

Occupational Medicine Clinical Update

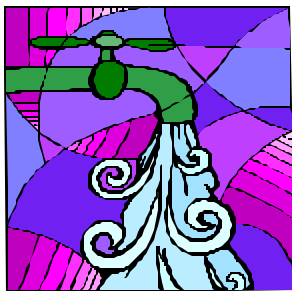
Dedicated to the prevention of occupational illness and injuries, and promoting the well-being of all workers

This Issue:

- Ecosystem Health and the Workplace

Coming Issues:

- HAVS
- Critical Appraisal of Review Articles



Occupational Health Clinics for Ontario Workers Inc, Samia-Lambton

Ecosystem Health: What is it? What's work got to do with it?

Heather Crowe may someday have saved thousands of Canadians from a premature death. The 57-year-old non-smoking waitress from Ottawa recently won a landmark compensation claim. The award was based on the medical literature showing her exposure to environmental tobacco smoke in the workplace was a significant contributing factor to her developing lung cancer.

What does this have to do with Ecosystem Health? Two important tenets of the Ecosystem Health approach are: Why has my patient got this illness, and how can I as a physician and community leader help prevent others from suffering the same illness?

Occupational medicine, like public health, is driven by these questions. Diseases like Heather Crowe's, shown to be work-related, help put the relationship "on the radar" for physicians and employers. Suddenly in communities across the country, the debate about smoking in the workplace is underway. Tighter restrictions will be put in place. Needless, and costly (in terms of health

care costs and years of life lost) premature deaths will be avoided, to say nothing of the human cost.

Much of the knowledge we have today on the pathogenesis of disease has been gleaned from the laboratory commonly known as the workplace. This information has saved countless lives and has moved us towards a healthier environment.

The Romanow report identified prevention as a key health initiative in promoting a sustainable health care system. We have been trained in a disease care model. The Ecosystem Health approach is teaching us to take a broader, more proactive view, to help make sustainable health care in Canada a reality.

Heather Crowe wants what most of us want: A feeling that her life has had a purpose. We, as physicians, have become very adept at cleaning up the water spilling on the floor, but we aren't keeping up. It is time to start thinking more about turning off the tap. People like Heather Crowe, and the principles of Ecosystem Health are pointing the way.

Ecosystem Health - Focusing Physicians on the Environment

by John Howard, M.D., FRCPC

The health of a person is critically dependent on the health of that person's environment - not only the physical environment but also the social, economic and political environment. It is very difficult to remain healthy in a sick environment. Equally a healthy environment is a key way to ensure ongoing health of the person. The definition of health is also changing from just a definition of physical and mental health to a much broader definition that includes economic and social health, moral health and spiritual health.

The Faculty of Medicine and Dentistry of the University of Western Ontario is lead-

Moving toward a broader definition of health:

- ◆ Physical
- ◆ Mental
- ◆ Economic
- ◆ Social
- ◆ Moral
- ◆ Spiritual

ing medical schools in the teaching of Ecosystem Health. This innovative program emphasizes the interdependency of human health with the physical, social, economic and political environment. It teaches future Canadian physicians to ask why a patient got a particular illness, and to advocate for a healthier environment that might prevent similar illnesses in the future.

The Ecosystem Health program is working towards creating an ecosystem health model for training doctors. Until the last decade, doctors were trained in the traditional medical model. This model consists of a disease within a patient. The job of the doctor is to narrow down the possibilities to define the disease within the patient. Defining the disease



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then defines the treatment. An example would be a patient presenting with shortness of breath. The doctor diagnoses asthma and prescribes the treatment that has been proven in asthma. The doctor has two main questions - what is the disease and how do I treat it?

Six years ago the UWO School of Medicine embarked on a new model called the Patient-Centred curriculum. This model included the traditional medical curriculum but added two important concepts - the illness and the context. The illness is the unique experience of the disease by the patient. This experience is critically dependent on the context or environment that the patient is in. In the above example of the patient who has shortness of breath and

asthma, the experience of the disease - the illness- is very different whether the patient is a senior, a smoker, someone with a drug plan, an opera singer or a miner. The treatment must be tailored to the specific illness and needs of the individual patient and not just to the disease. This model adds two important questions to those of the traditional medical model. What are my patient's unique needs and how can I best meet those needs?

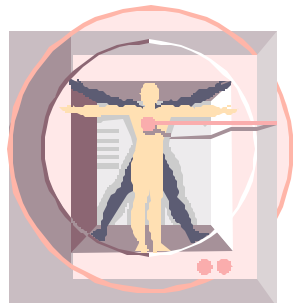
The Ecosystem Health approach builds on the patient-centred model and focuses on the context of the patient. It includes considering the patient's illness as a symptom of the environment. This model directs the physician's focus to look at what is happening in the environment that is affecting the patient. It challenges the physician to consider two more questions - perhaps the most important questions for society - why has my patient got this illness and how can I as a physician and community leader help prevent others from suffering the same illness?

The Ecosystem Health program began five years ago. The program has been generously funded by the McConnell Foundation of Montreal and Dr. Beryl Ivey of London. There is now a week in first year medicine devoted to ecosystem issues and two courses in fourth year, as well as a number of classes throughout the curriculum focusing on ecosystem health.

Third International Course in Ecosystem Health
University of Western Ontario
June 10th to 13th, 2003
Info: www.med.uwo.ca/ecosystemhealth

The International Society of Ecosystem Health is now centred in the Faculty of Medicine and Dentistry. There have been two successful international courses in Ecosystem Health with the third set for June 10th to 13th, 2003. These courses are

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open to all and are a great forum for learning and interacting. They focus on the problems but also on developing achievable solutions.

The program is also looking for partners to help develop Ecosystem Health further in Southwestern Ontario. The program needs projects and mentors that we can attach medical students to so that they can develop their knowledge, skills and attitudes in dealing with environmental issues. It is an excellent program to help medical students, to develop partnerships with the University of Western Ontario and to introduce future physicians to Southwest Ontario communities. Any interested people or projects are asked to contact Ms. Jennifer Hounsell (jennifer.hounsell@fmd.uwo.ca).

The mission of the Ecosystem Health program is to equip doctors with the knowledge, skills and attitudes to work with other professionals to develop a healthier world. Working with others is key to developing effective teams and effective solutions to some very challenging problems.



Editor's note: Dr. Howard's article is very timely. As we in Sarnia grapple with the issues of Kyoto, Romanow, and the chemical waste coming here from the Sydney Tar Ponds the principles of Ecosystem Health come rushing into play: What are the health effects from by-products of material goods we all use? Who is responsible for their safe storage/treatment? What are the economic, political, social and physical consequences of various solutions to the problem?

Sarnia, due to its economic dependency on the petrochemical industry, brings all these issues into sharp focus, perhaps more so than any other community. This puts us in the position of taking a leadership role on issues that the entire country is struggling with.

It is through responsible, respectful and factual consideration of these complex issues, in collaboration with a wide range of other professionals, that we can come to the kinds of solutions Dr. Howard has alluded to.

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