



Ontario Hospital Greenhouse Gas and Air Emission Challenge

Hospitals Healing the Environment

Case Study #1

Women's College Hospital

Empowering communities and enhancing health

With a history of more than a century in Ontario, Women's College Hospital (WCH) is well established as a leader in women's health and is the first and only independent ambulatory care hospital (providing treatments or examinations that allow patients to go home within 23 hours) in the province. The hospital, located in downtown Toronto, has a staff of 770 and serves over 270,000 ambulatory patients annually. As a teaching hospital, fully affiliated with the University of Toronto, WCH provides academic leadership in research, training and education in both women's health and ambulatory care.

Pollution Prevention Initiatives

Energy Efficiency

Throughout the past few years, WCH has undertaken a number of projects to reduce the amount of energy used at their facility. A major undertaking has been a lighting retrofit project through which T12 fluorescent tubes are being replaced with more energy efficient T8 or T5 bulbs. Further, incandescent lights are being replaced with energy efficient compact fluorescent bulbs.

The hospital has also been able to gain energy efficiency by closely monitoring and adjusting the building's automated heating ventilating and air conditioning (HVAC) system. To monitor upkeep, an annual steam trap survey is in place. In addition, the hospital's aged hot water tanks have been replaced with an instantaneous hot water exchange system. Non-efficient air conditioners and appliances, such as refrigerators, are also being replaced.

With this ongoing project the facility projects they will reduce their energy use by an estimated

20%, resulting in commendable cost savings and reductions in greenhouse gas emissions.

WCH is also promoting the use of an energy savings mode on computers and monitors throughout the hospital. Staff project this initiative will result in annual savings of \$50,000 and an estimated reduction of approximately 925 tonnes in greenhouse gas emissions.

Energy efficiency is also an important consideration for future planning. WCH is currently reviewing LEED (Leadership in Energy & Environmental Design) building designs for the re-development phase of the hospital.

Toxics Reduction

WCH has implemented many projects to reduce the use of toxic substances within their facility. The use of mercury, for example, has been greatly reduced by replacing older thermometers and blood pressure cuffs with digital versions. Mercury switches in plant maintenance are also being eliminated.

Throughout the facility, non-VOC and scent-free cleaning products have been introduced and paints used within the hospital are non-VOC water-based products. Pesticide use has also been targeted, with a complete elimination of these chemicals for care and maintenance of tropical plants and gardens in the hospital lobby. WCH has additionally implemented a pesticide-free rodent

**Women's College
Hospital's Green Team
has been leading the
way towards
environmental
sustainability
since 1992.**



and pest control program, using more natural alternatives such as diatomaceous earth or biotic acid dust.

Waste Reduction

Since the closure of the its incinerator in 1989, WCH has implemented an extensive program of recycling and waste reduction, further contributing to cost savings and reductions in greenhouse gas emissions.

Programs currently in place include organic waste diversion & processing; confidential shredding; recycling of cans, bottles & plastics (used in food & beverage service), commingled paper; corrugated cardboard; computer monitors & peripherals; fluorescent lamps and refrigerators; and re-use of medical equipment & furnishings.

Other new initiatives include the elimination of PVC IV feeding tubes in the Neo-natal Intensive Care Unit and a pilot polystyrene (HDP2) recycling project.

Staff Engagement and Public Outreach

Many of the environmental initiatives at WCH have been led by the hospital's Green Team. This voluntary committee has been active since 1989 and is composed of a multidisciplinary group representing all areas of the hospital.

The Green Team engages and educates staff in green initiatives and values through a variety of outreach activities. Each year the Green Team organizes a three-day Earth Week event that features the dissemination of environmental information through posters, flyers, e-mails and environmental quizzes with prizes. Green Team members also raise awareness through presentations to internal committees and departments. Further, a Green Leadership Award was created to recognize departments carrying out innovative environmental programs.

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www.c2p2online.com/cleanairchallenge

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WCH's Green Team is also active in raising awareness about environmental issues among the general public. For example, WCH set up a booth at the 12th Annual Women's Health Matters Forum & Expo in Toronto where, to engage forum delegates, the Green Team conducted a popular electronic quiz with prizes that covered issues surrounding energy efficiency and the reduction of mercury-use, among others.

Members of the Green Team also make public presentations and contribute articles for external publication. Recently two members were interviewed for a DVD series highlighting nursing and the environment, which was produced at the WCH Environmental Health Clinic by the Canadian Nurses' Association. Team members also participate along with fellow members of the Canadian Coalition for Green Health Care at the annual OHA HealthAchieve conferences.

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actions that avoid or
minimize the creation of
pollutants and waste, to
foster a healthier
environment and a
sustainable society.*



Photos by Michael Wong, Women's College Hospital

Green Team members Tracy Miller (left), Nancy Bradshaw and Howard Cheeseman; Maureen Adamson, and Vice President, Corporate Services and CAO



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