



## High cost of *Chlamydia* can be cut, researcher finds

The prevalence of *Chlamydia trachomatis* infection could drop by 87% in 5 years and related health care costs would be cut by 35% — or almost \$20 million — if annual screening of Ontario women aged 15 to 24 was introduced, research presented at a recent Health Canada forum indicates.

In contrast, Ontario's current status quo approach will have no impact on the prevalence of infection or cost over a 10-year period, cost-benefit research conducted by Dr. Max Chernesky reveals.

Chernesky, a professor at McMaster University and director of medical microbiology services at St. Joseph's Hospital in Hamilton, says Ontario now spends about \$49 million annually to treat *C. trachomatis* infection in women aged 15 to 24. His study,

funded by Health Canada and the Ontario Association of Medical Laboratories, reveals that the vast majority of the money is spent on treatment, not diagnosis.

He said the treatment component of costs would drop drastically if women aged 15 to 24 were screened and tested using nucleic acid amplification (NAA) methods. Currently, much of the testing is done using less sensitive enzyme immunosorbent assays (EIA). Genital *C. trachomatis* infection is the most commonly reported bacterial STD in Canada. Health Canada estimates that in 20% to 25% of cases in which the infection goes untreated, the condition progresses to pelvic inflammatory disease, which increases the risk of ectopic pregnancy and tubal infertility.

Reported rates of chlamydial infection among Ontario women in 1997 were 794 cases per 100 000 women aged 15 to 19, and 810 cases per 100 000 women aged 20 to 24. This compares with national averages of 998 and 941 cases respectively for those age groups in 1996. Health Canada has set a year 2000 national goal of 500 cases per 100 000 women aged 15 to 24.

The rate among men in the same age groups is lower, at about 250 cases per 100 000, but Chernesky says this reflects a difference in testing rates, not incidence. "Doctors have to stop thinking that the rate for women is different than the rate for men."

To date, men have been deterred from testing because of the discomfort associated with taking a urethral specimen for culture. However, men and women can now be tested using first-void urine and the newer NAA testing methods. Chernesky advised physicians to consult with laboratories to ensure that they are using NAA methods.

His model predicts that if Ontario switched all *Chlamydia* testing to NAA but did not introduce screening, the number of cases would rise because of the better detection but the province would still save \$3 million annually, thanks to a drop in treatment costs.

Chernesky noted that there is a disincentive for private labs to switch to NAA testing: it costs more than EIA but in Ontario the remuneration is the same. As well, labs can conduct more EIA tests in a day. Chernesky believes the solution lies in pooling samples, allowing 4 to be tested together.

He plans to make more calculations with his model — he wants to examine what impact screening of men might have on sequelae in women, for example — before publishing his results. —  
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David Kaplan, a second-year medical student at the University of Toronto, took the second prize of \$1000 in CMAJ's 1998 Logie Medical Ethics Essay Contest for a well-reasoned discussion of the issues surrounding fetal protection laws. He is shown here performing in a community production of *Les Misérables* in Jerusalem. The complete text of his winning essay, "Fetal protection laws: Is there a need to renew the abortion debate?", can be read online at [www.cma.ca/cmaj/index.htm](http://www.cma.ca/cmaj/index.htm). Deadline for the 1999 contest is June 1 (see [www.cma.ca/inside/awards/logie.htm](http://www.cma.ca/inside/awards/logie.htm) for details).