

## The CIHR Institute

The CIHR Institute of Gender and Health, under the leadership of Scientific Director Dr. Miriam Stewart, supports research to address how sex and gender interact with other factors that influence health to create conditions and problems that are unique, more prevalent, more serious or different with respect to risk factors or effective interventions for women and for men, girls and boys.

The first national research institute of its kind in the world, the Institute of Gender and Health focuses on five strategic priorities: access and equity for marginalized populations; gender and chronic conditions; gender and health across the lifespan; promoting positive health behaviours; and gender and the environment. The Institute supports research in a wide range of areas that addresses these priorities, including global health, rural and northern health, mental health, breast cancer, prostate cancer, cardiovascular health, Alzheimer's disease, immunity, early child development, palliative care, obesity, genomics and tobacco use.

The Institute of Gender and Health has led the Reducing Health Disparities initiative which focuses on vulnerable populations such as single parents, children and youth in disadvantaged circumstances, and women. This initiative has attracted numerous national and international partners.

## About the Canadian Institutes of Health Research

The Canadian Institutes of Health Research is the Government of Canada's agency for health research. Its objective is to excel, according to internationally accepted standards of scientific excellence, in the creation of new knowledge and its translation into improved health for Canadians, more effective health services and products and a strengthened Canadian health care system. Composed of 13 Institutes, CIHR provides leadership and support to close to 10,000 researchers and trainees in every province of Canada. For more information visit [www.cihr-irsc.gc.ca](http://www.cihr-irsc.gc.ca)

The Canadian Institutes of Health Research (CIHR) is the Government of Canada's agency for health research. Through CIHR, the Government of Canada invested approximately \$23.7 million in 2004-05 in research on gender and health across Canada.

## The facts

- Women experience more illness, more years of disability and more stress than men, but they also live longer. Even when diagnosed with a fatal disease, women survive longer than men.
- Life expectancy for women born in 1997 was 81.4 years, compared with 75.8 years for men.
- Women are more likely than men to consider overall health and weight when choosing food, while men are more likely to engage in vigorous activity during their leisure time. Forty-two per cent of men are overweight, compared with 24% of women, based on body mass index.
- On April 14, 2002, 3,274 women and 2,835 children were residing in abuse shelters across Canada. Roughly one third of them had stayed there in the past. The total figure is 7% lower than in 2000 and 11% below the number reported in a 1997-98 survey.
- Males are most often the perpetrators of violence against women, children and other men. This behaviour is attributable, in part or in whole, to hyper-masculinity and gender socialization.
- The health effects of gender violence across the lifespan include spinal injuries, depression, post-traumatic stress disorder and other mental health problems, substance abuse, suicide, HIV/AIDS, sexually transmitted diseases, pregnancy complications and death.
- Males, from about 2 years of age and throughout most of the lifespan, experience more frequent and severe unintentional injuries than females. However, for intentional injuries, adolescent females attempt suicide more often than males, while males succeed more often than females.

## Research finding solutions to gender and health

- Three times as many women as men are not getting the knee or hip replacement surgery they need, despite physicians' claims that gender has no bearing on their recommendations, according to CIHR-funded researcher Dr. James Wright of the Hospital for Sick Children in Toronto. Dr. Wright has received a Quality of Life Research Award for his work from CIHR's Institute of Musculoskeletal Health and Arthritis.
- Some of the most common household medications, including painkillers, antibiotics and antihistamines, may work differently in men and women, according to Dr. Gideon Koren, a CIHR-funded researcher from Toronto's Hospital for Sick Children. Some differences are the result of simple variations in body size and weight, with most pharmaceuticals designed for a 165-pound man, but some drugs will be metabolized by women differently according to where they are in their menstrual cycles, for instance.
- A CIHR-funded research team has uncovered evidence that suggests the traditional model of the menstrual cycle is wrong. Rather than a group of follicles growing during the cycle, with one selected to ovulate, the follicles develop in waves, with women experiencing two to three periods of follicular development each month – though only one egg is selected for ovulation. The discovery, by a team led by Dr. Roger Pierson of the University of Saskatchewan, could lead to the design of new, safer and more effective contraception and help women who are having trouble conceiving.

- In more good news for women seeking to conceive, two CIHR-funded researchers from McGill University have successfully used frozen unfertilized eggs to help seven women conceive – and one has already given birth. The success rate of about 40% was comparable to that achieved using fresh eggs. The technique could be a godsend for women facing cancer treatments that destroy their fertility – and an ethical minefield for women who want to delay childbirth until later in life.
- Hypertension, high cholesterol, obesity and diabetes are not more prevalent among homeless men than in the general population – but they are more poorly controlled, according to Dr. Stephen Hwang and his colleagues at the University of Toronto. Their study – supported through CIHR’s Reducing Health Disparities initiative, led by the Institute of Gender and Health – also found that cardiovascular disease is the leading cause of death among older homeless men, leading the investigators to conclude that cardiovascular risk factors are treated suboptimally among homeless adults in Toronto. Among the health services needed most by homeless adults are primary health care, access to prescription medications, smoking cessation programs and treatment of alcohol and cocaine abuse.
- The functioning of connective tissue in men and women differs, according to CIHR-supported researcher Dr. David Hart and his team at the University of Calgary. They are using both animal models and humans to learn more about these differences. Their work could lead to ways to assess the risk of developing osteoarthritis, not only according to sex but also taking into account different genetic and environmental factors.

## In the pipeline ... Heart disease by sex and gender

Heart disease is different in women and men – because of both biological and genetic factors (sex) and social and behavioural factors (gender). But little is known about most of these differences – their causes, their manifestations and their results.

The Institute, along with its partners, including CIHR’s Institute of Circulatory and Respiratory Health, Heart and Stroke Foundation, and the Lung Association, is investing more than \$7 million to support four teams that are studying cardiovascular health for both men and women. Among the researchers receiving funding is Dr. Louise Pilote (McGill University), who is bringing together more than 30 experts in fields as varied as molecular genetics, biostatistics, sociology and cardiology, to learn more about the role of sex and gender in the development, diagnosis, care and outcome of cardiovascular disease.

## The researchers ... Dr. Lorraine Greaves: Women-centred research in addictions

A lifetime in research has convinced Dr. Lorraine Greaves that we live in a women-blaming society and not a women-centred one – something she believes needs to change.

As a recognized leader in the area of women’s health research, Executive Director of the British Columbia Centre of Excellence for Women’s Health (BCCEWH), and co-founder of the Centre for Research on Violence Against Women and Children, Dr. Greaves is well known for her research into tobacco use and addiction, violence and gender influences on women’s health.

Dr. Greaves argues that social, psychological and medical approaches have often been concerned with blaming women for unhealthy behaviours. To counter this, she takes a women-centred approach to research that includes policy makers, communities and academics, working together to improve women’s health and well-being.

This approach is reflected in her research into women and tobacco use. Her first book, *Smoke Screen: Women’s Smoking and Social Control*, published in 1996, examined the historical and cultural influences on women’s smoking.

In addition, Dr. Greaves cites how health promotion campaigns and physicians often blame women for smoking or drinking during pregnancy. She believes an approach that is equally concerned with the health of both women and children would attract addicted women to treatment programs, rather than avoiding treatment and harm reduction because of the stigma attached to substance use during pregnancy.

In 2003, Dr. Greaves launched the CIHR-funded Integrated Mentor Program in Addictions Research Training (IMPART) at the BCCEWH as the first mentor-training program for gender, women and addiction researchers in Canada. IMPART brings together researchers from a multitude of disciplines, from neurobiology to sociology to nursing, in an effort to understand addiction in the context of sex and gender, to be better able to develop treatment, services and health policy.

“We’re collectively doing research and training from cell to society,” says Dr. Greaves.

Through her voluntary work as Vice-President and co-founder of the International Network of Women against Tobacco, Dr. Greaves also investigates tobacco’s addictive effects on the developing world. It’s a wider arena, but her underlying focus remains the same – to remove blame and focus on healthy outcomes for girls and women.