

# The effects of invisible waves

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The world is becoming dominated by wireless technology which is constantly emanated as micro, radio and extremely low frequency waves through the air. Researchers are studying the effects of constant exposure to these waves and how it impacts the human body.

Cell phones, cell phone towers, wireless internet routers, cordless phones and power lines of all sorts have all been recognized as possible contributors to an environmental health condition called electromagnetic hypersensitivity (EMS) caused by significant exposure from radio waves.

EMS symptoms include poor sleep, fatigue, headache, nausea, dizziness, heart palpitations, memory impairment and skin rashes. Patients' reactions vary, some requiring life-altering changes to minimize exposures as much as possible.

The first step for patients having these symptoms is to see their family physician. From there, they are usually referred to a specialist, like those in the Environmental Health Clinic at Women's College Hospital (WCH). Our experts understand sensitivities like EMS and are diligently trying to further delineate its complexities, educate the medical establishment and manage patients.

That's why on May 23, our Environmental Health Clinic hosted physicians, experts and patients at WCH for a day of interactive lectures, to share and discuss ideas about the issues surrounding EMS.

"We need to create more awareness about this condition," said Dr. Riina Bray, medical director, Environmental Health Clinic, WCH. "Health-care practitioners need to better understand EMS so they can help their patients prevent and manage their symptoms. The public needs to know how to protect themselves from the broad range of health impacts electromagnetic fields have on their minds and bodies."



## Dr. Magda Havas of Trent University

Dr. Magda Havas, associate professor of environmental and resource studies, Trent University, presented Electromagnetic sensitivity: Is it psychological or physiological? She challenged the critics' suggestion that symptoms are solely psychological by providing real examples of patients whose symptoms subsided when wireless technology was removed from their environment. Scientifically sound guidelines for safety were also reviewed, with the knowledge that the standards in North America fall abysmally short of those elsewhere.

A grand rounds lecture featuring Dr. Ray Copes, chief, environmental and occupational health, Public Health Ontario, discussed EMS from a public health perspective. Dr. Copes cited the difficulties in comparing research because there is no one universally-accepted definition of the condition.

In the afternoon, participants had the opportunity to interact in small groups and discuss next steps for patient care, government action and community collaboration.

"Women's College Hospital is leading the way by hosting workshops like this," said Dr. Bray. "Working together is the first step to creating a mutual understanding of electromagnetic hypersensitivity and being able to care for and treat patients in the best way possible."