggested precarious employment is associated with "a deterioration in occupational health and safety in terms of injury rates, disease risk (and) hazard exposures."

Research that looked specifically at outsourcing (contracting out) and organizational restructuring and downsizing

found negative effects on occupational health and safety. The findings on outsourcing were "virtually unanimously negative," according to Quinlan.

But how might precariousness lead to poorer health? Researchers have suggested several "pathways" which could link chronic stress caused by work insecurity to poor health, says Tompa.

One aspect of precarious employment is fear of job loss or "job insecurity" which has been linked to heightened stress. Stress causes our bodies to produce extra hormones and to suspend certain activities like digestion, immune function and tissue repair until the stress-causing event has passed. Long-term stress may also have direct effects on psychological health and well-being and may also encourage unhealthy coping behaviours such as smoking, overeating and substance abuse.

Beyond the potential negative health effects of job insecurity and stress, many workers in precarious job situations

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Precarious employment in the high-tech sector

Non-standard work arrangements have always existed in the service industry. But certain aspects of non-standard work are becoming common in the highly-paid, high-tech sector, too, according to Institute researcher Dr. Ellen MacEachen.

She and her colleagues have conducted in-depth interviews with senior managers and information technology workers (such as computer programmers) in 30 of Ontario's mid-sized software services and development companies. Although data analysis is still in progress, this research points to certain trends that may have long-term implications for workplace health:

- **High-tech workers don't expect job security.** This highly volatile industry can promise economic rewards but cannot promise security and stability, MacEachen says. "Organizational flux is the norm as companies are downsized, restructured

and merged. In this context, there is little expectation among managers or other workers that jobs will last longer than a few years."

- **Lifelong training is essential for workers to remain employable.** Those who don't keep their skills up-to-date can quickly become obsolete and be seen as a burden to their company's economic prosperity. "Training is resource intensive, and it may be difficult for smaller companies to live up to their commitment to training to foster longer-term relationships with employees," MacEachen adds.
- **Job tenure is short and staff turnover is high.** Workers in this sector move from company to company in order to increase their earnings rate, personal investments and skill sets. "Some highly skilled workers will seek out contract work and manage their own health insurance and job security to earn a higher income and may engage in intensified work periods in order to retire early," says MacEachen.

- **The high-tech workforce is predominantly young and male.** Younger workers who have recently left school may have training advantages because their skills are more current. Younger unmarried workers may also be less concerned about job security and be more eager to explore multiple job opportunities.
- **Occupational health in this growing industry may be difficult to measure and monitor.** The computer software firms in Ontario that MacEachen studied are not scheduled for mandatory insurance coverage with the Workplace Safety & Insurance Board and often did not offer short- or long-term health benefits to their staff. Occupational health was not seen as a significant topic in this entrepreneurial industry where IT workers play up their marketability as they constantly go in and out of the job market and jobs shift overseas.

The dimensions of precarious employment

What are the key features of precarious employment?

Researchers, including Institute Scientist Dr. Emile Tompa, have described the following “dimensions” of precariousness:

Inadequate income and benefits

Does the job pay enough in wages and benefits so workers can pay for basic needs like housing, food, education and health care?

Uncertainty of continuing work

Do workers feel they will have a job in the next month, the next six months, the next year? Are they being forced to work month-to-month or on six-month contracts? If they have permanent jobs, is there a risk of mergers or downsizing in their own workplaces or in their job sector?

Little or no control over work processes

Do workers feel they can influence things such as pace, scheduling and work flow in their jobs? Do they have the necessary resources to perform their jobs well? Or do they have almost no say in how they do their work?

Lack of legal and institutional protection

Are workers protected against unfair dismissal and unhealthy work conditions, either through labour legislation or organizational policies? Are they allowed to say “no” to work which they feel is unsafe or overly stressful?

Perceived work-role status

Do workers feel a lack of prestige associated with their jobs and/or their places within the organization? Do they

feel valued and respected by co-workers and supervisors?

Socio-cultural environment at work

Are peers and co-workers supportive or is the atmosphere at work highly competitive in a negative way, with everyone fighting for advancement?

Risk of exposure to physical hazards

Are workers forced to take jobs which expose them to physical, biological, chemical and/or other hazards that can negatively impact health?

Training and career advancement opportunities

Do workers have reasonable access to job-specific and occupational health and safety training and to other skills-development opportunities?

Institute scientists define and track precarious employment in Canada (continued from page 7)

simply don't earn enough income, Tompa says. This can contribute to poor living conditions, substandard nutrition and inadequate access to health-care resources. These workers may also be exposed to physical hazards on the job, which can further jeopardize their health.

More findings may emerge after longer follow-up

Yet when Tompa and his colleagues analyzed their own data from a national survey, they found “a general pattern of no relationship between poor self-reported health or declines in self-rated health and exposure to non-standard work forms and arrangements.”

“However, we did find some interesting trends,” he says. “For example, workers who reported substantial unpaid overtime were at greater risk of lower self-rated health.”

There could be several reasons why IWH researchers didn't find the same associations between non-standard work and declines in health which have been noted in other studies, says Dr. Cameron Mustard, a population health scientist at the University of Toronto and IWH President.

“For example, they only looked at one-year exposures. We may need to track chronic, long-term exposures before stress manifests itself as physical illness,” he says. “Also, our scientists analyzed data on general physical health and didn't look specifically at workers' mental health, which may be affected earlier than their physical well-being.”

Tompa is continuing to analyze information from the two national health surveys to see if new findings on health emerge after a longer follow-up period. Dr. Heather Scott-Marshall will be

working to develop a better understanding of precariousness from the workers' point of view.

“Our studies represent a first step in applying a conceptual framework for precarious employment to actual work experiences,” Mustard says. “We want to foster discussion about the consequences of labour-market change, and to encourage more research in this area. Only then will regulatory bodies have the information necessary to respond to health risks associated with a greater variety of work relationships.”

¹ The LFS, which began collecting data 30 years ago, asks a representative sample of Canadian workers about the nature of their work experiences.

² The SLID is a national labour-market survey administered by Statistics Canada; it looks at the work experiences of approximately 15,000 Canadians aged 16 and over for a six-year period.