## Coalition urges crackdown on contraband cigarettes

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Arguing that cheap, contraband cigarettes are seriously undermining public health initiatives to constrain smoking, the 70-member Canadian Coalition for Action on Tobacco has launched a national campaign to persuade governments to crack down on the illegal tobacco market.

The measures are primarily aimed at snuffing out the supply of cheap cigarettes that are manufactured on native reserves and are increasingly finding their way onto the streets of Canada's major cities. They include a ban on the supply of raw materials — paper, filters and even raw leaf tobacco — to unlicensed tobacco manufacturers, as well as hiking the minimum bond to obtain a tobacco manufacturing licence to $5 million from the current $5000.

The contraband tobacco trade has all but gutted national efforts to dissuade tobacco use through high taxes, says Neil Collishaw, research director for Physicians for a Smoke-Free Canada. "The whole phenomenon of availability of cheap tobacco completely undermines the health objectives of the high price policy that we have had and have successfully enforced."

"All of it is completely illegal, all of it without taxes at all, and now with distribution networks quite widespread in Ontario and Quebec, and rapidly spreading elsewhere, we can see our whole policy being eroded," Collishaw added.

The coalition contends the most feasible means of shutting down the contraband tobacco trade is to attack the supply side of the equation, particularly the 10 tobacco factories located on the St. Regis side of the Akewesasne reserve straddling the Ontario, Quebec and New York state borders, and other illegal operations on Kahnawake (near Montréal, Que.), Tyendinaga (near Belleville, Ont.) and Six Nations (near Brantford, Ont.). "The key to success is to get at the source," says Rob Cunningham, Senior Policy Analyst and lawyer for the Canadian Cancer Society.

The short-term solutions include the ban on the supply of raw materials and the multi-million dollar licence, the coalition argues. But, it adds, the permanent solution lies in structural, legislative and regulatory reforms, including a new law that would enable reserves to levy a First Nations tobacco tax, with the revenues being plowed back into social and economic projects on their reserves. Other recommended measures include implementing a tracking and tracing system that encodes all cigarette packaging to make it easier for police to identify contraband products; legislation that makes manufacturers liable if their products are seized on the smuggling market; and a major diplomatic initiative to convince the US government to shut down illegal, unlicensed manufacturing operations on the US side of the Akwesasne.
— Wayne Kondro, *CMAJ*

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## HIV microbicide trials halted

South Africa has launched an inquiry into ethical breaches that may have occured during a Phase III clinical trial of Canadian-made "Anti-AIDS" gel that was halted last January after preliminary results indicated use of cellulose sulfate could lead to increased risk of HIV infection.

The American reproductive health group CONRAD announced Jan. 31 that it had halted trials on Ushercell, a gel made by Canada-based Polydex Pharmaceuticals, that were being conducted on more than 1300 women in South Africa, Benin, Uganda and India. A similar trial being conducted by Family Health International in Nigeria was also halted. But another trial is just starting in Uganda.

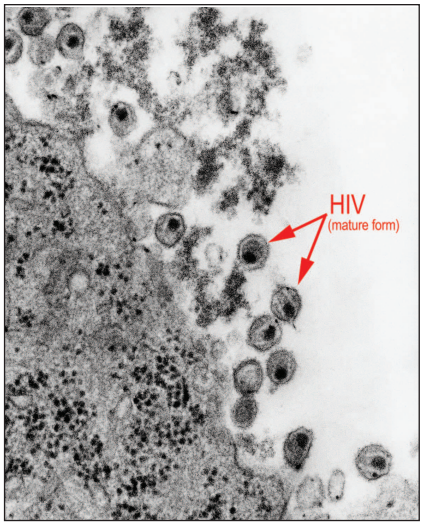
The topical microbicidal gel is supposed to release an active ingredient that would kill HIV during sexual intercourse. Polydex said in a statement that "at this point, it is not clear why use of cellulose sulfate was associated with an increased risk of HIV infection in the CONRAD trial. The Independent Data Monitoring Committee, an independent advisory group of experts overseeing the trial, will conduct a detailed review of the data to better understand the findings, and help determine any implications for other microbicide studies."

South African health minister Manto Tshabalala-Msimang directed the country's National Health Research Ethics Council to conduct a thorough investigation into the matter. Some 600 South African women were involved in the trials and there were media reports that some shared their gel with friends who were not part of the study.

The South Africa probe is seeking to establish whether the trials followed all ethical protocols and whether the women were given sufficient information to make informed decisions on their participation.

Several leading HIV/AIDS researchers in Africa argue that such trials need to continue if women are to find an additional tool (besides the condom) to help protect them from infection. They say HIV prevention mainly relies on the condom, but that only empowers men. "African women remain vulnerable as their poor sex negotiation skills, and low socio-economic power, mean it is the often the man who decides whether to use the condom," Mugyenyi told *CMAJ*.

Women are now being enrolled for the Uganda trial, which will eventually be expanded to South Africa, Tanzania and Zambia. Dr. Anatoli Kamali, a researcher at the Medical Research Council in Uganda, says investigation of the gel called PRO2000 will proceed "because there has not been a method that women can use to protect themselves without




US Centers for Disease Control and Prevention

Mature forms of the human immunodeficiency virus in a tissue sample.

negotiating with men." It is hoped 710 Ugandan women will be enrolled by next March, and that preliminary results will be available by the end of 2008.

Kamali added that separate trials on 2 other gels are ongoing elsewhere in Africa, including one in Rwanda where Dr. Eveline Geubbles, scientific manager at Projet Ubuzima, told *The New Times* their trials on the Dapirivine gel would not be affected by the CONRAD findings. "Currently, we are at the stage of data analysis. We sent the data [to the US] for laboratory tests and we expect results around the end of this year," she said.— Wairagala Wakabi, Kampala, Uganda

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## Imaging possibilities

Imagine the capacity to simultaneously identify the location of a tumour and obtain information about its biochemical and molecular nature.

That's the goal of an ambitious $26.9 million research project that hopes to combine diverse imaging modalities like MRI, PET and CT into a single technological platform for diagnostic use.

"If that can be achieved, the potential therapeutic benefits would be enormous, in that physicians would obtain information with greater speed and detail from a single scanning session," says Dr. David Hill, scientific director of London's Lawson Health Research Institute. "This obviously moves us enormously ahead in starting to arrive at the right course of treatment."

The Lawson, along with St. Joseph's Healthcare London, will take the lead in the multidisciplinary international initiative known as the Biomedical Multimodality Hybrid Imaging Project, which is expected to be launched this year, having successfully garnered a $13 million infrastructure award from the Canada Foundation for Innovation, primarily for the purchase of a cyclotron.

Hill says the 105-strong research team, including 23 from outside Canada, hopes to push the technologies "to the limits of what they can tell us in terms of useful information. Part of that is how can we devise new readings for imaging that will tell us, for instance, more about particular genes and how they're being expressed. To do that, we need to come up with radioisotopes that give us readouts based on carbon or oxygen or nitrogen."

The cyclotron and radiochemistry facilities will generate those isotopes, which researchers will mark with biochemicals for use as tracers in imaging.

Hill says the research team also plans to investigate myriad leading-edge imaging technologies, including the emerging form known as photoacoustic imaging, a hybridization of laser and ultrasound technology that can provide optical images at significant depths and with excellent resolution.

In photoacoustic imaging, a high intensity light is shined into a tissue for a few billionths of a second. The laser energy that is absorbed by subsurface objects causes an ultrasound signal. "What this does potentially is [create] a very high definition 3D picture of the tissue in real time," says Hill. "What we're looking for within [5 years] ... will be the application of these new technologies to patients.... We're pushing the limits of medical imaging." — Lynne Swanson, London

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Lawson Research

Canada Foundation for Innovation President Dr. Eliot Phillipson (centre) tours the 3T MRI Suite of the Lawson Health Research Institute with imaging scientists Dr. Terry Thompson and Dr. Neil Gelman.

## Family practice a tough sell

Family medicine residencies remained the toughest fill during the 2007 residency match, as some 108 of 987 available slots were left vacant at the conclusion of both iterations of the process.

By contrast, only 36 medical specialty slots remained vacant at the conclusion of the annual match run by the Canadian Resident Match Service (CaRMS).

Only 29% of medical graduates chose family medicine as their preferred option, compared with 32% in 2006 and 28% in 2005.

But CaRMS Executive-Director Sandra Banner says the decline isn't necessarily an indicator of the lack of appeal of family practice, so much as a function of the larger number of available family medicine residencies in this year's match. "The vacancies have everything to do with the funding that was in place and there was a lot of extra positions this year because of the expansion in BC and the expansion in Ontario. And the positions exceeded the number of grads and for the most part, international medical graduate positions were in addition to that and specially identified."

For the first time since 1992, the annual match allowed Canadian medical school graduates (CMGs) and international medical school graduates (IMGs) to participate in both iterations of the